The Role of Anticipation in Accounting for Assets and Liabilities.

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in

The Department of Accounting

by

Bruce Thomas Kruse
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ABSTRACT

Anticipation, in an accounting context, refers to expectations that are given recognition in the accounts of the firm. The problem of this study is to determine the degree of significance assumed by anticipations in the process of accounting for assets and liabilities.

Contrary to the popular opinion that accountants should not deal in anticipations, the results of this study lead to the conclusion that the process of anticipation plays a very vital role in accounting for assets and liabilities. On this basis, it can be concluded that anticipation is not exogenous to accounting theory, but assumes a position of significance as a necessary part of the complete theoretical framework of accounting.

The essence of an asset, as based on the service potential concept, lies in its ability to provide future services. As a result of this fact, the future is of primary significance for asset existence and recognition. The degree of uncertainty involved in asset existence varies, depending upon the type of asset given consideration. Since uncertainty of asset status exists in the case of many assets, the future economic benefits embodied in assets are not guaranteed, but are primarily of a prospective nature. Because economic benefits embodied in assets are of a prospective nature, it becomes evident that asset valuations represent anticipations of future service realization.

The cost concept of value is well established in accounting
doctrine; since it approximates fair value at date of exchange, is a
measure of stewardship responsibility, is basic to the matching process,
and is also realistic from the standpoint of enterprise continuity.
Anticipation of asset values in excess of cost is not appropriate to
accounting practice, while anticipation of value declines is appropriate
in some situations, notably in the case of current assets when cash-
realizable value falls below cost or in the case of fixed assets when
damage or unexpected obsolescence occurs.

Depreciation, as a process of cost allocation of fixed assets,
is also based on anticipation. In order to appropriately match revenue
and expense, it is necessary to allocate the cost of depreciable assets
to time periods during which it is anticipated the asset's service
potential will be utilized. Only a portion of fixed asset cost is
allocated periodically, evidencing the expectation that the future will
utilize a portion of the asset's services. In addition, salvage values
of depreciable assets are anticipated and reflected as offsets in the
computation of periodic depreciation.

Accounting practice accepts the legal concept of debts as liabilities,
and recognizes only those items that reflect debts requiring
payments to creditors. Practice thereby does not attempt to forecast
or anticipate all future cash disbursements that will be required in
order to attract factors of production to the firm, but instead accepts
as liabilities those items for which a determinable amount is owed as
a result of a past transaction. A going concern is under no legal obli-
gation to pay a liability until maturity, and as a result liabilities in-
cluded in financial statements represent anticipated legal liabilities.
If this were not true, only items representing past-due indebtedness
would be reported as liabilities. Amounts reported as liabilities therefore can be considered anticipated liabilities, since actual or real liabilities in the legal sense of obligation to pay do not develop until due date. The accounting concept of liability is thus more inclusive than the legal concept of obligation to pay. As a result, liability accounting is essentially a process of anticipating and reporting known future cash disbursements resulting from past transactions.
CHAPTER I
INTRODUCTION

Justification of the Study

Historically it has been considered undesirable for accountants to anticipate benefits. It is frequently asserted that benefits cannot be recognized until they are realized through the completion of a transaction with an independent party. The avoidance of anticipation of benefits was considered one of the greatest virtues of accountants until several decades ago.¹ There are a number of reasons why this procedure was adopted and followed with little modification.

The underlying reason carries over from the past when the accounting process was considered primarily a tool for developing and preparing a statement of financial condition for creditors and owners.² At that time individuals were mainly interested in the "pounce" possibilities of the firm. They were concerned with the ability of the firm to pay its obligations in event of forced realization of assets. Little emphasis was placed on the flow of earnings as a source of funds for future use or as a means of liquidating liabilities.


Another reason for the avoidance of anticipation of benefits in the accounts was due to the fact that the amounts of such benefits were not objective and verifiable, but were based on opinion. No clearly determinable, thoroughly accurate amount could be ascertained it was argued, for any amount which was anticipated was a subjective and perhaps inaccurate estimate. A fear thus developed that asset valuation or income determination could be based on the whim and fancy of managers or owners, a process which could result in financial statements reporting figures resulting from speculation, rather than those based on objective evidence.

It is doubted by some individuals if the avoidance of anticipations by accountants is justifiable today. With the advent of the corporate form of business organization with its stock widely dispersed among individual stockholders and the resulting separation of ownership of the firm from firsthand knowledge of its operations, anticipations in the form of current economic data about income and wealth of the firm may be of greater significance than historical data.

Most of the criticisms of accounting are concerned with alleged inconsistencies or inadequacies in financial statements prepared for investors and the public. The controversy which has arisen in regard to the need for recognizing current cost data in the accounts rather than historical cost data serves as an excellent example of accounting procedures which have given rise to these allegations. Identical firms with substantial fixed asset investments can report significantly

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different net income and total asset figures simply because assets were acquired at different points in time. Financial statements prepared under circumstances of this nature may be inadequate or actually misleading, particularly to the naive reader. As a result, it is argued by some that accounting has fallen behind in its attempts to portray the condition of business. There may be, therefore, a genuine need for a movement toward the establishment of a greater degree of comparability between accounting and economic data as a means of more effectively reflecting economic activity.

The dilemma which the accounting profession currently faces can be summarized as follows:

"The accountant can generally conform the reports of any one company to a single system, so that they are comparable from year to year unless conditions change radically. But he cannot make the reports of two or three companies comparable to each other. Nor can he add up a number of reports to find a general total. Yet that is just what is being done. We are told that the rate of profits in one industry is higher than in another; and that profits as a total are a decreasing percentage of National Income. Such statements are widely accepted, and they may be true. Nobody knows."

Greater reliance on anticipation may be a means of alleviating the situation by permitting a greater degree of comparability between accounting and economic data as well as among financial reports of various firms, in which case reports could become a more fruitful source of information for analysts.


\[5\text{Tbid., p. 30.} \]
The most significant reason for analyzing quantitative data of a firm is to secure clues pertaining to future performance. The primary consumers of financial data, exclusive of management, are financial analysts, including credit grantors, investors, and potential investors. Financial analysis is not an exact science, but depends to a large extent on the experience and judgment of the analyst. Definite standards of financial performance cannot be established for all situations, but only basic guides are available. These must be interpreted in the light of the overall financial performance of a specific firm, the industry in which the firm operates, and the level of economic activity of the entire economy. The task of the financial analyst is one of comparison. He must compare results of a specific firm for a series of years, and he must compare the results of operations of various firms in order to determine the financial strength and soundness of each.

Since the analyst is primarily concerned with the future performance of the firm to which he is contemplating a financial commitment, and since the comparability of data is so essential, the placing of greater reliance on anticipation in the reporting of assets and liabilities by the accountant may be of significant value to the analyst. The extension of the role of anticipation by the accountant could provide additional information to the analyst, and concurrently provide a partial solution to the problem of converting financial data to comparable bases.

There is an ever-growing need for continued improvement in accounting presentations due to the growing reliance placed on accounting data.

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by business managers and financial analysts who must of necessity adjust
to changes occurring in the dynamic economy in which accounting func-
tions. Accountants are obligated to improve their reporting standards
as a means of assisting users of financial statements in making the
required adjustments. Since the future is of paramount importance to
the analyst, extension of the role of anticipation by accountants could
be of value to him.

Meaning of Anticipation

Anticipation in a general context refers to prediction or ex-
pectation, requiring foreknowledge of an event or some preconception
by the anticipator. The meaning in an accounting frame of reference
is more restrictive. Anticipation as it pertains to accounting and
as used in this study is concerned with expectations in regard to asset
and liability recognition and valuation that are given recognition in
the accounts of the firm. In accounting usage, the degree of confidence
which can be placed in the expectation is of utmost significance. Ob-
viously complete confidence cannot be put in any expectation, since
this would require that no uncertainty be involved. In a dynamic
environment such as that in which accounting must currently function,
situations free of uncertainty are practically nonexistent.

Accounting anticipation must also be restrictive in another sense.
It must be restricted to specific events, rather than all of the aspects
of economic activity faced by the firm. It must be concerned with spe-
cifics which are included in the accounts of the firm. These consist
of such items as recognition and valuation of current and fixed assets,
expectations concerning useful lives of fixed assets, and expectations
in regard to payment of liabilities, all of which are not rigorously determinable, but yet are determinable within relatively narrow limits.

The role of anticipation in accounting may be influenced by one's concept of the purpose of accounting. If one adopts a very narrow interpretation of accounting; that is, assumes that the objective of accounting is only to provide historical data, anticipation will play a relatively minor role. On the other hand, if the purpose of accounting is defined more broadly, anticipation will assume greater significance. A trend is developing whereby accountants are becoming less concerned with the reporting of past history and more concerned with providing information which is suitable for planning and control, in addition to reporting stewardship. With increasing emphasis on the utility of accounting data for that which is currently happening or is likely to happen, as opposed to that which has already happened, it might be expected that anticipation will grow in significance.

Delimitations of Research

This research is primarily concerned with two basic questions:

(1) To what extent do accountants presently rely on anticipations in accounting for assets and liabilities, and

(2) To what extent should accountants rely on anticipations in accounting for assets and liabilities?

This research is devoted to a study of the present and ideal roles of anticipation in four classifications of balance sheet accounts—current asset; fixed asset; current liability; and long-term liability. It includes a discussion pertaining to the nature of these classifications of accounts, followed by an investigation and critical appraisal of the currently accepted valuation procedures regarding these accounts. In addition, valuation procedures which place greater emphasis on
anticipation are evaluated. Conclusions are then drawn concerning the most desirable procedures for the reporting of balance sheet items.
CHAPTER II

THE NATURE AND DEFINITION OF ASSETS

The Nature of Assets

Accountants are not always in complete agreement in regard to the precise meaning of terminology used. This can lead to serious misunderstanding. It is necessary, therefore, before getting into the problem of balance sheet valuation to consider in some detail the nature of assets, liabilities, and other related concepts.

The definition of an asset, proposed by the Committee on Terminology of the American Institute of Certified Public Accountants is as follows:

"Something represented by a debit balance that is or would be properly carried forward upon a closing of books of account according to the rules or principles of accounting (provided such debit balance is not in effect a negative balance applicable to a liability), on the basis that it represents either a property right or value received or an expenditure made which has created a property right or is properly applicable to the future."

This definition is inadequate for two reasons. First, it defines the term "asset" on the basis of a record-keeping method. This is equivalent to saying assets are items accountants call assets. The nature of the item itself should determine if an asset actually exists, rather than its existence being dependent upon a method of keeping records. Secondly, this definition has no meaning for one who lacks accounting knowledge, since such an individual does not know the meaning

of a "debit balance that is or would be properly carried forward upon a closing of books of account according to the rules or principles of accounting..." In some cases accountants are unable to agree on the precise meaning of this statement, and as a result the definition is even of questionable value to the accountant.

These considerations lead to the conclusion that the term "asset" should not be defined on the basis of the mechanics of accounting, but instead should be defined on the basis of the nature of the item being considered. The appropriate question then becomes: What is the essential element that an item must possess in order for it to be classified as an asset?

The definition by the Committee on Terminology, as quoted above, touches on this essential element which an asset must possess, when it states, "...it (an asset) represents...a right or value...properly applicable to the future." This emphasizes the one most significant element required of an asset—the ability to provide future benefit to its owner.

This future benefit which it is anticipated an asset will provide is usually referred to as service. One of the first accounting writers to recognize this fact was Charles E. Sprague,² who wrote early in the twentieth century. He described assets as "a storage of services to be received,"³ emphasizing the fact that if an item would provide no future


service it was not wealth, but was worthless. He enlarged upon the service concept by considering assets to be the "embodiment of services previously given."4

Some twenty years after Sprague wrote, John B. Canning again stressed the significance of expected future services as the essence of an asset, when he wrote, "...there must be some anticipated identifiable, separate (or separable) services to be had by a proprietor."5 Canning stresses the fact that the existence alone of a material object does not suffice to make the object an asset, but instead the primary determinant is the existence of future service potential.

Writing in 1940, Paton and Littleton again brought out the fact that service is the significant element of an asset, or as they state, "service-potentialities, which, when exchanged, bring still other service-potentialities into the enterprise."6 Kohler, in A Dictionary for Accountants, states that the "...most important characteristic of an 'asset' is its usefulness to the owner. An object or right is considered useful if it is the source of...future services economically advantageous...to its present owner."7

4Ibid., p. 46.
The Definition of Assets

Despite some minute differences, the preceding definitions and concepts of assets agree on certain basic essentials, the primary essential being a right to prospective benefits. Assets can thus be defined as: Any right a firm currently possesses which is capable of providing future economic benefit. This is the definition that will be followed in this study.

The virtue of this definition lies in its simplicity and comprehensiveness. It is easily understood by anyone, and can easily be applied by accountants in determining if an item should be included in the asset section of a firm's balance sheet. This definition provides a more objective and precise test for judging assets than that which is currently in general use, and thereby permits accountants to dispose of rule-of-thumb methods which are based largely on tradition.

Characteristics of Assets

The foregoing proposed definition of assets stresses the three significant elements of an asset:

1. Assets are rights.
2. These rights are possessed by a specific firm.
3. These rights pertain to economic benefit.

The usual concept of assets is one which considers the essence of assets to be either physical or representative of a claim to money. In reality, however, an asset need not be dependent for its existence on either of these. Instead, assets are bundles of rights, and as a

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result of this are fundamentally identical, regardless of accepted balance sheet classification. Therefore, classification of assets is a device used for analysis rather than one based on the fundamental nature of the items.

Assets are bundles of rights, and these rights must be property of a specific firm or accounting entity. The existence of the asset to the entity is not dependent upon legal title to the asset. Property acquired by the firm on the installment basis, with passage of title delayed until completion of the contract, represents a valid asset to the firm even though the firm does not hold title to the asset. The right which is represented by the asset must legally belong to the firm if the firm is to recognize the right as an asset. In the case of the installment purchase, the firm has an equitable right to services, and as a result, it has the privilege of recognizing an asset. It is not legal title which constitutes the existence of an asset, but it is an enforceable right to the services of the asset.

The right of the firm to services of the asset must be more than a moral right. This is evidenced in the case of a debtor who has been adjudged a bankrupt. A moral right continues to exist against the bankrupt, but since no legal right exists, no asset can be recognized.

Since the existence of enforceable rights are necessary for asset recognition, in no sense can an obligation be considered an asset under the terms of the preceding definition. As interest rates or price levels change, the relative burdens of various obligations will also change, but nevertheless obligations or burdens rather than privileges still

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exist. An obligor does not possess any rights or benefits under the terms of his obligations, since he has given his bond to perform a specific act or series of acts, the benefits of which belong to the obligee.

The third significant element an item must possess in order to be classified as an asset is the fact that it must provide service, or economic benefit. The services which an asset must provide can take one of several forms, but they must be economic in nature.° Economic refers to the fact that the services are scarce and therefore possess some value.

In the case of physical property the service may result from the use of the asset in a productive function, or it may result from the fact that the property has a salvage value. In the case of property such as cash, an exchange value exists, for this is an item which can be exchanged at the will of its owner for other assets.

It is more difficult to determine where the economic benefits lie in the case of the intangible assets. Items such as organization costs or franchises frequently have no exchange value, since they are valuable only to the firm possessing them. The services provided by these items take the form of a legal privilege granted by a governing authority, a privilege which has very real value to the specific firm, since the firm could not operate without this privilege. These items have no service directly attributable to them, but indirectly form the basis for the services flowing from the entire pool of assets which comprises the firm.

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Early accounting writers emphasized the importance of a stream of services which could be turned into cash. Kester, for example, stated that "property subject to the payment of debts" was a requisite for asset recognition.\textsuperscript{11} This is equivalent to saying an asset can only be recognized if it provides cash or is a source of cash for the liquidation of liabilities. Canning appears to agree with this concept of assets when he says, "...the service must either be itself a money income or it must have a money income consequence."\textsuperscript{12}

Both of these writers thus emphasized the need for generation of cash as a basis for asset recognition. This concept is still basic to asset recognition and valuation, which is evidenced by the American Accounting Association statement which points out the fact that the "value of an asset is the money-equivalent of its service potentials."\textsuperscript{13} Some modification has been made, however, during the intervening years, with the result that less emphasis is laid upon the cash realization aspect of benefits provided by assets. This diversity of benefits derived from assets includes a store of value, medium of exchange, physical utilization, and contractual or other legal rights.\textsuperscript{14}

Since assets exist because they represent an anticipated flow of future services to the accounting entity which possesses them, the future is of primary significance for asset recognition. Due to the importance of anticipation and the future, assets existing in a dynamic


\textsuperscript{13}American Accounting Association, Accounting and Reporting Standards for Corporate Financial Statements (Columbus: 1957), p. 4.

economy will be subject to some uncertainty. The uncertainty involved in holdings of cash and insured bank deposits will be negligible because of sound central government, but the uncertainty of asset status of productive facilities subject to a rapid rate of obsolescence or of intangibles is considerably greater. The future is restricted to the services anticipated from the asset and does not apply to future acquisitions of property, since the firm has no present right to the services of property to be acquired in the future.

The period of time during which the service of the asset will be available will vary considerably with the type of asset involved. The benefit may be immediately available, as in the case of cash on hand. With respect to other assets, such as the site on which a plant is located, perpetual bonds, or preferred stock, the benefits will spread into the indefinite future. Intermediate positions will be occupied by other assets.

From the preceding discussion, it becomes obvious that the term asset is an economic concept. Asset status depends on more than legal right or physical existence, the fundamental test being economic benefit. If assets no longer possess any "discernible benefit to future operations," they cease to exist. Assets are "...embodiments of future want satisfaction in the form of service potentials that may be transformed, exchanged, or stored against future events,...not

\[15^{15}\text{ Ibid., p. 20.}\]
\[16\text{Accounting and Reporting Standards for Corporate Financial Statements, Op. Cit., p. 8.}\]
physical things, legal rights, or money claims.\footnote{Vatter, op. cit., p. 17.} The outward appearance of an asset can remain unchanged, but its economic content may be dissipated as services are utilized, are changed in significance, or are lost because of idleness.\footnote{Ibid., p. 18.}

The preceding discussion of assets leads to the conclusion that anticipation forms an essential basis for asset accounting. As indicated earlier, asset recognition is not dependent upon legal title, physical characteristics, or money claims. Asset recognition, however, does depend upon the existence of rights of the firm to future economic benefit. Due to the degree of uncertainty characteristic of the economic system, these future economic benefits are not guaranteed or assured, but are primarily prospective benefits. Since they are prospective in nature, it is obvious that anticipation assumes an integral role in the concept of asset recognition. Anticipation is thus not exogenous to accounting theory, but assumes a position of significance as a vital member of the complete theoretical framework.

Measurement, Value, and Valuation of Assets

The Problem of Asset Measurement. Assets, as a part of the subject matter of accounting, must be reduced to an array of dollar amounts in order to provide a common denominator for expressing diverse items homogeneously. The problem of measuring, of determining the amounts at which to record the various asset items, can be regarded as one of the central questions of accounting.\footnote{George O. May, Financial Accounting, A Distillation of Experience (New York: Macmillan Co., 1957), p. 86.} It presents so many questions,
including both those that are theoretical and those that are practical, that much confusion and misunderstanding has developed in the discussion of the problems of valuation, or measurement.

Although accounting has had a long and evolutionary development, until one hundred years ago only one concept of cost and one concept of value existed in accounting literature. Cost at that time was defined in a manner which is similar to a current definition of historical cost, which states that cost is "measured by actual cash payments or their equivalent at the time of outlay." For accounting purposes, the term value was synonymous with cost.

Accounting literature today contains innumerable variations in the meanings of these two terms. Regarding cost concepts, Wyman Fiske indicates the wide variety by listing more than seventy different costs. Although these costs could be subdivided into several broad classifications, "...some of the...items represent distinctly different approaches and cannot be reconciled with others." In comparison to the many cost concepts, relatively few value concepts are currently utilized in accounting.

Cost is the fundamental basis for accounting. In its broadest sense, cost is the "amount of bargained price of goods or services

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received. It is the amount of cash or its equivalent given up for the items or services acquired. Assets that are acquired for something other than cash or are obtained by gift or other means which do not result in the establishment of a bargained price, are measured by either the market price of the consideration given or the market price of the asset acquired, whichever is the more easily and accurately obtained.

In the situation in which no market price exists for either of the items exchanged, an independent appraisal by a qualified party may be the best way to determine the amount at which to record the acquisition.

Meaning of the Term Value. The term value as used in accounting literature has three meanings, none of which are thoroughly exclusive, but instead are related to some extent. One of these definitions is a theoretical or conceptual one, while the others are more nearly based on observable market data. A conceptual definition of value is given by the American Accounting Association, which states that value is "the money-equivalent of service potentials." In effect, this is the present value of the anticipated stream of revenue generated by an asset. Obviously, because of uncertainty of the future, particularly in regard to the long-lived assets, this does not provide a sufficiently concise and practical basis for the measurement of assets, and as a result this method has not come into general use.

A second definition of value as it pertains to accounting is that presented by the American Institute of Certified Public Accountants, and is as follows: "Value as used in accounts signifies the amount at

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which an item is stated, in accordance with the accounting principles related to that item. Using the word *value* in this sense, it may be said that balance-sheet values generally represent cost to the accounting unit, or some modification thereof..."27

This definition of value is not entirely satisfactory since it defines value in terms of the accounting procedure followed in reporting an asset for financial statement purposes. Since valuation procedures are not the same for all accounting classifications of assets, this meaning has several interpretations and therefore is not useful in situations in which a definite meaning is required.

A third definition of value is given by George O. May. He considers value to be "the price that a willing purchaser will be likely to pay to a willing seller."28 The difficulty with this definition lies in the fact that in some cases there may be no willing buyer of an asset. However, in most cases this definition will be satisfactory. A definition similar to this is given by MacNeal, who holds that the "value of anything is its 'power in exchange,' which, measured in money, is its market price."29 The definitions given by May and MacNeal involve the concept of current worth, and thus have the advantage of being in agreement with the connotations generally associated with the term. Value will therefore be defined as the consideration, measured in money terms, an asset would command if it were placed on the market for disposal, assuming an arm's-length transaction.

The preceding definitions indicate the fact that there is no one generally accepted definition of value in accounting. The three concepts of value might be considered to include economic value, in the case of the discounted value of services; cost value, in the case of the accounting value based on accounting principles; and current value, in the case of market price. This dissimilarity of definitions is recognized by the American Institute of Certified Public Accountants when it admits, "the word value should seldom, if ever, be used in accounting statements without a qualifying adjective."30

On the surface these concepts of value seem to be opposing and mutually exclusive. There is, however, a marked similarity inherent in the concepts. At the date of acquisition of an asset, all of these concepts are virtually of equal magnitude in cases in which an arm's-length exchange free of coercion or undue influence has taken place. This will result from the operation of the price system in a free market economy. The operation of the price system will provide a price which is presumably in accord with economic conditions and aspirations at the date of exchange. A price other than the market price would be inequitable in that one party to the exchange would be sustaining an unnecessary loss and the other would be realizing an unearned gain. In addition, exchanges at artificial prices that are not consistent with actual economic sacrifices involved could lead to misappropriation of resources among alternative uses. The price paid normally is a result of a complex of factors and influences and can be accepted without

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question as satisfactory evidence of fair value.\textsuperscript{31} Cost is therefore a measure of value at date of acquisition, but it does not necessarily represent value at any subsequent date.\textsuperscript{32}

It appears that most accountants who adhere to the conventional concept of cost would prefer not to apply the word value to problems of accounting measurement. A. C. Littleton aptly points this out on several occasions. "Accounting records, from the very nature of the case, can not record value," for "value exists in men's minds and is not inherent in any particular set of circumstances."\textsuperscript{33} "A great dis-service to a great many people could emerge if we attempted to produce data in financial statements which for a given enterprise would be substantially subjective projections into an unknown future--these data being in exchange for the progress already achieved in making accounting data dependably objective."\textsuperscript{34}

Classification of Assets

Measurement, or valuation of assets, is concerned with the problem of determining the amount at which to report an asset for financial statement purposes, and as such assumes a great deal of significance in accounting for assets. A second major aspect involved in the reporting

\begin{itemize}
\item \textsuperscript{31}W. A. Paton, "Cost and Value in Accounting," \textit{Journal of Accountancy}, LXXI (March, 1946), 193.
\item \textsuperscript{32}Ibid., p. 193.
\item \textsuperscript{33}A. C. Littleton, "Significance of Invested Cost," \textit{The Accounting Review}, XXVII (1952), 170.
\item \textsuperscript{34}A. C. Littleton, "A Symposium on Appreciation," \textit{The Accounting Review}, V (1930), 6.
\end{itemize}
of financial data regarding asset values is the application of an appropriate classification method.

Classification refers to the grouping of assets according to their nature as a means of giving adequate expression of their nature. Adequacy and clarity of expression are primary requirements of financial reporting, being almost equal in significance to accuracy. Proper classification provides a means by which these requirements can be attained through providing a scheme for the grouping and reporting of items with similar characteristics and thereby facilitates comprehension of the meaning and significance of financial data by the analyst. The investor or stockholder who has a relatively small holding of corporate securities must rely almost entirely on published financial reports. The analysis of financial condition based on improperly classified statements may result in the drawing of inaccurate conclusions from an analysis of the data available.

