INTERPRETATION OF BALANCE SHEETS AND OTHER FINANCIAL STATEMENTS:

PRELIMINARY REFLECTIONS

Emmanuel Fava

ESSENTIALLY, a balance sheet is a historic statement showing the financial position of a business at a given point in time; consequently, its use is somewhat restricted. Whoever studies a balance sheet does so to get an *indication* of future, rather than past, performance and security. As a general rule a prospective investor, or lender, is primarily interested in the financial strength of the firm as it is likely to be in the months or years ahead. Therefore, he attaches greater importance to the security of his investment, and lesser to its yield.

In order to understand a balance sheet properly and adequately an individual must first study it as an entity with its own merits and peculiarities. It becomes imperative to perceive the importance of the relationship which the balance sheet figures bear each other and to judge the various items in the light of what is known of the business generally. For example, a figure of Lm6,500 for debtors does not carry the same implications if trade creditors amount to Lm1,800 as it would carry if they amount to Lm15,200. Again, there seems to be little point in comparing the two figures at all without first ascertaining whether the business concerned normally sells its goods on a cash or credit basis.

It has to be remembered, however, that a balance sheet in itself has little significance. To base an interpretation exclusively upon an examination of its constituent items without having a knowledge of the real, living and changing enterprise, which a balance sheet only imperfectly depicts, would indeed turn out to be a futile and misleading exercise. As a matter of fact, very little will be gained by pondering over a figure of, say, stock-in-trade; much more has to be known in order to arrive at a sensible and worthwhile conclusion. A balance sheet is as varied as the human activities which it reflects and cannot be usefully interpreted by studying it in isolation or by simply breaking it up into its constituent items.

This leads to another logical point. Although it is essential to study a balance sheet in conjunction with sufficient knowledge of the firm as a whole, yet, to do so only would result in an incomplete assessment. Therefore, to obtain maximum information and reliable data about the business, a series of consecutive balance sheets will have to be consulted and analyzed. Only then does it become possible to ascertain what is known as the "trend"; that is, how the period under review performed. Once the trend has been established, the forecasting and planning of the future tends to be easier than if such a trend had not been identified.

POINTS TO BE CONSIDERED

The proprietors' stake in an ordinary business should at all times be sufficient to cover, in the first instance, the amount invested in fixed assets and intangibles, including any loans to directors or investments in other businesses. Then, there should be a further sum available to finance trading, i.e. adequate working capital. Naturally, the working capital fluctuates from day to day as the constituent items forming it continually change in the course of the day's trading. The amount of working capital needed by a firm depends on a number of factors, and it is not easy to ascertain the exact amount. Too large a working capital is not at all conducive to efficient management; on the other hand, too little of it puts the business under constant strain and endangers the firm's existence. Thus, the experienced and skilful financial manager will be the one who is able to strike the ideal balance between the two – neither too much, nor too little.

The day-to-day running of an enterprise requires finance over and above that which is needed for the purchase of fixed assets, and the volume of trading which can safely be undertaken depends not only upon the equipment and labour which the business controls but also upon the finance which is available. Debtors, stock and work-in-progress have to be carried all the time, and whilst the amount of each of these and the aggregate total of all of them may fluctuate very considerably, there must always be a matching global amount of finance upon which they can float without undue worry. The firm's finance is provided either from the proprietor's stake in the business (capital, reserves and undistributed profits) or by borrowing (loan creditors, bank overdrafts, mortgages, etc.) or by obtaining credit for goods and services employed. In addition, money earmarked to meet future liabilities (for example, taxation) may be used to finance current trading. And since none of these sources provides unlimited money or credit it follows that there is an upper limit upon the total of current assets which may be carried. All this would become apparent by analyzing a series of balance sheets.

Also, a careful study of a balance sheet will show whether the firm is "overtrading" or not. This can be ascertained from the distortion of the trading structure, the relationship between current assets and current liabilities, amounts owed vastly in excess of the stake of the proprietors. Primarily, overtrading is a matter affecting the trading figures of a business – the current assets and the current liabilities, and as such caution should be exercised at all times so as not to reduce the working capital to an unacceptably low figure. Also, it has to be borne in mind that any programme of expansion necessitates additional capital, partly to buy new fixed assets and partly to finance the increased volume of trading. Regrettably, this latter aspect is often overlooked, with the result that the enterprise is subjected to unwarranted pressures.

