CHAPTER 4 – COMPARATIVE ANALYSIS OF COMPETITIVENESS AND EFFICIENCY OF MALAYSIAN BANKING SECTOR IN RELATION TO SINGAPORE, THAILAND AND INDONESIA

Following the increased openness of global market, the domestic banking groups would need to continuously assess their positions, not only within the domestic market but also within the presence of other regional and international players, in order to develop strategies to enhance their competitive presence in their targeted market segment. As such, this section attempts to assess the competitiveness of Malaysian domestic commercial banking industry in relation to that of Singapore, Thailand and Indonesia. The focus is on commercial banks while finance companies and merchant banks are excluded in order to maintain consistency across countries and also because commercial banks is the largest component, constituting for a majority of the total assets of the banking sector.

The data for this study comprise only the local commercial banks for all the 4 countries while foreign banks are excluded. This is because the performance ratios may not reflect the true position of the domestic banking sector if foreign banks are included as some countries may have heavy presence of foreign banks in the banking sector, such as Singapore, which may make these ratios more impressive as foreign banks are generally more efficient and better in most aspects. As such, excluding foreign banks from the analysis will be more appropriate since globalization will affect the domestic banks the most when more foreign banks are allowed to enter the
banking industry. The data is on 10 commercial banks in Malaysia, 3 in Singapore, 13 in Thailand and 111 in Indonesia for the years 2000-2001 (see Appendix 2, 3 and 4 for summary statistics of the data).

In this regard, several financial ratios under the CAMEL framework will be used as indicators in analyzing the competitiveness and efficiency of domestic banks of these countries. Singapore, Thailand and Indonesia are chosen in this analysis due to their geographical location which is near to Malaysia, hence directly posting potential threats to the Malaysian domestic banking sector. Besides, the ethnic and cultural aspects of these countries are almost identical to Malaysia, as such are more appropriate for comparison.

Appendix 1 presents a summary list of banks that comprise the domestic commercial banking sector of the 4 countries. Appendix 1 shows that Indonesia has the largest number of banks in the sample while Singapore has the fewest.

4.1 Capital of the Banking System

A bank’s capital, also known as equity, is the margin by which credits are covered if the bank’s assets were liquidated. Capital is a measure of financial strength and an important source of fund. Banks have to make decisions about the amount of capital they need to hold for three reasons:

(i) Bank capital helps prevents bank failure

(ii) The amount of capital affects returns for the shareholders
(iii) A minimum amount of bank capital is required by the regulatory authorities

When a bank creates a deposit to fund a loan, its assets and liabilities increase equally, with no increase in equity. That causes its capital to drop. Thus the capital requirement limits the total amount of credits bank may issue.

Table 3: Comparison of Bank Capital (US$ Million)*

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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>8578.2</td>
<td>16069.5</td>
<td>9424.9</td>
<td>5893.7</td>
</tr>
<tr>
<td>2001</td>
<td>9542.1</td>
<td>22561.5</td>
<td>10251.2</td>
<td>7028.4</td>
</tr>
</tbody>
</table>

*Base on exchange rate prevailing on 30/11/2002

1US$ = RM3.80
1US$ = SD1.74
1US$ = 42.6 Thai Baht
1US$ = 8636.4 Indo Rp

(Source: Computed from Annual Reports 1996-2001 of BNM, Monetary Authority of Singapore, Bank of Thailand, Bank of Indonesia)

