SHARE PRICES AND NET TANGIBLE ASSET BACKING

A thesis dated November 1972 on this subject was written by Mr R B McDonald of Blue Metal Industries Limited for submission to the University of Sydney. A copy has been kindly presented to The Securities Institute of Australia and placed in its library in Sydney.

A simple non-mathematical approach has been adopted in the study. There is no attempt to consider net tangible asset backing in the two, sometimes relevant, areas of capital components and tax-paid accumulated profits. Earnings per share, where used in comparative analyses, are based on the last published results, not the estimated earnings for the year current. In considering relationships over time, no attempt has been made to bring into account any changes in the relative importance of share-buyers according to their differing tax situations. The purpose of take-over - ranging from immediate break-up to full continuance under new control - may be relevant in comparisons even though the purpose may not be fully known until after the event. Current market price of particular assets is not necessarily good practice in respect of some continuing businesses, and cost of sale should usually be deducted in others.

Despite reservations in such areas, the thesis covers a number of interesting topics and represents a great deal of work. It may well stimulate interest in some aspects of accounting practice and determination of share prices, and certainly there is room for many more empirical studies in Australia.

The author has written a summary of his thesis which we are pleased to publish, not only as an indication of the ground covered in the major work to which reference may be made by those interested, but also as a contribution in its own right.

- Editor, JASSA

AN ENQUIRY INTO NET TANGIBLE ASSET BACKING

By R.B. McDonald, Sydney

It is an all too common feature of Australian securities markets that as soon as there is any hint of takeover activity, one of the first factors mentioned by observers is the net tangible asset backing of the offerree Company's shares.

To suddenly push net tangible asset backing to the forefront seems inconsistent with previous behaviour. This is especially so, as most market commentators often claim that N.T.A. is unrealistic and has little or no correspondence with the value of a firm's assets let alone its share price. The fact that N.T.A. appears to assume unprecedented importance as soon as there is suggestion of a bid is a cause for some concern. Accordingly, it has prompted a study of the significance of N.T.A. information in share price determination. Its conclusions will no doubt be of interest to security analysts, portfolio managers and persons in related fields.

Initially, the study involved the selection of one hundred stocks which were listed and traded on the Sydney Stock Exchange during the period 1962-69. For each year, data relating to earnings and dividend performance, asset revaluations, capital changes and numerous other factors were compiled in addition to an average share price for the year and a stock's reported N.T.A. The Sydney Stock Exchange Investment Service and the national newspapers were the chief sources for this information.

The study revealed that there was little tendency for shares, in general, to sell in the vicinity of their net tangible asset backing. The ratio of share price/net tangible asset backing varied from 0.19 in 1966 (Ira Berk) to 5.20 in 1964 (John Fairfax). Indeed it was apparent that over a period of years a stock may sell at quite diverse percentages of net tangible asset backing.

Stocks selling far below N.T.A. tended to be associated with poor rates of return on net tangible assets compared to stocks selling far in excess of that figure. There was a tendency for the companies whose stocks consistently sold at less than half their N.T.A. to be taken over or to engage in capital reduction programmes.

Another feature that arose was the tendency for most stocks to sell either above or below N.T.A. for a long period of time. Of the one hundred stocks in question, forty-seven sold above N.T.A. in 7 or more of the 8 years and 29 sold below N.T.A. for the same length of time.

Those stocks which consistently sold below N.T.A. tended to be associated with lower rates of return on net tangible assets than those stocks which consistently sold above N.T.A. In general, stocks with similar N.T.A.'s did not tend to sell either above or below N.T.A. let alone at similar prices.

Although some stocks sell above N.T.A. and others sell below, one might suggest that there may still be a tendency for the population, as a whole, to sell at either a greater or lesser percentage of N.T.A. from year to year. But, there was little evidence to support this claim. Apart from 1965, and to a lesser extent 1964 and 1968, there was little tendency for all one hundred stocks to follow a uniform trend with respect to the ratio of share price/N.T.A.

