

Some Conceptions And Mis-Conceptions On Reality And Assumptions In Financial Accounting

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Abstract

This paper addresses two problematic issues arising from the importation of terms into financial accounting: (1) the nature of economic reality; and (2) the role of assumptions. These two issues have stirred a lot of controversy relating to financial accounting measurements and affect attestation reports. This paper attempts to provide conceptual clarity on these two issues.

Introduction

In scientific research, as a first step in the construction of a model to describe observed phenomena, a relatively simple model is developed. This simple model, being based upon a series of simplifying assumptions, is knowingly unrealistic. However, it is hoped that from this basic model a more realistic model can be developed. After a model has been in existence for a very long period of time and has been handed down, it is necessary to determine whether the underlying assumptions of the current model are still unrealistic or have been modified somewhere along the line to incorporate realistic premises to reflect the reality which it purports to portray. Currently, the discipline of accounting is faced with this situation of self assessment.

In accounting, there has been quite a lot of turmoil caused by borrowing from other disciplines. While borrowing of itself is not a problem, it is the misunderstanding which accompanies such borrowing that at times hinders the proper development of accounting. In this paper the concern is

with the terms economic reality and simplifying assumptions as they are used in the accounting literature. Economic reality focuses on the question of what is to be captured in financial statements and thus influences accounting measurements and thus influences accounting measurements. Assumptions have a significant impact on accounting measures and the attestation to those measures. Auditors are confronted with the rendition of an audit opinion, in which case the facts must support the opinion.

Objective and Methodology of the Paper

Given the fervor of the debates on the need for realism in financial reports due in great part to the Savings and Loan Associations (S&L) debacle, it is appropriate to evaluate: (1) what constitutes reality for the purposes of financial accounting and (2) the more basic assumptions underlying financial accounting measurement. In this regard, this paper examines (a) the concept of economic reality and (b) two major terms which are referred to as "assumptions" (i) going concern (continuity) and

(ii) the measuring unit (stability of nominal money). (The other terms referred to as "assumptions" - entity and periodicity - can also be evaluated in a similar fashion; however, this paper is merely exploring the issue rather than trying to be an exhaustive analysis.)

As a prelude to an analysis of the two main issues: reality and assumptions, the first section of this paper reviews the major causes of the S&L debacle. Following this review, logical analysis is used to establish what constitutes reality within the context of financial accounting; then the concepts of necessary and sufficient conditions critical to measurement are contrasted with the role of assumptions in model building.

The Savings And Loans Association Debacle

Based on generally accepted accounting principles (GAAP), several S&Ls were insolvent in 1979 (Barth, 1991; Barth et. al., 1986), but the US Congress chose to ignore this ominous sign. In the aftermath of the collapse of many S&Ls, much blame for the debacle has been placed on the deficiency in financial accounting. It has been argued that the debacle was caused by financial accounting being out of touch with economic reality. While there was a problem with SFAS 12 (specifically the failure to require the use of lower of cost and market for debt securities (Fingleton, 1981 p. 129) - now (because of the "held to maturity" category) the problem is addressed only in part by SFAS 115 which has superceded SFAS 12), the evidence reveals that: (1) the deficiency attributed to financial accounting is in great part groundless (e.g., failure to provide for bad debt losses (White, 1991, p. 37]); (2) audit failures reported by the General Accounting Office were considered by some accounting academics as accounting deficiencies; and (3) while disclosure of current values in certain instances is beneficial, current value accounting is not the solution to the problem; it will introduce a false measure of financial success as noted by Fraire (1962).

As reported by Value Line (1971, p. 445), 1970 was a year that most S&Ls would rather forget. "[D]eposits were flowing out of passbook ac-

counts into a number of other money market instruments offering substantially higher yields. [Worse yet,] S&Ls with extensive real estate holdings were hit by falling sales and, hence, higher carrying costs. In some cases, sharp write-downs had to be taken to reflect new market values." In the early 1970s, the liability side of the S&Ls' balance sheets was affected by extensive changes in the environment; only in the 1980s were there changes in the laws and regulations (and not accounting) which restricted the S&Ls from changing the asset side of the balance sheet in response to the changing market forces which had dramatically altered the liability side. The tax-breaks which had been (from 1951 to 1962) 100% deduction of taxable income as a bad debt reserve was whittled away. In 1962, the deduction was reduced to 60%; it was reduced in steps with the 1969 Tax Reform Act from 60% to 40% in 1979. Furthermore, it was reduced by the Tax Equity and Fiscal Responsibility Act of 1982 to 34% in 1982 and 32% in 1984. Worse was yet to come! The Tax Reform Act of 1986 reduced the deduction to 8% in 1987.