Chart 2: Banking system: Bank Capital (US$ Million)
Table 3 and Chart 2 above show that the total capital of Malaysian commercial banks stands at US$9542.1 in 2001 with an annual growth of 11.2% from the previous year. Bank capital of Singaporean banks increased by the largest percentage of 40.3% while Thai banks’ capital rose by 8.8% and Indonesian banks capital grew by 19.3%. As at year 2001, Singapore banks’ capital was the largest followed by Thailand, then Malaysia and lastly Indonesia. This has proven that Singapore banks are conservative and strongly capitalized among the 4 countries hence they were the least affected by the 1997 Asian financial crisis. Thai banks’ capital are higher than Malaysian banks partly due to the larger number of banks as compared to Malaysia. Although recording a higher bank capital than Malaysian banks, Thai banks were still rather weak and were badly hit by the recent financial crisis compared to Malaysian banks, this was partly due to the speculative attack as well as the floating of Thai baht which directly affected Thailand’s economy as a whole, subsequently affected majority of the industries in Thailand. The inherent weaknesses in the Thai banks and many other factors too had also contributed to these banks to be badly hit by the crisis. Despite having the largest number of banks, Indonesian banks’ total capital were the lowest in the sample indicating their relative vulnerability towards external threats.

4.2 Capital Adequacy Ratio (CAR)

CAR measures the banks’ ability to meet regulated capital standards and the ability to attract loans and deposits. The 1988 Basle Capital Accord\textsuperscript{16} defined the CAR as the

\textsuperscript{16} The Basle Committee introduced the new Accord in 2001, to be implemented in 2004. The new Accord focuses on improvements in the measurement of risks, i.e. calculation of the denominator of the capital adequacy ratio. The new framework attempts to account for operational risk as well as credit ad market risks.
ratio of total capital to the sum of credit risk and market risk. Capital adequacy is important in ensuring that banks can absorb a reasonable level of losses before becoming insolvent. It is required to maintain depositors' confidence because in the event of winding-up, depositors' funds rank in priority before capital, so depositors would only lose money if the bank makes a loss which exceeds the amount of capital it has.

Applying minimum capital adequacy on banks requires banks to maintain adequate capital in relation to the volume and riskiness of their businesses in order to absorb unanticipated losses. Maintaining an adequate capital capacity serves to strengthen the bank's capital structure and financial position in meeting its loan obligations while attracting more deposits hence creating a large clientele. High capital adequacy ratio denotes high safety against bankruptcy. The Basle Committee has set an ideal minimum capital adequacy ratio requirement of 8%.

A simple measure of a bank's financial health is its capital to asset ratio (leverage ratio), which is required to be above the prescribed minimum. In some cases, due to the difficulty in determining the risk categories of balance sheet assets, the capital to asset ratio (which does not weight the assets for default risk) is used as a proxy for capital adequacy for different types of banks. Higher capital to asset ratio will reduce bank risks, hence stronger banks should display a higher capital to asset ratio. It is calculated by dividing the amount of capital maintained by the total assets owned.
However, due to the fact that greater capital requirement encourages banks to hold more risky assets, capital to asset ratio may not be a sufficient statistic for the risks that banks assume, especially if banks are subject to risk-based capital requirement. As such, the risk-weighted capital ratio (RWCR) will be a useful CAR to measure the amount of a bank’s capital expressed as a percentage of its risk weighted credit exposures. It is a measure of how much capital is used to support the banks’ risk assets. This ratio is important as it is used to promote the stability and efficiency of the banking system by reducing the likelihood of banks becoming insolvent which in turn may lead to a loss of confidence in the banking system. Higher CAR means lower probability of a bank suffering solvency problem.

Table 4: Comparison of CAR (%)

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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
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<tbody>
<tr>
<td>CAR (%)</td>
<td>11.91</td>
<td>12.09</td>
<td>20.93</td>
<td>18.23</td>
</tr>
<tr>
<td>Average (%)</td>
<td>12.0</td>
<td>19.58</td>
<td>12.3</td>
<td>NA</td>
</tr>
</tbody>
</table>
Chart 3: Banking System: Capital Strength Indicators (Capital Adequacy Ratio)

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT and BI)

Table 4 and Chart 3 above show that the CAR for all the 4 countries is way above the Basle requirement of 8% reflecting capital strength and conservative asset growth. Singapore exhibited the highest CAR at an average of 19.58%, followed by Thailand then Malaysia. Since no CAR data is available for Indonesia, thus Indonesia will be dropped from this analysis on CAR. However, Bank Indonesia Annual Report 2001 had recorded that as of end of 2000, the CAR ratios for majority banks in Indonesia were still below the minimum CAR requirement of 8% although all bank groups in Indonesia have recorded positive capital since quarter II-2000. However, there was later an improvement in the capital position of Indonesian banking sector when almost 95% of all banks had fulfilled the minimum 8% CAR requirement as of end of
2001\(^{17}\), this is perhaps due to the extensive efforts to increase paid-in capital and undertake mergers.

