

CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

Summary

This research involved 41 public listed companies that were acquired during the KLSE bull run of August 1990 to December 1993. An equal number of non-acquired public listed companies of similar sizes from respective sectors were selected as control group. This research started by looking at the mean scores of the selected financial ratios to make general inference on the characteristics of the acquired firms. Univariate analysis were conducted to study the significance of the relative differences among the 20 ratios listed in Table 2. Factor analysis were used to summarize the characteristics of the acquired and the non-acquired firms. In addition to summarizing the dimensions of both groups of companies, factor analysis also provided eight surrogated variables that were the least correlated to be used in multiple discriminant analysis. The multiple discriminant analysis yielded two financial variables that had the most discriminatory powers to classify firms into acquired or non-acquired companies.

The following financial characteristics of the acquired firms were observed based on the general overview technique:

- (1) they were very much overvalued against their net assets than firms not taken-over,
- (2) they were less profitable, and
- (3) they utilized more current liabilities than long-term loans to finance their business.

Other than providing general observations stated above, the general overview technique was unable to state how significantly different the ratios of acquired firms compared to their controls. Univariate statistical analysis (t-test) was employed to state the significant differences among the selected financial ratios. Through t-test, it was found that all valuation ratios were significant at 5% level. However, all the price-earnings ratios were not significant at both 5% and 10% levels. Net profit margin and return on investment were significant at 5% level. Debt-to-equity ratio, return on capital employed, return on shareholders fund and times covered were significant 10% level. These results indicated that the acquired firms when compared to their controls (percentage difference stated in bracket) were having higher valuation ratios (47.01% to 69.95%) and debt-to-equity ratio (112.01%). They were also having lower net profit margin (107.31%), return on capital employed (27.54%), return on investment (69.40%), return on shareholders' fund (147.32%) and times covered (34.28%). This pointed to the acquired firms having the following characteristics:

- (1) they were much more overvalued against their underlying assets,
- (2) their managements were inefficient in generating profits and returns,
- (3) they utilized more current liabilities to finance their operations, and
- (4) they paid lower dividend yield and retained less incomes in the companies.

These results were very similar to the general observations stated earlier using the average mean scores technique. The results obtained through t-test were better as it provided concrete statement on the significant differences among the selected financial ratios.

Factor analysis were conducted to summarize the ratios into smaller sets of descriptive dimensions. From this study, it was found that 85.3% of the total variance can be accounted by six factors common to the acquired firms. These factors were:

- (1) valuation in relation to their underlying assets,
- (2) management efficiency in generating profits,
- (3) market valuation based on price-earning ratios,
- (4) short-term liquidity of the company,
- (5) debt dimensions of the company, and
- (6) retained earnings of the company.

Detailed analysis on the six factors showed that the acquired firms were generally more overvalued against their underlying assets, less profitable, using higher portion of current liabilities to run their operations and retained less incomes in the companies. Factor analysis conducted on the control group produced five factors that accounted for 81.0% of total variance. These five common factors were:

- (1) valuation of firms relative to their underlying assets,
- (2) general market valuation based on price-earning ratio,
- (3) management strategy in achieving growth opportunity,
- (4) management efficiency in generating profits, and
- (5) returns to shareholders.

Detailed study on the ratios that were grouped together under the five factors revealed the following characteristics. In general, companies in the control group were also overvalued, but to a lesser extent than the acquired firms based on valuation ratios. These firms were striving for higher growth in earnings by retaining more of their incomes and using lesser portion of current liabilities to run their businesses. Companies in the control group were more liquid, enjoying higher net profit margin and more profitable. The distinct factor that was excluded from the acquired companies grouping was the returns to shareholders dimension. The managements in the control group were generating higher returns to shareholders, maximizing the

shareholders' wealth by having higher return on investment, dividend yield and earnings per share.