Classification is an element involved in the scientific approach to problem solving, one of the first steps necessary to bring order out of chaos.\(^{35}\) Classification is particularly important in accounting because of the fact that there is a lack of thoroughly uniform terminology, in addition to the fact that the analyst has no knowledge of the intent of management of the firm in regard to the use to which assets are to be directed. The need for proper classification is summed by Kester as follows: "Only by...careful grouping...of the items can their mutual interrelations...be shown. Not only does the bringing of similar items into groups put them in proper perspective, but the

arrangement of... groups to show their relations to one another makes for a more intelligent interpretation of the balance sheet.  

Functional Classification of Assets. Various titles have been used in describing the classifications of assets, but it is generally agreed that there are two basic classes of assets. One class consists of those assets that are necessary for the physical operation of the business, or are actually used in attaining the primary objectives of the business entity. This group includes those items with which the business is conducted and is usually referred to as capital, or fixed, assets and is made up of land, plant, equipment, and similar items, none of which are held for sale. These items, exclusive of land, are ultimately consumed in the operation of the business through conversion to product as a result of depreciation and obsolescence, with costs of these items being recovered through revenue generated.

A second major category or class of assets consists of those items that are required for the facilitating of operations. This class includes items that are usually referred to as current assets, and is made up of cash, receivables, and inventories, all of which are items that result from the activity of the business and will be converted into cash, or save the use of cash, during the normal operations of the firm.

This second basic classification of assets has developed largely as a response to credit necessities. When financial statements were first prepared, their primary purpose was to maintain an historical


record as a means of establishing business entity sources and resources, and thus a natural classification of assets was practical and adequate. This natural classification was based on the physical characteristics of the assets, and included such items as cash, grain, and livestock. Early accounting was thus characterized by this natural grouping. When regular financial periods were adopted by business entities, outside creditors demanded access to the periodic reports, and began relying on the data presented as an indication of solvency and a measure of credit risk. Creditors were more interested in the current assets, and thus demanded that a distinction be made between current and non-current assets.

One of the earliest writers to distinguish between these two classes of assets was Adam Smith, who wrote in 1776. In regard to current assets, he explained:

"Capital may be employed in raising, manufacturing, or purchasing goods, and selling them again with a profit. The capital employed in this manner yields no revenue or profit to its employer, while it either remains in his possession, or continues in the same shape. The goods of the merchant yield him no revenue or profit till he sells them for money, and the money yields him as little till it is again exchanged for goods. His capital is continually going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit. Such capitals, therefore, may very properly be called circulating capitals." 38

Smith thus referred to what is presently termed current assets as circulating capital. This capital is circulating as a result of the fact that the assets which make up this classification are constantly being disposed of and replaced. These assets embody a round of

conversions, from cash to cash, through intermediate stages of merchandise and receivables. This classification of assets has significance for financial analysts. It is the most important classification in the balance sheet, since it largely determines the immediate solvency of a business firm.39

Smith discussed the concept of fixed assets as well as that of current assets. He discussed fixed capital as follows:

"It may be employed in the improvement of land, in the purchase of useful machines and instruments of trade, or in suchlike things as yield a revenue or profit without changing masters, or circulating any further. Such capitals, therefore, may very properly be called fixed capitals. Different occupations require very different proportions between the fixed and circulating capitals employed in them."40

For accounting purposes, the accepted basis of asset classification is the distinction between current and fixed, or non-current, items. This basis for separation has financial and administrative significance and as a result accountants consider it more generally useful than any other alternatives.41 The current items are the relatively liquid, short-lived resources that are constantly in a process of conversion from one current item to another, and thus represent an active, revolving fund. The fixed assets are relatively illiquid, long-lived resources not readily convertible into cash during the normal operations of a business enterprise or not subject to periodic purchase and sale.


The practice of distinguishing between the concepts of fixed and current assets in accounting originated late in the nineteenth or early in the twentieth century.\(^2\) The first American business enterprise to divide its assets into appropriate subdivisions was the Pennsylvania Railroad Company in 1891.\(^3\) The change to the classification of assets for balance sheet purposes was gradual, with the practice fairly well established by the 1920's, although some well-known firms did not make the change until the 1930's.\(^4\)

In addition to the two broad classifications of assets discussed, a third classification, investments, is frequently used. Investments may consist of real or personal property which is not intended to be converted into cash or otherwise disposed of as a part of normal operations of the business. The principal distinction between the investments classification and other classifications is the intent of management regarding the use to which the various assets are to be put. If the asset is not to be used in normal operations, or is ancillary to the primary purposes of firm operation, and is held for its own income-producing function, it can be said to belong to the investment category.

**Monetary or Non-monetary Classification of Assets.** In addition to the preceding functional classification of assets, other methods of classification have been recommended. One of the other methods which has been frequently advocated is a system of classification based on a


\(^4\)Ibid., p. 178.
division of assets between those of a monetary nature and those of a non-monetary nature. Assets of a monetary nature consist of cash and claims to cash, the claims representing rights to receive reasonably definite amounts of cash within reasonably definite time limits.\(^{45}\) Assets of a non-monetary nature include all other property of the firm, and consist of such items as inventories and plant and equipment.

There are several reasons why this method of classification is advocated for financial statement purposes. It is argued by proponents that a firm's cash flow is the most significant determinant of solvency. The ideal information for a financial analyst or prospective investor, if this were true, would be a schedule indicating future cash receipts and disbursements.\(^ {46}\) This schedule would provide information on the availability of cash to the firm at future dates. If one assumes that cash flow more than any other variable determines the ability of the firm to pay creditors and returns to investors in the future, as proponents of this method of classification do, monetary assets are generally more closely related to the interests of analysts than non-monetary assets, for the monetary items have a more direct effect on the cash position of the firm because their conversion is directly into cash.\(^ {47}\) Future cash movement associated with the monetary assets can be more readily determined than the cash movements resulting from the non-monetary assets, and therefore it is contended that a more accurate indication of anticipated cash flow can be obtained from the accounts.

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Due to the smaller degree of uncertainty which exists in regard to monetary assets from the standpoint of projecting cash flow and the significance of cash flow, it is argued that an exclusive classification for these items on the balance sheet would provide a more reliable indication of cash availability than does the current asset classification, which consists of a mixture of monetary items and non-monetary items.

The monetary or non-monetary division of assets overcomes another alleged limitation of the current-plant grouping. It is argued that the latter disregards the essential similarity that exists between inventories of merchandise and plant and equipment, or other durable assets. The various items that make up the non-monetary assets of a firm are essentially similar since they all represent future costs to be charged against future revenue. Thus, it is concluded, from an accounting standpoint a monetary or non-monetary distinction would be more logically correct than a classification which takes into consideration the nature of use or function of an asset.

Another dissimilarity between monetary and non-monetary assets results from the fact that changes in the value of the monetary unit affect these groups differently. The significance of monetary items to the analyst depends upon the value of the monetary unit, while the significance of non-monetary assets is more dependent upon the amount of future service potential available to the firm through utilization of the asset.\textsuperscript{48} This distinction between assets is important in a dynamic economy in which the value of the monetary unit of measurement

\textsuperscript{48}\textit{Ibid.}, p. 58.
fluctuates. The fact that monetary assets will become less valuable in real terms as the level of prices increases, while non-monetary assets will generally maintain their value is considered by some to be a significant distinction for analysts.

Evaluation of Classification Procedures. The advocates of the monetary or non-monetary system of classification overlook the fact that function more than anything else dominates the significance of assets. Only if a firm functions properly will it be successful, and in order to function properly it must possess various types of assets in the proper proportions. The main purpose of acquiring and keeping assets is for the utility they possess for the owner, and this usefulness is the element which gives the asset value. The functional classification of assets between current and plant gives recognition to the basic significance of assets.

Plant and equipment assets perform a repetitive function over a relatively long period of time, while the current assets represent the relatively short-lived resources upon which the specialized services of plant and equipment assets are performed. The current assets are therefore necessary as a means of realizing the service potential embodied in the plant assets and through this process absorb utility and thereby increase in value and acceptability. Thus two types of assets, indicating as they do the basic distinction that exists between the two functional classifications, working in conjunction with each other are essential for business operation and success. Current assets, or circulating capital, thus facilitate the transference or absorption of service potential as a means of utilizing plant and equipment assets.
It is clear that both current and plant assets are required for business operation. The two classifications of assets must be used in conjunction as a means of utilizing the service potential embodied in each. Since assets utilized by a firm can be divided into two major categories and since these categories are mutually complementary, it seems advisable for accounting reports to give recognition to the two basic groups—current and plant.

The alleged limitations of the functional classification procedure can be refuted. If one assumes that cash flow represents the most satisfactory information for an analyst, it is not necessary to classify assets according to monetary or non-monetary in order to get this information, since it can easily be obtained from an analysis of balance sheet accounts even though they are functionally classified. Monetary or non-monetary classification procedures do not eliminate the effect of price level changes any more than do functional classification procedures. Hence much of the significance of the argument advanced by monetary or non-monetary classification proponents that this procedure results in the grouping together of items which react similarly to changes in the price level is lost.

A significant disadvantage inherent in a monetary or non-monetary system of classification is that the intent of management of the firm is not given consideration in financial presentations. The limitations placed on management as to the use to which certain monetary assets are to be diverted have significance for analysts and investors. If a bond indenture requires specific periodic contributions into a fund which is restricted in its use to bond retirement, management's freedom of choice
is restricted in regard to the use of monetary assets included in the fund, but a strict monetary or non-monetary system of classification will not disclose this fact.

Since economists recognize two basic categories of capital goods, since the intention of management is crucial to future performance and activity of a business entity, and since the concept of current assets is accepted by analysts as an indication of solvency, it appears that these should be the governing determinants of asset classification procedures. Functional classification does meet these demands of adequate financial reporting, and therefore this method seems more appropriate.

Summary

Assets are economic in nature. They are economic resources which represent the embodiment of future service potential, which, rather than physical existence, imparts asset status to an item. Regardless of accounting classification, assets are fundamentally identical, since they represent rights of a specific entity to economic benefit.

One of the central problems involved with asset recognition is the measurement of future service potential embodied in the asset. Asset items must be reduced to dollar amounts in order to provide a means of giving expression to heterogeneous tangible and intangible items. The essence of the problem is to determine if cost or value should serve as a basis for asset measurement, and if value is more applicable, which concept of value is most appropriate.

Another significant area, in addition to measurement, with which the reporting of financial data pertaining to assets is concerned is the appropriate classification of assets. Classification refers to the
method of grouping assets according to the characteristics of the items involved. Functional classification has been generally accepted as a means of giving adequate expression to the characteristics of various assets, having developed as a response to credit necessities and also as a means of giving expression to the concepts of circulating and fixed capital. The distinction between current and fixed assets is one based on the function performed by the asset. It is not related to the economic nature of assets, since, as indicated earlier, the basic nature of all assets—service potential—is similar.
CHAPTER III

THE NATURE AND DEFINITION OF LIABILITIES

Introduction

The concept of liabilities has recently been the subject of a considerable amount of discussion and debate. The discussion that has occurred has been concerned with the proper accounting-report presentation of such liability items as deferred income taxes, employer-financed pension plans, leasehold obligations, and similar items, the liability status and amount of which are subject to some controversy. In the case of deferred taxes, for example, it cannot be agreed if a liability actually exists, and in cases in which it is assumed to exist, some question arises in regard to the acceptable manner of disclosure of the fact.

There are inherent weaknesses in present definitions of the term liability, for if various definitions are compared, divergent meanings emerge, indicating the fact that the concept is neither simple nor well understood.¹ In view of the diversity of meanings associated with the term, a more precise definition is required due to the growth of situations in which substantial future obligations assume greater significance in the analysis of financial position of the firm.

The Concept of Liabilities Under the Proprietary and Entity Theories

One's concept of liabilities will be determined, or otherwise influenced to some extent, by the particular school of thought to which he subscribes concerning the basis for the framework of accounting theory as it applies to the firm. There are two significant schools of thought which serve as an integrating framework for accounting theory, both of which have gained recognition and have been applied in accounting practice. The oldest of these theories, known as the proprietary theory, dating from the beginning of the nineteenth century, is the first structure that is now recognized as a theoretical foundation for accounting and is thus the original basis for accounting methodology.²

It is agreed that nothing worthy of the name theory existed in accounting prior to 1800. Peragello, for example, writes: "No theory of accounting was devised...down to the opening of the nineteenth century. Suggestions of theory appear...but not to the extent necessary to place accountancy on a systematic basis.... There grew up instead a great mass of rules applicable to particular cases."³ Littleton presents facts consistent with this when he states that "...discussions...which went beyond the customary explanations of entries...were, even in the nineteenth century, the exception rather than the rule. There was a disinclination on the part of writers to put 'theory' in their books.... Yet there were a few who began to break away from the pattern...."⁴


This break from the old pattern of presenting bookkeeping technique resulted in the development of a body of accounting theory which is now known as the proprietary theory of accounting.

The second of these fundamental theories is called the entity theory. It is of more recent origin, not having achieved its full stature as a description of the nature of double-entry bookkeeping until after 1900, with many of the refinements of the early ideas being added after the turn of the century. The entity theory thus developed and achieved acceptance during the 1900's and, with its full maturity, became the more useful concept of the two.

The Proprietary Theory. The proprietary concept conceives of the firm, either proprietorship, partnership, or corporation, as an association of entrepreneurs. The proprietor of the firm is thus the most significant figure of the basic theoretical framework, and his account is explained by assuming that the accounting process represents an accounting by the proprietor for his own property. Accounting records and statements are prepared and presented from the standpoint of the proprietor of the business firm, with emphasis directed at the measurement and analysis of changes in his capital, or net worth. Under this concept of accounting, assets are property of the entrepreneur, and liabilities are his debts.

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5 Ibid., p. 200.
For the proprietary theorist, the proprietor is the individual for whom financial reports are prepared, with the concepts of assets, liabilities, and net worth being personal in nature, since the proprietor is viewed as the central figure around whom the accounting process revolves. The proprietary view can be given expression as follows: "...the right side of the balance sheet is...composed of claims against...the left side. 'Is it not then true...that the right side is entirely composed of liabilities?' The answer to this is that the rights of others, or the liabilities, differ materially from the rights of the proprietor."^9

The Entity Theory. Due to the general dissatisfaction resulting from the inappropriateness of the proprietary theory as a basis for the accounting framework, the entity theory developed. The essence of the entity theory is given expression as follows: "...the business undertaking is generally conceived of as an institution in its own right, separate and distinct from the parties who furnish the funds."^10 The accounts of the firm and the statements that are rendered thus become those of the entity rather than those of the proprietor, partners, or stockholders. Under the entity concept of accounting, the proprietor regards himself as an individual separate from the business, even though he may be very closely associated with enterprise operations. The assets and the debts involved in the accounting records are those of the entity rather than those of the proprietor or partners. In this situation, the entity accounts for, or reports stewardship, of investments entrusted to it. The accounting entity convention thus attributes

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personality to the entity itself rather than to the proprietor, as is the case in the proprietary theory.

Accounting under the entity view is concerned with reporting transactions between the entity and all outside parties, with all property recorded considered to be contributed to the entity by individuals from outside its boundaries. The distinction between the entity and proprietary viewpoints thus provides different concepts of capital. As indicated earlier, capital under the proprietary theory represents the proprietor's investment in the firm and is therefore measured as the difference between total assets and total debts of the firm. Under the entity theory, capital is represented by the total property of the firm, regardless of the source from which it is derived, and hence includes contributions in the form of loans from creditors as well as investments from proprietary sources.

**Proprietary and Entity Views of Liabilities.** Similar concepts of liabilities will not be visualized by proprietary and entity theorists, due to the differences in viewpoints that exist. The proprietary theorist will take a personal view of liabilities, thinking of them in terms of his personal obligations or debts which take priority over amounts he has invested in the firm. This embodies a legal view, which holds that some claims rank higher than others in regard to order of liquidation.

The entity theorists will make no significant distinction between common or preferred shareholders, bondholders, or holders of other obligations\(^\text{11}\) since all represent sources of capital to the entity and

\(^{11}\text{R. T. Sprouse, "The Significance of the Concept of the Corporation in Accounting Analysis," The Accounting Review, XXXII (1957), 370.}\)
therefore are equities or claims against the assets of the firm. In this situation the firm is considered an institution in its own right, possessing the right to act as a competent party to contract with capital-supplying parties as a means of obtaining the required capital,\(^\text{12}\) with the firm agreeing to be responsible to the capital suppliers in accordance with the terms of the contracts.

The supplying of capital by the parties with whom the firm contracts results in their obtaining a claim, or legal right, in exchange for their financial commitment. Paton and Littleton express the view that those "who contributed capital have a claim against the assets according to their contracts...\(^\text{13}\) while Li's view holds that "...the imparting of capital results in a claim...against the corporation according to contracts."\(^\text{14}\) This seems to be an insignificant difference, since presumably Paton and Littleton are looking at the economic realities of the firm. In addition, a "claim against assets" is appropriate in the case of unincorporated entities where no legal entity exists but where the concept of the accounting entity is applicable. The pertinent point of the discussion is the fact that all capital suppliers have claims against total enterprise value based on the terms of their contracts, indicating there is no essential difference between any sources of capital except as the specific legal claims of suppliers differ.

\[^{12}\text{Li, Op. Cit., p. 259.}\]
\[^{13}\text{Paton and Littleton, Op. Cit., p. 8.}\]
\[^{14}\text{Li, Op. Cit., p. 259.}\]
The Accounting Concept of Liabilities

As indicated, all capital contributed to an accounting entity is similar, regardless of the source from which it is derived, and all represents claims against the assets of the entity, without respect to the legal status or classification of the claims. Yet, accounting must function within the legal framework of the economic system, and as a result appropriate recognition must be given to the legal implications in accordance with the terms of agreements made for the purpose of supplying capital. As a consequence of this fact, accounting reports and generally accepted practices are influenced to a significant extent by the applicable legal concepts.\(^\text{15}\) It is necessary, therefore, to consider the status of the law as it pertains to accounting procedures in the evaluation and discussion of those procedures. This is especially appropriate in the case of liabilities, since they are dependent to a great extent on legal implications. Therefore, the legal view must be given consideration in arriving at an acceptable and adequate definition of the term liability for accounting purposes.

Early accounting writers were well aware of the importance of legal technicalities as they affected accounting, and as a result early definitions of the term were legalistic in nature. These definitions were generally based strictly on the debtor-creditor relationship as established by law. Bryant and Stratton, writing in 1869 for example, define liabilities as "...any debt owed by the firm."\(^\text{16}\) Debt is used exclusively in the publication to refer to legal obligations to third parties.


Current definitions, although significantly influenced by the legal concept of liabilities as debts, are broader in nature and thus not restricted to only the legal implications. The definition given by the American Institute of Certified Public Accountants brings out this fact. It defines the term liability as follows:

"Something represented by a credit balance that is or would be properly carried forward upon a closing of books of account according to the rules or principles of accounting, provided such credit balance is not in effect a negative balance applicable to an asset. Thus the word is used broadly to comprise not only items which constitute liabilities in the popular sense of debts or obligations (including provision for those that are unascertained), but also credit balances to be accounted for which do not involve the debtor-creditor relation. For example, capital stock or related or similar elements of proprietorship are balance sheet liabilities in that they represent balances to be accounted for, though these are not liabilities in the ordinary sense of debts owed to legal creditors."

This definition has serious deficiencies. First, it is inadequate because it defines liability in terms of an accounting procedure. The nature of the item itself should be the controlling factor in determining if a liability exists, rather than its existence being dependent upon a method of keeping records. Furthermore, this definition has no meaning for one who is not familiar with record-keeping techniques, since he cannot comprehend the meaning of a "credit balance that is or would be properly carried forward upon a closing of the books of account according to the rules or principles of accounting." A satisfactory definition must answer the question: What kinds of items are properly carried forward upon a closing of books? The definition quoted does not answer this question in a manner that is sufficiently definitive to permit accountants to agree on all specific items.

Finally, some confusion may result from the fact that "capital stock and related or similar elements of proprietorship are balance sheet liabilities," since this is not consistent with the popular notion and current usage which hold liabilities to be synonymous with debts and equities to include both debt and proprietorship items. It is true that from the standpoint of the firm under the entity theory there is no essential distinction between proprietary and liability items, since both represent claims, or equities, against the assets. However, from a statement analysis standpoint, there is a significant difference between the two, since liabilities are usually contractual and terminable, calling for payment or retirement on definite dates.\textsuperscript{18} Paton further states that the combining of equities and liabilities is unfortunate, that in order to avoid confusion "...propriorship and liabilities should be thought of as two important subclasses under the fundamental category, equities."\textsuperscript{19}

The Committee on Concepts and Standards of the American Accounting Association defines liabilities as follows: "The interests or equities of creditors (liabilities) are claims against the entity arising from past activities or events which, in the usual case, require for their satisfaction the expenditure of corporate resources."\textsuperscript{20} This definition does not give a rigorous definition of the term, but it does provide one which is basically legalistic in nature. It associates liabilities with

\begin{itemize}
\item\textsuperscript{18} W. A. Paton, \textit{Accounting} (New York: The Macmillan Co., 1926), p. 32.
\item\textsuperscript{19} Ibid., p. 33.
\item\textsuperscript{20} \textit{Accounting and Reporting Standards for Corporate Financial Statements}, Op. Cit., p. 7.
\end{itemize}
creditors, and the determination of the debtor-creditor relationship is a matter of legal interpretation.

Kohler defines liability as:

"An amount owing by one person (a debtor) to another (a creditor), payable in money or in goods or services: the consequence of an asset or service received or a loss incurred; particularly, any debt (a) due or past due (current liability), (b) due at a specified time in the future (e.g., funded debt, accrued liability), or (c) due only on failure to perform a future act (deferred income, contingent liability)."\(^{21}\)

The legal attitude toward the term liability can be summarized as "amenability, or responsibility to law," while "in a restricted sense liability is that which one is under obligation to pay to another, that for which one is responsible or liable; that which one is under obligation to pay, or for which one is liable; one's pecuniary obligations, or debts collectively."\(^{22}\) The term in its unrestricted sense is broader than the word debt,\(^{23}\) while in its restricted sense is similar in meaning to debt, which is defined as "...an obligation to pay a fixed sum of money on a definite determinable date."\(^{24}\)

A review and comparison of the definitions quoted reveal the fact that as the term is currently used in an accounting frame of reference, it is basically legal in nature.

Even though it can be determined that debts will qualify as liabilities in financial statements, another question remains unanswered. This


question is concerned with the problem of recognizing a liability for accounting purposes when a debt, as a legal concept, actually does not exist. Accounting is replete with examples of items of this type which may or may not be accounting liabilities and at the same time may or may not be debts. Examples include such diverse items as deferred income taxes, leasehold obligations, premium or discount arising from the issuance of long-term debt, and others. The definitions quoted above accept debts as accounting liabilities, but do not indicate where the limits should be established for items that go beyond, or are outside the parameters, of the legal concept of debt. An adequate definition of the term liability should establish these boundaries. Before the required limits of liability recognition can be established, it is necessary to analyze the present concept of liabilities in greater detail to determine if it is adequate and at the same time determine if any restatement of the basic concept is required.

**Characteristics of an Accounting Liability.** As indicated previously, liabilities are currently considered to be primarily legal in nature, and consequently their existence is more dependent upon legal considerations than on physical or economic considerations. There are three essential characteristics a liability as currently defined must possess. They are as follows:

1. A liability involves a future outlay.
2. A liability is the result of a past transaction.
3. A liability must have a known or reasonably determinable maturity date and maturity value.25

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The future outlay required can take the form of either cash or cash equivalent. Liabilities are generally satisfied by the payment of cash, but situations in which an outlay of other assets or the performance of services are sufficient are also evident. Claims against the business entity, representing liabilities, may consist of performance obligations, as in the case of product guarantees or collections received in advance of product delivery or service performance. Settlement of these obligations will require the transfer of assets other than cash, but yet they do come within the generally accepted liability concept.

Liabilities result from past transactions, which is to say that they arise as a consequence of financial events which affect the accounts of the firm and thereby require recognition in the accounts. These transactions are exchanges which occur between the entity and outside parties. Liabilities are generally recognized only in situations in which transactions occur under terms of executory contracts. Wholly uncompleted contracts generally do not justify liability recognition. They represent future transactions and thereby may require future liability recognition, but until contracts become executory they are expectancies rather than fact. Likewise, executed contracts require no liability recognition since no obligations remain to be fulfilled under the terms of the agreement.

The final characteristic of liabilities refers to the fact that they must possess reasonably determinable maturity dates and maturity values. Paton states that liabilities "...call for payment or retirement on definite dates," but there are instances in which definite maturity

dates do not exist but yet liabilities are recognized. As a result of this fact it seems more appropriate to consider a determinable rather than definite maturity date as one of the essential characteristics. Stock brokers' loans covering debts resulting from margin purchases are recognized as liabilities and do exist as debts, but no definite maturity date is stated. These obligations, however, do have a determinable maturity date since they are dependent upon the development of a specific event. Likewise, the maturity value of a liability need not be definitively determinable, but must be determinable with a reasonable or acceptable degree of accuracy. The Committee on Accounting Procedure of the American Institute of Certified Public Accountants established this fact in a specific situation as it pertains to estimated liabilities existing under employer-sponsored pension plans for employees when it expressed the following idea:

"The total cost of the pension that will be paid ultimately to the present participants in a plan cannot be determined precisely in advance, but, by the use of actuarial techniques, reasonably accurate estimates can be made. There are other business costs for which it is necessary to make periodic provisions in the accounts based upon assumptions and estimates. The Committee believes that the uncertainties related to the determination of pension costs are not so pronounced as to preclude similar treatment."27

Evaluation of the Accounting Concept of Liabilities

On the basis of the preceding analysis and discussion of the concept of liabilities as it is presently conceived, the question of adequacy of this concept can be considered. It must be determined if an accounting oriented definition would be more satisfactory for accounting purposes than the current legalistically oriented definition.