In brief, Singaporean banks were the best capitalized for the period. The overall capital reserves of Singaporean commercial banks continue to be well above the mandatory 12% CAR\(^{18}\). Malaysian banks are the least capitalized (although Indonesian banks could most likely be the least capitalized) despite a strengthening of capital position by 0.18% resulting from the continued profitability and capital injections into the banking institutions to support its enlarged operations following the conclusion of the mergers\(^{19}\). Thailand’s CAR too had improved from 11.4% to 13.2%, well above the BOT’s minimum 8.5% requirements.

Generally, the banking sector of the four countries have become more stable after the 1997 financial crisis with an improved CAR, reflecting the need to maintain higher capital to cushion the adverse impact of financial crisis while remaining more steady in meeting future challenges. Singapore is the strongest and most competitive among Malaysia, Thailand and Indonesia in terms of capital adequacy. Both Malaysia and Thailand’s capital position had strengthened from year 2000 to 2001 with Thailand performing relatively better compared to Malaysia and Indonesia in improving its capital base.

\(^{17}\) Bank Indonesia Annual Report 2001
\(^{18}\) Singapore’s Retail Banking Sector: At a Crossroads, www.usembassysingapore.org.sg
4.3 Asset Quality

Asset quality has direct impact on the financial performance of banking institutions. The quality of assets particularly, loan assets and investments would depend largely on the risk management system of the institution. The value of loan assets would depend on the realisable value of the collateral while investment assets would depend on the market value.

4.3.1 Asset Size

Usually the rule-of-thumb is all other things remaining constant, the bigger the size of a bank, the better it is in terms of greater loan and product diversification and accessibility of larger banks to asset markets which are not available for smaller banks. Hence, implying higher profitability for larger banks. This is agreed by earlier researchers such as Heggestad (1977) and Smirlock (1985) who had considered firm size in their profitability model. In most literature, the total assets of the banks are used as a proxy for bank size though in some instances, deposits and net profits are also relevant.

Table 5: Comparison of Assets (US$ Million)

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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
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<tbody>
<tr>
<td>Malaysia</td>
<td>85353.8</td>
<td>95832.5</td>
<td>136357.5</td>
<td>201051.7</td>
</tr>
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</table>

(Source: Extracted from Annual Reports of BNM, MAS, BOT and BI for years 2000-2001 and converted to US$ base on the exchange rate on 30/11/2002)

19 necessity to meet the 31 December 2001 deadline of a higher minimum capital funds requirement.
Table 5 and Chart 4 show that Singapore banks have the largest asset size as in 2001, followed by Thailand, Malaysia and Indonesia. In fact, Singapore’s 3 big local banking groups, DBS, OCBC and UOB had moved up the Asian ranking list, following the successful consolidation and overseas acquisitions. Though ranking behind Thailand in asset size in 2001, Malaysian banks’ asset growth is impressive and relatively higher at 12.3% compared to 3% for Thai banks, hence indicating the relative competitiveness of Malaysian banks as strong asset base is important in determining the strength and credibility of banks. Among the 4 countries, Indonesian banks have the lowest asset size despite having a large number of banks, in fact the asset size is decreasing though at a slow rate.
4.3.2 Loan Provisions Ratio (LPR)

LPR is a ratio of loan provisions to total loans. The objective of employing this ratio is to examine the ability of banks to build reserves for both expected and unexpected losses. A high ratio shows that banks have enough funds to cover loan losses. Theory suggests that the higher this ratio is, the lower the probability of a bank suffering problem as banks will have enough funds to back up its losses (Santoso, 1997).