Regulation Q was extended to S&L deposits in 1966, with a ceiling as set by regulators that was below the ceiling set on bank deposits. The intent of this policy decision was to allocate credit to housing. In order to avoid disintermediation from the S&Ls, political pressure was placed on the Federal Reserve to keep market rates below Regulation Q ceilings (Hetzl, 1990, p. 104). Yet much earlier in 1961, the Commission on Money and Credit had recognized the awkward position of savings and loans institutions and recommended that those institutions be permitted greater flexibility in their asset portfolios. In 1966, the merit of such a recommendation became painfully obvious. Interest rates had soared and the S&Ls were badly squeezed, suffering losses and large withdrawals. At that time the Commission suggested: (1) the creation of an agency that would buy the mortgages from the S&Ls, and (2) the permission of variable rate mortgages, a device to prevent an interest rate squeeze. The Federal Home Loan Bank Board (FHLBB) rejected those ideas.

In the S&Ls debacle, it was not GAAP

that failed; it was: (1) the change in the environment authorized by the government (viz: money market mutual funds with check writing privileges while there was a ceiling on the interest payable on deposits by S&Ls), (2) the elimination of the special tax deduction for S&Ls, and (3) the failure of the government to accept the recommendation of the Commission for variable rate mortgages. On top of this the government initiated regulatory accounting principles (RAP) and when that could not keep the S&Ls looking solvent, the government introduced tangible accounting principles (TAP). Despite accounting gimmickry by the government, the capital of the S&Ls continued its precipitous decline. This condition was attended with more gimmickry by the government. In 1980, the Depository Institutions Deregulation and Monetary Control Act, which eliminated the ceiling on interest payable by the S&Ls on deposits over a six-year period ending on March 31, 1986, removed the 5% minimum statutory capital requirement. The Depository Institutions Deregulation and Monetary Control Act (DIDMCA) mandated the FHLBB to set the requirement within a range from 3 to 6 percent. The FHLBB lowered the capital requirement from 5% to 4% in November 1980 and to 3% in January 1982. In December 1982, the Garn-St. Germain Depository Institutions Act, while permitting the S&Ls to accept deposits that would compete with the money market mutual funds, replaced the 3-6% capital requirement with a requirement of "adequate" capital.

This approach on the part of the government was further aggravated with the rapid growth of the money market funds from \$0.1 billion in 1973 to \$411.9 billion in 1989 (White, 1991 p. 69). Worse yet, the FHLB did not only lower the capital requirement but counted as part of RAP capital items that are not permitted to be included under GAAP - the deferral of losses on the sale of: (a) mortgage loans, (b) mortgage-related securities, and (c) debt securities. In November 1982, the government placed the final straw that would break the camel's back: current values were used in the financial statements of the S&Ls. The use of appraised values were permitted to be used by S&Ls; such values were used for offices, land, buildings and improvements owned by those institutions and

the house of cards came crashing down.

In 1989, the US Congress accepted accounting reality. The Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) was enacted into law. FIRREA reinstated the 6% capital requirement and required the use of GAAP for thrift financial reporting and the calculation of capital requirements (Tucker and Salam, 1994, p. 48).

Economic Reality

In those tumultuous years with the S&Ls, the term economic reality was tossed around with ever increasing frequency. What is economic reality? According to Lee (1989, pp. 2-23), economic reality is the current economic states or conditions of independently observable assets and liabilities. Replacement cost of an asset is rejected because it reflects a different asset and not the asset held by the firm. To Lee (1989), sales value and cash flow is economic reality. As per Nave (1993, pp. 64, 68, 69), economic reality for mutual funds is tax basis cost. However, economic reality is not some singular, peculiar feature of society.

To many, market prices for common equity constitute economic reality. While cash flow is of the utmost concern, the capital market which is the mechanism for the intertemporal transfer of risk is considered as the basis for determining economic reality. In this regard, accounting measurements are questioned if they do not mimic capital market prices. Apart from the problem of the unethical conduct of some accountants, asset values as presented in financial statements are derided. What does the firm possess which is valued by the capital market? Does the market place a value on the firm's assets and liabilities? Or does it place a value on the firm's earnings generating capacity? Firms having the same type of assets and liabilities will not have identical values placed on their equity securities by the capital market unless they generate the identical earnings and reflect the same risk. It is quite clear that firms do not have similar earnings although they have similar assets and liabilities, simply because of differences in management's philosophy, strategy and percep-

tions of operating possibilities.