Of the one hundred stocks under consideration, sixty two displayed a positive correlation between share price and N.T.A. In thirty eight cases there was a negative correlation. When we adopted a critical cut-off point of ± 0.7 for statistical validity, it was found that the correlation co-efficient was above +0.7 in only twenty cases, whilst it was below -0.7 in seven cases. We may well conclude from the results ascertained that there is virtually no tendency for stocks, in general, to rise in price as N.T.A. increases. There are, however, isolated cases in which share prices appear to be correlated to N.T.A. It was not possible to identify any characteristic which was common to the stocks in question.

The study suggested that there is a marginally greater tendency for share price rises to be associated with an increase in the rate of return on net tangible assets, than there is with an increase in N.T.A. itself. But the fact that the correlation was significant for only 24 stocks limits the plausability of the suggestion that share prices may increase as a result of an improvement in the rate of return on net tangible assets.

Contrary to expectations, there tended to be little correlation between dividends or earnings per share and the ratio of a stock's share price/N.T.A. Only 21 stocks displayed a tendency to sell at a greater percentage of N.T.A. as earnings per share increased, whilst only 20 stocks displayed a tendency to sell at a greater percentage of N.T.A. as dividends per share increased.

There appeared to be little evidence to suggest that the ratio of a stock's price to its N.T.A. will be boosted or hindered by a company's earnings re-investment policy. In only eleven cases was there a tendency for stocks to sell at a greater percentage of N.T.A. as the company re-invested its earnings rather than pay them out as dividends. In four cases a higher payout ratio tended to be associated with share prices at greater premiums above N.T.A.

An analysis of the stocks of companies engaged in similar industries revealed that there is little tendency for them all to sell either above or below N.T.A. Even where this tendency did exist, the stocks rarely sold at similar percentages of N.T.A. It was found, however, that in a number of instances there was a tendency for stocks of firms having the same classification to sell, as a group, at either a greater or lower percentage of N.T.A. from year to year, irrespective of the trend in the rate of return on net tangible assets and dividend policies. Where this tendency did exist, however, there was seldom any similarity in the magnitude of the change in the ratio of share price/N.T.A. for each stock. What is more, there appeared little tendency for the trend in the share price/N.T.A.

ratio to match the trend in the rate of return on net tangible assets.

In some industries there was a tendency for the stocks bearing higher rates of return on net tangible assets to sell at higher percentages of N.T.A. but this was not widespread. There was little tendency, however, for stocks with the same classification to display similar characteristics with respect to the correlation between share prices or P/B and dividends, earnings or N.T.A.

Contrary to the thoughts of many analysts, there was little tendency for the stocks of financial companies - such as banks, insurance and investment companies - to sell in the vicinity of N.T.A., or N.T.A. adjusted for the market value of listed securities. Only in the case of banks, and to a much lesser extent investment companies, was there a tendency for the share price/N.T.A. ratios to be of a similar magnitude for most stocks in any one year.

A study of company takeovers revealed that a company, the shares of which are selling below N.T.A. is more likely to be a takeover target than if its shares are selling above N.T.A. As the share price drops below fifty per cent of N.T.A., so the likelihood of a takeover significantly increases. There appeared to be little tendency, however, for the shares of companies subsequently taken over to sell in the vicinity of N.T.A. prior to the bid. Nor did it appear that a bid will necessarily approximate a stock's N.T.A. The latter observation would appear to cast some doubt on analysts' claims that a takeover bid should be considered in relation to a stock's N.T.A.

It was found that the bid is more likely to fall short of N.T.A. in the case of companies with poor earnings histories. Where losses are common it is likely that the bid will fail to exceed fifty per cent of N.T.A. The more impressive a company's past earnings performance, the greater is the likelihood that the bid will approach or exceed N.T.A.

Throughout the study the limitations of N.T.A. information, and accounting reports in general for that matter, became increasingly apparent. The results suggest that there is no clear-cut rule for basing estimates of share prices on N.T.A. information. The vagaries of the stock market are such that they make share price estimation difficult at the best of times.