Table 6: Comparison of LPR (%)

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<tr>
<td>LPR (%)</td>
<td>1.95</td>
<td>2.13</td>
<td>2.63</td>
<td>2.63</td>
</tr>
<tr>
<td>Average (%)</td>
<td>1.79</td>
<td>2.05</td>
<td>1.75</td>
<td>NA</td>
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</table>

(Source: Computed from various local commercial banks annual reports in Malaysia, Singapore, BI Annual Reports and BOT Annual Reports 2000-2001))

Chart 5: Banking system: Average LPR (%)

(Source: Computed from various local commercial banks annual reports in Malaysia, Singapore, BI Annual Reports and BOT Annual Reports 2000-2001))
Table 6 and chart 5 show that on average, Singapore banks maintain the highest loan loss provisions while data for Indonesian banks are not available hence will be dropped out from the analysis of this ratio. Malaysia ranked second then followed by Thailand. In all the three countries, the loan provision had been reducing from year 2000 to year 2001. This is perhaps due to the declining rate of NPL as majority of the NPLs were resolved or taken over by AMC, this had perhaps increased the confidence of the banks in lowering the provisions while extending more credits. A lower loan loss provision will reflect a better profitability of banks.

Despite the inavailability of data, the BI Annual Report 2001 stated that there is an increasing provision for loan loss, above the official requirement among Indonesian commercial banks as the economic outlook is still not favourable following the unstable political and social condition in the country. As such, higher provision was allowed as a cautious move against possibilities of bad loans so that the overall financial position of the banks remain sound.

Both Thai and Malaysian banks had maintained an adequate level of LPR though a higher rate would be preferred due to the existing world economy that is still not too stable. As noted earlier, Singapore banks had always been conservative hence were maintaining a relatively higher LPR. In addition, higher provision could have been directed to their foreign branches as the NPLs are much higher in these branches than their local branches.
4.3.3 NPL/Total Loan Ratio (%) (NPL/TL)

NPLs are loans that have defaulted for 3 months or more. Since these are the assets that are doubtful to return to principal or interest due in the near future, the lower NPL/TL ratio, the better. As such, NPL/TL is a good indicator of loan quality.

Table 7: Comparison of NPL/Total Loan ratio (%)

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<th>Thailand</th>
<th></th>
<th>Indonesia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NPL/Total Loan (%)</td>
<td>6.55</td>
<td>9.51</td>
<td>8.5</td>
<td>8.1</td>
<td>17.2</td>
<td>10.5</td>
<td>18.8</td>
<td>12.1</td>
</tr>
<tr>
<td>Average (%)</td>
<td>8.03</td>
<td>8.3</td>
<td>13.85</td>
<td></td>
<td></td>
<td></td>
<td>15.45</td>
<td></td>
</tr>
</tbody>
</table>

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT and BI)

Chart 6: Banking system: Average NPL/TL ratio (%)

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT and BI)
Table 7 and chart 6 present some data showing the overall quality of loans in the banking sector of the countries. The NPL TL ratio was decreasing in Singapore, Thailand and Indonesia while there was an increasing trend for Malaysia. In Malaysia, there has been an increase in the NPL TL ratio from 6.55% to 9.51% thus implying a deteriorating asset quality of the banking system, which is rather alarming as past studies have shown that bank failures frequently occur because of deteriorating asset quality.

Despite having an increasing NPL TL ratio, Malaysia's average ratio is still the lowest among the 4 countries, followed by Singapore at 8.3%, Thailand at 13.85% and Indonesia at 15.45%. Actually, in terms of potential risk to the Malaysian domestic banking sector, total outstanding loans in arrears have stabilised and kept at manageable levels. The improving risk management practices of banking institutions by the Malaysian government should be given credit in keeping NPL levels comparatively low and manageable. Unlike Indonesia, the Asset Management company in Malaysia had been able to dispose of a significant portion of the NPLs they acquired from banks, hence the relatively lower NPL TL ratio.