The truth of the matter is that economic reality involves plans (as they are implemented and their gestation) and institutional arrangements, which include contracts. According to Lowe (1965, p. 96), the manifestations of economic reality are "the result of the strivings and expectations which shape marketers' behavior."¹ Consumption influences production decisions. Accordingly, people determine prices through their behavior, and in this manner demand and supply conditions are determined. Price determination necessitates an expression of human behavior in a simplified form, one which is capable of aggregation (Boulding, 1970, p. 73), and this simplification is found in a money economy: money price. Nominal money prices and money contracts do provide the measurement basis for cash flows and they do reflect the existing reality of the economic situation. An interesting observation on economic reality follows:

Modern research has aimed at defining the forms of market precisely...Often a system of market forms is constructed a priori instead of being obtained from economic reality and found in it. Systems of market forms of this kind do not reproduce the forms in the actual economic world...Working out the different forms of markets must start with the real phenomena...They have to be discovered. This can be done by studying the economic plans of actual economic units; for the planning data on which those taking part in a market construct their plans can be precisely ascertained. It is from these plans and not from the behaviour of economic units, a concept which can be given varying content, that the forms of market can be discovered. Forms of market obtained in this way, by studying economic reality, can solve the double problem...the understanding of actual economic systems...and the provision of a basis for theoretical analysis to be applied to the economic process and its inter-connections. (Eucken, 1951, p. 335)

Economic reality implies an understanding of the forces that shape or influence behavior in the economy. It is for this basic reason that Boulding

(1970, p. 155) calls for a focus on "the economic sociology of the market."

From Subsistence to a Money Economy

In a subsistence economy with customary prices, money and commodities are passive; whereas, in a money economy exchange is motivated by the ability to store and, hence, gives rise to a concept of surplus: *store a given monetary value now to reap a higher monetary value later*. That is, invest a sum of money in the present to be redeemed by a larger amount of money later. The difference between the two sums of money represents the surplus (Myrdal, 1939, p. 205; Ashley, 1912, p. 430). Money is accumulated in its own right by individuals and firms operate with a stock of money, always seeking to increase that stock of money. This development is well entrenched in the mental and social framework of the earlier period in which the economic system was monetized as the following passage reveals:

Moneys were invented and made by common consent to be the rule and square to set a price unto all things, and the right and true judges of them; and is...the publicke measure between man and man (Malynes, 1622, pp. 59-60).

Monetary economies are characterized by a system of indirect exchange. Money ab initio did not produce an exchange system, but it has contributed to efficiency in the exchange of goods and services. By effectively incorporating the element of time (time is money!) into the decision-making process, nominal money provided for an effective and precise price system; it permitted the further development of an exchange economy because it permitted storing of an unspecified but nominal liquidity (general exchange acceptability) and/or services in the form of durable machines, etc. The storing process is the monetization of the system. Once the monetization of the system was formalized, an exchange system was perfected: *the cash flow process was set in motion and the capitalization of a cash flow stream was an automatic adjunct*. Value was then assigned to cash flows. However, such values were contingent on the existing demand for money and savings/investment

opportunities.

Emerging from this social evolutionary process of exchange is a simplified form for understanding and expressing human behavior - aggregative analysis, which is the total periodic amount of nominal money spent, contracted and received, for the total periodic physical output. The aggregate amount of money spent on a particular commodity is a clear indication of the desirability of that commodity by consumers; it is the cumulative effect. The unit price does not provide such an insight since it is directly related to factor costs at a point in time; but the aggregate amount spent by consumers on a particular commodity at given prices is a guide to action. Data on physical output is available in the social system, but it is the monetary impact that determines the movement--the rate of return on nominal money invested (Salvary, 1993, pp. 168-170).

