CHAPTER THREE
LITERATURE REVIEW
3.1 Literature Review

There have been several research on the financial institutions of mergers. Most of the researches are very complex and using econometric model to analyse the various variable and hypothesis of the banks and finance companies mergers.

The study carried out by Stephen A. Rhoades in 1997 on the efficiency effects of bank mergers is the first of summarises analysis of case studies of nine mergers. The study summarises nine case studies, by nine authors, on the efficiency effects of bank mergers. The analysis was based on the efficiency effects of bank mergers in relation to industry peers in the period surrounding mergers and acquisition. The study revealed that, generally, the mergers especially horizontal (in market) mergers, seemed relatively likely to yield efficiency gains. That is, the all nine mergers resulted in significant cost cutting in line with pre-merger projections. On the other hand, the most frequent and serious problem was unexpected in mergers are the difficulty in integrating data processing systems and operation. In addition, the domestic mergers are mainly defensive tactics and aimed at protecting the established market position.

The study summarises nine case studies that address the efficiency effects of bank mergers. Since the mid to late 1980s, many bankers and bank analysts have argued that bank mergers result in efficiency gains (Krabill, 1985; Meehan, 1989; McNamere, 1992). On the other side, recently some analyst have expressed skepticism. Furthermore, the bulk of research empirical shows no evidence of efficiency gains from bank mergers or from increased bank size per se beyond a small size\textsuperscript{13}. Even those few studies that have analysed the

\textsuperscript{13} All 39 of the studies of Bank mergers and performance published between 1980 and 1993 are summarised in Rhodes (1994)
efficiency effects of horizontal mergers, the type of mergers thought to be the most likely to yield efficiency gains, have found that such merger do not, on average, yield efficiency gains: (Azarchs, 1995; Srinivasan and Wall, 1992; Berger and Humphery, 1992; Rhodes, 1993). Such conclusion from the typical cross-section studies are generalizations based on statistical tests, but there are exceptions in which mergers to result in efficiency gains. Nevertheless, the market place appears to have generally questioned the gains from the horizontal bank mergers as reflected in the adverse effect of a merger announcement on acquirer’s stock prices.

To analyse the efficiency effects of bank mergers, used a case study approach rather than the cross-section statistical methodology which used in most earlier studies. The case study approach used to provide insight into firm(industry) behavior and performance. A case study may use a wider range data and institutional details from sources that unique to a firm or industry. The nine mergers studied were not randomly selected. Indeed the mergers selected were generally large horizontal mergers that are thought to be the kind of mergers most likely to yield efficiency gains. The analysis covered a period mid to late 1980s to early 1990s, during which time there had been considerable emphasis in the industry on cutting cost. In the case study, a further distinction is made between cost reduction and efficiency improvement to establish the possible gains from mergers. The efficiency improvement is established as follows:

1) Reduction in operating expenses may result in from cutting employees, closing branches, consolidating headquarters offices, closing computers and back-office operation and so forth. Such reduction in expenses, however, do not automatically translate into improvement in efficiency as measured by an expenses ratio such as expenses to assets or revenues. Reduction in expenses may be accompanied by corresponding reduction in assets and revenues, which represent shrinkage of the firm rather than efficiency improvements.
2) Improvement in efficiency required that cost be reduced by more than any decline in assets (revenue).

3.2 Efficiency Measurement Of Mergers

In the case study the selection of mergers cases were not selected randomly. The characteristic of choosing the firms were as follows:

1. Large firms
2. Firms with considerable office overlap, that is, both were required to have offices in at least one market that is important to their operations.
3. Mergers that occurred in recent years, in 1990, during which time cost cutting and efficiency improvement in the industry.

In the study a common set of financial ratios, at least 16 financial ratios, three econometric cost measures, and the effect of the merger announcement on the stock price of the acquiring and acquired firms were employed. The expense and profitability during the pre- and post- mergers period. All ratio were analysed for three years preceding the year of the merger and three year after the merger.

The three years time period was used based on unanimous assessment among the experts interviewed that about half of any efficiency gains should be apparent after one year and all gains should be realized within three years.

3.2.1 Pre-Merger Period

For the pre-merger period, ratio of both the acquirer and the target were examined to get an indication as to the relative efficiency and performance of the acquirer and target. That is, a merger is most likely to result in efficiency gains if
the acquirer is more efficient than the target. In the period, ratios for a control or peer group of other firms were examined, which provided a basis of comparing the efficiency and the performance of the parties to the mergers with other firms that similar in term of size and/or location.

3.2.2 Post-Merger Period

For the post merger period, the focus of analysis was on the combined firms relative to a peer group. Post merger data compared with pre-merger data to determine what changes occurred in efficiency, performance, and some balance sheet ratio from the pre to post merger period. This is to help explain any performance change, being the result of the merger per se.

The analysis consists of financial ratios to compare the pre and post merger performance of mergers. The performance indicators consists of ratios that reflect the efficiency improvement resulted in mergers. The measures of efficiency is based on as follows:

1. The analysis expenses based on a ratio of expenses to assets or operating revenue. If there is absolute expense reduction would not indicate an efficiency gain if assets were reduce proportionately. This will simply reflect a shrinking firm. An improvement in efficiency requires that costs be reduced by more than any decline in assets(revenue).