Singapore's average NPL TL ratio is slightly higher than Malaysian's likely due to the rising level of NPLs at the banks' overseas subsidiaries following their rapid regional expansion. In fact, the levels of NPLs in their foreign subsidiaries almost double the level in Singapore.
Thailand’s NPLs remained relatively higher despite the extensive effort by the government to achieve the indicative target of 5% for NPLs, which include credit restructuring that were undertaken by the banks themselves. The declining NPL/TL ratio from 17.2% to 10.5% in 2001 was a result of substantial NPL disposal to asset management companies hence a substantial shrink of bad loans.

Indonesia records the highest NPL/TL ratio among the 4 countries. This is partly due to the economic slowdown and the lax or inadequate banking supervision and regulatory forbearance resulting from the large number of banks, that contributed to the relatively high proportion of qualified loans. The strong practice of “connected lending” has also contributed to the high NPL ratios in Thailand and Indonesia. Despite a decline in the NPLs in Indonesia from 18.8% in 2000 to 12.1% in 2001 resulting from the transfer of problem loans from the banks’ balance sheet to publicly funded asset management companies (AMC), the NPL/TL ratio is still relatively high. This is because the Indonesian Bank Restructuring Agency (IBRA) had only been able to dispose 7% out of the 88% of banks’ problem loans transferred to it. Similarly, Thai Asset Management Company (TAMC) was only able to resolve one-fifth of the band loans when about half of the banking sector’s NPLs had been transferred to them.

In actual fact, the banks loan quality for all the 4 countries is generally low, which can be seen in the relatively high NPL/TL ratio when the ratio should ideally be less or equal to 5%.
4.4 Management Quality

This is the most important element of the CAMEL components. The performance of the other four CAMEL components will depend on the vision, capability, agility, professionalism, integrity and competence of the management. This parameter is used to evaluate management quality as sound management is crucial for the success of any institution.

4.4.1 Cost-to-Income Ratio

This is an efficiency ratio and it is calculated by dividing operating expenses (Staff cost + Overhead) to total income (Net interest income + Non-interest income) of the banking system.

Table 8: Comparison of Cost-to-Income ratio (%)

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<tr>
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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost to income (%)</td>
<td>39.1</td>
<td>44.3</td>
<td>29.1</td>
<td>32.8</td>
</tr>
<tr>
<td>Average (%)</td>
<td>41.7</td>
<td>30.95</td>
<td>41.89</td>
<td>61.0</td>
</tr>
</tbody>
</table>

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT and BI)
Chart 7: Banking system: Average Cost/income ratio (%)

(Source: Annual Reports 2000-2001 of BNM, MAS, BOT and BI)

A regional comparison of the cost-to-income ratio, a standard benchmark of banking efficiency, reveals that Indonesian banks are the least efficient in managing their costs, hence indicating a low quality in management. It is therefore suggested that Indonesian banks should further merge into fewer larger groups to reap the benefits of economies of scale through cost reduction by eliminating duplicated systems and redeployment of staff and full utilization of assets and human resources.

Comparatively, Singapore had the lowest average cost-to-income ratio of 30.95%, indicating their relative efficiency in banking. This is perhaps due to the fact that local banks in Singapore were merged into only 3 large groups which would benefit in terms of economies of scale. Besides a smaller number of banking groups would facilitate better integration and enhance management control.
Malaysian banks recorded a slightly lower ratio than Thailand, the increasing cost-to-income ratio from 39.1% to 44.3% was due partly to the increasing staff cost and overhead resulting from the merger exercise in the banking industry wherein more placement costs and compensation for retrenched staff are involved. Thai banks' cost-to-income ratio had been declining from 2000 due to a large increase in income particularly fee-based income.