Multiple discriminant analysis was carried out using the surrogated ratios from the factor analysis. The surrogated ratios were extracted based on the highest factor loading found in each factor. A standardized canonical discriminant function with two ratios (ROCE and VR2) was generated. This function had a p-value of 0.0227, but was only capable of explaining 15.18% of the total variance. A total of 49 companies were included in the analysis sample, 26 of which came from the control group. With a cutting score of 0.00 and classification procedure stated in Chapter 4, the function was found to be capable of classifying the firms studied. From the classification matrices, it was found that 63.27% of the analysis samples and 66.67% of the holdout samples were correctly classified. The classification accuracy of the function was tested using proportional chance criterion approach, and was found to be acceptable. There was a negative relationship between VR($t=-2$) and the dependent variable. ROCE on the other hand had a positive relationship with the dependent variable. The stepwise multiple discriminant analysis ranked ROCE as having more discriminatory power than VR($t=-2$). These two variables when taken together would yield the following characteristics for the acquired companies:

- (1) they were less profitable than non-acquired companies, and
- (2) they were relatively more overvalued against their net assets than their controls.

Conclusion

The univariate analysis, factor analysis and multiple discriminant analysis provided consistent results in stipulating the characteristics of companies acquired in KLSE during the 1990/93 bull run. These companies came with higher valuation against their

assets, less efficient in generating profits, utilizing higher proportion of current liabilities in running their operations, retained lesser proportion of incomes in the companies that resulted in lower growth rate, and having smaller dividend yield. The profitability and valuation ratios were found to be more discriminatory than other ratios.

These results were interesting in a few aspects. First, even though univariate analysis failed to conclude whether the acquired firms were more overvalued or undervalued than their controls, the multiple discriminant analysis did point out that valuation ratio was more discriminatory than the price-earnings ratio. This result concludes that the valuation ratio is the better measure than the price-earnings ratio to identify acquisition candidates, even though price-earnings ratio potentially is a better measure for valuation. The valuation ratio of the acquired companies were found to be significantly higher than those not acquired. This result refutes the finding of Robin Marris (1964), Ajit Singh (1971) and Kamal Adzham (1987) that companies acquired were those that were relatively undervalued. However, the results of this research on valuation ratio did confirm the findings by Newbould (1970) that the acquired firms were generally overvalued against their underlying assets. Other than the valuation ratios, the results from this research are consistent with the findings of previous researchers in terms of profitability and growth. It was observed that acquired firms were less profitable, less efficient and were having lower growth rate. Ajit Singh (1971) found acquired companies in the British stock market from 1955 to 1960 retained significantly higher portion of their profits. This finding was different from the results obtained in this research; the acquired firms were found to retain less earnings in comparison to non-acquired companies.

Based on all the above discussions and tabulated results, the conclusion on the acquired companies was that they were relatively more overvalued against their underlying assets. The lower dividend yield together with higher valuation ratio indicated that the shareholders of those acquired firms would be better off financially in selling their stakes to reap capital gains instead of taking dividend incomes.

The results concluded that the managerial economics on takeovers were observed in Malaysia. Generally, those companies acquired were less profitable and less efficiently managed compared non-acquired firms in their respective industries. This type of acquisitions is good as it would increase the values of the acquired companies, given the potential that the acquirers would operate them more efficiently.

Suggestions for Additional Research

This research was originally conducted with the intention of comparing the companies acquired during the bullish period and the bearish period in KLSE. Study on the characteristics of companies acquired in the bearish period was abandoned subsequently due to insufficient sample size. It is hence recommended that future study be conducted on the characteristics of companies acquired in KLSE during the down trend, when sufficient data is obtainable. Future researchers could also conduct studies on the characteristics of acquiring companies during both up-trend and down-trend in KLSE. Finally, further investigations could also be conducted on the post acquisition performances of acquired and acquiring companies.

Implications

The most obvious implication from this research is that to the management of any public listed companies, the basic theory of the firm is being upheld. It is very clear that

to avoid being taken over, it is most prudent for the management to maximize shareholders' wealths and company's profit. Valuation against underlying assets is less important and difficult to predict; a company may be acquired if it is undervalued, or it may be sold by the shareholders if it is highly overvalued. This study also has implication on the investing public. The results showed that to identify potential takeover targets during a bull run in KLSE, one should be looking at the few ratios that were found to be significant discriminators and avoid following rumours blindly or by just looking at price-earning ratios. Finally, the results from this study also indicate that as far as company's leverage is concerned, it is best to analyze both the gearing ratio and debt-to-equity ratio together. The main reason being that companies in KLSE seem to be using higher portion of current liabilities than long-term liabilities to finance their business operation.