A Going-Concern Concept of Liabilities. Traditional accounting practice accepts the legal concept of liabilities and recognizes only those items that reflect debts requiring payment to creditors of the firm. In the case of ordinary trade payables and payables arising from borrowings of cash or acquisition of assets, this concept of liabilities presents no difficulties in application. However, as one moves down the entire spectrum of items that will require a future disbursement of funds by the firm, the accepted definition of liabilities becomes less applicable. The line of demarcation between items that do or do not require liability recognition becomes more and more difficult to establish, since there is a continuous gradation from definite to indefinite as one moves outward toward the outer limits of the liability concept. 28

At the outer extreme problems in regard to such usual and recurring items as normal commitments for maintenance of plant and equipment, purchase of raw material, payment of payrolls, distribution of earnings, and items of a similar nature arise. These items that occur at the outer extremes do not represent obligations which are legalistic in nature, but they do represent items that will require future cash disbursements under the going concern concept of accounting.

The going concern concept states that the accounting entity under consideration will have an indefinite existence, which means that the business will not be liquidated "...within a span of time necessary to carry out present contractual commitments or to use up assets according to the plans and expectations presently held." 29 It is assumed that the


entity will remain in operation indefinitely unless evidence to the contrary exists. Therefore under this concept assets are expected to have future usefulness for the purposes for which they were acquired and liabilities are expected to be paid in full at maturity.

Future cash expenditures which do not meet the requirements of the legal conception of liabilities do, from the going concern standpoint, however, represent liabilities, or future asset outlays, that will be required if the firm is to continue operations. Thus under the going concern concept all future cash expenditures do take on some aspects of liabilities, since they do represent required future cash disbursements or expenditures necessary for the maintenance of enterprise operations. Failure to make any of these normally-recurring future expenditures would result in the cessation of enterprise activity just as surely as would failure to liquidate legal liabilities of the firm. Hence, under the going concern concept, these expenditures are as necessary as those which are required for the satisfaction of creditors' claims.

An Economic Concept of Liabilities. As pointed out in the preceding chapter, assets are economic in nature due to the fact that they represent the embodiment of future service potential to the firm possessing the asset. Assets are thus considered to be economic in nature, while liabilities are considered to be legalistic in nature. On the surface, in order for accounting theory to be internally consistent, it may seem that both assets and liabilities should be considered as having similar natures for accounting purposes. Liabilities, if defined in terms of their economic nature, would include all foreseeable cash outlays or commitments of the firm, regardless of legal existence or significance of these outlays. This would require liability recognition whenever
management anticipated that a future cash outlay would be required in order to attract factors of production, or economic resources, to the firm.

An economic concept of liabilities is thus similar to a going concern concept of liabilities. The two are similar in that both are concerned with the recognition of future outlays of assets, generally cash, as liabilities prior to the time a debt actually exists.

J. E. Walter states the "...commitments made by corporation executives range from those which are definite, written, and irrevocable to those which are indefinite, oral, and not legally binding..."\textsuperscript{30} and on this basis contends that narrow legalistic interpretations of liabilities are insufficient as a basis for balance sheet liability recognition.\textsuperscript{31} It is therefore recommended by him that the concept of liabilities be broadened to include items which are not liabilities in the legal sense of the term,\textsuperscript{32} but which are, in effect, similar to those items that can be considered liabilities from the going concern and economic standpoints.

\textit{Evaluation of Going-Concern and Economic Concepts of Liabilities.} In evaluating the desirability of broadening the liability concept to include commitments not currently recognized, but which are liabilities from the economic and going concern standpoints, the affects of this procedure on a number of areas must be considered. The areas on which this change would have significant effects include:

(1) Objectivity.

\textsuperscript{30}\textit{Op. Cit.}, p. 100.
\textsuperscript{31}\textit{Tbid.}, p. 100.
\textsuperscript{32}\textit{Tbid.}, p. 102.
(2) Asset recognition.

(3) Balance sheet utility.

Effect on accounting objectivity. Objectivity as it pertains to accounting is defined by Kohler as follows:

"Having a meaning or application apart from the investigator, the peculiarities of his experience, or of the environment, and substantiated or capable of being substantiated by the findings of independent investigators.... By comparison one fact may be said to be more objective than another because it is observable by more persons, experimentally repeatable, more promptly recorded after observation, recorded by more competent or more disinterested observers, more precisely measurable, more coherent with other generally accepted facts, or observed under less confusing circumstances."33

Objectivity was stressed in accounting in the early stages of professional auditing in England, when emphasis was placed upon objective evidence to support recorded transactions.34 Recorded transactions can be accepted as valid only if they are based on objective, verifiable evidence consisting of authentic business documents. The dependability of accounting data is thus dependent upon the extent to which these data are based on unbiased fact and experience, as opposed to personal belief.

Paton and Littleton stress the significance of the concept of objectivity as follows: "This emphasis upon objective evidence has never been weakened; in fact it has become stronger as complex business activities have increased.... Verifiable, objective evidence has therefore become an important element in accounting and a necessary adjunct to a proper execution of the accounting function...."35

Generally the initial appearance of an item in the accounts of the firm is the result of an exchange transaction the terms of which are established through bargaining and supported by source documents. Transactions resulting from this process are not ambiguous, and in addition, they provide data which will adequately serve as a basis for the measurement of the sacrifices made. Measurement of assets and liabilities is a requisite to accounting recognition, and objective evidence is required before assets and liabilities can be adequately and accurately measured. Therefore, the existence of objective data is a requirement for asset and liability recognition for accounting purposes. Moonitz regards it as imperative that recognition of changes in these accounts be postponed until such a time that the changes can be measured in objective terms.

The obvious emphasis on objectively determined facts may lead one to draw the erroneous conclusion that there is no element of judgment, error, or estimation involved in the accounting process. Accounting, however, can not be as thoroughly scientific as the stress on objectivity may tend to indicate. Judgment areas are significant in accounting, and poor or inappropriate judgment by accountants may lead to significant, although unintentional, misrepresentations. The factual material with which accounting is concerned can not always be measured with complete accuracy, since the future in the business world does not lend itself to absolute prediction, and therefore results are not always verifiable.

Acquisitions of assets and liabilities can generally be rigorously measured on the basis of objective evidence accumulated to support the

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transactions; but internal accounting entries reflecting transfer and disposition of the items once they have been recorded are not subject to the moment of truth customarily reflected in the market place. Hence entries recording internal transfers are based on evidence which is something less than absolutely objective, but which may nevertheless be dependable. Examples of items which fit into this category include such estimates as depreciation of fixed assets, valuation of receivables and inventories, and estimation of liabilities for guarantees, taxes, and other obligations which will require liquidation in the future. Depreciation, for example, can not be considered completely verifiable until ultimate disposal of the asset, but the estimation of depreciation by individuals who are competent to make the estimate through familiarity with the circumstances surrounding fixed asset service potentials would result in evidence which is sufficiently objective and verifiable to make it sufficiently dependable.

Subsequent discovery of objectively determined facts may result in the cancellation of objectively determined facts of a prior period, as in the case of early obsolescence of fixed assets due to rapid technological advancement which was not anticipated when depreciation schedules were first established. Nevertheless, the original objective facts present a better basis for financial analysis than subjective opinion, or unobjective supposition.

Edwards and Bell summarize the matter of objectivity and the significance of the concept as follows:

"There can be no doubt that the main purpose of objectivity in accounting is to prevent fraud and deceit and to facilitate the independent audit of accounts by avoiding subjective data. But clearly objectivity is here a relative proposition. The accountant who follows traditional practices makes countless subjective judgments:
in deciding on the depreciation problem of fixed assets, in making an estimate for bad debts allowance, in deciding upon pension liabilities. The degree of objectivity in accounting is never absolute.\textsuperscript{38}

From the preceding analysis of the concept of objectivity, it can be seen that this concept provides one of the principal means available for the omission from financial presentations to analysts of biased opinions, unscientific measurements, and misrepresentations and deceit, any of which may be the result of either clandestine or overt action by those who prepare financial statements. It thus becomes one of the first lines of defense against the reporting of opinion rather than fact, one of the important elements of protection for statement analysts who have no knowledge of how data reported were obtained, and who therefore must rely on the accountant in his role as an unbiased and objective reporter.

On the basis of the analysis of the concept of objectivity, the following question can now be answered: Are the economic and going concern conceptions of liabilities sufficiently objective to serve as criteria for balance sheet recognition of liabilities within the generally accepted theoretical framework of accounting? This question requires a negative reply, since cash or other asset outlays which will result from future transactions are not measurable with a sufficient degree of accuracy to be acceptable. These liabilities may be objective in one sense, because they are arrived at through the exercise of one's best judgment and be based on opinion which is seemingly free of bias. But yet they are not objective to the extent that the same or reasonably the same amounts would be arrived at by independent observers not directly associated with the firm for which the projections are made.

Projections in regard to necessary outlays for the factors of production that will be required are primarily dependent upon the level of economic activity of the future periods for which projections are being made. Economic forecasters are not always able to agree among themselves on the precise level of economic activity of future periods in a dynamic economy. The position of one who must accurately forecast for the individual firm is even more untenable, since the reaction and adjustment of the firm to changes occurring within an economy which is characterized by some degree of competition are even more difficult to forecast. The process followed in arriving at projections of anticipated liabilities may be sufficiently objective and verifiable to present amounts which seemingly reflect accuracy, but which upon closer examination reflect spurious accuracy. The basic data, however, will result from a process of estimation and assumption, and these data will not be verifiable by a disinterested observer. As a result, projections regarding asset outlays arising from anticipated liabilities are not sufficiently objective and verifiable to warrant incorporation into the accounts of the firm. An economic or going concern concept of liabilities is therefore not acceptable from the standpoint of objectivity.

Effect on asset recognition. Another aspect of accounting which is vitally affected by premature liability recognition is asset recognition. On the basis of the double-entry system of accounting, accounts are integrated to the extent that an entry to one account must be exactly offset by an entry to another account. This method of keeping and recording accounting data is founded logically on the nature of the facts with which accounting deals, facts which pertain to assets and
equities in the assets. These two classes of items must always be equal since one is concerned with the objective accounting values involved and recorded as items of property, while the other is concerned with the claims against the property. As a result of the interdependence that thus exists between asset and equity items, assuming no nominal accounts are involved as would be the case in a situation in which one is considering liabilities which will arise in the future, any liability recognition must be offset by an equal asset recognition.

Since liability recognition also requires asset recognition, recognition of liabilities that are such only from the economic or going concern standpoints rather than from the legal standpoint, poses a serious problem concerning recognition of appropriate assets. If no asset exists under these circumstances, no liability can exist either, and hence no liability can legitimately be recognized.

As was pointed out in the discussion of the nature and concept of assets, asset recognition can only be justified when the firm possesses a legal right to a discernible future benefit. In the case of anticipated liabilities, no redressable legal right exists against the services of any property, and hence no asset can be recognized. No legal rights exist against any suppliers of factors of production until an executory contract exists between the owners of factors and the firm which represents the purchaser of the factors. The owner of a factor is under no obligation to supply the factor until he has agreed to supply it to a purchaser for a consideration. The purchaser likewise has no legal right in the

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factor until the owner has accepted consideration from the purchaser and has agreed to supply the factor in exchange.

Control over future streams of services is a requirement for asset recognition. No control over future services exists, however, in the case of items which would require recognition when liabilities under the going concern concept are recorded. The Committee on Concepts and Standards of the American Accounting Association states that "...the initial appearance of an asset...is the result of an exchange transaction in which terms and amounts established by negotiation are supported by documents and market data. This tends to make the transaction unambiguous and objective, and the requirements for measurement are met clearly and directly." 40 It follows, therefore, that no liability can be recognized until an asset exists and is measurable, and this will not be the case in situations in which liabilities that are such only from the going concern or economic standpoints are recognized. Liability recognition must therefore be postponed until a legal obligation exists.

**Effect on balance sheet utility.** The third item that would be significantly affected by a broadening of the liability concept is the balance sheet. Various definitions of the term balance sheet have been advanced, but general agreement regarding the definition exists. The *Accountants' Handbook* defines the balance sheet as a financial statement which "...reflects the assets or resources of the business enterprise and the claims or rights attaching to these same assets." 41 Dewing

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presents a similar definition when he states the balance sheet is a "...statement of the money values—expressed, for the most part, in terms of costs—standing against the various economic values of the enterprise contrasted with the various claims against the enterprise, also expressed in terms of money." Paton's definition agrees with the preceding when he states that the balance sheet is "...any complete statement of the assets and equities pertaining to a particular enterprise." These definitions point out the fact that the balance sheet is generally considered to be a financial statement which presents the assets of the firm and the claims against the assets of the firm.

This concept of the balance sheet provides no basis for the recognition of liabilities that do not legally exist. Liabilities that it is anticipated will develop from future transactions do not represent present claims against the firm and hence are not compatible with the current balance sheet concept. The inclusion of anticipated liabilities would result in the elimination of a true balance sheet and its being replaced by a budget or financial plan of future operations. Budget data are useful in financial analysis as a means of providing supplementary information, but they cannot replace the balance sheet completely, since actual assets and equities are more significant than anticipated ones. Actual assets and equities establish the boundaries within which the firm must operate, and therefore exert more influence on operations than do those that are only anticipated. From the standpoint of balance sheet

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"Accounting, Op. Cit., p. 34."
usefulness, the recognition of liabilities prior to their legal existence is thus unacceptable.

Definition of the Term Liability

Since the legal concept of liabilities is the only acceptable method for liability recognition on the bases of objectivity, asset recognition, and balance sheet utility, the liability definition must rely heavily on the legal aspects of the concept. Liabilities will therefore be defined as calculatory claims against the business entity which have resulted from past transactions and which must be paid, or satisfied by another means in accordance with creditors' terms, at some future time.

This definition gives three conditions which must be met before a claim can be included in the balance sheet as a liability. The three are: (1) a claim which is subject to adequate calculation; (2) a claim which is a result of a past transaction; and (3) a claim which will require the future transfer of assets to a creditor.

The application of these criteria to any situation will readily reveal the existence or non-existence of a liability. All items which meet the legal test for liabilities will qualify under this definition, and in addition it establishes definite limits or boundaries for liability recognition. The use of this definition will permit one to determine if all items included as liabilities actually should continue to be included and if other items which are omitted should continue to be omitted.
Measurement of Liabilities

The primary purpose of measurement in accounting is to determine the financial condition of a business entity. To determine the financial condition of an entity it is necessary to place a value on all asset, liability, revenue, and expense items of the enterprise. Due to the interdependence of these items in the double-entry framework in which accounting operates, the standard of measurement must be the same for all. Since cost is the basis for measurement of items appearing on the balance sheet, consistency and comparability require that cost also be the basis for measurement of asset expirations for purposes of determining income of the firm. Financial measurements placed on assets, liabilities, revenues, and expenses are not physical in character as are scientific units of measurement such as pounds or inches but are, instead, social in nature, resulting from the application of judgment and preference.

Since accounting measurement in general is to some degree social and subjective, adequate accounting quantification of events as a means of providing a basis for interpretation and comparison of financial data is difficult to achieve.

Liabilities, however, usually present less of a problem of measurement or valuation than do assets. The amounts are generally fixed and definite and, so long as the going concern concept is recognized, must be paid in full. Since liabilities result from past transactions, the


\[\text{Tbid., p. 96.}\]

amounts to be paid can be determined on the bases of the agreements which gave rise to the liabilities. Exceptions exist to this general rule in cases in which the measurement of the liability is a result of estimation as in the case of estimated liabilities for claims arising under product guarantees, income taxes, damage claims, or other items of a similar nature.

Measurement, as the term applies to a liability, refers to the determination of the weight or burden of the obligation as of the date on which the balance sheet is prepared. A problem arises in the determination of the weight or burden since two interpretations of the term burden are possible. One interpretation permits the term to be defined as the amount of cash that will be required to liquidate the liability at maturity, while the second interpretation permits the term to be defined as the amount of cash that could be invested now and thereby provide a sum sufficient at maturity of the debt to satisfy, or liquidate, it. The first of these interpretations thus measures liabilities in terms of the anticipated amount of cash required, while the second measures them in terms of the discounted value, or present value, of the anticipated payment.

In regard to the means of payment and therefore the measurement of liabilities, two basic categories of liabilities exist. The first of these categories requires payment in cash, while the second requires the performance of a service or the transfer of an asset other than cash. Examples of items included in the second category are liabilities arising from advance payments by customers and those arising from commitments requiring performance of services for customers following the point of sale

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of merchandise to them. In the case of items of this nature, the amount of the advance or the estimate of the cost value of services to be performed is an adequate measure of the liability, since it measures the value, or bargained price, of non-cash assets to be transferred at a later date. Recognition of an amount smaller than the bargained price of the assets to be transferred would require the concurrent recognition of an element of profit. Since profit generally can not be recognized prior to the time at which the agreed upon obligation is performed, the bargained price of non-cash assets to be transferred is an adequate measure of the burden of the liability. The problem then of determining whether to measure the liability as the anticipated amount of cash required or as the discounted value of this amount applies only in situations in which satisfaction of the claim of the creditor requires a future cash disbursement to him by the debtor.

Not all accounting theorists agree on which method of measurement of liabilities requiring cash outlays is most satisfactory in all circumstances. The American Accounting Association for example, believes that the anticipated cash payment correctly reflects the magnitude of the burden when it states that liabilities ""...should be accorded accounting recognition in the period in which money, goods, or services are received or obligations incurred, and should be measured...by the agreed cash consideration..."" The "agreed cash consideration" presumably refers to the amount of cash required to liquidate the debt, giving no consideration to the fact that some time lag may be involved between accounting recognition and ultimate settlement of the liability. In situations in

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which there exist short-term obligations which explicitly recognize interest, as in the case of interest-bearing notes, accounting for the amount of the liability in terms of the face of the instrument exclusive of interest will result in the reporting of the liability at its discounted value. However, if the interest charge is not an explicit element of the liability, as in the case of non-interest bearing notes, the American Accounting Association recommended procedure would result in reporting the liability at maturity value. This procedure thus results in the fact that some liabilities are reported at maturity values exclusive of interest charges while others are reported at maturity values inclusive of interest charges.

That the opinion of Sprouse and Moonitz is different from that of the American Accounting Association is evidenced by the fact that the former state that "...the amounts of obligations calling for settlement in cash should be measured by the future payments, discounted to the present by the use of a market (yield, effective) rate of interest." Paton advances a similar concept regarding the measurement of liabilities in his discussion of the discounting process when he concludes that discounted value is an amount that can appropriately be recognized in the balance sheet.

These two opposing concepts of the measurement of liabilities will result in the reporting of liabilities of dissimilar magnitudes because interest is given explicit consideration under one concept while it is ignored in the other. In the case of short-term trade obligations, such


as accounts payable, which do not give recognition to the interest factor, the results obtained under either method of measurement of the liability will be substantially the same. This is due to the fact that the burden of interest is insignificant since the time lag between measurement and final settlement of the liability is short.

However, in the case of long-term liabilities in which the time period is measured in terms of years the burden of interest is substantial, and failure to give recognition to it will result in significantly different measurements of the liability. It is therefore generally agreed that the discounted value of all future payments, including interest and final payment of the principal, should represent the amount of the liability to be recognized. Even though the discounted value of the future payments is reported, unequal amounts will still result if the coupon rate of interest carried by the contract of indebtedness differs from the going market rate of interest for other equally advantageous contracts. The problem involved in the measurement of long-term liabilities is thus one of determining which discounted value is appropriate as a measure of the liability.

The discounted value of the future payments computed on the basis of the coupon rate of interest results in the recognition of the liability at an amount equal to par, while computation of discounted value at a market or effective rate of interest results in the recognition of an amount equal to the amount of cash or other assets realized upon issuance of the debt contract. Recognition of par value as the amount of the liability when the effective rate is different from the coupon rate results in the relegation of the excess of issuance over par or par over issuance to another balance sheet classification and thereby results in
the recognition of an asset other than that for which the debt was 
issued or a liability in addition to and separate from the debt contract 
itself. The relative merits of using either the coupon rate or the 
market rate as bases for determining the burden of the indebtedness will 
be considered in greater detail in a later chapter, and therefore the 
rendering of judgment in regard to these will be postponed until then.

Current practice in regard to the measurement of liabilities re- 
quires that short-term obligations not giving explicit recognition to 
interest be measured at an amount equal to face value, the amount of cash 
that will require transfer to settle the obligation at maturity. For 
short-term obligations giving explicit recognition to interest and which 
thereby require payment of both interest and principal, measurement is 
based on discounted value of the total payment computed on the basis of 
the stated interest charge. Likewise, longer-term obligations are measured 
in terms of future payments discounted to present value through the use 
of the coupon rate of interest.

Classification of Liabilities

Measurement, or valuation of liabilities, is concerned with the 
problem of determining the amount at which to report liabilities for 
financial statement purposes and as such assumes a great deal of impor-
tance in accounting for liabilities. Liability measurement is impor-
tant, since liabilities reflect means which in the past were property of 
parties outside the business enterprise, means which were made available 
to the enterprise to use in obtaining desired results. They now rep-
resent claims against enterprise assets and therefore assume a significant

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position in the determination of debt paying capacity. A second area in regard to the reporting of financial data concerning liabilities is the determination of appropriate classification of liabilities.

The need for appropriate classification of balance sheet items was discussed in the preceding chapter. Account classification, as suggested at that time, has been greatly influenced by natural groupings which characterized early accounting, and this fact led to classification of liabilities according to names of creditors.\(^{52}\) This natural method of classification was practical and adequate, since at that time the primary purpose of accounting was to maintain an historical record of transactions as a basis for determining entity charges and discharges.\(^{53}\) The later adoption of financial periods and the periodic preparation of accounting reports presenting detailed information in regard to assets and liabilities provided useful data which could serve as a basis for credit analysis, or solvency determination. This emphasis on the credit viewpoint resulted in the development of the custom of reporting liabilities in the order of their due date.\(^54\)

There are three major criteria to use as a basis for the determination of the adequacy of a system of account classification. They are:

1. "The classes are mutually exclusive. No item is properly placed in more than one class.

2. "The classes exhaust the universe classified. Every item can be properly placed in some class.

3. "The basis for classification should be significant, should have meaning to the user of the classified data."\(^{55}\)


\(^{53}\)Ibid., p. 258.

\(^{54}\)Ibid., p. 259.

Items one and two are self-explanatory, but elaboration of item three is essential. In order for liability classifications to have significance and to have meaning for the statement user, it is necessary to adopt a method of classification which is consistent with the classification procedure applied to assets. Gilman emphasizes this need as follows: as it applies to specific rules which could be adopted for classifying both assets and liabilities as current. The rule that is adopted "...is less important than consistency between the two groups. The test for inclusion or exclusion in either group should be consistent with the test adopted for the other since the totals are significant only when compared."56 The absolute amounts of current assets and current liabilities, for example, have little significance when isolated. However, when the two totals are compared, the relative size of the two can be determined. The relative size is significant, since it gives an indication of the current resources available to the firm and the extent of the claims against the current resources.

Hatfield stresses the need of classifying liabilities between current and long-term as follows: "The...value of the balance sheet is increased if some classification is made...of debt.... A showing of the funded or long time debt separate from the short time or floating debt is of great importance, indicating, as it does, the immediate financial strength of the concern...."57

Short-term, or current liabilities, are most frequently represented by open accounts, short-term notes, accrued liabilities, and customer


advances, while long-term liabilities are generally represented by bonds, mortgages, long-term notes, and other contracts of indebtedness. The distinction between these two classes of liabilities is significant to both management and creditors, since it represents one of the variables which has a significant influence on short-term solvency. The maintenance of immediate solvency requires that cash be available for the satisfaction of short-term liabilities, and therefore the provision of funds for payment of these constantly maturing obligations is a problem with which management must always be concerned. Likewise, from the standpoint of creditors, excessive current liabilities relative to current assets may represent a potentially dangerous situation which may have an adverse influence on the collectibility of claims.

Paton sums the significance and desirability of the current or non-current basis of classification of both assets and liabilities as follows:

"The single balance sheet, if properly classified, affords a basis for a considerable degree of analysis. In particular, the importance of comparisons between special groups of items on the opposite sides may be noted in this connection. A comparison of quick or liquid assets with current liabilities, for example is of value in indicating immediate financial standing and, hence, in furnishing a rational basis for the formulation of current financial policies. Similarly, comparisons between fixed assets and long-term liabilities, between the total of assets and the total of liabilities...may be of distinct value to the immediate management and to others interested. Experience in the particular industry usually demonstrates the fact that ratios between important financial elements have a certain normal range, and that inconvenience or even financial danger is indicated when abnormal relationships are established."

There is no major objection to the generally accepted method of classifying liabilities between current and long term if blind adherence

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to the rule is avoided.\textsuperscript{59} Blind adherence to the rule may lead to the presentation of inappropriate relationships between balance sheet items. For example, if an outstanding issue of long-term debt is nearing maturity but will be refunded through the floatation of a new issuance of debt instruments, inclusion of the outstanding issue among current liabilities will result in an overstatement of current debt, since the old issue will not require the disbursement of current assets already held by the firm and hence in effect is not current from an accounting standpoint. Likewise, if a specific fund has been accumulated, the proceeds of which will be used to retire a maturing issue of debt, neither the fund nor the debt need be classified as current, since, from an accounting point of view, neither current funds are available for operations of the firm nor are there current liabilities which require satisfaction from operating resources.