On average, the cost-to-income ratio of domestic commercial banks of the 4 countries had been rather stable, there is neither sharp decrease or increase in this ratio. The increase is most likely due to the major restructuring and consolidation exercises which are currently carried out in the countries hence the increase of costs due to adjustments to the new structural changes as well as additional incidental costs arising from such practices. Should the banks later settle down with the structural changes, this ratio would be expected to decrease.

4.4.2 Branch Network (Average no. of branches per bank)

Banks with a large branch network generally have access to a larger client pool hence a better market involvement in promoting their products and services. Besides, banks with large branch network will also be able to realize better efficiency through the rationalizing of the branches that compete for the same market segment in a locality (Talagavathi, 2002).
Table 9: Comparison of Average No. of branches per bank* as at 31 December 2001

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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
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<tbody>
<tr>
<td></td>
<td>153</td>
<td>87</td>
<td>293</td>
<td>49</td>
</tr>
</tbody>
</table>

*Number excludes overseas branches
(Source: Bank Annual Reports 2001 of BNM, MAS, BOT and BI)

Table 9 above shows that Thailand has the widest branch networks among the 4 countries under study. Malaysia ranks second before Singapore and Indonesia. This is an indication of relative competitiveness for Thai banks as they are able to service at more locality and to reach out to more people. However, the fact that Thailand and Malaysia both have more domestic commercial banks than Singapore and the fact that there is land constraint in Singapore as it is a much smaller country, may perhaps also allowed more branches to be opened in Malaysia and Thailand.

Despite having a relatively smaller branch network compared to Malaysia and Thailand, Singapore banks have a wide and well-balanced branch networks not only in their domestic banking sector but overseas. For instance, UOB had long-standing branch networks in Malaysia. In fact, currently UOB is the largest foreign bank in Malaysia in terms of branches and OCBC Malaysia tops among foreign banks in terms of loans. Focus is also on expanding to Southeast Asia and China. DBS and UOB had stakes in banks in Indonesia, Philippines and Taiwan²⁰.

Although Indonesia has the largest number of banks among the 4 countries, its bank branch network is the lowest, signifying that it is least competitive in expanding and
providing services to more people. However, the total number of bank branches had increased from 13018 to 13530 even with a reduction in the number of banks. One possible reason for the slower branch expansion is perhaps the recapitalization and restructuring exercises of banks currently carried out. However, caution should be given to Indonesian banks when expanding their branch network as currently their relative efficiency is low with high operating costs, should there be a further increase in branches, costs might accelerate even further.

4.5 Earnings Performance

The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. A banking institution must earn reasonable profit to support asset growth, build up adequate reserves and enhance shareholders’ value. Good earnings performance would inspire the confidence of depositors, investors, creditors and the public at large.

4.5.1 Return on Assets (ROA)

ROA measures how well assets are employed to generate incomes. Hence it measures the profit generated for each ringgit in assets. It is calculated by dividing annual earnings by total assets. A high ROA ratio indicates high profitability and the better income generating capacity of the assets. A high ratio also indicates better earning potential in the future.

\[ \text{ROA} = \frac{\text{Net Income or Pre-tax profit}}{\text{Total Assets}} \]

\[ \text{Extracted from www.usembassysingapore.org.sg} \]
Table 10: Comparison of ROA of Banking Sector of the countries

<table>
<thead>
<tr>
<th></th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>1.19</td>
<td>1.69</td>
<td>-0.19</td>
<td>0.45</td>
</tr>
<tr>
<td>2001</td>
<td>0.87</td>
<td>1.02</td>
<td>-0.014</td>
<td>0.60</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td>1.03</td>
<td>1.36</td>
<td>-0.10</td>
<td>0.53</td>
</tr>
</tbody>
</table>

(Source: Computed from Annual Report 2000-2001 of BNM, MAS, BOT, BI and websites of Malaysian and Singapore banks)

Chart 8: Banking system: Average ROA (%)

Based on the ROA calculation in Table 10 above, the domestic commercial bank industry of all the countries under study except Thailand had recorded positive average ROA, indicating profitability. Singapore ranked number one in terms of profitability and efficiency in employing asset by recording an average ROA of 1.36%, followed by Malaysia at 1.03%, Indonesia 0.53% and Thailand at -0.10%.

