Journal of Accountancy

Volume 32 | Issue 6 Article 2

12-1921

Principles of Interpretation of Accounting Data

Frederick A. Thulin

Principles of Interpretation of Accounting Data

By Frederick A. Thulin

The writer, in his practice, upon the completion of an annual audit, customarily offers the suggestion to his client, that he will be glad to appear before the board of directors or the annual meeting of the stockholders and orally amplify and analyze the audit report. The suggestion is usually readily accepted by the client. Furthermore the writer is of the opinion that if the public accountant would more generally follow a procedure of this nature, the public accounting profession would be giving a distinction to accounting service that the cold report can never give.

Under the English companies act, it is compulsory to submit the annual audit report at the annual meeting of the stockholders, but the suggestion herein set forth is carrying the English legislative requirement a step further.

Inasmuch as the analysis of figures should be imaginative or interpretive, at least of the past and present and, in a general way, of the future; and inasmuch as accountancy is scientifically classified as a branch of economics, the public accountant should be in an excellent position to present a many-sided analysis of a business. The writer proposes therefore to outline a plan of analysis, embodying principles of which the public accountant has knowledge but frequently neglects to apply.

The presentation of accounting and related data can be classified as follows:

I. The analysis of the balance-sheet, with a view of determining the present financial condition of the client.

II. The analysis of the profit-and-loss statement with a view of determining the condition of the operations.

III. Forecasting on the basis of business statistics and general economic principles.

IV. General comments.

Analysis of the Balance-sheet

The writer in this discussion assumes the balance-sheet to be properly set up, to wit: reserves of all kinds are adequate, the correct nomenclature of accounts is used, etc.—in fact, that the general principles set out particularly in the recommendations of the American Institute of Accountants to the federal reserve board have been followed.

Under American banking practice, a rule of thumb has developed to determine present, sound, financial condition—as regards working capital, a rule which over a long period of years of banking practice has justified itself and proved itself sound.

The before-mentioned bankers' test and one that can be readily adopted by the public accountant is briefly this:

> "A business presumptively is in a good financial condition, to wit: has sufficient working capital, if its current assets in relation to its current liabilities are approximately 200 per cent., or greater."

But to determine financial condition, the public accountant must analyze the balance-sheet further. There may be certain factors of omission and inclusion that should be noted, generally of the following nature, before any definitive opinion can be rendered:

The accounts receivable personal, particularly if of any moment and if the reasonable expectation for the liquidation of such accounts is through the medium of a dividend declaration, or if the liquidation will be haphazard, should not be included in current assets.

Investments, although having a restricted market value, if sound, can legitimately appear in the classification of current, i.e., convertible assets of a going business. In America some of our corporations have adopted in a minor way the practice of many of the French establishments, the building up of an investment account sufficiently large to guarantee earnings on the stock of the company.

Ordinarily, fixed assets such as land, buildings, machinery, etc., are excluded from the calculation determining financial condition, the reason being that the liquidation of such assets is a business liquidation convertibility and not a convertibility to cash of the assets of a going business. If, however, a fixed asset has a ready market and its convertibility will not be a violation of the rule before mentioned, to wit: a business liquidation convertibility, such an asset can be included in the computation of financial worth. An asset of this character would necessarily be an excess fixed asset.

The writer has analyzed many businesses in which the fixed assets have a substantial value, but such assets without a financing programme of convertibility such as a bond or note issue, did not place the business in the position where the accountant was able to state to the board of directors or stockholders:

> "Your company does not need further working capital with the present state of its liabilities."

The inventory—purposely discussed last—is logically a current asset. The transition from inventory to accounts receivable to cash in theory is accomplished in the period of time pertinent to the business under consideration.

Inasmuch, however, as an inventory may be somewhat frozen, i. e., not make the transition according to schedule, the accountant should note that fact before determining what weight should be given to the slow turnover.

The turnover that should roughly obtain for a particular business can usually be obtained by a study of the preceding years of the business, from trade bodies or associations of commerce or by a special report from some trustworthy business information service, that has gathered statistics on the particular line of business and can be qualified by the accountant to the individual case under consideration.

An inventory therefore that is not moving normally, in the same manner as accounts receivable that are not paid normally, is a factor that, if substantial enough, will necessitate a reduction of the inventory asset or the use of a larger ratio in determining financial position.

The analysis to which the current liabilities of a business should be subjected can be summed up thus:

> Are there any liabilities of the business over which the proprietorship of the business has control? If so, the liabilities are ordinarily functioning as capital liabilities, and, in commenting on such liabilities, the public accountant should make recommendations for a conversion to the capital or fixed liability classification or should otherwise take notice thereof in his comments.

Accounts or notes payable, over which a business has control, to wit: can determine the maturity thereof, are ordinarily met with in closed corporations, where in the expansion of the business capital was needed, or where at the inception of the business, insufficient capital was contributed, and to meet further capital requirements, the stockholders or directors advanced the requisite funds. Advances of the foregoing nature are not expected to be liquidated in the same manner as the ordinary trade or bank debt and the recommendation before-mentioned is usually appropriate.

The fixed liability, the funded debt, ordinarily is not taken into consideration in analyzing financial worth. However, all or a portion of the fixed liability may mature within a period of time after the date of the balance-sheet whereby the original character of a fixed liability is changed to that of a current liability. If the maturing liability is of sufficient proportion to warrant the inference that a refunding and not a liquidation is contemplated, there will be no need for the public accountant to analyze financial worth by including such liability in the current liabilities. The public accountant, however, should comment on the preparation made for refunding.