Another point which should be considered is the relationship between overtrading and liquidity; liquidity is here taken in its stricter sense, denoting the availability of cash to meet cash calls. When a balance sheet is said to be "liquid" it means that it shows an excess of current assets over current liabilities, but it does not follow that such a business is not vulnerable. Although, globally, a business may appear to be safe, it may be short of cash to pay its wages or an impending payment. A business should at all times have available sufficient cash or overdraft facilities to meet any contingency. The fact that an enterprise is profitable will be of little comfort if cash is not available in time and in the required amount. Overtrading imposes a strain an all the finances of a business and where too great a part of the resources is tied up in stock and debts there will be constant pressure on the overdraft limit and persistent difficulty in finding ready cash to pay the workers' wages or accounts as they fall due.

Again therefore, in a financially healthy business the current assets should exceed the current liabilities. However, a clear and substantial excess is not always a guarantee of stability and invulnerability. A great deal depends upon how current the current assets really are; in other words, how frequently they are turning over and turning into cash. It is no comfort at all to have large amounts of money tied up in stocks which are obsolete, damaged or out of fashion. Moreover, what is the use of having considerable amounts owed by debtors, when many of these are bad or doubtful? Therefore, a business becomes vulnerable if it is not turning over its stock-in-trade quickly enough, even though the balance sheet shows a liquid surplus.

The balance sheet, like any other financial statement, serves as an aid in efficient managerial control. Every activity of an expanding business must be carefully watched to ensure that it develops in proper relation to other activities. Stocks must be kept low enough to

maintain rapid turnover, yet large enough to give adequate selection and thus prevent lost sales. Expenses must be checked for unwarranted increases. Book debts must be collected promptly partly to minimize as much as possible losses through bad debts and partly to provide cash for further operations. All these efforts are helped by the figures shown in financial statements, particularly the balance sheet. The most important goal of the balance sheet, then, could be to facilitate intelligent executive control by supplying exact information about the condition of the enterprise. In addition it must be borne in mind that the executives of a firm are not the sole persons who have an interest in its financial position or progress. There are others as well. The shareholders, for security of their investment and the lenders cash and creditors, for the stability of their employment.

MANAGEMENT (ACCOUNTING) RATIOS

The annual financial statements prepared by a business are most carefully and rigorously produced. They are the ones which carry the highest credibility and are accepted as embodying unimpeachable truth. These statements often serve as the bases on which the firm's stability performance and forecasting are computed and compared by means of ratios.

Ratios are arithmetical relationships or comparisons between two different totals as shown in the financial statements. They always relate one figure to another. Thus, whilst being concise, they have significance. Ratios should always be identified with that aspect of the business which they are designed to bring to our attention. Generally speaking, these fall under two headings:

a) financial, that is pertaining to stability and security, both short and long term.
b) performance, that is pertaining to efficiency, profitability and return on capital.

Accounting ratios are indeed an important aspect of management accounting because they enable business executives, or other interested persons, to form an opinion as to the financial soundness of the enterprise and as to how well its commercial objectives have been attained. Once computed, present ratios may be compared with those of past years, resulting in a fuller and more meaningful picture. Such comparisons help to establish the business trend and the progress achieved. Furthermore, ratios can be compared with those of similar firms (inter-company comparisons), thus indicating how the enterprise is doing in the context of the industry as a whole.

FINANCIAL RATIOS

Financial ratios are of great help and value because they measure the financial strength and stability of a business. Survival is the main priority of any enterprise and this can only be ensured if the business, at any time, is able to pay its debts as they fall due. The more commonly-used financial ratios are:

1. Working Capital Ratio (Current Assets Ratio).
   Current Assets/Current Liabilities.

This ratio shows the solvency of the business and the ease with which it can carry on its trading activities without undue strain. It is assumed, rather arbitrarily, that the current assets should be approximately double the current liabilities. However an excess of net current assets well beyond that which is needed for survival represents idle capital – capital tied up in a constituent part, or parts, of the current assets.

2. Liquidity Ratio (Quick Assets Ratio or "Acid Test" Ratio) Liquid Assets/Current Liabilities.

Liquidity is the ease with which assets can be turned into cash. Liquid assets normally include cash and bank balances, bills receivable, short-term investments and debtors. This ratio indicates what is immediately available to meet current commitments. In a sense it is a measure of safety in the short term. Generally speaking, liquid assets should be slightly above the current liabilities if the firm is to be regarded as safe.