Accordingly, the term economic reality pertains to the data which are necessary and sufficient for aggregative analysis. Resources are contracted for in nominal money terms resulting in financial quantity flows through the economy. The process of production and consumption involves the storing of financial inputs at one moment and then the releasing of those financial inputs at another moment. Such data is captured by financial accounting. The following passage emphasizes this point:

[T]he formation of economic data in the real world can only be explained historically. The data need classification into data from the point of view of the individual unit, the economy as a whole, planning data [managerial accounting data], and ex post data [financial accounting data]. The economist, when formulating economic problems and abstracting and analyzing their significant characteristics, is bound to have to deal with the conditions on which the course of economic events depends (Eiriksson, 1954, pp. 341-342).

Planning (ex ante) data for cash flows are derived from managerial accounting, and factual or realized (ex post) data are documented by financial

accounting. Essentially, cash flow in its entirety is a direct result of monetary commitments related to investment plans and the ability to recover such monetary amounts through plan gestation. After investment plans have been implemented, then cash flow measurement ensues. *Measuring cash flows is the critical aspect of economic reality which is embedded in the accounting framework.*²

The Firm: Cash Flow Conduit

The firm is involved in a nominal money augmenting process. This process is a *cash flow process* which is measured in financial accounting. This process involves financial resources which are stored in the form of nonmonetary assets and released in the revenue generating process at an amount greater (or possibly less) than those amounts which were stored earlier. *Financial accounting measures the actual cash flow processes of the firms, and the capital market places a price on the cash flow processes of those firms whose shares are traded in the equity securities market.* There is a difference between the pricing of a future cash (nominal money) flow stream and the measurement of that cash flow as it emerges. *The plans which these firms execute and the consequences which are measured in nominal money terms constitute economic reality.*

Since there are different uses (different cash flow opportunities) to which an asset can be placed, then the cash flow to be expected from a particular asset is directly related to its use. Thus, values of individual assets are conditioned by their uses and the risk associated with those particular uses. Planning cash flows calls for an understanding of the environment and the existing circumstances. Many firms use their accounts receivable to increase their monetary returns. They prefer credit sales to cash sales. This preference is based upon two considerations: cost effectiveness and efficiency in cash management. The need to find an outlet to invest cash inflows from sales is eliminated and the risk associated with unrelated investments is minimized. Good managers attempt to understand and anticipate the conditions that would produce change. Those who do understand and anticipate changes are those who lead their

companies in the right direction. So it is not the values of the assets and liabilities of the business firm that is valued by the capital market but the strategy of management and the nominal money earnings that they generate.

[T]he notion of a measurement of value is vain. An act of exchange is neither preceded nor accompanied by any process which could be called a measuring of value. Values and valuations [nominal money prices and capital market prices] are intensive quantities [properties of abstract space] and not extensive quantities [properties of Euclidean space].

In the market economy all those things that are bought and sold against money are marked with money prices. In the monetary calculus profit [in financial accounting] appears as a surplus of money received [money claims secured] over money expended [money obligations incurred]. Profit and loss can be expressed in definite amounts of money. It is possible to ascertain in terms of money how much an individual has profited or lost. However, this is not a statement about his individual's psychic profit or loss. It is a statement about a social phenomenon.

An entrepreneur can make a profit only if he anticipates future conditions more correctly than other entrepreneurs. Then he buys the complementary factors of production at prices [costs - anticipated recoverable money outlays] the sum of which is smaller than the price [revenue - realized money claims] at which he sells the product (Von Mises, 1949, pp. 205, 287, 291).

Therefore, to exclude nominal quantities (recoverable money committed to investment opportunities) as the basis of financial accounting measurement in this dynamic process is to wander aimlessly in the process of analysis. The exclusion of nominal quantities--actual money flows--implies that money is a veil, and that it is replacement value that is necessary to pierce or remove the veil in order to understand and assess the performance of the enterprise. But money is not a veil (Newlyn, 1962, p. 92; Von Mises, 1949, pp. 202-203). It is quite clear that the demand for the firm's strategic

assets is determined in nominal terms by the money yield (nominal quantities), and not in real terms (physical quantities of output) (Salvary, 1993, pp. 168-169). In the final analysis, nominal money: (a) permits storing of services, (b) facilitates production for exchange, (c) directs and enables a re-direction of production and distribution, and (d) integrates the efforts of the many into a cohesive and unified effort.³

In the foregoing discussion, the roles of money and the firm are not simplifying assumptions; they are social evolutionary conditions of the socio-economic system. When simplifying assumptions are assumed to be interchangeable with necessary conditions problems emerge. Accordingly, assumptions constitute the next area of focus.