Giving explicit recognition to exceptional cases in liability classification, such as those in which current assets will not be diminished through the retirement of long-term debt, results in the acceptance of due date as a basis for liability classification. This method is also acceptable from the standpoint of consistency, since a time basis is employed in the classification of assets and consequently comparability between subtotals of both assets and liabilities is obtained.

Summary

Liabilities are legalistic in nature. They represent means which in the past belonged to someone outside the boundaries of the enterprise and which were transferred to the enterprise for use in realizing its objectives. Liabilities thus result from past transactions. In addition they represent claims which are subject to calculation or reasonable estimation and which will require satisfaction in the future in accordance with creditors’ terms through the transfer of cash or other assets.

There are several fundamental schools of thought which have developed as means of explaining the basic framework of accounting theory, and under which different concepts of liabilities have developed. Two of these—the proprietary and entity theories—have gained some degree of recognition. Under both theories the business firm is the center of attention, but a difference of viewpoint concerning the concept of liabilities exists. Under the proprietary theory liabilities are considered as debts of the proprietor, or personal debts, which take precedence over his capital contributions. Under the entity theory, the firm is conceived of as an entity separate and distinct from parties who furnish funds. The imparting of personality to the entity thus results in the notion that liabilities are claims against the assets of the entity rather than debts of the proprietor. In view of the predominance of the corporate form of business organization, the entity theory of the firm has become more realistic and hence more useful than the proprietary theory.

Measurement of a liability refers to the determination of the burden of the obligation. The measurement of liabilities presents less of a problem than does the measurement of assets. The amounts are generally
fixed and definite, or readily determinable, since liabilities result from past transactions, and, from a going concern standpoint, must be paid in full.

Another significant area with which the reporting of financial data regarding liabilities is concerned is the determination of proper classification. Classification refers to the grouping together of liabilities with similar characteristics. The basis for classification of liabilities is predominantly time of payment, with the result that current and long-term classifications have developed.

On the basis of the preceding discussion concerning the concept of liabilities, the fact can be demonstrated that anticipation plays a role in the accounting recognition of liabilities. All liabilities represent future asset transfers, and as such in effect are future rather than present obligations. A firm is under no legal obligation to pay a liability until the maturity date arrives, and therefore liabilities as reported in accounting statements represent anticipated legal liabilities. The firm will become obligated to perform a specific act at maturity of the liability, but is not obligated to do anything prior to maturity. Items reported as liabilities can thus conceivably be considered as anticipated liabilities, with actual liabilities developing at due date. Even though liabilities in a sense are anticipations, this fact indicates no lack of definitiveness in regard to amount, date, or method of payment.
CHAPTER IV

THE ROLE OF ANTICIPATION IN ACCOUNTING FOR CURRENT ITEMS

Introduction

Until early in the twentieth century, corporate reporting to individuals or groups outside the boundaries of the entity, if formal reports were published at all, consisted principally of presenting a statement of the assets, liabilities, and net worth of the firm. Income was then ascertained by statement users through a comparison of net worth figures at the beginning and end of the period, after giving due consideration to capital transactions. Statement analysis was primarily concerned with the determination of two significant elements—the determination of solvency and the consistency of increases in net worth.

The mode of accounting thought at that time, as characterized by the accepted balance sheet approach, is aptly summarized by Charles Sprague, who considered the balance sheet "...as the groundwork of all accounting, the origin and terminus of every account."\(^1\) Realizing the significance of income, however, he adds, "the whole purpose of the business struggle is increase of wealth, that is, increase of proprietorship.... The all-important purpose of the proprietary accounts is to measure the success or failure in increasing wealth, and to analyze that success or failure so as to ascertain its causes...."\(^2\)


\(^2\)Ibid., p. 59.
The mode of thought which currently characterizes the concept of accounting and the objectives to which the evolutionary process of development has carried this concept can be stated as follows:

"The uses to which the corporate system is put and the controls to which it is subject change from time to time, and all parts of the machinery must be adapted to meet changes as they occur. In the past fifty years there has been an increasing use of the corporate system for the purpose of converting into readily transferable form the ownership of large, complex, and more or less permanent business enterprises. This evolution has brought in its train certain uses of the processes of law and accounting which have lead to the creation of new controls, revisions of the laws, and reconsideration of accounting procedures.

"As a result of this development, the problems in the field of accounting have increasingly come to be considered from the standpoint of the buyer or seller of an interest in an enterprise, with consequent increased recognition of the significance of the income statement and a tendency to restrict narrowly charges and credits to surplus. The fairest possible presentation of periodic net income, with neither material overstatement nor understatement, is important, since the results of operations are significant not only to prospective buyers of an interest in the enterprise but also to prospective sellers. With the increasing importance of the income statement there has been a tendency to regard the balance sheet as the connecting link between successive income statements; however this concept should not obscure the fact that the balance sheet has significant uses of its own."3

The Concept of Working Capital

One of the specific uses to which the balance sheet can be put is the determination of short-term solvency of the firm. The current position, as measured by the amount of working capital, working capital ratio, acid-test ratio, percentage distribution of current assets, and other similar measures, has long been considered important as a test of

immediate solvency, and it does have a great deal of significance in this connection.\(^1\)

The need for liquidity and solvency is basic for business success, with the scope of activity of the enterprise significantly affected by the presence or lack of sufficient working capital. Working capital must increase with each round of conversions from cash--through intermediate stages of inventories and receivables--to cash, if expansion of operations and facilities is to be made through the use of accumulated current funds. If working capital does not increase with each cycle, it is soon mandatory for the firm to incur additional liabilities or secure additional capital contributions in order to make up for the lack of working capital. A progressive increase in working capital from within is required if the firm is to have sufficient funds for the retirement of maturing debt, purchase of raw materials and supplies, the payment of wages and other operating expenses, and the distribution of earnings to owners. Among the requisites for business success, therefore, perhaps none has greater significance than the need for an adequate degree of liquidity of the firm.

Determination of liquidity of the firm is not an easy matter, and is made more difficult due to the lack of uniformity that exists in regard to the meaning of the term liquidity and its related concepts, working capital and solvency. Thus two problems develop concerning the discussion of the current position of the firm. The first is concerned with the meaning of working capital, and the second with the meaning and source of liquidity and solvency. Once acceptable definitions of the terms

working capital, liquidity, and solvency are developed, perhaps accountants, financiers, and businessmen may find it easier to have a common basis for discussion.

The Equity Concept of Working Capital. An examination of writings in this area reveals the lack of uniformity that exists in the definition of the term working capital. Kohler states that working capital is "Capital in current use in the operation of a business: The excess of current assets over current liabilities: Net current assets." A similar definition is presented in Restatement and Revision of Accounting Research Bulletins by the Committee on Accounting Procedure of the American Institute of Certified Public Accountants, in which working capital is defined as follows: "Working capital, sometimes called net working capital, is represented by the excess of current assets over current liabilities and identifies the relatively liquid portion of total enterprise capital which constitutes a margin or buffer for meeting obligations within the ordinary operating cycle of the business." Kester offers a definition of the term which is in agreement with those offered by Kohler and the American Institute of Certified Public Accountants. In his words, working capital is "...the excess of current assets over current liabilities, i.e., the net current assets...."

On the basis of these definitions it can be concluded that there is agreement among accountants that working capital represents an equity concept, net owned current assets. A similar concept of working capital

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is held by writers in the field of finance. Working capital is defined in the Corporate Treasurer's and Controller's Handbook as the difference between the dollar totals of current assets and current liabilities. Guthmann and Dougall define working capital similarly, when they state the opinion that it is the excess of current assets over current liabilities, or the part of current assets that has been supplied by the permanent investors.

A comparison of definitions of working capital presented by accounting and business finance writers indicates the general agreement that exists in regard to the meaning of the term as used in the literature of those fields. The term working capital is associated with the algebraic difference between current assets and current liabilities. This concept of working capital stresses the equity of the firm in the current assets employed, and the concept of working capital is thus a net equity concept rather than a description of material wealth. Thus no capital in the sense of material property is involved in the concept of working capital in the accountant's sense, but instead it represents the difference between two dissimilar accounting items, property and obligations. Current assets represent the property involved in the determination of working capital and current liabilities represent the obligations, or claims involved. Since it cannot be determined which specific elements making up the total of current assets current creditors have a claim against, the term working capital thus becomes a generic one rather than a description of specific asset items.

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**Functional Concept of Working Capital.** In order to give a greater degree of recognition to a specific classification of assets, definitions of working capital in terms of function performed by specific assets have also developed. Proponents of definitions of working capital stated in terms of function performed look to the function of assets as being of dominant significance, while proponents of the equity view of working capital are more concerned with the ownership of current assets.¹⁰ Wilford Eiteman, for example, stresses the significance of function performed by assets when he considers working capital to include any assets used during an accounting period "...to induce a current income of a type consistent with the major purpose of a company's existence."¹¹ Mueller proposes a similar definition of the term in the following words: "The term working capital should be coextensive with current assets."¹² Kohler's definition quoted earlier, in which he considers working capital as "capital in current use in the operation of the business" and also as "net current assets," touches on the dual aspects of the problem. "Capital in current use" can be interpreted to mean wealth, or assets, in current use, an interpretation which would be synonymous with current assets; while "net current assets" refers to the equity of the firm carried in the form of current assets. Moore and Jaedicke take cognizance of the terminological difficulties involved when they recognize the fact that the term working capital is applied to the total of


current assets and also to the excess of current assets over current liabilities, and on that basis recommend the use of the term net working capital to clearly distinguish between the two meanings.\footnote{13}

**Reconciliation of Equity and Functional Concepts.** The differences between the two concepts of working capital can be reconciled when the meaning of the term capital is considered in greater detail. Capital, as the term is used in an accounting framework, refers "to the proprietorship or net worth, the equity of the owners or stockholders."\footnote{14} It is also used when one is referring "to the total invested funds employed by an enterprise."\footnote{15} On the basis of the accounting definition of capital, it can be demonstrated that the term working capital, when defined as an equity concept, is consistent with accepted accounting usage. Substitution of the accounting meaning of the word capital in the term working capital reveals the fact that acceptable accounting usage requires that net equity in current assets be associated with the term, since capital does refer to an investment of equity funds. Since working capital in accounting terminology does refer to the equity of the firm in the current assets the firm utilizes in its current operations, this concept of working capital is justifiable and consistent. Working capital thus indicates the extent to which current assets are financed by capital funds, with the remainder of the claims against current assets represented by short-term debt evidenced by claims of creditors and classified for reporting purposes as current liabilities.


The term capital as used in an economic frame of reference is "...commonly defined as wealth which man has produced or as produced goods used in further production; that factor of production which permits the use of roundabout or capitalistic methods of production." Substitution of this definition of capital in the term working capital permits a broader interpretation of the term than that permitted in the accounting definition, and thus results in the term's being synonymous with current assets. This definition of working capital is therefore consistent with the definition proposed by those who deem the function performed by current assets to be of greater significance than the equity in the current assets.

This concept of working capital is not of recent origin, but dates back to the time of the early writers on political economy. One of the early writers who elaborated on the functional aspect of current assets was John Stuart Mill, who said:

"Of the capital engaged in the production of any commodity, there is a part which, after being used once, exists no longer as capital: is no longer capable of rendering service to production, or at least not the same service.... Capital which in this manner fulfills the whole of its office in the production in which it is engaged by a single use is called Circulating Capital.... This portion of capital requires to be constantly renewed by the sale of the finished product, and when renewed is perpetually parted with in buying materials and paying wages; so that it does its work... by changing hands."17

Alfred Marshall followed Mill in emphasizing the significance of this concept of working capital, and further indicated the need for capital of

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this type for the profitable functioning of a business enterprise.\textsuperscript{18} Modern economists still find this concept of working capital to be generally acceptable.\textsuperscript{19} In economic usage, nothing is said about the algebraic difference between current assets and current liabilities, or equity and net ownership of current assets. Instead, working capital is considered to be a classification of capital, the existence of which is necessary for business operation.

Discussion of the two definitions of working capital reveals the fact that two distinct concepts are involved. It also reveals that general agreement exists within particular areas, but that between separate areas different meanings are associated with the term.

It is evident that working capital, within both connotations of the term, is necessary for business operation and continuity. It is essential that there be working capital, defined as a function, upon which the fixed assets of the firm can perform their services. The capital upon which or for which the fixed assets perform their services is the classification of assets owned by industry and represented by current assets. These assets are required to absorb the service potential of the fixed assets as the principal means available to the firm for realizing the value embodied in the fixed assets.

Likewise, working capital, defined in terms of equity, is essential for business operation. This fact is recognized by Mill, for example, when he refers to the need for the reproduction of circulating capital consumed in operations at an amount greater than the original amount in

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\textsuperscript{19}Ibid., p. 75.
\end{flushright}
order to provide a means of expanding the capital available to the firm. Financial analysts similarly recognize this need for working capital as a most important element of financial success. Insufficient working capital in this sense of the term may result in slow payment of liabilities with resulting poor credit rating, in the curtailment of operations, and general inability to progress. Insufficient working capital presents the possibility of a firm's getting into the position in which its maturing obligations exceed the means it has available to satisfy them. The need for an adequate amount of working capital, in the equity sense, is so essential, that its inadequacy is the most common reason for the failure of industrial concerns.

An analysis of the two meanings of working capital reveals that two related concepts are associated with the term—an equity concept and a functional concept. The analysis further reveals that the existence of working capital within both concepts of the term is essential for business growth and success. Due to the fact that rigorous definitions are associated with the term within specialized areas of endeavor, little confusion results from the use of the term within those areas, but when communication between areas occurs, the specific concept associated with the term must be stated as a means of avoiding the confusion that would otherwise develop. The equity concept of working capital will be the applicable one when the term working capital is employed in this study, since this is consistent with general accounting usage.

\[^{20}\text{Op. Cit., p. 93.}\]
\[^{22}\text{Ibid., p. 364.}\]
Definitions of Current Assets and Current Liabilities. Since working capital is defined as the excess of current assets over current liabilities, the meaning of the term may still be vague due to the fact that the terms current assets and current liabilities have not been adequately defined.

During the past twenty years of accounting development, the concepts of current assets and current liabilities have undergone very little change. During the 1930's and until the early 1940's, current assets were generally considered to be those assets that would be "converted into cash within one year in the normal course of business," while current liabilities were generally considered to be those liabilities that would be "paid during the ensuing year." The emphasis during that period was on the realizable value of the current assets for credit purposes, and balance sheets were not so much based on the going-concern concept as on the protection afforded creditors in the event of liquidation.

The accounting custom of grouping some of the assets together in the current classification, and practices followed in determining which items should be included in that classification, developed during a period when it was customary to close the accounts and to prepare statements for credit and other purposes at annual intervals only. The business of each year was to some extent considered as a separate venture at that

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25 Ibid., p. 430.
time, and the security for debts was more dependent upon specific assets than it is today.  

26 The ratio of current assets to current liabilities then had a degree of significance comparable to that presently enjoyed by the ratio between the market value of collateral and the loan which it secures. 

27 With this degree of significance attached to the relative size of current assets and current liabilities, the logical result was that the availability of current assets for the payment of liabilities falling due in the ensuing year became the primary criterion for current asset acceptance.

With the general recognition of the going-concern, or continuity-of-life, assumption, the significance of the year declined. It is now recognized only as a convenient method of breaking up the flow of operations of an entity as a means of reporting accountability of management to owners, government, creditors, and other interested parties. Due to increased diversification of firms for the purpose of avoiding operations of an excessively seasonal nature, the significance of the year has further declined. Continuity of operations has thus become one of the basic considerations of the accounting framework, with the result that the one-year rule in regard to current asset and current liability classification has lost some of its significance.

In addition to the fact that the one-year rule lost some of its usefulness due to the greater degree of emphasis placed on the continuity of operations, it was also difficult to apply consistently in practice. In the case of inventory, for example, turnover sometimes exceeded a

27 Ibid., p. 48.
year, which, under a strict one-year interpretation, required a portion of the inventory to be classified as a non-current item. However, inventories were generally not broken down into current and non-current items. Similarly, accounts receivable arising from instalment sales of merchandise were generally collectible over a period of time considerably longer than a year, with the result that part of trade accounts receivable were included in the current classification and part in a non-current classification. This inconsistent treatment of merchandise inventories and accounts receivable resulted in the loss of some degree of comparability among financial statements, because credit terms or inventory turnovers were longer in the case of one firm than another.

The time factor as the only determinant of liability classification is likewise inappropriate. This is particularly true in a situation in which there exists an instalment of long-term debt which is nearing maturity but which will be satisfied through the issuance of a new series of long-term obligations. Liquidation of debt in this manner does not result in a drain on currently held resources of the firm and hence it is difficult logically to consider the maturing debt as a current liability.

As a result of the inconsistency and variation that resulted from the use of the one-year rule, it began to be recognized as of secondary importance during the 1940's, and this led to the development of the general belief that it was not completely acceptable. 28 The concept of working capital as it is based on the one-year rule represents concepts and practices that are "...based on outmoded customs, arbitrary rules,

28 Ibid., p. 49.
and alternative practices..." all of which tend to reduce the significance and usefulness of the concept of working capital.

The 1947 redefinition of current assets. The first general acceptance by the accounting profession of an alternative and more realistic basis for current asset classification was given recognition in August, 1947. At that time the Committee on Accounting Procedure of the American Institute of Accountants published Accounting Research Bulletin No. 30, in which the term current assets was extended to mean "...cash and other assets or resources commonly identified as those which are reasonably expected to be realized in cash or sold or consumed during the normal operating cycle of the business." In October, 1951, the Committee on Concepts and Standards Underlying Corporate Financial Statements of the American Accounting Association issued Supplementary Statement No. 3, in which endorsement of Accounting Research Bulletin No. 30 was indicated as follows: "This Committee endorses the conclusions of Bulletin 30 as constituting, within that limited area and in the present stage of the accounting art, desirable standards for balance sheet presentation."

The Committee on Accounting Procedure justified their departure from the previously accepted definition of current assets in the following words:


30 Restatement and Revision of Accounting Research Bulletins, Op. Cit., p. 20. This feature developed in Accounting Research Bulletin No. 30 has been carried forward without change to Accounting Research Bulletin No. 43.

"The Committee believes that, in the past, definitions of current assets have tended to be overly concerned with whether the assets may be immediately realizable. The discussions which follow take cognizance of the tendency for creditors to rely more upon the ability of debtors to pay their obligations out of the proceeds of current operations and less upon the debtor's ability to pay in case of liquidation. It should be emphasized that financial statements of a going concern are prepared on the assumption that the company will continue in business. Accordingly, the views expressed in this section represent a departure from any narrow definition or strict one year interpretation of either current assets or current liabilities; the objective is to relate the criteria developed to the operating cycle of a business."32

The essence of the definition of current assets, as established in 1947, lies in the words "resources...which are reasonably expected to be...consumed during the normal operating cycle of the business." The operating cycle of a business refers to the period of time that is required by a producing company to convert raw materials into finished products and the final realization of cash for the products.33

Assets consumed during this period of time are not consumed in the sense which Paton and Littleton use in discussing cost expirations, in which they consider cost expirations to be those costs representing elements the utility of which has been fully exhausted.34 Instead, consumption in the sense in which it is used when applied to current assets refers to conversion of the assets from one form to another. The beginning balance of cash is converted, or turned over, a number of times during the cycle as it is used to pay expenses and liabilities; accounts


receivable are consumed or converted to cash through the process of collection; and inventories of merchandise are converted to receivables and later to cash as a result of the sales process. Thus, the consumption of current assets refers to the round of conversions that occurs within the current category as assets of one kind are exchanged for assets of another kind. This round of conversions from cash through inventory, receivables, and back to cash therefore represents the operating cycle of a business entity.

In order to maintain consistency between the definitions of current assets and current liabilities, the redefinition of the former therefore required a similar redefinition of the latter. Current liabilities were thus extended to cover "...obligations whose liquidation is reasonably expected to require the use of existing resources properly classified as current assets, or the creation of other current liabilities."35 This classification of liabilities is thus intended to include obligations for items that have entered into the operating cycle.

The inclusion of the operating cycle standard as a determinant of current asset classification has not resulted in the complete abandonment of the one-year rule. The one-year rule is still recognized as a valid criterion for current asset classification in situations in which the operating cycle is less than a year. Since current liabilities represent obligations the liquidation of which will require the use of current assets, the one-year rule also governs in current liability classification in situations in which the operating cycle is shorter than a year.

As indicated earlier, there are several limitations of a fixed time period such as a year as opposed to a flexible time period such as that inherent in the operating cycle concept, as a basis for recognition of current assets and current liabilities. There are three reasons, therefore, why professional recommendations concerning current asset and current liability recognition, such as those recommendations included in Accounting Research Bulletins No. 30 and 43, were required.

First, confusion existed because of the fact that no unanimity of opinion existed among accountants concerning the definition of current assets.36 A question existed in regard to whether current assets should include items that would be converted into cash or whether they should include items that could be converted into cash during the fixed time period. A significant difference was evident in these two concepts, since the second was considerably more inclusive than the first.

Second, the old definitions were challenged because current expense prepayments, such as prepaid insurance or rent, were not included among current assets.37 With emphasis on the going concern concept of accounting, it became evident that there was no appreciable difference in the asset status of a firm that had just paid insurance premiums or rent in advance from one that must shortly make the payment. From the standpoint of immediate liquidation, there was a difference, but with consideration given to the debtor's ability to pay as a going concern, this difference vanished.


37 Ibid., p. 49.
Third, the fixed time period was arbitrary and, furthermore, was not applied consistently.\(^{38}\) It was arbitrary in that it gave no consideration to the fact that one firm might turn its merchandise into cash several times a year, while another might require more than a year to make this conversion. It was not consistently applied since some items, inventories for example, were included in current assets even though they would not be consumed during the year, while other items, such as trade receivables not to be realized during the year, were excluded.

**Distinguishing Features of Current Assets.** Paton discusses five principal tests that may be applied in distinguishing current assets from other classifications of assets. They are:

1. Degree of liquidity;
2. Normal term or length of life;
3. Rate of transfer to expense or loss;
4. Technical character or rate of use;
5. Nature of business and intent of management.\(^{39}\)

These criteria are not all entirely independent, but each does have some degree of significance in itself. It is therefore necessary when applying the tests in a given situation to consider them as a group of requirements to be met, rather than a list of individual requirements, any of which may be met.

Liquidity as used in this context refers to the ease or speed with which an asset can be converted into cash. Thus there are degrees of liquidity, ranging from demand and unrestricted time deposits at banks.

\(^{38}\text{Ibid., p. 49.}\)

\(^{39}\text{W. A. Paton, Advanced Accounting, Op. Cit., p. 8.}\)
which from a practical standpoint are equivalent to cash, to a specialized fixed asset such as plant or equipment, which may be highly illiquid from the standpoint of immediate convertibility.

The second test refers to length of life only, and distinguishes between items such as short-term trade receivables and long-term investments such as bonds or mortgages. Due to the fact that a fixed time period is of necessity arbitrary and difficult to apply consistently, a variable time period, the operating cycle, has developed as a means of giving consideration to variations in asset turnovers among industries.

The third and fourth criteria are closely related and apply specifically to assets consumed in productive operations. A building or item of equipment is absorbed slowly over an extended period of time into product costs, while an inventory of supplies or merchandise is consumed relatively more rapidly. In addition, a fixed asset is not consumed physically, but instead is consumed in an economic sense as its service potential is diminished through absorption or utilization by raw material in the process of production. A current asset such as material or supplies is consumed in a physical sense as it is physically diminished through conversion to product.

Finally, the nature of the business and the intent of management must also be given consideration. In other words, the use to which the asset is to be diverted may be significant in some cases. Assets such as land or equipment in the hands of a dealer in those kinds of assets represent inventories of merchandise to him and hence are current assets. On the other hand, land as a building site or parking lot is a fixed asset on the basis of the other criteria considered. Likewise, securities
held for a specific purpose and restricted to that purpose, such as bond retirement, may be a non-current asset, while the same security if held as a temporary investment of excess cash would be considered current.

It is not always easy to determine the proper account classification of a specific account, since there is not always an easily discernible line of distinction between current and non-current items. Debatable cases will arise, and in these situations the nature of the circumstances surrounding the account must be given appropriate consideration. Yet, the use of specific tests, such as those enumerated, will result in the reduction, if not the complete elimination, of questionable and confusing situations and thereby result in the establishment of more nearly scientific classification procedures.

The Concept of Liquidity

The Meaning of Liquidity. Liquidity, in a static sense, refers to the ease or speed with which an asset can be converted into cash without a significant loss of value.\(^4^0\) It is generally agreed that degrees of liquidity exist, with the degree of liquidity of an asset being determined by the nearness of the asset to cash. In Boulding’s words, liquidity of assets is synonymous with the degree of moneyness of assets, and is a quality which can be possessed in greater or less degree.\(^4^1\) Cash is the most liquid of current assets, while merchandise inventories and prepaid expenses are the least liquid. Liquid assets, a subclassification of current assets, consisting of unrestricted "cash in banks and on hand..."

\(^4^0\)Ibid., p. 8.

or readily marketable investments, is a more restrictive classification than current assets, since it does not include receivables, inventories, and prepayments.

A second related, but yet distinctly different meaning is sometimes associated with the term liquidity. This definition of liquidity is not concerned with the ease with which assets can be converted into cash, but instead refers to the ability of the firm to pay its liabilities. This concept of liquidity is unacceptable, since the ability to pay liabilities is generally associated with the term solvency and in effect liquidity is thus confused with solvency.