3. Working Capital to Turnover Ratio.
   Net Current Assets/Turnover.

This ratio may be expressed as a decimal, but normally it is multiplied by 365 to indicate the number of days' sales as represented by the net current assets. Although this ratio serves the purpose of comparison with that of previous years, yet it provides no proof that it is optional nor does it remove any distortion caused by the inability to keep expenditure on fixed assets in line with accumulations of depreciation provided.

4. Capital Employed to Fixed Assets Ratio:
   Capital Employed/Fixed Assets.

As a general rule capital employed comprises share capital (both ordinary and preference), all reserves, debentures and loans (both medium and long-term). It is expected that the proprietors' funds (including preference shares) should be such that they cover the fixed assets of the business and leave a reasonable amount as working

capital. If this is not the case, then the enterprise is overtrading, that is, it is relying too much on outside sources. This is a financial weakness which could be remedied by an increase in a long-term debt.

5. Proprietor's Ratio
   Share holders' Funds/Total Liabilities

The Shareholders' Funds include preference shares. This ratio denotes the long-term financial stability of the business with regard to an adequate security for the payment of all liabilities. This shows whether the shareholders' funds are large enough to provide a cushion for unsecured creditors. The proprietors' funds should be large enough to cover also the book values of goodwill and other intangible assets, if the financial position of the firm is to be regarded as satisfactory.

6. Net Worth to Fixed Assets Ratio:
   Net Worth/Fixed Assets

Net worth means what the business as a whole is worth. This is taken as all the assets (fixed and current) less all outside liabilities. Alternatively, the net worth may be computed by adding the share capital to all the reserves. This computation assumes that the real value of the assets is that stated in the balance sheet. This ratio shows the structure of the business. If it is high then it implies a low working capital ratio with correspondingly inadequate liquid resources. On the other hand, a low ratio indicates a "top heavy" structure with insufficient earning power. However, this ratio is influenced by the type of business under investigation; an estate business will have a high ratio, while a retail one will have a low ratio.

7. Fixed Assets to Current Assets Ratio:
   Fixed Assets/Current Assets.

This ratio is frequently used to determine the pattern of the resources employed by the business under review. Then, when compared with that of other firms in the same industry it will have a useful indication as to whether or not the fixed assets are being utilized optimally.

8. Capital Gearing Ratio:
   Equity Capital/Fixed Rate Capital (Preference shares + Loan Capital)

This ratio shows the capital structure of the business, that is, the relationship between ordinary share (equity) capital and fixed rate

capital, that is, preference shares, debentures and loans. It has to be remembered that the greater the proportion of fixed rate capital to equity capital, the greater the fixed annual commitment and the smaller the amount available for distribution. This ratio is useful for comparative purposes because it gives an indication as to whether the enterprise's policy, as compared with other similar business, has been prudent or not. It is commonly assumed that the optimal ratio for British industrial and commercial firms should be ·5.

9. Debentures + Long-Term Loans to Total Assets (or Fixed Assets) Ratio. Debentures + Mortgages + Loans/Fixed + Current + Assets.

This ratio shows the long-term borrowing power of the firm. It indicates to debenture holders and to lenders of cash the security on their loans. This ratio is based on the book-value of the assets.

PERFORMANCE RATIOS

Performance ratios show how well the business has performed during a current year. It can safely be said that the greatest value and benefit of these ratios is their comparison with ratios of past years and with those of similar businesses. Some of the more common ratios in use are:

10. Net Profit to Capital Employed Ratio (Efficiency Ratio) (Net Profit/Share Capital + Reserves + Loan Capital) × 100

This ratio shows the earning power of the long term capital employed in the business; that is, how much the capital has earned as an investment.

It has to be pointed out that the return expected on capital depends on a) the cost of the present capital, and b) the cost of raising future capital. The cost of capital depends on the capital "mixture" or "structure". The return on capital should compare favourably with the return of similar business in the same industry. Usually, the higher the risk, the greater should be the expected return.

Return on capital is a top-management ratio. Once it has been fixed, other more detailed ratios can be evolved in order to assist middle- and lower-management.