Assumptions

When the term "assumptions" is used in financial accounting, does it signify "simplifying assumptions" adopted for model building, or does it invariably mean a necessary and sufficient set of conditions for a measurement (valuation)? Simplifying assumptions are the removal of reality for the purpose of developing a means of analysis fully cognizant of the limitations. However, to capture reality "simplifying assumptions" are subsequently relaxed. While the LIFO inventory valuation method is based upon a simplifying assumption, it is being advanced that in most cases the term assumptions as used in financial accounting invariably means a necessary set of conditions for a measurement (valuation). However in the literature, necessary conditions are equated with the "simplifying assumptions" adopted for model building in economics. Hendriksen (1982, p. 61) states:

It is not necessary that the postulates be true or even realistic. The assumptions that provide the greatest degree of prediction may be more useful than those that are most realistic.

When a *necessary set of conditions* is treated as "simplifying assumptions," confusion is experienced because any abandonment of realistic condi-

tions (under the guise of relaxing simplifying assumptions), instead of capturing reality, is an unintended movement away from reality.

Going Concern (Continuity)

Since one can assume liquidation of the entity, some accounting theorists treat the going concern assumption as a "simplifying assumption". In most accounting texts (e.g. Keiso & Weygandt, 1992, p. 40; Williams, Stanga & Holder, 1992, p. 45), reference is made to the going concern (continuity) assumption; but in fact it is an *empirical statistical law* (Salvary, 1989, p.35). It is emphasized that there is a distinct difference between *the precept of continuity*--the desire for continuous operation which was/is provided with the firmarius/corporation--and the empirical statistical law (Salvary, 1989, p. 65). In the case of the precept, one can state that in the absence of evidence to the contrary (that is the absence of evidence of the desire to liquidate), one can assume continuity. It is quite easy for an accountant to treat or think of the empirical statistical law (going concern/continuity) as a "simplifying assumption." However, in financial accounting the term going concern *in reality pertains to a necessary set of conditions*. These conditions are not assumed to exist but in fact must exist for financial accounting measurement to be applied. When the set of conditions is satisfied, it justifies the use of the estimated recoverable cost (invested resources/ committed finance expected to be recovered) approach (Salvary, 1985; 1989; 1992) as opposed to the liquidation or exit value approach to measurement for a liquidating concern.

In 1981, the American Institute of Certified Public Accountants (AICPA) issued SAS No. 34 *The Auditor's Consideration When A Question Arises About An Entity's Continued Existence* (SAS 34), which focused on factors contrary to "going concern" and on mitigating factors (Williams, 1984, pp. 15-16). Yet, in February 1984 the Securities and Exchange Commission (SEC) was more forceful on this issue and in Financial Reporting Release No. 16 (FRR 16) it required evidence to be obtained by the auditor on the existence of a "viable" plan for dealing with fi-

ancial difficulties. However, "the auditor's evaluation of "going concern" issues must go beyond the existence of a viable plan" (Rader, 1984, p. 82). If such evidence cannot be obtained, the SEC requires that the financial statements of the registrant be prepared on a liquidating basis (Rader, 1984, p. 81).

The AICPA, in 1988, responded to FRR 16 with Statement of Auditing Standards No. 59, *The Auditor's Consideration of an Entity's Ability to Continue as a Going Concern* (SAS 59), which implicitly recognizes the need for evidence to support the auditor's opinion on the going concern. There is an implicit recognition by the AICPA of going concern (continuity) as a set of conditions which, in fact, must exist.

"The auditor has a responsibility to evaluate whether there is substantial doubt about the entity's ability to continue as a going concern for a reasonable period of time, not to exceed one year beyond the date of the financial statements being audited (hereinafter referred to as a reasonable period of time). The auditor's evaluation is based on his[/her] knowledge of relevant conditions and events that exist at or have occurred prior to the completion of the fieldwork. (Emphasis added.) (SAS 59, para. 02)

Behavior of Firms.

The going concern (continuity) law is based upon inductive and deductive reasoning about the behavior of firms. Observations have revealed that whenever a set of conditions is satisfied a firm can execute its plan. The ability to execute its plan makes the firm a "going concern." A going concern is observed as being a firm which has committed finance (money) to its operation; it has implemented investment plans, and as a necessary condition for investment those plans provide for recovering the money (finance) invested. There is an unbroken connection between the investment plan (financing, production, distribution and collection) and the recovery plan (revenue stream to be generated from the investment) (Salvary, 1989, pp. 35-36). A liquidating concern is characterized by the disruption of the investment plan with the

recovery plan; the recovery plan is no longer operational, and the investment plan is no longer valid.