The bankers' ratio to demonstrate current financial position is predicated on the theory that the translation of inventory and attendant expenses of business to accounts receivable and the payment thereof is not contemporaneous with the maturity dates of the obligations of the business, the latter preceding the former in point of time.

Therefore in many businesses, particularly the instalment business and foreign trade, the difference in time between payment of receivables and maturity of obligations may be so pronounced that the ratio ordinarily indicative of sound financial position may not actually demonstrate sufficiency of cash working capital. A larger ratio may be necessary. The remedy in a situation of the foregoing nature is to convert such assets by discounting them or to create a fixed liability using such assets as collateral security.

As the writer has indicated, the bankers' method is more or less arbitrary but has been found to work out in practice. The scientific method of computation, outlined by the writer in a previous number of The Journal of Accountancy, is too cumbersome a method for use in every-day business affairs where quick action is desired.

Analysis of the Profit-and-loss Statement

The requisite bankers' relationship of current assets to current liabilities prima facie indicates that there is sufficient working capital in the business to liquidate current maturing obligations in due form and as a corollary thereto the business is not drawing on profits unduly to furnish working capital.

An analysis of the profit-and-loss statements of the business, however, may show, that while the business is in a position to liquidate its current liabilities in due form, nevertheless one or more of the following situations may be present:

1. A drain on such ability by a loss from operations; or
2. The business may not be earning enough commensurate with the entrepreneur risk of its type of business; or
3. The business may not be earning sufficiently to liquidate its fixed liability at maturity, after allowing a reasonable proportion of such fixed liability to be refundable, thus indicating that a certain portion of the fixed liability of the business is functioning as a pure capital account.

1 and 2. The earnings a business should make on its capital commensurate with the entrepreneur risk entailed are variable according to the nature of the business under consideration. It is perfectly obvious that a rate for one business may be ample, yet entirely inadequate for another business. Eight per cent. may be a sufficient return for a bank but certainly would not be sufficient for a gold-mining or an oil company. The market interest rate, locality, market competitive factors and nature of product sold are the chief factors that the accountant should take into consideration in determining the earning rate logically applicable. If a business is not earning sufficient to compensate capital invested, the accountant should seek to ascertain the reason therefor.

3. It is a fundamental proposition of accounting economics that the liquidation of a fixed liability shall be made from earnings. This proposition is the reverse of the principle governing the liquidation of the current liability.

In advising on the question of financing capital requirements through the medium of long-time borrowing, the accountant should be in an excellent position to determine the amount, serial payments, refunding probabilities and other incidents attendant on a funded indebtedness.

Frequently, in trust indentures, there is a provision for the maintenance of a certain ratio or excess of current assets to current liabilities to insure to the investor a sufficiency of working capital so that earnings can be used in all or part for the appropriate purpose of liquidating its fixed liability and that earnings shall not be unduly called upon to contribute working capital to the business. The before-mentioned reason is also the underlying reason for the provision, also frequently found in trust indentures, limiting distribution of earnings by way of dividends.

Forecasting by Statistics and General Economic Principles

It is axiomatic that a business may be presently in an excellent financial position, may have an excellent history, but that the future may not be so favorable.

In the writer's opinion, therefore, a business should prepare and have ready for convenient reference, the statistics that indicate from time to time the weak and strong factors of a business. Sales statistics are particularly important and generally speaking the following divisions are sufficient:

A. Analysis of commodities sold, thus indicating the source of gross revenues from lines sold, and the relative profit from each line.

B. Analysis of customers into classes, thus indicating the customer market for the business.

C. Analysis of territories, thus indicating territorial distribution of the sales.

In many instances the gross revenues of a business may show an increase which may be illusory, due to the increase in one type of business offsetting a decrease in another type of business. Statistics will show the strong factors but will also demonstrate the weak factors. Certainly statistics which showed a large government mail order or railroad business in 1918 and 1919 would be a factor in correctly prognosticating the business for 1920 or 1921. Advertising programmes and other plans of an administrative nature may be largely determined by the statistical data of the business.

The writer in the preparation of audit reports by his staff insists in most instances on the analysis of the sales account, so that no client will be misled by illusory increases or decreases in gross revenues.

Sales statistics serve another purpose in forecasting by giving data on which to base the successful further continuance of the business. The commodity analysis may show a patented or specialty article the future sales of which may be curtailed by a superseding commodity. The customer analysis may bring to the attention of the management a customer market that may be weakened or disappear in the future; and the territorial analysis may do likewise.

As the average business has a fairly accurate classification of expense accounts, the data on expenses is ordinarily not difficult to ascertain. Increases not consistent with the growth of the business are facts which are items of information that the public accountant should be cognizant of and interpret as to their significance.

General

In ordinary periods of business activity, the analysis of a business generally may ignore the personality element and confine itself to the concrete facts as shown by the accounting data. But in unusual circumstances, such as the present period of business depression or any similar period of general depression, when the assets shrink and liabilities remain stationary, the analysis should not fail to weigh the intangible elements that give potentiality to the business. The business character and fitness of the official personnel, the organization developed, the character of the house for business integrity, its history, etc., are factors that will always assume an importance in determining the financial stability of a business. As Andrew Carnegie once stated, in substance:

> "My losses I can always recoup, if my personnel and organization are not taken away from me."