On average, Thai banks’ bad loans and maturity mismatch losses show up clearly in their earnings performance. Thai banks’ ROA is very low due to huge losses in year
2000, nevertheless, profitability had improved with a lower loss recorded in 2001. By examining the average ROA of Indonesian banks, Indonesian banks are relatively inefficient in employing their assets in generating profits. Nevertheless, ROA is improving from 2000 to 2001 due to increasing profit, which were largely generated by recapitalized big banks stemmed from bond interests. The Malaysian banks’ ROA deteriorated from 1.19% to 0.87% resulting from declining profit in 2001, underscored by high overhead and merger-related costs, heartier competition and slower economic growth.

4.5.2 Return on Equity (ROE)

ROE measures the returns to shareholders. This ratio indicates how well the officers and employees are managing the bank to earn a high return for the shareholders. ROE is calculated as net income divided by shareholder’s equity. High ratio shows high profitability of bank but in certain instances it can also give an indication of high leverage and the riskiness of the banking business.

\[ \text{ROE} = \frac{\text{Net Income or Pre-tax profit}}{\text{Shareholder's Equity}} \]

Table 11: Comparison of ROE of the Banking Sector of the countries

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<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
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</thead>
<tbody>
<tr>
<td>Return on equity (%)</td>
<td>13.3</td>
<td>9.8</td>
<td>15.8</td>
<td>10.1</td>
</tr>
<tr>
<td>Average (%)</td>
<td>11.55</td>
<td>12.95</td>
<td>-6.5</td>
<td>7.6</td>
</tr>
</tbody>
</table>

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT, BI and websites of Malaysian and Singaporean banks)
It can be deduced from Table 11 and Chart 9 that in general, profitability ratio had been deteriorating for all the countries under study except for Thailand as shown by the decreasing ROE from 2000 to 2001 for all the 4 countries. The decrease in ROE was most significant for Singapore with a decrease of 36% followed by Malaysia at 26% and Indonesia at 15%. There had been an improvement of about 25% in the ROE of Thai commercial banks, despite still recording negative ROE. Such decrease of ROE in the 3 countries was perhaps due partly to the unstable world economic outlook and the worries over the September 11 terrorist attack.

Comparing across countries, Singapore banks record the highest average ROE, followed by Malaysia, Indonesia and Thailand. This is again indicative of relative competitiveness and profitability of Singaporean banks to those in the other 3 countries under study. It is again proven that Singaporean banks are still leading in Southeast Asia and are fast moving up the rank among Asian countries.
Malaysian banks in general had been well-managed and profitable with majority of the banks recording profits in 2001 while only a few small banks are still reporting losses. Some big local banks in Malaysia such as Maybank and Public Bank had been very strong and were even elected as among the top 10 companies in Malaysia. Table 11 and chart 9 show that Indonesian banks have not reached optimal profit and are still heavily dependent on public deposits rather than their equities, not only ROE had decreased but the average ROE is also very much lower than Malaysia and especially Singapore. This is indicative of Indonesian banks’ general inefficiencies in managing the shareholder’s equity in generating the highest possible return. Thai banks had recorded a negative average ROE following net losses in both 2000 and 2001 in the domestic commercial banking industry. Thai banks are still slowly recovering from the terrible effects of the 1997/98 Asian financial crisis, many banks are still very weak and major efforts and focus had been directed towards reforming and rescuing these ailing banks. Nevertheless, such efforts had seen positive results when the net losses had declined followed by an improvement in ROE in year 2001.