The continuity of a firm hinges upon its planning process. Sound planning and effective execution of plans are critical. The following discussion addresses the points outlined in context of the concept of planning.

Planning: Meaningful Only if There is a Future.

It is common knowledge that (the management of) a business enterprise plans its operation. The major role of management is planning, and planning implies that there is a future. Continuity (the going concern) is a concept of the future; that is, continuity is impossible in the absence of the future. It is meaningless to plan if there is no future---no continuity. It is true that one can plan for one's own demise, but most firms do not plan to go out of business; they generally plan for their continued existence. Firms, when their continuity is threatened, strive to the best of their ability to ensure their continuity. Some good examples are W. T. Grant & Co. and Chrysler Corporation (Strachan, 1976, pp. 33-35; *Economist*, 1975, p. 11; *Financial World*, 1975/1978, pp. 17-21, 57). Going out of business is always an alternative available to any firm, but it seems to be the least desired alternative. It is accepted generally when it is the only course of action available to the firm. The auditor in his/her attestation to the representations of management cannot assume that the firm will continue to exist because management has said so. The auditor is compelled to seek evidence to verify management's assertion--that the set of conditions necessary for continuity do exist. In this regard, criteria do exist by which to judge (determine) whether the necessary set of conditions for the 'going concern' (continuity) has been satisfied.

Criteria for Determining 'Going Concern'.

Bankruptcy prediction models have been suggested as a means for the auditor to assess the status of a firm as a going concern (Koh, 1991). However, while such models are useful decision

aids, the main problem stems from the inability of those bankruptcy models to capture identifiable qualitative conditions. This latter point is recognized by Koh (1991, p. 337).

In the environment of financial accounting, one finds a class F (of classes of firms) and a class V (of classes of valuation). Class F is characterized by properties F_1, F_2, \dots, F_6 :

- $F_1 =$ Firms that are financially sound
- $F_2 =$ Firms that have a marketable product for which a sound market exists
- $F_3 =$ Firms that are executing production and marketing plans
- $F_4 =$ Firms that are not financially sound
- $F_5 =$ Firms without a marketable product or a sound market does not exist
- $F_6 =$ Firms that do not have (and are not executing) production and marketing plans

Given the characteristics enumerated, there are eight combinations of these characteristics. However, only five combinations are meaningful. Accordingly, five indexed subclasses of class F are identified:

- $F_a = (F_1 \cap F_2 \cap F_3)$
- $F_b = (F_1 \cap F_2 \cap F_6)$
- $F_c = (F_1 \cap F_5 \cap F_6)$
- $F_d = (F_2 \cap F_3 \cap F_4)$
- $F_e = (F_4 \cap F_5 \cap F_6)$

Class V is characterized by the measurement property: $V =$ Recoverable Cost: That which is recoverable from an invested sum(s) of money given current conditions. Class V is comprised of two subclasses V_g and V_k :⁴ $V_g =$ Valuation for a going concern--invested money (committed finance) estimated to be recovered from continuation of operations; and $V_k =$ Valuation for a liquidating concern--invested money (committed finance) estimated to be recovered from the discontinuation of operations--derivable finance from sale of the nonmonetary assets. The valuation sets V_g and V_k are measurement based. Each set reflects the particular condition of an entity. The valuation sets are operationalized based upon the indexed sub-

classes of F as outlined in the next two sections.

Necessary and Sufficient Conditions for Classification.

It should be clear at this juncture that a firm is held to be a going concern if, and only if, the necessary and sufficient conditions are fulfilled: F_1 , F_2 and F_3 . Any firm (satisfying those conditions) is a member of the class F_a . When conditions F_4 , F_5 and F_6 are found to be present, then the necessary and sufficient conditions for a liquidating concern are fulfilled. Any firm characterized by those conditions is a member of the class F_e . Once the classification has been made as outlined above, then the valuation set is operationalized. There yet remains three subsets which provide for auditor judgment in the determination of the appropriate valuation. The three remaining subsets (F_b - low; F_c - moderate; and F_d - high) are grey areas with degrees of greyness concerning the ability of a firm to satisfy the conditions for a going concern. Such conditions require a disclosure relating to uncertainties surrounding the entity, and specific mention in the auditor's report in accordance with generally accepted auditing standards (ASB, 1988, para. 13). This condition is adequately captured by Asare (1992, p. 384):