The Meaning of Solvency. Solvency is a related term, and it too has two meanings. It is generally used to express the financial status of a firm. In a popular sense, it indicates the ability of a firm to meet outstanding debts as they mature. It is evident that solvency as used here is a function of liquidity, for if a business is to remain solvent its liquid assets must be sufficient to satisfy maturing obligations. Insolvency, or the inability to pay maturing debts, commonly arises from net operating losses, overextension of credit to customers, overinvestment in inventories or fixed assets that cannot be converted into cash, or overdependency on creditor rather than stockholder investment.

The conception of solvency, as described above, differs from the conception of the term as defined by federal bankruptcy legislation.

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Under terms of the National Bankruptcy Act, "A person is 'insolvent' when the present fair salable value of his property is less than the amount required to pay his debts." Under this meaning, a business entity may be unable to meet maturing obligations temporarily, but if its assets at a fair valuation exceed its liabilities, it is considered solvent under terms of the Act. On the other hand, a firm with liabilities in excess of asset values would be insolvent, even though it might be able to meet its maturing obligations temporarily.

The disastrous result of insolvency is summed by Karrenbrock and Simons as follows: "The inability...to meet maturing obligations frequently results in creditor control and credit management of all of the debtor's assets. So long as the person remains solvent, creditors are unorganized. With insolvency and the possibility of loss to creditors, this group may organize and assume control of the insolvent's assets...."

A comparison of the meanings of the terms liquidity and solvency reveals the degree of dependency that exists between the two. If a firm is to remain solvent within the popular meaning of the term, it must be liquid, which means it must have liquid assets available for the purpose of paying its maturing liabilities.

Current Assets as the Source of Liquidity. The measurement of the firm's ability to pay its maturing liabilities as they become due is not only important from the standpoint of managerial independence from intervention by creditors, which is the result of insolvency, but it is also

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important from the standpoint of financial analysis conducted by parties outside the entity. A quantitative type of measurement is required for such purposes as bond indentures, bank loans, and comparative analyses of firms. A quantitative type of measurement commonly used for these purposes is the ratio of current assets to current liabilities. The absolute amount of current assets, current liabilities, and working capital is of less significance than the relative size of current assets and current liabilities, and hence the current ratio has developed as a means of stating their relative size. The two are related, for current assets provide an indication of short-run financial strength, while current liabilities measure the extent of the firm's requirements for current assets.

In order to determine the debt-paying ability of a firm, or solvency of it, it is necessary to determine the relationship that exists between liquidity and the need for liquidity. It is through current assets that liquidity in attained, and it is through current liabilities that the need for liquidity is derived. The ratio of current assets to current liabilities thus relates the firm's present ability to pay its debts to the debts that it will have to pay in the near future.

A portion of the firm's cash balance and also its short-term investments in marketable securities are held as a source of liquid assets that serves as a buffer against uncertain future flows of cash. Sorter and Benston state the need for maintaining a buffer of liquid assets to

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meet uncertainties in the following words: "There will be times when receipts do not come in as quickly as expected or when sales decline temporarily. Conversely, the firm might be faced with a sudden increase in expenditures...in response to an order which must be filled immediately or by the opportunity to make an...advantageous purchase."49

Keynes likewise considered the need for cash for unexpected contingencies when he described the precautionary motive for holding cash. In his words, idle cash balances are required "...to provide for contingencies requiring sudden expenditure and for unforeseen opportunities of advantageous purchases, and also to hold an asset of which the value is fixed in terms of money to meet a subsequent liability fixed in terms of money."50

It is evident that in order to remain free from creditor domination and financial death, solvency, and its determinant, liquidity, are necessary. Yet the determination of the degrees of solvency and liquidity is no easy matter. In the long run they may depend upon the profitability of the firm, but whether the firm will ever survive to reach the long run will depend to some extent on its financial structure. In a recession, excessive debt, or its companion inadequate working capital, may result in financial failure of the firm. With increasing emphasis on the going concern aspect of business operation and a decline in emphasis on the "pounce" possibility of the firm as a basis for determining solvency and liquidity, the emphasis concerning the source of liquidity of the firm has also shifted. In a static situation with


emphasis on forced sale of assets as a source of cash with which to pay short-term creditors, the source of liquidity is represented by the liquid assets held by the firm. However, with the emphasis on the going concern aspect of business enterprise, the source of liquidity has shifted from the static concept of liquid assets to a dynamic concept of turnover, or conversion, of current assets.

A Dynamic Concept of Liquidity. In the currently accepted basis for inclusion of assets within the current classification, the operating cycle of the firm has been given recognition. The circulating capital process is thus presented as commencing with cash and ending with cash. In a formal way this is true because it completes the cycle as generally conceived.

This is not completely realistic, however, from the standpoint of enterprise objectives. The objective of enterprise activity is to produce and dispose of merchandise, and thereby through a continuous process of conversions increase circulating capital on a continuing and recurring basis. Cash is the end product as far as the cycle is concerned, but cash in the form of idle balances is an unproductive and unprofitable asset. As a result, it must be reinvested in physical merchandise which will again be available for disposal at a profit. Once a business has begun functioning, this process begins operating, and, as Dewing says, "The proprietors of business do not want the return of their investment in the form of cash; they want the continuing earning power of their investment."51 Thus in the case of most enterprises it is not cash which is desired, but rather it is current assets, composed of specific assets

in advantageous proportions, the exact proportions depending upon the type of firm. It can thus be discerned that the objective, or function, of enterprise is "...to process less acceptable goods into...more acceptable form, and...the cycle is not from cash to cash but from raw materials to raw materials. The objective of an enterprise is not from one point of liquidation to another but an uninterrupted continuous cycle...." From the standpoint of business continuity, then, a desirable degree of liquidity is not represented by the possession of only cash, but instead consists of balanced holdings of assets that comprise the current classification.

As the foregoing discussion concerning liquidity indicates, two concepts of liquidity exist—static liquidity and dynamic liquidity. Static liquidity is not a physical or functional property of an asset, but refers to the ease with which an asset can be sold. Liquidity in this sense "...is a quality related to and measured by the ability to exchange the asset for money in general." This static concept of liquidity gives rise to the notion that degrees of liquidity exist; that merchandise is the least liquid of current assets and that cash and receivables the most liquid. In the case of merchandise inventories, raw materials would be of a lower order of liquidity than finished goods, and in the case of receivables the longer-term accounts would presumably be less liquid than the shorter-term ones.

Dynamic liquidity, on the other hand, takes cognizance of the fact that the utility of merchandise is increased through the productive

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process. Merchandise in its raw material state or in various stages of process is not able to command cash, since it is not to be disposed of in that manner. In terms of the dynamic concept of liquidity, degrees of liquidity do not exist, since liquidity is a result of conversions that occur through the entire process of business operation. This concept of liquidity recognizes the fact that the process of conversion will not stop when cash is realized upon the sale of merchandise or collection of receivables, but instead that cash acquired will be reinvested in order that merchandise can be acquired to replace that sold. The liquidity of various current assets can therefore not be compared scientifically because they are not homogeneous. Various current assets can be substitutes to a degree, but basically they must be maintained in proper proportions if an enterprise is to operate successfully. Consequently, attempts to assign various degrees of liquidity to specific current assets are not necessary, since liquidity of a firm is represented by the ability of the firm to convert its current assets from one form to another during the operating cycle.

Considering liquidity in a dynamic framework, it becomes a process of conversion rather than a characteristic of a particular asset. Exchanges in the market place between producers and consumers of the product are essential if dynamic liquidity is to exist, since if exchanges are not possible, conversion of assets and finally economic activity of the firm ceases. In order for this process to continue, it is necessary for the firm to produce or stock merchandise for which an effective demand exists. Only if an effective demand exists can merchandise be disposed of in exchange for cash, the cash to be reinvested

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as a means of facilitating and thereby continuing the process of conversion into perpetuity.

It is evident that this concept of liquidity is consistent with the continuity of life concept of accounting. It presumes a realistic, long-run view of the enterprise, recognizing that as cash is realized from the sale of merchandise and the collection of receivables, the cash will be used for the payment of existing liabilities, with new liabilities being created as additional merchandise is acquired. It avoids the short-run view embodied in the static concept of liquidity, which emphasizes the ability of an asset to command cash immediately as a means of satisfying creditors. The dynamic concept thus recognizes that liquidity is a continuing process rather than a measure or an indication of the immediate "pounce" possibilities of the assets held by the firm.

**Conclusions Concerning Liquidity.** Two conclusions can be drawn concerning the concept of liquidity. First, two aspects of liquidity stand out. These refer to the static and to the dynamic aspects of liquidity. Second, the source of liquidity consistent with the going concern concept of accounting lies in the ability of a current asset to be converted from one form to another. This convertibility depends on the effective demand for and hence marketability of the final product. Only exchanges of the product resulting from its marketability can assure the conversions which are inherent in the operating cycle and thereby assure the process of liquidity of the firm.

**Dynamic Liquidity as a Measure of Solvency.** The preceding discussion indicates that the concept of liquidity which is consistent with the going concern concept of accounting is a dynamic one. It must now be determined if liquidity in this sense is useful in measuring solvency.
Solvency as used here refers to the ability of the firm to meet maturing obligations.

The current ratio as a measure of solvency. The measurement of a firm's ability to pay its debts as they become due is an extremely important aspect of financial analysis. A quantitative, formula type of measurement is required for such purposes as bond indentures, term loans, short-term bank credit, and comparative analyses of firms.\(^{55}\) In addition, an analysis which will reveal the capacity of a firm to withstand temporary delays or declines in receipts will also be appropriate for a complete short-term analysis. At present, the current ratio and quick ratio are generally used for these purposes. If these ratios are valid measures, current assets should provide a good indication of short-term solvency and hence financial strength.

Since the going concern concept of accounting is so basic to accounting theory and methodology and so realistic from the standpoint of business operations in the real world, a valid measure of solvency must be based on this concept. In this situation it is recognized that due to continued operations, neither will all current assets be realized nor will all current liabilities be liquidated at any time. Instead, specific assets and specific equities existing at any given date will be eliminated only temporarily. Each of these items will be replaced with others as existing ones are disposed of. The sum of each classification will be relatively constant, except for seasonal and secular variations, but the specific items of assets and liabilities making up the sum will be in a constant state of movement. As indicated earlier,

liquidity comes from this state of activity within the current asset classification. Likewise, solvency to a considerable degree depends upon this state of change that occurs within the current liability classification. Solvency thus depends upon the liquidity of current assets as established through the continual turnover of the assets. The firm as a dynamic entity need never repay its creditors at any given time, but instead need only dispose of existing current assets as a means of maintaining the turnover of current liabilities.

Proper application of generally accepted accounting principles of current asset valuation and classification will assure statement analysts of the fact that under normal business circumstances, assuming away temporary loss periods for the present, the amount assigned to current assets is an indication of funds that will be available in the short run for the satisfaction of creditors' claims. Generally accepted accounting principles assure analysts of this since the valuation procedure applicable to current assets is the lower of cost or net realizable value. A conservative, but yet realistic picture of funds that will become available is thus presented. Likewise, assets that will not be realized or consumed during the operating cycle will not be included among current assets. Again, the result of these procedures is the reporting of a realistic and reliable figure for total current assets and therefore a realistic relationship between current assets and current liabilities.

Working capital as a requirement for solvency. The procedure outlined above must be modified to some extent to provide a means of meeting either unforeseen loss periods or periods during which collections are reduced as a result of seasonal or cyclical reductions in sales
revenue. In these situations conversion of current assets may not be sufficient to meet maturing obligations and business expenses as well. Under these circumstances a firm's working capital must be relied upon as a basis for absorbing the losses or expenses and thereby permit the firm to survive the period of financial stress. Working capital held in the form of liquid assets is therefore a buffer which can be utilized during unfortunate business experiences to pay maturing obligations and thereby avoid insolvency and financial embarrassment. A satisfactory current ratio thus gives some degree of assurance that a buffer of working capital exists for the absorption of unforeseen losses which may develop.

One further advantage adds to the reliability of some of the formula-type measures of short-term solvency, notably the quick current ratio, which omits inventories from its computation. When a comparison is made between liquid assets and current liabilities, comparability of the items results due to the fact that similar valuation bases exist. In regard to the point of valuation basis, a dollar of liquid assets is usually nearly the same as a dollar of current liabilities.

There are possibilities that the chain of conversions that determines the liquidity position of the firm may break down and thereby result in insolvency. As indicated earlier, if the chain of conversions slows appreciably, realization of some current assets will be postponed to a date outside the boundaries of the operating cycle and these items will then be transferred from the current classification. The

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resulting decrease in the ratio of current assets to current liabilities will thus indicate the fact that the short-term debt paying capacity of the firm is diminishing. Increasing inventories and longer collection periods of accounts receivable are two of the most common evidences of an impending breakdown in the chain of conversions.\textsuperscript{57}

A greater than proportional increase in inventories relative to sales will not be revealed by the current ratio until a portion of the inventories can no longer be included in current assets; but the quick current ratio, which does not include inventories in its computation, will reveal the change immediately and thereby assist in determining if overinvestment in merchandise inventories is occurring. A lengthening of the collection period of receivables will not be revealed by either of the formula-type measurements, but a possible breakdown in receivable conversions can be revealed through a subjective evaluation based on a periodic comparison of accounts receivable to credit sales.

Even in situations in which increasing inventories and longer collection periods are developing as a result of a slowdown in the rate of conversion, however, a companion of the current ratio, the quick ratio, will highlight the fact that the rate of conversion, notably the inventory conversion, is declining. This reduction in the quick ratio will thus forecast that the future may hold some degree of danger of insolvency.

\textbf{Conclusions Concerning Liquidity and Solvency}. On the basis of the preceding analysis of the current and quick ratios, it can be concluded that liquidity, as measured by the two ratios analyzed, indicates

the probable capacity of an enterprise to meet maturing obligations. A strong current position generally means that all currently maturing obligations will be paid promptly, while a weak current position indicates that debt retirement may be slow, or even doubtful. Also, as indicated, some degree of judgment will be required on the part of the analyst, since some subjective evaluations will also have to be made. However, even though some subjective evaluation will be required in addition to the computation of ratios, it must be argued that an analysis of current assets does reflect short-term liquidity, and this compared with current liabilities does reflect short-term solvency. It can furthermore be concluded that a sufficient amount of working capital must exist, since the capacity of the enterprise to carry on effective operations and the ability to withstand periods of financial stress are dependent upon the adequacy of working capital. In other words, it is through current assets and working capital that liquidity is attained. The concepts of current assets and working capital can be put to dynamic use and thereby serve as vital financial guideposts.

The significance and usefulness of the current classifications of accounts and the entire working capital concept can be summed as follows:

"The working capital section of the balance sheet is the measure of liquidity of the firm." It is important to management as a "...measure of the fluidity of capital and as an indicator of balance in the

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58 Ibid., p. 162.
asset and liability structure of the company. Banks and...short-term creditors are vitally interested in the amount of working capital from the standpoint of evaluating the prospect of repayment of...claims against the company."61

Paton similarly stresses the significance of the current classification in the following words: Generally, current resources represent "...purchasing power immediately available or shortly to become available. Fixed resources are...slowly revolving commitments,...unavailable as working capital. This is...of considerable importance in...financial administration of the enterprise, and it is not surprising that the accountant takes cognizance of the situation in...classifications and methods of reporting."62

Valuation of Current Assets

Current assets consist of five main classes: (1) Cash; (2) Temporary investments; (3) Short-term receivables; (4) Inventories; and (5) Current prepayments.63 Cash consists of money and negotiable instruments which circulate as money, including "...any medium of exchange which a bank will accept for deposit and immediate credit to the depositor's account,"64 and also unrestricted bank balances. Temporary investments consist of marketable securities for which a ready market exists and which it is management's intention to dispose of in the near future at existing market

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61Ibid., p. 39.
63Ibid., p. 9.
prices. Short-term receivables are claims of the firm against other firms or individuals and represent "...amounts owed to the business as a result of credit transactions." Inventories consist primarily of merchandise held for sale, and are made up of raw materials, work in the process of manufacture, and finished merchandise. Finally, current pre-payments consist of miscellaneous items, basically representing payments made in advance on short-term assets that will be consumed and thus charged to operations as expenses within the time limits established by the current asset concept.

Cash, receivables, and marketable securities generally represent no great problem of valuation, or measurement. Their valuation procedure is based on cost or cash-realizable value, whichever is lower. In the case of cash, the cash-realizable value is obvious, referring to the amount of unrestricted cash on hand and on deposit. Cash-realizable value in the case of receivables can not be determined without some degree of estimation. It requires that total receivables of the firm be reduced to a realizable value figure through the use of a valuation allowance representing the dollar amount of estimated uncollectible accounts included in the totality of receivables. Marketable securities are valued at cost, except in cases in which market prices have declined since the date of acquisition. In these situations a valuation allowance, determined on the basis of a comparison of cost with current market quotations, can be deducted from the cost of the securities as a means of presenting the realizable value of the investment.

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The basic valuation procedure applicable to inventories is cost, meaning, "...in principle, the sum of the applicable expenditures and charges directly or indirectly incurred in bringing an article to its existing condition and location," but which is generally "...understood to mean acquisition and production costs." However, in some circumstances valuation at a figure lower than cost will be necessary. In a situation in which replacement cost of the inventory is lower than original cost of salable merchandise in stock and selling prices of the merchandise have also declined, or if it is anticipated that selling prices will decline as a result of the decline in replacement cost, the inventory should be valued at an amount which is less than cost. This can be accomplished by reducing the value to an amount commonly referred to as market. The term market means replacement cost, except that this amount (1) "should not exceed the net realizable value (i.e., estimated selling price...less reasonably predictable costs of completion and disposal); and (2)...should not be less than net realizable value reduced by an allowance for an approximately normal profit margin."

Current prepayments are valued at cost. This figure represents the balance of the original cost of the asset that has not been converted to expense, and thus indicates the portion of cost which will be carried forward to future accounting periods. Cost as used here consists of the unabsorbed service potential still embodied in the assets.

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68Ibid., p. 28.
69Ibid., p. 31.
Summary

In the past the balance sheet of a firm was considered of prime importance as an indication of the firm's debt-paying ability. Creditors looked at the statement from the standpoint of a forced sale of assets as a means of obtaining satisfaction of their claims. The balance sheet is still of significance in the determination of debt-paying ability, and particularly so in regard to short-term debts. However, the viewpoint has changed. Emphasis is no longer placed on realizable values of assets resulting from their forced sale, but instead liquidity of the current assets is of greater importance as a means of determining solvency.

Liquidity in a dynamic sense results from the convertibility of the current assets. Convertibility refers to the ability of the assets to be exchanged or turned over during the operating cycle, with a resulting increase in the totality of current assets with each round of conversions. This growth or increase in current assets and hence working capital gives an indication of an increase in assets that will become available for expansion of the firm and liquidation of liabilities in the future. A weak or unfavorable balance sheet position can be remedied through a continuing series of profitable conversions, while a lack of adequate conversions can result in the dissipation of assets and thereby a decline in solvency. From a going-concern standpoint, therefore, liquidity is determined by the ability of current assets to be converted to other forms, and liquidity thus developed results in the growth of working capital and an improvement in the short-term solvency of the firm.

Solvency of the firm, as indicated by the various measurements of the adequacy of working capital, is of marked significance, for upon its adequacy depends the capacity of the firm to carry on effective operations
and also the ability of the firm to survive periods during which losses are incurred.

On the basis of the preceding analysis and discussion of the current accounts of a firm, it can further be concluded that anticipation assumes a significant role in regard to two aspects involved in the reporting of current accounts on financial statements. First, it requires consideration in problems of recognition of current items, and secondly, it requires consideration in problems of valuation.

Anticipation forms an essential basis for asset accounting in general, since assets represent prospective economic benefits to be realized by the firm through utilization of the assets. In the more specific case involving current assets, it is anticipated that the benefits embodied in the assets will be realized during a relatively short period of time—the operating cycle. It is thus obvious that anticipation in the area of current asset recognition assumes a dual role. It is anticipated first that service potential does exist, and secondly, it is anticipated that the potential benefit will be realized through conversion of the asset within a determinable period of time. The situation in regard to recognition of current liabilities is somewhat different. Reported current liabilities represent anticipated payments that will be required, but the date on which these payments will be necessary is generally fixed. This results in the fact that anticipation assumes only a single role in current liability recognition, and therefore is not as significant in this area as in the area of recognition of current assets.

Anticipation plays a similarly important role in the valuation of current items. In situations in which cash-realizable value is less
than cost of the asset, cash-realizable value is used as the basis of valuation. In the case of receivables, short-term investments, and inventories, cash-realizable value is frequently less than cost, and therefore valuation allowances are required as a means of reducing the amount of the asset to the lower figure. Thus, any losses which may develop as a result of uncollectible receivables, market declines of short-term investments, or declines in the realizable value of inventories of merchandise, are anticipated and consequently recognized prior to actual realization of the loss through sale of the asset.
Chapter V

THE ROLE OF ANTICIPATION IN ACCOUNTING FOR FIXED ASSETS

Introduction

Financial accounting in the United States, apparently since its first appearance here, has been anchored by the idea of historical cost. Net income for the majority of firms has been considered to be the excess of realized revenue over historical costs that can reasonably be determined to have been consumed or expired in the process of generating revenue. Income determination is thus primarily a problem of matching revenue with related costs. In order to arrive at a reasonably objective and comparable basis for matching revenue and costs, numerous accounting conventions and standards have developed as a means of effecting the income-determination process.

One of the significant conventions that has developed and is thus basic to income determination is the use of original cost, with no adjustment of this cost due to subsequent changes in the real value of the monetary unit. One of the important elements of cost which must be matched with revenue of a period and which is at the same time significantly affected by changes in the real value of the monetary unit is depreciation of fixed assets. Depreciation refers to the allocation of the cost of fixed assets to operations during periods which benefit from the use of the asset and thereby absorb the service potential of the asset.

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1Stephan Zeff, "Replacement Cost: Member of the Family, Welcome Guest, or Intruder," The Accounting Review, XXXVII (1962), 611.
Meaning of the term Fixed Assets

Reference has been made in preceding chapters to the functional distinction between current and fixed assets. As indicated then, fixed assets represent bundles of service potential which are of little significance unless current, or circulating, assets are available for the purpose of absorption of the service potential of the fixed assets. Fixed assets are thus of value only so long as they are actually utilized in the generation of services, a process which is facilitated by the existence of current assets.

Historically, the word asset, without regard to classification, can be traced back to the French phrase *assez d'effets*, which referred to one's owning sufficient effects or properties for the payment of debts.\(^2\) A literal retranslation of the anglicized word assets back into the original sense would give the phrase "sufficients to pay debts," which indicates the term asset is a technical one carrying its own connotation—that of property available to pay debts.\(^3\) Later in business and accounting the term came to mean any property held by a business enterprise for use in its operation.\(^4\) The meaning further evolved from this concept to the presently accepted one, which states that assets are embodiments of service potential.

In discussing the problems involved in accounting for fixed assets, it is essential that the term be more rigorously defined. A study of professional writings reveals the fact that several types of definitions

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\(^3\)Ibid., p. 341.

\(^4\)Ibid., p. 341.
of the term exist. Included among the various definitions are the following:

1. "Fixed assets are those assets of a more or less permanent nature used in a business, whether it be a manufacturing, wholesale, retail, or other type of enterprise. They represent the tools, using the term in a broad sense, which are used in the conduct of a business, as distinguished from...other assets which arise out of the operation of the business...."^5

2. "A tangible asset held for the services it yields in the production of other goods and services; any item of plant.... A balance sheet classification denoting capital assets other than intangibles and investments in affiliated companies or other long-term investments."^6

3. "Land and depreciated values of plant and equipment; non-marketable securities, or securities of necessity held permanently, and intangible assets...."^7

4. "Items...categorized as 'other assets,' sometimes also described as 'long-lived' or 'fixed,' include those not readily convertible into cash and/or held for use over a number of years."^8

5. "The assets that are excluded from the current asset section may all be included in another group called the non-current or fixed assets."^9

All the differences in the definitions quoted are differences concerning the scope of coverage of the fixed asset category, with all definitions excluding the assets that would be classified as current.


The definitions are basically in agreement, except for recommended treatment of permanent investments and intangibles. The definitions either set up classifications for permanent investments or intangibles as separate from the current and fixed asset categories or they include one or both within the fixed asset group.

The first definition quoted, by the implication of the phrase "used in the conduct of the business," excludes from the fixed category the permanent investments. Definition two, by Kohler, excludes in addition the intangible assets, which are presumably included in the first definition. The last three are all more inclusive than the first, including within the fixed classification items of plant and equipment, long-term investments, and intangibles. It is thus clear that the classification of fixed is very likely to be inconsistent. However, the first definition is the most frequent one encountered.\(^{10}\)

The lack of a uniform, accepted definition is not a particularly serious handicap to accountants or financial analysts. Some confusion may develop if writers do not clearly indicate the meaning they associate with the term, but in regard to statement presentation the lack of a rigorous definition has little significance. The question is one of how the assets appearing on the balance sheet should be classified or sub-classified, rather than a question of the magnitude of total assets. The classification procedure followed on the statement will indicate the definition that has been selected by the individual who prepared the statement.