2. The ratio of non-interest operating expenses to assets accounts for all of the operating expenses such as personnel, back office operation and branches that are directly affected by the cost saving which resulted in from the bank mergers.
3. Total expenses to total revenue and non-interest, and expenses to adjusted operating revenue (net interest income plus non-interest) were analysed as an alternative to the expenses to assets ratio.

4. Return on asset, that is, rate of return measures were analysed. This is an indicator profitability and a good overall indicator of a banking organization's performance. This ratio illustrates the ability of a firm to generate profits from the asset at its disposal, that is, it reflect the return to owner's investment.

Other than the five balance sheet ratios, some efficiency measures are also analysed based on econometric analysis and stock price changes. There are as follows:

5. As an alternative way to analyze the efficiency effect of the mergers, used econometric analysis of 'efficiency' measures as proposed by Berger and Humphery. Ranking of firm both before and after mergers, efficiencies were computed relative to the peer group.

6. Stock Price changes of the merging firms around the announcement date was also used to measure the efficiency gains of mergers.

3.3 Main Finding

3.3.1 Significant Cost Reduction/Cutting Objective Achieved.

The post merger firm (combined firm) achieved its cost cutting objective. The largest volume of cost reduction was associated with staff reduction and data reduction system and operation. Reduction in staff costs accounted for nearly two third or the total cost reduction. All of the merged firms shows that actual savings met or exceeded their expectation. Most of the cost reduction would be fully achieved within three years after the merger, with majority of savings being
achieved after two years. The summary of the case studies (table 1 - appendix 4) show that mergers were relatively successful in term of efficiency. Thus, the cost reductions were achieved. For example two post merger firms (E,F) in the table shows the firms accomplished its cost reduction within one year after the merger (Firm E) and the other stretch the cost saving program out over several years (Firm F).

3.3.2 Four Of The Nine Mergers Showed Clear Efficiency Gains Relative To Peers.

As illustrated in table one - appendix 1, even all mergers achieved cost reduction goals, but only four of the mergers (A,C,E,F) obtained unambiguous efficiency gains relative to the total expenses to assets ratio (refer table one - appendix 1), five of the nine mergers (A,D,E,F,I) resulted in an improvement in efficiency relative to peers. Of the four mergers that did not show improvement, of which three (B,C,H) decreased in efficiency relative to peers and one (G) showed no change relative to peers.

However, based on the total expenses to total revenue measure, B,C,H mergers showed gain in efficiency relative to peers, while G mergers again showed no change relative to peers. The firm I merger showed a decrease in efficiency relative to peers based on the total expenses to revenue ratio although it should gain on the asset ratio. Finally, all firm after merger showed an improvement in efficiency relative to peers, based on the econometric estimate of total efficiency.

3.3.3 An Improvement In Return On Assets Relative To Peers.

From the result showed in table one appendix 4, based on the return on assets ratio, most of the mergers were associated with an improvement in return on asset relative to the respective peer groups. Such improvement may have been particularly feasible, because all of the merger firm except G, on average, had a

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lower return on assets than peers before to merging. Even, G and I mergers showed declines in returns were rather small.

3.3.4 Increase Net Wealth Of Mergers.

After mergers, the net wealth effect, based on the stock price reaction to the merger announcement was positive for five mergers of the seven mergers for which data were available. The stock price of the acquiring firm increased around the announcement date relative to the market. These result contrast with many studies that the stock market generally has a adverse effect to the acquiring firm's stock upon announcement of a merger.

3.4 Case Conclusion

This study reveals the efficiency effects of bank mergers. This paper address the issue whether merger improve the performance and profitability of acquiring firms after the mergers. The result of the research findings are not only significant to shareholders and bankers, but it may be also important for mergers' consultant to evaluate to what extent of efficiency gains in mergers.

The findings of the research are summarised as follows:

1. Mergers were clearly successful in improving efficiency and profitability relative to peers.

2. The acquiring firm was more efficient than its peer group(based on expenses to assets). In contrast, the target firm in the majority cases was less efficient than the peer group. Based on both the expenses to asset and expenses to return ratios, showed acquiring firm was marginally more efficient than target firm, prior to merger. In general, more efficient firm acquiring less efficient firm.
3. The degree of office overlap is not perfectly related to the extent of efficiency gains of mergers. However, office overlap does not, by itself, guarantee success in increasing efficiency, although it may contribute toward that end.

4. The absolute size of the acquiring firm and its size relative to the target also do not seem to be particularly important factor in determining the performance result of the mergers. For example, mergers F and I involve two large firms. Merger A involve different size firms (Table 1-appendix 4).

5. Other factors such as a solidly improving economy, external pressure for success and chemistry between CEO, having a positive influence on a mergers.

The research of the paper indicates a strong commitment to cutting cost (efficient operation) and having acquiring firms that are more efficient than the target may be important, they apparently most likely to cause bank to result in efficiency gains. In domestic scenario, mergers of finance companies, that is, the tier-one firms, were selected based on more efficient than their partners (target firms). In all of the cases have been observed that post-merger efficiency and profitability have tendency to improve. These mergers seem to benefit synergy and reduce redundancies as well as improve efficient operation.