[T]he going concern modification decision is characterized as a two-stage process. In the first stage, the auditor collects and evaluates evidence, E, in the form of ratios, contrary information and mitigating factors, to reach a subjective belief, $P(C|E)$, where C is the firm's continued existence. In the second stage, the auditor compares $P(C|E)$ to the threshold ($P^(C)$) at which the auditor will have substantial doubt about the entity's ability to continue in existence ... If $P(C|E) < P^*(C)$, the auditor will have substantial doubt about the entity's ability to continue in existence and should issue a modified report; otherwise a standard unqualified report would be issued.*

While the audit report should have an explanatory paragraph following the opinion paragraph on the uncertainty; there should be no conditional language (if, then) in the auditor's report (ASB, 1995, p. 2, para. 2).

Necessary and Sufficient Conditions for Valuation.

The business firm issues titles to claims (debt or equity securities) against its future earnings. Once one is considering the future operations of an entity, one is essentially addressing the valuation of a going-concern in which case "matching of periodic revenues with periodic expenses" enters the picture. Once identification of a going-concern has taken place, then plan gestation coupled with realization (an acceptable level of uncertainty concerning the collectibility of the transformed value) constitute the necessary and sufficient conditions for financial accounting valuation. It is the inability to predict the future with any degree of certitude that makes realization a necessary condition for financial valuation. The future implies a risk, and the business enterprise undertakes risk for a return. This return is always prospective and is conditioned by value changes in the future.

Plan gestation (completion of the earnings process) and realization are the two necessary and sufficient conditions for measuring value changes in a firm's resources when neutrality and equity considerations are of prime importance, as in the case of risk-sharing arrangements in markets for title to claims. The role of realization is to create a basis for revenue recognition which enables a measurement of profit that is tempered with a relatively low level of uncertainty. In a world of certainty this condition would be unnecessary, inasmuch as its current role is *the reduction of uncertainty to an acceptable level*. According to Whittred (1978, p. 156): "revenue is recognized when a legally enforceable claim under a contract of sale comes into existence." However, the existence of a claim is but one of two components of realization. Reasonable assurance of collectibility is the other component. The realization rule together with the critical event rule (the completion of the earnings process) constitute the recognition rules in financial accounting (Salvary, 1989, pp. 89-90). Realization gives rise to unrealized profit, that which is not recognized because of the high degree of uncertainty attached to it (Bierman and Davidson, 1974, p.53). Although not intended as a commentary on accounting, the following clearly expresses the position in financial accounting theory:

Once the date of expected realization is made an explicit variable in the analysis of portfolio decisions, the importance of uncertainty can no longer be suppressed. The further into the future the date of realization, the less conviction an individual will have in his ability to describe correctly his expectations via a subjective probability distribution of future eventualities (Davidson, 1972, p. 208).

If realization were to be treated as an assumption, it would be subject to the call for its relaxation; however, relaxation in this case would result in the replacement of the realistic condition of uncertainty with a simplifying assumption of certainty. The introduction of the certainty assumption "is a distortion of the economic reality faced by the relevant decision maker" (Shwayder, 1971, pp. 78, 79, 83, 84). The insurance industry provides clear and unequivocal evidence on this proposition (Fraine, 1962).

Having outlined the approach to valuation, it is necessary to focus on the issue of stability in the measuring unit.

The Measuring Unit (Stability of Nominal Money)

The instability of commodity prices has been deemed to be the result of the instability of money, the measuring unit. Confusion exists due to the failure to distinguish between a price system and a physical quantity system. (See appendix for discussion.)

Necessary and Sufficient Conditions for Stability of Measure.