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\(^{10}\) Frank A. Singer, "Fixing 'Fixed Assets'," *The Accounting Review*, XXXII (1957), 105.
In reviewing the five definitions quoted, one point stands out as being particularly significant. This is that all definitions are in complete agreement on one point—that fixed assets definitely exclude the current items, which are those assets that enter into the determination of working capital. For purposes of this study, this significant point of agreement will be given consideration, and on that basis fixed assets will be defined to include all assets except those that are properly classified as current. This definition has the advantage of simplicity, plus the fact that it also creates a clear dichotomy for all assets. In order to give recognition to physical or functional differences that exist among various fixed assets, if these differences are significant, subclassifications such as plant and equipment, intangibles, and investments will be utilized. The similarity of all subclassifications of fixed assets is highlighted in the following words: "A great deal of fallacious thinking has stemmed from...over-emphasis of a brick-and-mortar viewpoint. Careful analysis of the modern concept of fixed assets...will indicate...there is little basic economic distinction between so-called tangible and intangible properties, the values of both being practically entirely dependent upon earning power."\(^\text{11}\)

Problems in Accounting for Fixed Assets

Since fixed assets represent a substantial part of the entire asset investment of industry in general, fixed asset accounting assumes an integral part of the complete accounting art. No company can operate a business without a certain amount of equipment and a place in which

to operate. The significance of the fixed asset investment varies from one type of firm to another. If a firm is purely a selling operation with merchandise shipped directly from the manufacturer, it may need only an administrative office. If it is going to carry inventories of merchandise and sell from the stock, storage and display facilities will be required in addition. If it is going to manufacture the merchandise it sells, the requirements will be much greater, since plant and equipment will be required in addition to storage, selling, and administrative facilities. Thus it can be readily demonstrated that the more extensive the operations of a firm, the more significant the fixed asset investment becomes.

Two major problems are inherent in the process of accounting for fixed assets. The first is concerned with the measurement or valuation of fixed assets, and the second with the determination of the appropriate amount to charge to expense. In addition, each of these basic problems has a number of minor problems relating to it.

Value and Valuation of Fixed Assets

In the measurement of fixed assets, the terms value and valuation are frequently encountered. The concept of value has been discussed earlier, and at that time it was determined that no one generally accepted accounting definition of the term exists. Instead, three distinct meanings are associated with the term. The three meanings are: (1) Economic value, which represents the discounted value of anticipated services; (2) Cost value, which represents the accounting value based on accounting principles; and (3) Current value, which represents the cash an asset would command if it were disposed of as a result of an arm's-length transaction.
Each of these meanings of the term value can be associated with the process of valuation of fixed assets. The valuation of assets refers to the selection of a set of procedures to apply in reducing assets to an array of money amounts.\textsuperscript{12} Economic, cost, or current values might be considered as theories of value, while the application of specific procedures required to determine the magnitude of the dollar amount of each of these values is referred to as the valuation of assets. Valuation is thus associated with specific procedures that are applied for the purpose of determining asset values.

**Direct Valuation of Fixed Assets.** Some accounting theorists maintain that an asset's value might be measured by the discounted value of its future services. This approach is generally referred to as direct valuation or economic valuation. For example, the American Accounting Association's Committee on Concepts and Standards Underlying Corporate Financial Statements has stated that: "The value of an asset is the money-equivalent of its service potentials. Conceptually, this is the sum of the future market prices of all streams of service to be derived, discounted by probability and interest factors to their present worths."\textsuperscript{13} A similar position is taken by Moonitz and Staeling, who emphasize direct valuation accuracy by stating that "...to the extent we are unable to determine exactly when and how much cash will be received and paid out in the course of all future operations, the derived values of assets... must be correspondingly incorrect."\textsuperscript{14} The opinion is further stated


\textsuperscript{14}\textit{Op. Cit.}, p. 120.
that "...cash constitutes the only asset...that provides no valuation
difficulty. In this respect it differs from all of the other assets
whose value amounts, if properly determined, should reflect the value
of prospective cash receipts or disbursements."^{15} "The fact is that
future receipts although unknown are the most important measure of the
value of an asset..."^{16}

Application of direct valuation procedure. The application of
this valuation procedure for the determination of economic value requires
that the owner of the asset possess three crucial bits of information.
The owner must know first the monetary value of services which the asset
will provide during its useful life and the dates on which these services
will be realized. These services may be in the form of increased revenue,
cost savings, or both.^{17} Secondly, the owner must know the complementary
outlays required in order to realize the increased revenues, or cost
savings, which he anticipates in the first instance, and again, he must
know the dates on which these outlays will be required. Finally, he
must know the residual or salvage value of the asset at the end of its
economic life. The outlays required for the generation of revenue or
realization of cost savings, offset against the gross amount of services
realized during the life of the asset plus the salvage value at the end
of the asset's life results in a series of net proceeds that will be
yielded during the period of investment. The value of the asset to the

15Ibid., p. 119.

16Sidney S. Alexander, Income Measurement in a Dynamic Economy
in Five Monographs on Business Income (New York: American Institute

17Arthur L. Thomas, "Precision and Discounted Services," The
Accounting Review, XXXI (1956), 186.
owner at any point in time is thus the present value of all future net proceeds, discounted at some appropriate rate of return. Discounting is necessary in order to adjust the net proceeds for time, risk of loss, and uncertainty of risk so that a realistic determination of value is possible. 18

An outline of the essential elements of this process is as follows:

1. Cash assets are invested in productive assets;
2. The application of labor and materials to the productive facilities adds utility to materials, creating a product with increased economic value;
3. The product is then converted from non-cash assets to cash assets. 19

The outlays result when cash is converted into physical assets or used to pay for services, and revenue results when physical assets resulting from the productive process are converted into cash. The difference between the outlays and revenues of each period represent the net proceeds of the investment, the discounting of which gives the value of the asset.

Uncertainties attend the forecasts made of each asset's cash flow. These uncertainties result from the lack of definite knowledge concerning the future behavior of the many factors, basically economic in nature, which affect each asset's financial outcome. While some factors, such as the rate of obsolescence of assets or the rate of exhaustion of assets due to wear, vary from asset to asset, other factors, such as the general level of economic activity, are of a common nature, for their projected behavior is common to the estimation of cash flow of

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numerous assets at any given time. However, since some factors exist which influence the anticipated cash flows of specific projects or assets, uncertainties must of necessity be appraised on an individual asset basis. As a result of the fact that unequal degrees of uncertainty exist, therefore, it is necessary to employ a variety of rates of discount for the various assets held by a firm.

It is generally agreed that this approach does have advantages in some situations. Business decisions, for example, often require dealing with complex facts, and the direct valuation approach provides a useful tool for organizing and simplifying complicated facts and thereby providing a systematic method for solving investment decision problems. However, some theorists, such as those quoted above, imply criticism against other valuation procedures, arguing that the direct valuation procedure is the only acceptable method for determining accounting values of fixed assets. This criticism could be very important, since asset valuation is a significant determinant of income, which is one of the primary reporting objectives of accounting. Thus, if the discounted services approach is more nearly accurate than conventional approaches, as claimed by some accountants, greater effort should be expended to implement this procedure into accounting theory and practice. The premise that this method of valuation is more precise should first be investigated, however, to determine if it is realistic. In order to determine if the major premise is accurate, the assumptions underlying the concept must be analyzed and evaluated.


Assumptions of the direct valuation procedure. The first major assumption is generally explicitly stated: Future uncertainty is assumed away. The economic valuation approach requires that the owner be certain of future net cash flows resulting from the utilization of the asset. If the future holds any degree of uncertainty, the owner of the asset will not know exactly the dates and magnitudes of revenues and outlays, and in this situation this method of valuation may not give results with the degree of precision as that claimed by its proponents and hence may not be an infallible standard with which to compare other accounting valuation procedures. The assumption of certainty is a simplifying assumption, and may be stated as follows: "The basic problem of the income determination problem can best be studied by eliminating the most disturbing factor,...uncertainty. Once the nature of the process is understood, we may judge any proposed solution to the problems of profit measurement." ²²

A second assumption which is required is less explicitly stated, but is required none the less. Canning touches on this requirement when he states that "...no one can make a direct money valuation of...services unless they are to be sold separately." ²³ More explicitly stated, the direct valuation process assumes that the services of each asset can be independently determined, that each asset's services are separate and distinct from the services rendered by all other assets that comprise the firm.

Evaluation of direct valuation procedure. In regard to the first assumption, that of certainty, it can be argued that this does not

square with the facts of the real world, and hence this assumption must be relaxed if accountants are to use the direct valuation approach for the purpose of determining fixed asset values. In a dynamic economy, which is characteristic of the case in which accounting must function, change, or uncertainty, is the very essence of the situation. In actuality, then, uncertainty is so inherent and is such an integral part of the economy that it cannot be eliminated without the simultaneous destruction of the validity of computations excluding or assuming away this vital aspect. Not only is uncertainty a significant element in the usual course of economic events, but unforeseeable decreases in asset values resulting from such situations as casualty losses also arise, and these make valuation of assets by direct methods even more difficult to achieve. The elimination of uncertainty about the future ignores one of the most important elements that enters into the determination of asset values.

In regard to the second assumption that underlies the direct valuation process, that of independence of services and hence values of fixed assets, it can be argued that the value of the services of one asset cannot be separated from that of other assets of a firm. The service performed by each asset can be determined, but it does not seem probable that total revenue realized by the firm can accurately be apportioned to all of the assets which perform services on the product during the productive process. If material passes through a series of operations as it is transformed from the raw material state to finished product, it is difficult if not impossible to value the services of each asset independently. It may be possible to value the whole process or the whole firm, but it becomes impossible to determine precisely
the value added to the product by each asset individually. The value of the services of one part cannot be separated from the value of the services provided by the whole without the separation being very arbitrary.\(^{24}\)

Canning sums the process of direct valuation as follows: "Ideally... it would be desirable to have direct valuations throughout. If we could by any means obtain future manufacturing and sales data in the forms and amounts that are later to eventuate, we should be able to prepare a balance sheet that would be an instrument of precision."\(^{25}\) However, he adds the opinion that to carry direct valuation procedures to fixed assets under conditions that presently exist "...runs too close to the work of the clairvoyant and the astrologer to appeal to the professional accountant."\(^{26}\)

On the basis of the preceding analysis it can be concluded that the direct valuation approach to the measurement of fixed assets is imprecise in accounting practice. However, this does not imply that it should be discarded for theoretical or analytical purposes even though, from a pragmatic standpoint, it might be argued that the direct valuation procedure is of little significance. This approach does give an insight into the process of asset valuations and also an indication of the extent to which service potential is a requirement for asset recognition.

The preceding analysis is primarily concerned with the applicability of the direct valuation approach as a means of measuring plant and

\(^{24}\text{Thomas, Op. Cit., p. 71.}\)

\(^{25}\text{Op. Cit., p. 184.}\)

\(^{26}\text{Ibid., p. 184.}\)
equipment and intangible elements of fixed assets. The direct approach could be more useful in the valuation of investments since in the case of many investments, and bonds in particular, the extent of the stream of net asset inflows resulting from the investment can be more precisely measured. In the case of a bond investment, for example, the carrying value on the books of the investor represents the amounts of future proceeds discounted to present value through the application of the market rate of interest in effect at date of acquisition. Bonds thus represent an asset the valuation of which does require the anticipation of future receipts.

A theory can be defined as a "...set of definitional, classificational, and causal statements that combine in a logical way to provide an explanation of how something happens, and also of associated rules for testing and implementing the theory."27 The direct valuation procedure thus fits into the theoretical framework of accounting since it provides an insight into asset measurement techniques, even though it may not be precise enough to be useful as a standard of comparison for actual accounting practice in all circumstances.

Indirect Valuation of Fixed Assets. Since the conversion of fixed assets into cash is usually indirect and therefore characterized by a significant degree of uncertainty, the direct valuation approach is not acceptable on a practical level for all elements that comprise the fixed asset category. As a result, indirect valuation procedures must be adopted. On this basis, valuation of fixed assets must be based on

present or past rather than future exchange prices. Present exchange prices consist of current costs of assets, while past exchange prices consist of original costs of assets.

**Current cost as a basis for fixed asset valuation.** Current cost of assets refers to cost at present day price levels, and is equal to the outlay that would presently be required in order to acquire the resources necessary to reproduce the asset. Current cost, therefore, is equivalent to the cost of replacement of an asset by manufacture.

Three methods of measurement are available for the determination of current cost. The three are: (a) reliable current market data; (b) conversion from original historical cost to current cost through the use of an index number especially designed to measure the movements in prices of a specific item or group of similar items; and (c) the use of independent appraisals of specific assets.

In regard to the first method for determining current cost—market data—it is generally agreed that in the absence of market imperfections such as monopoly, ignorance, and immobility, current cost should be equal to market value and market price. However, in actuality due to the imperfections that exist and the sporadic character of the market for used plant assets, these three amounts may not be equal. Market

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price refers to the amount for which the asset could be sold; market value refers to the present value of services anticipated from the employment of the asset; and current cost refers to the cost of reproducing the asset in its present state. In the case of new plant assets, these three concepts would very likely result in measurements of equal magnitude, since a competitive and organized market exists. Since a prevailing market does not exist in the case of many used assets, however, market price, market value, and current cost need not necessarily be of equal amount.33 As a result, the reliability of current market data as a measure of current cost cannot be objectively determined by the accountant.

Since market data that are reliable are difficult to obtain, a more acceptable method of determining current cost has developed. This method is concerned with the conversion of deferred or unamortized original cost to current replacement cost by the use of a specific index number, one which is based on a homogeneous group of assets including assets similar to those for which current cost is being determined. The use of a specific index is required in order to arrive at a figure which adequately measures the change in the level of prices associated with the type of fixed assets being revalued. If a general price index number is used for conversion from original cost, the resulting amount is influenced by the changes in relative prices of all products and services. As a consequence, the procedure which utilizes a general price index provides an amount which represents historical purchasing power of the dollars committed to the asset as a basis of valuation, rather than current cost of the specific asset.

33Ibid., p. 375.
However, there are inherent deficiencies involved in the development of current cost figures through the application of index numbers to historical undepreciated cost. Most significant perhaps is the fact that the reliability or adequacy of the current cost figure obtained for each asset or group of assets by this method is dependent upon and hence limited by the appropriateness of the index numbers that are actually available. Index numbers as developed generally cover a relatively broader classification of assets than the assets held by a particular firm, with the result that the degree of technological change recognized in the construction of the index number may differ radically from the degree of technological change actually realized by the firm. The index number is thus based on the costs of new assets, while it is being applied to used assets.

The second alternative which might be used for the establishment of current cost figures in situations in which no reliable current market price is available is the utilization of an independent appraisal of the specific asset in question. This method requires that a group of professionals make an objective study of a firm's facilities and on that basis make a recommendation concerning the current cost of the assets of the firm. As with the preceding method of determining current costs, this method also has inherent weaknesses. From the purely practical standpoint, asset appraisals are costly in terms of fees that must be paid to professional appraisers who perform the services involved. From the standpoint of reliability of figures thus developed it can be argued that they do not represent thoroughly adequate reflections of

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Ibid., p. 375.
the current costs of plant assets. In the case of specialized plant and equipment items, "the price paid is the result of negotiations between the parties and generally is a more reliable index of fair value than the opinion of an outsider who is not required to back his opinion by making an actual expenditure in the amount thereof."\textsuperscript{35}

It is sometimes contended that current cost is equal to the value reflected in terms of market prices of assets.\textsuperscript{36} However, it was argued earlier that market price need not necessarily reflect the current costs of specialized plant assets, primarily due to the fact that a limited market frequently exists. In addition, historical book value of fixed assets adjusted to current cost through the application of index numbers, is derived through the use of a depreciation method which may be rational from the standpoint of cost allocation, but nevertheless may be arbitrary from the standpoint of market valuation of assets. Hence market price reflects an amount which might be considered a residual representing a combination of both current cost and adjustments for depreciation charges which the impersonal market may consider appropriate, but which may differ from depreciation charges a particular firm may consider appropriate.

The general inappropriateness of market value as a measure of current cost, however, does not preclude the use of market value in some situations as a valid measure of resources committed to a firm. Rather than a measure of current cost, market value represents a measure of the opportunity cost associated with asset ownership and utilization. This


\textsuperscript{36}Ibid., p. 197.
cost reflects the value of the asset when put to its best alternative use. Opportunity cost is thus a measure of the foregoing or sacrifices involved in the use or other disposition of an asset, and as such is superior to past market price as measured at the time of acquisition. Opportunity cost is representative of the current price of an asset, but, as indicated, may differ from the current cost of an asset as developed from the use of index numbers or appraisals.

The concept of original cost. Various definitions of original cost have developed, but general agreement in regard to the meaning of the term exists. In broad terms, historical cost refers to the "...quantity of resources actually expended...or surrendered as a condition of realizing revenue." Cost can also be defined as "...a general term for a measured amount of value purposefully released or to be released in the acquisition or creation of economic resources, either tangible or intangible." In its widest application, cost thus includes any asset outlays or liability incurrences necessary for the generation of revenue, or any outlay incurred for the purpose of furthering business objectives.

The term cost is more narrowly defined when it is used in reference to the acquisition of fixed assets. In the case of fixed assets, cost refers to all elements "...necessary for acquiring the property and placing it in a position to serve the particular function for which it

37Sprouse and Moonitz, Op. Cit., p. 27.


is intended. The elements included in cost are measured by the amount of the immediate cash consideration in a cash transaction, while in a credit transaction cost is the amount of money necessary to effect immediate settlement of the liability assumed.

Cost generally represents a sacrifice of values and thereby constitutes a dependable basis for asset recognition. It can be reliable, however, only if it has developed from competitive bargaining, which means that costs resulting from controlled relationships may not be adequate measures of the sacrifices made by both parties to the transaction on which the transfer is based.

In addition to the acquisition price, other related outlays are frequently required before the property is able to perform its required functions. It is a generally accepted principle of accounting that these related costs also be included as a part of the cost of the assets obtained. This category of costs includes such items as transportation, insurance, and storage costs associated with the acquisition of fixed assets, legal fees incurred in the acquisition, costs resulting from the preparation of land for building construction, and planning, construction, and carrying charges applicable to buildings or other fixed assets during the construction period. Since the costs of these various services required to prepare assets for effective utilization are as necessary and important as the physical assets themselves, it is proper to include the costs of these within the total purchase price of assets.

A special problem of cost determination arises in situations in which a firm constructs plant and equipment assets for its own use. On

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\(^{41}\)Ibid., p. 34.
the basis of the cost concept, it would seem appropriate to include all applicable charges in the cost of the asset. The essence of the problem involved is the determination of the amount of general factory overhead to be borne by the project under construction. Two divergent viewpoints are frequently advanced concerning the appropriate charge to the construction account. These are: (1) that the assets under construction should bear their proportional share of normal factory overhead; and (2) that construction costs should only include overhead that can be directly assigned to the project and is in excess of overhead that is normally incurred in plant operation.¹²

Proponents of the first method argue on the basis of the usual application of the cost concept, which states that all costs incurred should be capitalized as a part of total asset cost. On this basis all overhead, whether normal or abnormal, is a legitimate element of cost incurred in construction and therefore should be carried forward as a part of the cost of the completed project. Proponents of the second viewpoint, however, argue that because normal overhead exists anyway it is not a legitimate cost associated with the project, since this part of overhead does not result from asset construction.

Evaluation of current and historical cost concepts. In a static economy a current-historical cost controversy would very likely not develop, because there would be no significant difference in the magnitude of the two. However, in the present economy wide divergencies between the asset measurements arrived at through the application of these two concepts of cost exist in the case of some assets, and in

this situation the current-historical cost controversy has developed and gained recognition as one of the most perplexing problems faced by accountants.

Overt action was taken during the 1920's by management in many cases in order to reflect asset values at figures which gave recognition to the inflation which occurred following World War I, and the result was that asset values in excess of cost were reported in financial statements. This was followed in the 1930's by wholesale write downs of plant asset values as a means of giving recognition to the lower price levels existing at that time. The bad experiences resulting from the arbitrary write ups and write downs of the 1920's and 1930's have perhaps exerted some influence on the attitude of accountants during the inflationary period that has been in existence since 1940, and the result has been adherence to the principle that accounting is based primarily on historical cost outlays.

A review of current accounting literature reveals that the effect of inflation on financial reports presents a very real and challenging problem. It is alleged that present asset measurement techniques, as based on historical cost outlays, present data which are internally inconsistent and therefore not comparable. On the basis of this allegation it is then argued that greater recognition of current cost would present more scientific and objective measurements of asset values, with the result that the usefulness of accounting data would be enhanced. The argument for current cost is stated by Sprouse and Moonitz as follows: "It represents a neutral, objective evaluation of economic benefits. Since people act in the present and future... current market price is preferable to past.... Current market price is superior to
past market price... as a measure of the 'foregoing' or 'sacrifice' involved in the use or disposition of the asset.\textsuperscript{43}

The first detailed proposal in the United States of an accounting technique designed to eliminate the effect of changing price levels from accounting presentations was that advocated by Henry W. Sweeney. He expressed the opinion that accounting figures did not portray reality because of the changes in the purchasing power of the dollar. He contended that "... accounting figures are expressed in rubber units of measurements.... The truthfulness of accounting depends largely on the truthfulness of the dollar—and the dollar is a liar!\textsuperscript{44}

The significance of current value of assets can be stated as follows:

"The financial significance of property is manifestly to be determined largely from present facts and prospects rather than from past facts; the latter are ordinarily of importance only so far as they may be said to indicate what is likely to happen in the future. As a result the present value of property is, generally speaking, the factor of outstanding importance; it indicates, with varying degrees of accuracy, what the owner may expect to realize upon the sale; it determines his borrowing capacity in so far as the property is concerned; it fixes his liability for various forms of taxation; it reflects his earning capacity as owner; it may be said to measure his ability to make gifts; it is the basis upon which the property may be insured."\textsuperscript{45}

Divergencies between historical cost and current cost are a result of the passage of time. At the date of acquisition of fixed assets current and historical costs are substantially the same as a result of

\textsuperscript{43}Cit., p. 27.

\textsuperscript{44}Henry W. Sweeney, Stabilized Accounting (New York: Harper and Brothers, 1936), p. iv.

\textsuperscript{45}James L. Dohr, "Cost and Value," Journal of Accountancy, LXXVII (1944), 193.
arm's-length bargaining. Due to factors which come into operation after acquisition, current cost at a later date may significantly exceed or be exceeded by historical cost. Changes in current cost may be the result of changes in the purchasing power of money, physical or economic development, changes in demand, or technological advances. The significant question that arises is thus which of these two bases of cost should be most appropriate for accounting presentations. Some accountants argue that recognition should be given to such changes, while others argue that recognition should not be given. The current position of the accounting profession is stated by Dohr as follows:

"Accountants recognize cost as the cost to the present owner; they generally belong to the group opposed to recognition of changes, although some accountants feel that a distinction may be made as between appreciation and decline in value."\textsuperscript{46}

In order to arrive at a workable solution to the current-historical cost problem, consideration must be given to the implications of accounting statements prepared on both bases in view of the basic objective or purpose of accounting. The basic objective of accounting is to accumulate, present, and interpret the financial activities of business entities in a manner that will provide a "...sound guide to action by management, investors, governmental agencies, and other appropriately interested parties, and to secure equitable determinations with respect to the various parties, in the light of prevailing standards of law and business practice."\textsuperscript{47}

\textsuperscript{46}Ibid., p. 194.

On the basis of this broad objective, it can be deduced that the accounting function in business is largely, if not exclusively, utilitarian in nature. Accounting practices have evolved in response to the users of financial data, consisting primarily of individuals or groups not directly associated with the actual day-to-day management of the firm. Various factors, notably the advent of the corporate form of business organization with the attendant government regulation that has developed in its wake, have operated to bring entity finances and operations more and more under public scrutiny. As a result, published accounting statements reporting stewardship of capital contributions have been emphasized. Because of the fact that stewardship reports are specified by law or corporate agreement, any imbalance that develops between the stewardship and managerial objectives of published financial reports will most likely be at the expense of service to management.\(^8\)

The duality of accounting purpose, covered by the concepts of stewardship accounting and managerial accounting, implies the possibility that not one set of outputs from the accounting system will adequately serve all needs. Stewardship accounting places emphasis on the enterprise as a whole, while managerial accounting focuses attention on the constituent elements of the firm.\(^9\) The objectives of stewardship accounting, with emphasis on consistency, objectivity, and comparability of financial data, require the general acceptance of a relatively rigid methodology. This methodology, when applied to a given enterprise, may seem to be unduly arbitrary, but is nevertheless necessary as a requisite


\(^9\)Ibid., p. 11.
for the realization of universal applicability and acceptance of the product of the accounting function.

In order to meet the basic objective of usefulness and fairness to all parties, and at the same time meet the requirements established by acceptable standards of stewardship accounting, the accountant must endeavor to present a financial outline which conforms to the actual affairs of the firm. Accounting must portray adequately the flow of costs associated with the acquisition and subsequent utilization of economic resources held by the firm, since this flow of resources represents the economic history of the firm. As indicated previously, firms must of necessity operate in the future and succeed or fail during that time period, but yet from the standpoint of stewardship accounting, past history measures the effectiveness with which stewardship has been discharged, and concurrently offers fact and objective opinion which can be analyzed as a means of rendering judgment concerning future prospects of the enterprise. On this basis it should be emphasized that accounting does not set up a thoroughly rigid or unyielding methodology which must be followed in all circumstances, but rather a methodology or framework which can achieve maximum utility only through conformity to situations actually existing in reality in objectively determinable form.