11. Profit to Sales (Turnover) Ratio: (Net Trading Profit/Sales) × 100

This ratio measures the success of executive managers in maximizing the profit from the firm's business activities. Items having no connec-

tion with the enterprise's normal trading operations, such as investment income, rent received, taxation, etc, should be excluded, otherwise the ratio will be distorted. If the ratio is decreasing then costs are normally rising quicker than sales, or disproportionately. However, a poor ratio may not necessarily mean inefficient management. Other factors, such as tighter economic conditions, difficulty in obtaining credit, increased competition, difficulty in reaching marginal customers etc, may be at play.

12. Net Sales to Debtors Ratio:
    Net Sales/Debtors.

This ratio shows the average credit given to debtors. Usually, the figure for net credit sales, with bad debts subtracted, is used. A declining ratio indicates that customers are taking longer to pay. The average collection period should be related closely to the credit policy of the firm. If monthly credit is given, then the average collection period should not exceed 40 days; if it does, then the debt-collecting system is not as efficient as it should be. If this ratio is allowed to deteriorate then it may jeopardize the cash flow, with the added risk of bad debts.

13. Sales to Stock Ratio (Stock Turnover):
    Cost of Sales/Average Stock

This ratio shows the number of times that the stock has been turned over during the year. This is a simple yet very important ratio. The quicker the stock is sold the higher will be the profit. It must be kept in mind that slow-moving stock ties up capital and is rather costly. Besides lost profits provision will have to be made for warehouse overheads, pilfering, deterioration, etc.

14. Net Purchases to Ratio:

This ratio shows the period of time allowed by creditors for the payment of purchases. It is advantageous for a business to have a considerable amount of creditors because in this way the business would be employing the suppliers' funds to generate part of its profit. It would be working with other people's money.

Although it is beneficial to have a large amount, yet this policy is rather risky and great caution has to be exercised.

15. Gross Profit Ratio:
    (Gross Profit/Net Sales) $\times$ 100

This ratio shows the profit margin earned on the sale of goods. It is the mark-up over and above the cost of goods sold. Only expenses which have a direct influence on the goods sold are included in the cost

of good, such as carriage inwards and it is important ratio because once it remains constant the profit earned on any sales can easily be revealed without having to prepare a trading account.

16. Earnings per Share Ratio:
Equity earnings after tax/Number of ordinary shares.

This ratio shows the profitability of a firm. It measures the earnings available for distribution divided by the number of ordinary shares. In computing it complications may arise (a) if the number of equity shares changes during the year, and (b) according to whether a "full" or "nil" distribution of dividends occurs.

17. Price Earnings Ratio: (P/E ratio)
Market value of one share/Distributable earnings per share.

This ratio shows what an ordinary share has earned from an investment point of view. It reveals the number of years that have the elapse so that the investor recovers his capital, assuming that future earnings remain unchanged. The importance of this ratio is, perhaps, the ease which it affords investors to assess the share value of their investment. Since it takes into account all the distributable profit, both that which is retained and that which is given out as dividend, investors attach great weight to it.

18. Earnings Yield Ratio:
(Earnings per share/Market Price per share) $\times$ 100

The ratio relates the amount available to the equity shareholders, after settlement of all prior charges, with the purchase price of the ordinary share capital. Undoubtedly, in calculating the yield the market price of the share plays an important part in the computation because the ratio indicates what the investment is yielding in the present conditions.

CONCLUSION

Reference has been made to turnover and to assets, both fixed and current. It is essential to note that turnover (sales) is more directly and immediately influenced by inflation, therefore ratios having turnover either as a numerator or as a denominator will tend to rise (improve) year by year, even if there is no real gain in efficiency. Moreover, in the case of assets, their value is taken as it appears in the balance sheet, without knowing for certain what the actual value really is, Wasting assets depreciate because of a number of factors, and although provision is usually made for this loss in value, yet it may either be

inadequate to cover the real loss, or else in excess. Consequently this will distort the ratio in question.

Notwithstanding the flaws that are inherent in the calculation of ratios, yet their computation is of considerable help to persons who need some guidance which could serve as a basis for the forming of an opinion as to the financial soundness of the business. Therefore, accounting ratios are regarded as useful management tools, and they have to be employed diligently, prudently and above all objectively, otherwise they could lead to wrong decisions.

EMMANUEL FAVA is Head of the Department of Accounts, The New Lyceum (Arts), Msida.