The socio-economic system is characterized by real things (physical quantities--physical output) and monetary exchanges (nominal quantities) are equal to certain real things (physical quantities) in the system. Therefore nominal money measures represent physical quantities (Eiriksson, 1954, p.351). However, *there are variations in this representation through time which reflects the equilibrium adjustment process--the dynamics of the system.* Accordingly in such a setting, every commodity is subject to

variation in its supply as well as in its demand, therefore any value of each and every commodity is subject to change. Evidently, it is the effect of external forces (i.e. technology and taste) upon organizational behavior that influences the frequency and conditions of exchange and thus price changes.³

In a price system, nominal money is an invariable measure. In a physical quantity system, nominal money is not an invariable measure. In a money economy, (as stated earlier) it is price formation that guides the physical quantity system so that the price system and the physical quantity system are interdependent. But in any given period a smaller or a larger physical amount of goods and services may be exchanged for the same aggregate amount of nominal money (Salvary, 1993). Valuation in financial accounting is expressed in nominal money terms, not in physical quantity terms, and appeals have been made to relax the assumption of the invariability of money as a measure of the price system (Edwards, Bell, and Johnson, 1979, pp. 633-648). *However, disregard of this condition could exist only "if all prices were kept constant over time, that is, if the price forming process itself were eliminated"* (Botha, 1959, p. 155).


Money is a frame of reference which introduced the term "price" as the expression of the exchange ratios of commodities--relative purchasing power of commodities (Salvary, 1993, pp. 153, 161). The exchange ratios of the various commodities constitute the price setting mechanism; the role of nominal money is to communicate these relationships as money prices in a uniform manner. Nominal money prices are signals and nominal money earnings influence behavior. Given the foregoing analysis, *only two conditions would render the money measure unstable: (1) the repudiation of the money unit--monetary dislocation and (2) the revaluation or devaluation of the money unit.* Except in those cases of monetary dislocation and domestic revaluations and devaluations, the variability, addressed by some economists and accepted as doctrine by some accountants, is witnessed not in nominal money but in commodities due to changes in taste and tech-

nological effects on the production of goods and services (Salvary, 1993, p. 165).

Conclusion

This paper has attempted to clarify some misconceptions involving only two of the more general and pervasive concerns (reality and assumptions) in financial accounting. Too often accountants borrow concepts and jargon from other disciplines, then accounting inherits the problems associated with those terms and concepts. It is possible that misinterpretations of certain terms has lead to and can lead to changes in accounting measurements and evidence gathering in attestation engagements. Accountants can minimize the effect of such problems if a conscientious effort is made to present clearly, and in unequivocal terms, the concepts which underlie financial accounting.

Suggestions for Future Research.

Currently, the existence of several accounting methods (e.g., depreciation methods) is interpreted as the existence of accounting alternatives; hence, the same transaction is accounted for by different companies in several different ways by means of the "alternatives methods." This condition has given rise to the terms: "liberal accounting methods" and "conservative accounting methods." The concern for sound accounting information consistent with measurement theory indicates an urgent need for guidance in the selection of accounting methods. Thus, future research should explore the necessary and sufficient conditions for the use of particular accounting methods to aid preparers in identifying the appropriate accounting method for the transaction under consideration. 

Endnotes

1. A similar view is presented by Laidler (1975, pp. 8-9).
2. Hicks, (1968, p.141) who was not an advocate of accounting valuation, implicitly accepts this proposition
3. Similar views are to be found in Malynes (1622, pp. 59-60); Botha (1959); Davidson (1972); and White (1984).

4. Other valuations (e.g. replacement cost, discounted cash flow) for decision-making do exists. The subclasses are based upon the portrayal of an entity, and not possibilities as projected.

Appendix Price System Vs Physical Quantity System

In the economic system, the physical quantity system is not directly represented by the nominal money price system, and the fault for the lack of physical quantity comparability is attributed to the measuring unit - money. Attempts have been made in economics to address this issue. Sraffa (1960) has developed a theoretical standard net product which would be equivalent to a variable quantity of labor; this could serve as an invariable standard of value. This standard net product enables an assessment of the distribution of the physical output of the system between profits and wages. Pasinetti (1977, pp. 116-119) has shown that this invariable standard applies to a physical quantity system and is entirely independent of prices. However, Pasinetti has shown that the relationship in the standard (physical quantity) system in terms of the distribution of income is the same that would prevail in the actual price system which is measured as ratios between values.

The invariable measure in Sraffa's (1960) system provides an awareness of the distribution of the physical output of the system free from the effects of the changes in the relative prices of the various commodities that constitute the total physical output (Pasinetti, 1977, pp. 18, 119-120). However, the only situation in which the same magnitude can simultaneously express both the physical quantity of a capital good and its value is the case of the purely hypothetical and imaginary economic system in which only one commodity is produced, and this one commodity serves both as the consumption good and as the capital good (Pasinetti, 1977, pp. 31-32).

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