In accounting for fixed assets it is suggested that generally the cost basis is preferable in view of the basic stewardship-reporting objective of accounting. The function of accounting, as it is concerned with the accumulation and reporting of financial data relative to these assets, is "...primarily one of dealing with the cost of acquisition and
amortization of that cost over the useful life of the assets.\textsuperscript{50} The measurement of assets for balance sheet purposes \textldots{} involves primarily a showing of the extent to which cost is unrecovered or unamortized and the extent to which the evidence indicates the residue is recoverable in the normal course of business.\textsuperscript{51} The accountant is largely concerned with the business firm as a going concern, and thus does not play a significant role as a determiner of current cost. On the basis of these arguments, "it follows that accounting is generally on a cost basis and that there is and should be a strong presumption in favor of statement in terms of cost."\textsuperscript{52}

The significance of cost as a basis for fixed asset recognition and subsequent measurement is stated by various authors as follows:

"In general, the only definite facts available to reflect exchange transactions objectively and to express them homogeneously are the price-aggregates involved in the exchange; hence such data constitute the basic subject matter of accounting."\textsuperscript{53}

"\ldots{}the principal concern of accounting is the periodic matching of costs and revenues\ldots{}\textsuperscript{54}

"\ldots{}price\ldots{}is indicative of value at time of exchange, and as such is a great aid in the quantification of business data for accounting purposes."\textsuperscript{55}

\begin{footnotes}
\textsuperscript{51}\textit{Ibid.}, p. 195.
\textsuperscript{52}\textit{Ibid.}, p. 195.
\textsuperscript{54}\textit{Ibid.}, p. 7.
\textsuperscript{55}Accounting and Reporting Standards for Corporate Financial Statements, \textit{Op. Cit.}, p. 3.
\end{footnotes}
"...cost is significant primarily because it approximates fair value at date of acquisition."^6

"The accounting for fixed assets should be based on cost, but the... strongest argument in favor of this procedure is the difficulty and uncertainty that are encountered in determining value."^7

In addition to the foregoing arguments, additional reasons for the adherence to the cost concept exist. Since most fixed assets wear out and are thus discarded or replaced, cost is self correcting. The regular and continuing replacement of fixed assets clears the accounts of old, historical cost and replaces that cost with a new historical cost figure which again is equal to current cost. This process of disposal and replacement is therefore a continuing process of current cost recognition. The process of asset replacement, coupled with an irregular or creeping type of price-level change as opposed to a runaway price-level change, results in the fact that historical cost does not lose its significance. Concerning the rate of change of prices and the effect of that rate of change, Paton expresses the following opinion: "Departure from the standard policy of adhering to cost at date of acquisition... should be considered only where such a substantial and persistent change has occurred as to render accounting on the old basis inadequate and invalid in view of the recognized purposes of accounting."^8

The preceding defense of the cost concept should not be interpreted to mean that cost must be idolized by accountants. In some situations,


as in the case of self-construction of assets and asset exchanges involving non-cash consideration, cost determination requires the utilization of estimates and assumptions which result from a process less than perfectly verifiable and objective. Some allocations of cost are frequently involved in asset valuation procedures, and even though the allocations are reasonable, they may also be arbitrary to some extent. The result of cost determination then, in some cases, is not as definite and infallible as the basic doctrine might indicate or imply.

The analysis and evaluation of the cost concept indicates that the concept is well established in accounting doctrine. The continuity of life assumption as an integral element of the accounting framework stresses the significance of cost since it is assumed assets are held for utilization rather than outright sale. This is the normal situation faced by business enterprise, but in abnormal or atypical cases liquidation is a prospect. If liquidation is contemplated, cost loses its significance and cash realizable value becomes the all important alternative. Absolute justification exists under these circumstances for the abandonment of the cost concept, since assets are no longer being held for utilization. Under the going concern concept justification also exists in some cases for the abandonment of historical cost in the case of some specific assets.

If it becomes obvious that as a result of obsolescence, damage, or similar circumstances, the service potential of an asset has been materially reduced, justification exists for a write down to a figure which can be considered the dollar amount of service potential which will be realized through utilization of the asset. If use of an asset is discontinued as a result of factors of this nature, an immediate write
down to scrap value, if any, would be required. In these situations a significant decline in value has occurred, and the historical cost should be abandoned in order to give recognition to the loss in value which has been sustained. Substantial losses, when concretely demonstrated, require loss recognition prior to disposition of the asset, but because losses can frequently not be convincingly demonstrated, write-downs of asset values should not be lightly undertaken.\(^5^9\)

The Allocation of Fixed Asset Cost to Operations

Depreciable fixed assets represent a prepaid or deferred cost of manufacturing, marketing, or general administration of an accounting entity. In order for a firm to be profitable and thus successful, depreciation cost, like other costs incurred in operations, must be recovered by sales revenue. If the asset cost is not fully recovered as the service potential of the asset is consumed, a loss on disposition of the asset results. This loss must then be absorbed by revenue in a period subsequent to and thus unrelated to the time of use, with the consequence that a mismatching of revenue and expense occurs.

Depreciation differs from other operating costs in that a lump-sum prepayment is made for facilities of a productive nature that represent a source of services to be supplied to the firm over a series of future periods. Since service potential of depreciable assets cannot be acquired in quantities sufficiently limited to cover an operating period, a number of service periods of capacity must be acquired as a unit. The accounting problem that results from these circumstances is thus concerned with the determination of the proportion of the total cost

\(^{5^9}\)Ibid., p. 197.
of the asset that is applicable to each individual time period included in the useful life of the asset.

The amount of depreciation cost applicable to individual periods cannot be separately traced or directly associated with the periods involved, but instead can only be allocated with the aid of certain assumptions. Some methods of depreciation accounting assume depreciation to be a function of time only—that depreciation cost is incurred at a uniform annual amount or rate; while other methods assume depreciation to be a function of use—that cost expiration is proportional to the number of hours of use of the fixed asset or the number of units of product produced by it.

Judgment is required in determining which assumptions are most realistic and hence most appropriate for a given situation. Different depreciation methods yield unequal amounts of annual depreciation cost. Since judgment is a significant element involved in the depreciation process, it is not possible to prove that annual depreciation costs as measured by a particular depreciation method are more nearly exact or correct than are amounts as determined by other depreciation methods. Nevertheless, asset service potential expiration must be estimated and allocated to fiscal periods in order to prepare financial statements based on an adequate matching of revenue and expense. The rendering of sound judgment based on a careful analysis of the circumstances results in an acceptable measure of service expiration, even though equally sound judgment in a similar situation may provide unequal depreciation charges.

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Accounting for depreciation obviously has a significant element of subjectivity involved, but also involved is a degree of objectivity. Objectivity is involved in the analysis of facts that is required in determining which assumptions regarding depreciation method are most appropriate. Even though some degree of subjectivity is involved in the determination of depreciation expense by the conventional methods, this degree is not sufficiently great to force accountants to admit that financial statements are largely statements of opinion.

The concept of depreciation has had an evolutionary development. There is almost no reference made to depreciation accounting in American writings published prior to 1830.\(^61\) However, after the invention and utilization of the steam locomotive, companies having large capital requirements developed, and the resulting relatively large investment in fixed assets coupled with the new business concept of corporate accountability to stockholders caused many of the early companies to study depreciation.\(^62\)

One of the first clear references to depreciation accounting was in the annual report of the Baltimore and Ohio Railroad Company for fiscal year 1835, but no consistent policy was followed by any company or group of companies during the years following 1835.\(^63\) The concept of depreciation was not clearly established by the latter part of the nineteenth century, since at that time it was frequently believed that


\(^{62}\)Ibid., p. 71.

\(^{63}\)Ibid., p. 71.
if property were properly maintained depreciation did not occur.\textsuperscript{64} It was not until after the end of the nineteenth century that the concept of depreciation became generally accepted.\textsuperscript{65}

The Accounting Concept of Depreciation. Depreciation can be defined as "...the systematic assignment of a capital expenditure to different accounting periods."\textsuperscript{66} Based on this definition the primary objective of depreciation accounting can be stated as follows: "...to allocate the total cost of equipment to production during the period in which it will be used."\textsuperscript{67} Depreciation thus measures the reduction in services that a depreciable fixed asset will be capable of providing to future operating periods. The useful life and hence the service potential of an item of plant and equipment or an item of an intangible nature is limited by both physical and functional factors.\textsuperscript{68} Physical factors refer to the gradual diminution in useful life of the asset as a consequence of utilization and the wear and deterioration of the asset that results from the use to which it is put. Functional factors, however, are not related to actual physical use of the asset, but instead result from the passage of time. Functional factors therefore include obsolescence, supersession, and inadequacy, and result in a reduction in the service potential of a fixed asset not because of

\begin{itemize}
  \item \textsuperscript{64}\textit{Ibid.}, p. 72.
  \item \textsuperscript{65}\textit{Ibid.}, p. 74.
  \item \textsuperscript{66}Tyron H. Ross, "Depreciation and User Cost," \textit{The Accounting Review}, XXX (1960), 122.
  \item \textsuperscript{67}Joel Dean, "Measurement of Profits for Executive Decisions," \textit{The Accounting Review}, XXVI (1951), 187.
  \item \textsuperscript{68}Sprouse and Moonitz, \textit{Op. Cit.}, p. 32.
\end{itemize}
physical deterioration, but economic deterioration instead. Depreciation covers the portion of asset cost that has expired during a given period as a result of both functional and physical factors, and, as such, represents the cost of the services consumed during that period.

In order to avoid an unnecessary degree of subjectivity in depreciation accounting, the depreciation method adopted must be a rational one and it must also be applied in a systematic manner. To be rational, a depreciation method must be characterized by reasonableness. That is, it must produce an allocation of cost which is realistic from the standpoint of measuring the expired service potential. Likewise, the book value, or undepreciated cost, of the asset remaining after the depreciation recorded to date has been deducted, should represent a realistic anticipation of benefits to be derived in the future from the utilization of the asset. To be systematic, a depreciation method must be applied with regularity. Depreciation is a function of time and use, and therefore must be applied regularly on the basis of these determinants. Rationality and systematization are requisites for an acceptable depreciation program, since only by the application of a method consistent with these requirements can an undesirable degree of artificiality and arbitrariness be avoided.

The consequence of an adequate depreciation policy is the appropriate matching of revenue and expense and the resultant reporting of an income figure which gives recognition to the cost of service potential expired during the period. The accounting concept of depreciation is one which considers depreciation to be a process of allocation. The accountant is concerned with allocating the cost of depreciable assets to operating periods which derive benefit from the utilization
of the assets. Thereby depreciation contributes to the realization of the primary objective of accounting, which is the determination of net income.

If income is defined as the excess of current revenue over the original cost of assets consumed in the generation of that revenue, as it is in accounting, present methods of depreciation meet the requirement of adequacy very well. Under these conditions original cost becomes the all-important basis for depreciation measurement. The possibility that the amount of resources retained in the enterprise as a result of allocating original cost of assets might be an amount smaller than the replacement cost of the assets at the end of their useful lives is not a part of the accounting problem associated with depreciation accounting. Replacement of assets is generally not considered by accountants as one of the variables associated with income determination. The primary objective of depreciation accounting is to match cost of operations with revenue realized during a period, and depreciation charges which are adequate on this basis automatically provide for capital maintenance in terms of the money invested in property in situations in which a net income is earned.69

On the basis of the preceding discussion of the accounting concept of depreciation, it can be observed that depreciation charges do not represent a measure of physical deterioration alone. To the contrary, they should be based on a logical and rational system of assigning to expense of operations the basic cost value of depreciable fixed assets

over the estimated useful lives of the assets. The allocation of cost over the useful lives of fixed assets as related to the concept of depreciation does not involve the recognition of market value. General agreement exists in regard to the requirement that the accountant does not seek to value or appraise either the asset itself or the physical depreciation existing or accumulated at any time in the course of the useful life of the asset.70

It can furthermore be observed from the preceding analysis of the accounting concept of depreciation that it is significantly dependent upon expectations concerning the future. A requirement of an adequate depreciation policy is that the book value of a partially depreciated asset represent a reasonable measure of the benefits to be gained from future utilization of the asset. Book value at any point in time therefore represents a realistic measure of anticipated future benefits remaining in an asset, indicating that the accountant anticipates the future will use a portion of the asset. If the accountant did not anticipate or expect the future to consume a part of the asset, depreciation charges would be irregular and possibly higher. If anticipation assumed no role in depreciation accounting, it would be necessary to charge the entire cost of plant and equipment acquisitions to depreciation expense in the period of acquisition since no future benefit could be expected.

The Current Cost Concept of Depreciation. In addition to the generally accepted accounting concept of depreciation, several other concepts of depreciation exist. The generally accepted accounting

concept of depreciation holds that the allocation of the original cost of the asset to the entity is an adequate measure of cost associated with fixed asset ownership. Cost of the fixed asset on this basis is considered a deferred charge to be deducted from revenue during the period of use. Depreciation charges are deemed to be a reliable measure of cost when they permit a company to recover from revenue the number of dollars capitalized in the accounts on the date of acquisition of a depreciable fixed asset. Income tax regulations are based on this concept, and this concept is also consistent with that held by the United States Supreme Court.71

Two concepts of depreciation which are separate and distinct from the accounting concept, but which are closely enough related to permit their being discussed together, can be stated as follows:

1. "Current depreciation charges should provide buying power equal to that possessed by dollars at the time originally committed to the depreciable assets now being depreciated.

2. "Depreciation should provide the funds necessary for keeping a company's plant and equipment abreast of technological progress and for maintaining its competitive position."72

These concepts of depreciation are related, since both would tend to allocate a charge to operations which is dissimilar to that allocated on the basis of historical cost. Depreciation charges under both of these concepts would provide amounts closely resembling an amount which might be considered the current cost of ownership of fixed assets. These concepts would be consistent with a concept of net income which

71E. C. Flewellen, Jr., "Concept of Depreciation Held by the United States Supreme Court," The Accounting Review, XXXV (1960), 421.

could be stated as the excess of current revenue over the current cost of facilities utilized or consumed during a given period.

Advocates of these points of view contend that depreciation as generally recognized has been inadequate during the inflationary period that has been in effect for the past two decades. Depreciation charges, as based on this line of reasoning, have been inadequate because they have not been of a magnitude sufficiently large to enable a firm to maintain its productive capacity and efficiency without resorting to outside sources of cash with which to replace retired facilities. Funds recovered from revenue based on an allocation of historical cost have been insufficient, and as a result it is argued that this constitutes a hidden taxation of capital which interferes with the circulating flow of capital from current assets back to fixed assets as required to maintain a company's productive power.73 These concepts of depreciation assume that the source of funds for permitting an enterprise to maintain its position in the industry must be recovered from customers prior to the application of appropriate tax rates. On this basis it is concluded by proponents that depreciation charges based on historical cost have recently been understated and an erosion of equity capital has occurred.

The objective of depreciation accounting inherent in these current cost concepts of depreciation is not to allocate the historical cost of facilities consumed, but rather to measure expired earnings potential. This comparison of depreciation policy objectives gets to the heart of the divergencies that exist between the historical cost and current cost schools of thought.

73 Ibid., p. 11.
It was argued earlier that original cost of fixed assets represents a valid measure of value for accounting purposes. Likewise, depreciation as an allocation of original cost is the relevant measure of expense associated with fixed asset utilization, and as a result depreciation practice remains firmly anchored to original cost of fixed assets. As stated explicitly earlier, the purpose of depreciation accounting is to allocate the cost of fixed assets and thereby provide a measure of net income, through the matching process, which is consistent with the current accounting concept of income. A basic accounting objective—income determination—dictates that the appropriate depreciation concept is one which allocates original cost to operations. The original cost concept of depreciation does not confuse the cost of service potential utilization with the cost of capital improvements which represent reduced costs of future operations, superior quality of product, greater capacity of equipment, or other advantages, none of which are relevant as a measure of expired cost and therefore are not recognizable as a present cost of operations.

**User Cost as a Measure of Depreciation.** A third concept of depreciation is covered by the term "user cost." User cost refers to the opportunity cost involved in fixed asset utilization. This concept of depreciation measures the net revenue foregone by putting an asset to its present use in the enterprise as opposed to its most profitable alternative use. The alternative involved in using the asset for a period may be viewed as selling it at the beginning of the period rather than the end of the period, in which case the fall in value of the asset

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during the period represents the user cost, or depreciation for the period. 75 Depreciation on this basis measures the reduction in disposal value during the period, and as such is an indication of capital deterioration. Depreciation computed on this basis is not related to cost, for market values fluctuate both up and down, with the result that in some cases depreciation could be negative.

This concept of depreciation can have significance for managerial decisions concerned with selling or utilizing a fixed asset, but is not systematic as an acceptable depreciation method must be. As with the two preceding concepts of depreciation, user cost does not represent an effective reporting of stewardship, nor does it report a net income figure which is consistent with the accounting concept of income.

The Significance of Salvage Value in Depreciation Accounting.

In Chapter II, assets were described as bundles of service potential. This chapter is concerned with the problem of measuring the cost of the portion of the bundle of services that is consumed by business operations during a period of time. This portion of total asset cost which attaches to operations during a given accounting period is referred to as depreciation. Depreciation is therefore a measure of the cost of the portion of services that has been exhausted during a period, and this cost must be covered by revenue if a firm is to be as well off at the end of the period as it was at the beginning.

One of the elements involved in determining the portion of cost to allocate to operations is the establishment of the proper depreciation

75 Ibid., p. 187.
This represents the total amount of depreciation that will be charged to operations during the service life of the asset. This amount will frequently be less than total cost because the asset will possess some value after it has reached the point at which it is no longer suitable for its intended use. This value is generally referred to as salvage.

There are two concepts of salvage. The older of the two concepts is embodied by the term "junk value," which refers to the scrap value of the asset as basic material to be reused in a physical form different from that of the present asset. A newer concept of salvage refers to amounts that will be recoverable when the asset, after normal use by the original purchaser, is disposed of because it is no longer useful to him. In this case, the asset may have some service potential remaining, but the owner may find replacement of the present asset with a more efficient one to be more profitable. The profit motive of the owner may thus dictate the disposal of the asset before its service potential has been fully absorbed by operations.

Since a salvage value may frequently remain because asset disposal precedes complete service potential utilization, the estimated salvage must be considered in determining the portion of total cost of the asset to be allocated to operations. The portion of cost to allocate is the excess of total cost over salvage.

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78 Ibid., p. 97.
Since salvage values are estimates rather than fact prior to realization, the accountant is forced to anticipate the amount to be realized as salvage upon disposal of the asset. The amount anticipated as salvage is not included as revenue of the firm, but rather as an offset against the total of asset cost and hence depreciation charges based on that net figure. Failure by the accountant to anticipate salvage in establishing annual depreciation charges would overstate costs of each period, and overstate revenue in the period in which disposal occurs. A proper matching of revenue and expense therefore occurs only when salvage value is considered in the establishment of the depreciation base.

Summary

One of the basic problems of financial accounting is income determination. An essential element involved in determining income is the process of fixed asset valuation. Since the vast majority of fixed assets, notably plant and equipment and intangible items, are characterized by limited useful lives, asset revaluations are required at the end of each accounting period as a means of determining the cost associated with fixed asset ownership and utilization for that period.

One possible method of valuing assets at the end of each period is referred to as the direct method of valuation. The direct method of valuation requires that the future stream of services resulting from asset utilization be anticipated. The anticipated stream of services is then reduced to its present value, which represents the value of the asset, through the application of an appropriate rate of discount. This approach assumes certainty of the future and independence of services of
each asset. Since these assumptions hold true only in the case of long-term investments, direct valuation procedures are generally not applicable.

A second method of fixed asset valuation is concerned with the development of current cost data. Current cost can be obtained through the use of market values, price indices, or appraisals. For a number of reasons, including the emphasis on stewardship accounting, continuity of life, matching of cost and revenue, objectivity, and others, excesses of current costs over historical costs are not anticipated by accountants.

The third and most frequently applied valuation procedure is cost. Asset revaluation is then accomplished at the end of each accounting period through the allocation of a portion of the cost of assets to operations. This process of allocation is termed depreciation, and is essential for the determination of periodic income.

The accountant must deal in anticipations to some extent in fixed asset accounting, especially in regard to fixed asset valuations accomplished through cost allocation. The concept of depreciation rests on the expectation that a benefit will be derived in the future from the utilization of the asset during ensuing time periods. If the accountant did not anticipate that the future will consume a part of the service potential of the asset, periodic depreciation charges would be irregular and significantly greater, presumably equal to the cost of plant and equipment acquisitions during the period.

In determining the portion of cost to allocate periodically, one must first determine the period of time during which the service potential embodied in the asset can profitably be utilized. Only through
the establishment of a realistic time period can a satisfactory attempt
at matching expired cost with revenue be made. Secondly, the salvage
or residual value of the asset at the end of the time period represent-
ing useful life must be anticipated. This amount is anticipated and
thereby included as an offset in the determination of periodic deprecia-
tion charges. An inappropriate matching of cost and revenue results
if salvage values are not anticipated.
CHAPTER VI

THE ROLE OF ANTICIPATION IN ACCOUNTING FOR LONG-TERM LIABILITIES

Introduction

It is necessary to maintain a distinction in financial statements between short-term and long-term liabilities, since the date of repayment of debt is a significant element that must be given consideration in the analysis of the financial position of a firm. As indicated earlier, a short-term, or current liability, is one that will require payment during the longer of the current operating cycle or one year. Long-term liabilities include those liabilities that will require payment on a date which lies outside the time period embodied in the current liability concept, and therefore "constitute part of the relatively permanent capital structure of the enterprise."\(^1\)

It has been recommended that assets be classified for statement presentation purposes as either current or fixed. A similar classification procedure is also recommended for liabilities, except for the fact that the phrase long term be substituted for fixed in the case of liabilities, since the term fixed indicates a degree of permanence which in fact does not exist.

In addition to date of payment, a number of other distinctions frequently exist between the two classifications of liabilities. As

mentioned in Chapter III, in the case of a large proportion of short-term liabilities; particularly accounts payable, no explicit interest charge is required of the debtor. Since money does have a time value, however, an implicit interest element is presumably included in the face amount of the liability. Since the implicit interest is small in the case of short-term obligations, it is generally ignored in accounting for current liabilities. In the case of long-term liabilities, the interest factor assumes a significantly more important position and therefore must be given careful consideration in financial presentations, both in order to present a comprehensive balance sheet view of the liabilities existing at a given date and also in order to achieve an appropriate matching of revenue and expense for a fiscal period.

Another distinction sometimes existing between current and long-term debt is concerned with the degree of formality that exists between the two types. Short-term obligations frequently arise from very informal, perhaps even verbal agreements in which only implied contractual arrangements are made. Long-term obligations on the other hand arise under terms of formal written contracts in which rights and duties of both parties to the agreement are explicitly stated. Considerable detail is given in regard to privileges and obligations of both parties in such areas as due date, interest payments, property liens, and restrictions placed on the activity of the debtor throughout the period during which the debt is outstanding. Information in regard to these elements is not particularly important from the standpoint of account balances on either the balance sheet or income statement, but is significant from the standpoint of a complete financial analysis in which the relative positions of other equity holders must be determined.
Long-term debt as a source of funds for enterprise growth and stability is generally required, for the types or sources of funds obtained should be consistent with or in harmony with the kinds of operating assets employed. As a general policy, it is desirable to finance the fixed assets and a portion of current assets with long-term funds, either debt or equity. Fixed assets provide services over a period of years and during this period of years provide a cash inflow through service potential realization which results in the accumulation of assets which can be used as a source of funds for debt retirement at maturity. Fixed asset conversion is a slow process in many cases and hence long-term debt or equity capital is a more suitable source of funds for fixed asset financing than is current debt. Consequently, firms with relatively large investments in fixed assets generally rely to a greater degree on long-term debt and equity than do firms with a relatively small fixed asset investment.

Accounting for Long-Term Debt

When property is acquired as a result of long-term borrowing, the asset is valued in the accounts at cost, a figure which is equal to the amount of cash obtained upon issuance of the debt instruments. The long-term liability which arises at the date of issuance should be recorded at an amount which represents the proceeds, exclusive of issuance costs, received by the issuing company upon the sale of the obligation. In a situation in which debt instruments are issued at par, the amount of the liability will be equal to par, or maturity value.

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In the majority of cases, however, long-term debt will be issued at an amount which is different from par or maturity value. This difference between par and issuance price is primarily a function of the interest rate. Since the decision concerning the rate of interest to establish for the issuance in the case of public offerings must be made sometime prior to the date on which bids are taken, the market rate of interest may be different from that anticipated at the date on which the coupon rate was established. In some cases, an interest rate different from the market rate may be deliberately established in order to influence the issuance price. A divergency between the coupon rate and the market rate at date of issuance will be reflected in the issuance price, since this is the only variable that can be affected at the date of issuance.

If long-term debt is issued at an amount which is less than par, an indication exists that investors demand a rate of interest which is higher than the rate stated on the debt instruments. If purchased at par, the debt would be an undesirable investment because similar investments could be acquired at the higher market rate of interest. Since the coupon rate of the debt is fixed, a higher effective rate of interest equal to the rate prevailing in the market can only be obtained through acquisition of the debt at an amount less than par. Because investors receive interest at the stated rate on par, they are receiving a higher effective rate since they paid less than par. In addition, upon maturity par must be repaid by the issuing firm to the investors, who in the first instance paid less than par, with the result that an additional gain is realized which similarly acts to increase the effective rate of interest.
In the event that the debt instruments bear a rate of interest higher than that demanded by the market, the debt will prove to be a more desirable investment and hence investors will be willing to pay more than par. As in the case in which issuance occurs at less than par, the issuance price fluctuates to the extent necessary to permit it to be equated to the present value of the stream of interest and principal payments that will be made by the issuing firm to the investor on the basis of the market rate of interest.

It can be recognized that in situations in which debt is issued at an amount other than par, the effective rate of interest is a better measure of cost of acquiring funds than is the nominal or stipulated rate involved. It is also obvious that discount, which is the excess of par over issuance, and premium, the excess of issuance over par, are related for they are both functions of the interest rate and hence represent interest adjustments.

It has long been recognized practice to report debt discount as an asset under the deferred charge subclassification and debt premium as a liability under the deferred credit subclassification,\(^3\) a procedure which is difficult to justify theoretically and thus will be considered more completely in the following section. Current treatment recognizes that on an issue of long-term debt the entire amount agreed to be paid to the lender of the funds by the borrower in excess of the net proceeds of the issue constitutes the compensation paid for the use of money.\(^4\)

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The amount to be paid by the borrower in excess of the net proceeds of the issue consists of two elements—nominal periodic interest payments plus an amount at maturity, which may be either positive or negative, representing the algebraic difference between par and original issuance price. Since both premium and discount enter into the determination of the cost of borrowed money, it is necessary to carry the balances of these accounts on the balance sheet from period to period while the issue of long-term debt is outstanding.

Because it is agreed that discount or premium plus the interest that must periodically be paid reflect the cost of the borrowed money, it has become accepted accounting practice to allocate the discount or premium over the term of the issue to interest expense and thereby report both interest paid and discount or premium allocation as interest expense for the period. The process of allocating the discount or premium resulting from an issuance of debt to the interest expense associated with the issuance is referred to as amortization. This process results in an appropriate reporting of costs resulting from borrowings and thereby makes possible an adequate reporting of income. Adequate income reporting would be impossible if any part of the interest burden were reported elsewhere.

Until the early days of this century, discount was commonly regarded as a capital charge. This is an undesirable reporting practice, since in effect it is equivalent to reducing contributed capital by an amount which should be deducted from earnings, and hence relieves both

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net income and retained earnings of appropriate charges. When this became generally recognized as unsound, accounting practice accepted the procedure of charging the discount to retained earnings immediately upon issuance of the debt instruments.\(^6\) This procedure likewise was incorrect, because of the distortion of earnings that resulted. In essence, past earnings under this procedure are reduced by an amount sufficient to cover the unpaid interest when it becomes due, which is at the maturity date of the debt, and in addition the integrity of the income statement is destroyed since current interest expense is not being charged against current revenue of the period and a mismatching results.

The preceding analysis of the reporting of debt discount or premium indicates that the only accounting practice which adequately reports interest expense associated with long-term borrowings is one which amortizes the discount or premium through the interest expense account over the outstanding life of the issuance. Amortization therefore meets the requirement of reporting accurately the expense incurred by a firm as a result of borrowing on a long-term basis. It can thus be concluded that the anticipation of the total income charge or credit resulting from the issuance of debt at a discount or premium through a debit or credit to either contributed capital or retained earnings in the year of issuance has no theoretical justification, since both discount and premium are related to nominal interest payments of the future in that they represent an adjustment of interest to be incurred.

\(^6\)Ibid., p. 129.
Valuation of Long-Term Debt

Problems associated with the process of accounting for long-term debt revolve around one major area—valuation. Minor considerations, such as the balance sheet presentation of debt discount or premium also arise, but the offering of a solution to the major area of contention will simultaneously provide a solution to the less important problem areas. The problem of valuation of long-term debt is concerned with the determination of the amount at which to report the debt for balance sheet purposes. The problem of valuation can be resolved if the true burden of the liability to the issuer of the long-term debt can be determined. In regard to the size of the burden of the debt, Paton states that three possible means of measurement exist:

(1) The total amount payable by the borrower during the period covered by the contract.

(2) The amount payable by the borrower at maturity.

(3) The actual amount received by the borrower, adjusted periodically for the amortization of premium or discount.7

Adoption of the first alternative would require that the debtor state the liability at an amount equal to the total of all payments he would become obligated to make under terms of the debt contract. In the case of a 1,000 dollar, 10 year, five percent debt instrument for example, the liability would be stated in the amount of 1,500 dollars, regardless of the amount for which the obligation was issued. Of this amount, 1,000 dollars represents repayment of principal, while the remainder represents interest payments. Recording the liability at this amount has a number of deficiencies. In the first place, it does not

measure the amount which the debtor is under obligation to pay currently, but rather measures the total number of dollars that will be paid throughout the outstanding life of the issue. It is not permissible to anticipate future interest payments as a liability since interest accrues over time and is not owed until time has elapsed. Establishing a liability to the extent of 1,500 dollars would indicate that the borrower would be willing to become immediately obligated to pay 1,500 dollars for only 1,000 dollars, and thereby incur an immediate loss of 500 dollars. Recognition of a liability in the amount of 1,500 dollars is also unrealistic since it fails to give recognition to the time value of money. Payments to be made during the tenth year of the contract are not of the same magnitude as those required during the first year, since a sum considerably smaller could be invested during the first year and thereby provide a sum sufficient for satisfaction of amounts requiring payment during the final year.

The second alternative—valuation at par or maturity value—represents the usual practice concerning long-term liability measurement. In this situation, any discount resulting from debt issuance is reported as an asset on the balance sheet, while any premium is reported as a liability classified separately from the debt which gave rise to the premium. The liability is measured at par, an amount which represents the totality of future payments anticipated under the terms of the debt contract, discounted to present worth at the date of issuance of the obligation at the rate of interest stated in the debt contract. This method is realistic from the standpoint of giving proper recognition to

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the time value of money, and therefore is acceptable in cases in which debt instruments are issued at par. However, this method is objectionable when debt is issued at a premium or at a discount. When issued at a discount, an asset debt discount is recognized. If discount on debt could be considered an asset, no injustice would arise, but its asset status is questionable. The essence of assets, as indicated in Chapter II, is service potential, with the definition of assets embodying the service potential concept. Debt discount, when viewed from the service potential standpoint, is clearly lacking of any future benefit to the issuing enterprise. Since no service potential or future benefit exists, debt discount does not qualify as an asset from the theoretical standpoint.

A further analysis of the nature of debt discount may be useful in determining the proper accounting presentation of this item. It can not be considered an immediate loss, since, given the usual relatively stable or mildly fluctuating interest rates, soon after issuance the debt instruments could likely be repurchased on the open market at an amount less than par and perhaps at only a slightly smaller discount than that resulting from issuance. Rather than an immediate loss, the discount represents an element of the interest cost associated with long-term borrowing, an element which will be paid as a part of par value of the obligation at maturity. If debt is offered on the market at a rate of interest which is lower than the going market rate of interest the debt will go at a discount, because it is less valuable to a purchaser since it provides an annuity the amount of which is less than that paid by a similar amount of debt bearing a higher interest rate. On this basis it can be argued that discount is a function of the interest rate.
Theoretically the amount of the discount is equal to the present value of the excess of the market rate of interest over the nominal rate of interest of the debt applied to the par of the debt.

Since discount can neither be construed as an asset nor an immediate loss, only one other possible disposition of the item exists. It must be considered a liability valuation balance, an amount to be deducted from the par of the obligation in arriving at the true burden of the future payments to be made. The deduction of discount from par results in reporting the liability at an amount representing the proceeds of the issuance, which is the third alternative available for the measurement of long-term debt.

This third alternative method, valuing long-term debt at issuance price plus or minus periodic amortization, is the only method which has no serious objections. This method presents discount as a deduction from the par of the obligation and premium as an addition to par, thereby stating the liability at discounted "value." At the date of issuance, this results in stating the liability at the amount borrowed, with discount or premium amortization bringing the amount of the liability to par value at maturity date.

Paton presents the following argument in support of this method of long-term liability valuation:

"The effective liability at the outset is the actual amount received from the investor. This conclusion is obviously reasonable; in a commonplace and supposedly equitable transaction it is to be expected that the immediate obligation incurred by the borrower will be neither more nor less than the amount of money or equivalent obtained. It also leads directly to a sound program of...amortization.... At all interim points the liability is the sum of the original obligation and the accumulation to date of that portion of the interest element which is retained"
until maturity. This treatment involves no padding of
assets or charging off of fanciful losses.9

Sprouse and Moonitz reach the same conclusion in regard to the
proper method of valuation of long-term liabilities, and state their
conclusion as follows: ". . . in the case of long-term debt, the liability
is properly measured by the present (discounted) value of all future
payments to be made under the contract. . . . Ordinarily the pertinent
rate of interest for determining present value is the yield rate of
interest at the date of issuance."10

One major argument is advanced against this method of measuring
long-term debt. It is sometimes contended that the true legal liability
involved is the face value of the debt, since this is the amount which
would presumably become payable in event of default.11 Inclusion of
premium or discount in valuing the debt, it is argued, results in the
misstatement of the liability. It is true that in event of default,
par of the obligation represents the extent of the claim of creditors
against the issuing firm. However, from the standpoint of enterprise
continuity and the emphasis which is placed upon this aspect of account-
ing, this argument loses much of its significance. The argument is
valid, but it is of little significance since accounting principles and
procedures are developed and applied primarily from the standpoint of
continuity of life rather than insolvency and liquidation.

9Ibid., p. 610.
Current Market Value of Debt

In addition to the three methods suggested by Paton, another means of measurement might be used. Long-term debt could be stated at current market value, as determined by market rates of interest.

Measurement of long-term debt at current market value would result in an amount which would fluctuate as market rates of interest changed over time. At the date of issuance of debt, issuance price is equivalent to current market value, and hence no problem would arise at that date, since the amount of premium or discount as usually computed is the same as that existing if current market value is to be used as a basis for valuation. Furthermore, an amount based on the current market method would also approach par as the amount of time remaining before maturity is diminished, since the force of interest becomes relatively less significant as maturity approaches. If interest rates were fixed, valuation at current market value would be satisfactory, since the gradual approach to par as the time to maturity is reduced would result in charging or crediting interest expense with an adequate amount of amortization. However, because interest rates normally do fluctuate, the market value of the debt could change significantly and thereby present problems of liability valuation and income determination.

There are a number of reasons why this method of liability valuation has not achieved acceptance. Of primary significance is the fact that an appropriate matching of revenue with costs incurred may not result under this procedure, particularly in situations in which interest rates fluctuate. The current market value of debt may either rise or fall as interest rates change, with the result that amortization
could be either a positive or negative charge to interest expense. Charges to interest expense in these circumstances would not be measures of cost incurred, but instead would be indications of opportunity costs involved. As indicated earlier, opportunity costs may be relevant and useful in some decision-making circumstances, such as in the determination of costs of capital or in refunding decisions, but are irrelevant in stewardship accounting where an adequate matching of revenue and cost incurred is required.

In addition, from the going concern standpoint market value of debt is insignificant, since it is assumed debt will be retired on schedule as repayment dates arrive. Furthermore, as concluded in the evaluation of current cost as a means of fixed asset measurement, measurement of assets for balance sheet purposes is primarily a showing of the extent to which cost is unamortized. Consistency thus requires a similar method of measurement for long-term debt, in which case unamortized cost represents the unamortized portion of premium or discount recognized at date of issuance.

Conclusion

A significant problem associated with the accounting for long-term debt is that of valuation. The best method of valuation, from the standpoint of theoretical soundness, is at an amount equal to the proceeds at issuance of the debt plus or minus amortization of premium or discount accumulated to date.

The currently accepted practice in accounting in regard to presentation of long-term debt is to report discount as a fixed asset, within the deferred charge subclassification, and to report the liability
at par. Unamortized discount is in no sense an asset, since no service potential or future economic benefit is inherent in this element. Instead, the discount represents a part of the total of interest cost resulting from the borrowing; that part of effective interest which remains unpaid by the borrower until the maturity of the debt.

Premium resulting from long-term debt issuance is frequently presented as a liability, but separate from the debt issuance which gave rise to the premium. A premium has no characteristics which differentiate it from the remainder of the long-term debt, since it is an integral part of the proceeds realized upon issuance of the debt instruments. It is repaid as a part of periodic interest throughout the life of the contract and therefore is as much a part of the long-term debt as is the maturity value.

Measuring long-term liabilities at proceeds at issuance adjusted for premium or discount amortization results in the reporting of debt at an amount equal to the anticipated stream of cash disbursements discounted to present value through the application of the effective rate of interest. The series of future cash disbursements embodied in the long-term debt reported on the balance sheet consists of periodic interest payments required during the life of the debt plus the final principal payment at maturity. Long-term liability reporting is thus essentially a process of anticipating and reporting known future cash disbursements resulting from long-term borrowing. The anticipation of discount or premium resulting from debt issuance as an income charge or credit in the year of issuance cannot be theoretically justified, since discount or premium, as a function of the nominal interest rate, require periodic amortization for the purpose of achieving an adequate matching of revenue and expense.
CHAPTER VII
SUMMARY AND CONCLUSIONS

Anticipation in a general context refers to prediction or expectation, and requires foreknowledge of an event or some preconception by the anticipator. The meaning of the term in an accounting frame of reference is more restrictive, referring to expectations that are given recognition in the accounts of the firm. As used in this study, anticipation is applied to expectations in regard to asset and liability recognition and valuation for financial reporting purposes. The central problem of this study is thus to determine if anticipation does assume any significance in the process of accounting for assets and liabilities.

Contrary to the popular opinion that anticipations should be avoided by accountants, the results of this study lead to the conclusion that the process of anticipation plays a very vital role throughout the entire process of accounting for assets and liabilities. On this basis, it is concluded that anticipation is a necessary part of the body of theory that underlies the process of accounting.

Anticipation forms an essential basis for asset accounting. Assets are economic in nature, and can be defined as rights a firm possesses which might provide a future economic benefit. This definition indicates the three essential elements or characteristics an item must possess if it is to be included among a firm's assets. First, asset
existence depends upon a right or privilege, rather than a physical
classification. Assets are bundles of rights, being fundamentally
identical. Secondly, the rights embodied in assets are property of a
specific accounting entity. Legal title to physical property itself
is not necessary for asset recognition, but the rights embodied in the
property must legally belong to the entity if the entity is to recog-
nize an asset. Finally, an item must provide future economic benefit
if it is to be classified as an asset. This indicates that the services
to be realized through asset utilization are scarce and thus possess
some value.

The essence of assets, as based on the preceding concept, lies in
the ability of items to provide future services. All assets are bundles
of service potential and therefore are fundamentally identical, regard-
less of generally accepted balance sheet classifications.

The future is of primary significance for asset recognition, since
assets represent an anticipated flow of services to be realized in the
future by the accounting entity which possesses the asset. Since an-
ticipation and the future are of immediate significance in asset
existence, the existence is subject to some degree of uncertainty.
The degree of uncertainty may vary from negligible, as in the case of
insured bank deposits, to considerable, as in the case of intangibles
subject to a high rate of supersession. Nevertheless, the anticipated
services embodied in the asset must be valued in terms of the monetary
unit and entered in the accounts of the firm.

Asset recognition is not dependent upon legal title or physical
characteristics, but does depend upon the existence of rights of the
firm to future economic benefit. Due to the fact that uncertainty
exists in the economic system, the future economic benefits embodied in assets are not guaranteed, but are primarily of a prospective nature. Since they are prospective rather than absolute, it is evident that anticipation assumes a necessary role in the process of asset recognition.

Assets, as a substantial element of the subject matter of accounting, must be reduced to an array of dollar amounts as a means of providing a common denominator for the purpose of expressing diverse items homogeneously. The problem of measurement, or determining the dollar amounts at which to record the various asset items, is one of the central questions of accounting for assets. The essence of the problem of asset measurement is to determine whether cost or value should serve as a basis for measurement.

Cost, as used in an accounting framework, refers to the bargained price of assets acquired, a price resulting from arm's-length dealings by independent parties. Cost is thus a measurement of cash or its equivalent given in exchange for another asset. Market prices or independent appraisals will be determinants of cost in situations in which assets other than cash are obtained by gift or other means which do not result in the establishment of a bargained price. In its widest application to accounting theory, cost includes any asset outlays or liability incurrences necessary for the generation of revenue, or any outlay incurred for the purpose of furthering business objectives. The term cost is more narrowly defined, however, when it is used in reference to the acquisition of assets, and includes all outlays necessary for acquiring assets and placing them in a position to serve the purposes for which they were acquired. The elements included in cost are measured by the
amount of the cash paid in a cash transaction, while in a credit trans-
action cost is the amount of cash that would be required to immediately
discharge the liability assumed. Since cost in competitive situations
represents a sacrifice of values, it constitutes a dependable basis for
asset recognition.

The term value as used in accounting literature has three meanings
associated with it. A conceptual definition states that value is the
present worth of all future net proceeds to be derived from asset utili-
zation. Value in this sense can only be computed if the owner of the
asset to be valued has complete information concerning future asset in-
flows and outflows resulting from asset use. The information which the
owner of the asset must have consists of three elements:

(1) The cash value of services which the asset will provide and
the dates on which these services will be realized;

(2) The complementary outlays required for realization of ser-
vices provided by the asset;

(3) The residual or scrap value of the asset at the end of its
economic life.

The value of the asset to its owner at any point in time is the
present value of the future series of net proceeds, based on an appro-
priate rate of discount. Valuation based on this procedure fits into
the theoretical framework of accounting since it provides an insight
into asset measurement techniques, even though it is not precise enough
to be useful as a means of asset valuation, since in actuality too great
a degree of uncertainty surrounds asset utilization projections.

The remaining two definitions of value are more nearly based on
observable market data and therefore are more frequently utilized in
accounting presentations. The first of these, as it is used in
accounting, signifies the amount at which an asset is stated in accordance with generally accepted accounting principles. Value in this sense generally represents cost, and is therefore referred to as cost value. A final concept of value is regarded as the amount of cash a willing purchaser would likely pay a willing seller for a specific asset. Value in this sense is synonymous with current worth, or current market value.

Another major aspect involved in the reporting of assets, in addition to the problem of measurement, is the application of an appropriate method of classification. Classification refers to the grouping of assets according to their natures as a means of giving adequate expression of their natures, a process which is necessary to show mutual interrelations and proper dependence, both of which are required for an intelligent interpretation of the balance sheet.

Function dominates the significance of assets, and for this reason a functional classification of assets is preferred. Two major classifications of assets are required--current and plant, or fixed. Current assets are required for the facilitating of operations, and represent the relatively short-lived items upon which the specialized services of plant and equipment assets are performed. Plant and equipment assets are those that are required for the physical operation of the business, and perform a repetitive function over a relatively long period of time. Current assets are necessary for the purpose of absorbing the service potential embodied in plant assets as a means of increasing in value and acceptability. Current and plant assets working in conjunction are essential for business operation and success, for only if these classifications of assets exist in the proper proportions can a firm
function successfully and thereby continue operating for an indefinite period of time.

Anticipation is evident in other areas of asset accounting as well as in asset recognition procedures. Considering asset classification procedures, for example, if an asset is classified as current, it is anticipated that the economic benefits inherent in the asset will be realized during a relatively short period of time—the operating cycle. Convertibility of assets is a major criterion for current classification. Therefore, whenever an asset is classified as current, it must be anticipated that conversion will occur within a determinable period of time. Anticipation thus assumes a dual role in current asset recognition. First, the existence of service potential must be anticipated, and secondly, the time period in which service potential realization will occur as a result of conversion of the asset must be anticipated.

Not only does anticipation play a role in current asset recognition, but it also assumes significance in current asset valuation. In situations in which cash-realizable value is less than cost of current assets, cash-realizable value is used as the basis for valuation, thereby giving recognition to anticipated losses. Any losses which may develop as a result of uncollectible receivables, market declines of short-term investments, or declines in the realizable value of inventories of merchandise, are anticipated and consequently recognized prior to actual realization of the loss through disposition of the asset.

Solvency, as indicated by the algebraic relationship that exists between current assets and current liabilities of a firm, is of significance, for upon its adequacy depends the capacity of the firm to carry on effective operations and also the ability of the firm to survive
periods during which losses are incurred. Solvency's primary determinant, liquidity, depends upon the convertibility of current assets, or the ability of current assets to be converted to other forms during the operating cycle of a firm. Liquidity thus developed results in the growth of working capital and a resulting improvement in the short-term solvency of the firm.

One significant problem associated with accounting for fixed assets is that of valuation. Valuation of fixed assets refers to the selection of a set of procedures to apply in reducing fixed assets to an array of monetary amounts, a process which is necessary in order to combine heterogeneous tangible and intangible assets. The basis of valuation of fixed assets is preferably cost, which includes all outlays required for acquiring assets and preparing them for utilization.

The cost concept is well established in accounting doctrine for a number of reasons. It approximates fair value at date of exchange; it is a measure of stewardship responsibility; it is basic to the matching process; and it is also realistic from the standpoint of enterprise continuity. It must therefore be concluded that the anticipation of fixed asset values in excess of original cost is not appropriate to accounting practice. Similarly, anticipation of fixed asset value declines is not appropriate, except in unusual cases, such as those in which damage or unexpected obsolescence has occurred.

A second significant problem associated with fixed asset accounting is that of determining the proper amount of the periodic charge to depreciation expense. Since plant and equipment items, in effect, represent long-term prepayments, it is necessary to allocate the prepayment to time periods which utilize the service potential of assets. This
process of allocating cost of assets to time periods is referred to as depreciation. Depreciation measures the reduction in services that a depreciable asset will provide to future operating periods.

Anticipation holds an important position in the depreciation concept. First, only a part of the cost of a fixed asset is allocated to expense each period, evidencing the expectation that the future will utilize a portion of the asset service potential. If this were not the case, depreciation charges would be considerably larger and more irregular. Secondly, salvage values of depreciable assets are anticipated, not as periodic revenue, but instead as offsets to the total cost allocation. As a result, total depreciation expense represents a net figure—the excess of total cost allocation over anticipated salvage value.

As indicated earlier, it can be concluded that assets are economic in nature since they represent the embodiment of future service potential. Liabilities, however, are considered to be legalistic in nature. Liabilities, if defined in terms of their economic nature, would include all foreseeable cash outlays or commitments of the firm, regardless of legal existence or significance of the anticipated outlays. An economic concept of liabilities would require liability recognition whenever firm management anticipated that a future cash outlay would be required to attract factors of production. An economic concept of liabilities is not acceptable from the standpoint of accounting objectivity, since anticipated liabilities are not sufficiently objective and verifiable to warrant recognition. Similarly, no liability can be recognized until an asset exists and is measurable, and this would not be the case in situations in which liabilities that are only economic in nature are
recognized. Finally, from the standpoint of balance sheet utility the recognition of liabilities prior to their legal existence is not appropriate, since legal liabilities establish the boundaries within which the firm must operate and therefore exert more influence on firm operations than do anticipated economic liabilities.

Since an economic concept of liabilities is inappropriate, liability definition must rely heavily on the legal concept. A liability definition which is legalistic in nature contains three conditions a claim must meet before it can be considered a liability. The three are:

1. A claim which is subject to adequate calculation;
2. A claim which is a result of a past transaction;
3. A claim which will require the future transfer of assets to a creditor.

Liabilities are generally classified between current and long term, resulting from the emphasis placed on due date by credit grantors. Measurement of liabilities generally presents fewer problems than does measurement of assets. Since liabilities result from past transactions, the amounts to be paid can frequently be determined on the bases of agreements which gave rise to the liabilities.

In addition to the fact that anticipation is an essential element involved in asset recognition and accounting, it is also involved in liability accounting. Traditional accounting practice accepts the legal concept of liabilities as debts, and recognizes only those items that reflect debts requiring payment to creditors of the firm. Accounting practice thereby rejects those future anticipated cash expenditures which are liabilities only from the economic standpoint and accepts those anticipated future cash disbursements which result from past transactions and therefore are liabilities from the legal standpoint.
All liabilities represent future asset disbursements, and as a result are future rather than present obligations. A going concern is under no obligation to pay a liability until maturity, and as a result liabilities included in financial presentations represent anticipated legal liabilities. A debtor is obligated to perform a specific act at maturity of the liability, but is not obligated to do anything prior to maturity. Items reported as liabilities can thus be considered as anticipated liabilities, with actual liabilities developing at due date.

Long-term liabilities are measured at proceeds at issuance adjusted by unamortized premium or discount. The anticipation of premium or discount as an element of interest expense or as an asset or a liability upon issuance cannot be theoretically justified, since discount or premium can only be considered a liability valuation item which requires periodic amortization as an element of interest cost associated with long-term borrowing. Reporting long-term debt at issuance price adjusted by unamortized premium or discount results in reporting debt at an amount equal to the anticipated stream of cash disbursements discounted to present value through the application of the effective rate of interest. Long-term liability reporting is thus essentially a process of anticipating and reporting known future cash disbursements resulting from long-term borrowing.
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VITA

Bruce Thomas Kruse, son of Corneil Kruse and Anna Bronsema Kruse, was born in Parkersburg, Iowa, on January 25, 1931. He was graduated from Shell Rock Consolidated High School, Shell Rock, Iowa, in 1948. He attended Iowa State Teachers College from 1948 to 1951, receiving the degree of Bachelor of Arts in 1951.

Upon graduation from Iowa State Teachers College, he attended Boston University to study toward the degree of Master of Education. He served as a graduate assistant during his work toward the Master's degree, and was awarded the degree in August, 1952.

He was called to active military duty in the United States Army in December of 1952, and served until his release in November, 1954.

Following his separation from the United States Army, he began teaching at the high school level, until September, 1957, at which time he accepted a position as instructor of Industrial Administration at Iowa State University. He held this position until June, 1960, when he resigned to enter Louisiana State University to study toward the degree of Doctor of Philosophy. He left Louisiana State University in August, 1963, and returned to Iowa State University as an Assistant Professor of Industrial Administration. He is a candidate for the degree of Doctor of Philosophy at the January, 1964, commencement.
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