Nevertheless, despite deteriorating ROE, there had been improvements in ROE for all the 4 countries since financial crisis in 1997/98. At the height of the Asian crisis, most of the countries had recorded negative ROE with Thai banks’ ROE plunging to as low as -50%. As a result of the various recovery measures undertaken, recent years have witnessed a sharp recovery in bank profitability in these countries.
4.6 Liquidity Position

A banking institution must always be liquid to meet depositors' and creditors' demand in order to maintain public confidence. There need to be an effective asset and liability management system to minimise maturity mismatches between assets and liabilities and to optimise returns. As liquidity has an inverse relationship with profitability, a banking institution must strike a balance between liquidity and profitability. Among assets, cash and investment are the most liquid of a bank’s assets.

4.6.1 Loan-to-deposit ratio (LDR)

The LDR is an assessment of the role of deposits in financing loans. A high ratio means a lower proportion of loans financed by deposits. Theory suggests that the higher this ratio, the higher the probability of a bank suffering liquidity problem. Nevertheless, if LDR is too low, that means the bank’s function as intermediary institution has not been optimal. As such, the ideal LDR would be in the range of 80-120%.

Table 12: Comparison of LDR (%)

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</tr>
</thead>
<tbody>
<tr>
<td>Average (%)</td>
<td>93.7</td>
<td>75.2</td>
<td>77.0</td>
<td>31.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Source: Computed from Annual Reports 2000-2001 of BNM, MAS, BOT, BI and websites of Malaysian and Singaporean banks)
Table 12 and Chart 10 above show that Malaysia had the highest LDR, followed by Thailand, Singapore and Indonesia. Generally, liquidity appears to be adequate for all the countries under study except Indonesia. Despite recording a low LDR and hence, theoretically should be having a healthy liquidity position, it is arguable that Indonesian commercial banks are sufficiently expansionary in credit extensions but borrowers are simply not able to absorb all the available credit. This may be due to the continuing high business risk as a result of less conducive macroeconomic conditions, such as unstable socio-political conditions, unstable exchange rate and high interest rates. It may also be argued that Indonesian banks have low loan portfolios because instead of making loans, banks use the funds to buy government papers.
Meanwhile, Malaysian banks had recorded an impressive LDR which also mean a relatively lower liquidity. Most of the liquid assets held by Malaysian banks in the sample consist of the obligatory cash holdings stipulated by BNM. Nevertheless, great attention would be necessary in maintaining the LDR at this ideal level and not increase to an alarming level. Singapore and Thailand had both achieved satisfactory LDR by striking a balance between fulfilling the bank’s intermediary role while maintaining a healthy and sufficiently high liquidity level. Singaporean and Thai banks although not optimizing their role as financial intermediary by maintaining a higher LDR, the current higher liquidity kept in the banking system will undoubtedly reduce the risk of any possible liquidity problem which also reflect the more conservative stance adopted by the banks of these 2 countries.

4.7 Summary of Findings

Besides the above ratios which show quantitative comparison, some qualitative factors such as the various efforts and initiatives taken in promoting technology transfer and financial product innovation etc could also be considered in comparing the relative competitiveness across countries.

Based on the above comparisons among the 4 countries in the various competitiveness and efficiency ratios, the following Table 13 presents a summary of ranking of the countries by the ratios analysed earlier. Ranking was based on the average ratio and where comparison on bank capital, bank assets were concerned, 2001 data were used
as they are the latest available data to reflect the most current position of these banking industries.

Table 13: Ranking by bank capital, average CAR, bank assets, average LPR, average NPL/TL, average cost/income, branch network, average ROA, average ROE, average LDR

<table>
<thead>
<tr>
<th></th>
<th>Malaysia</th>
<th>Singapore</th>
<th>Thailand</th>
<th>Indonesia</th>
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<tbody>
<tr>
<td>Bank Capital</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Average CAR</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>NA</td>
</tr>
<tr>
<td>Bank Assets</td>
<td>3</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Average LPR</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>NA</td>
</tr>
<tr>
<td>Average NPL/TL</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Average Cost/income</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Branch network</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Average ROA</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Average ROE</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Average LDR</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

(Source: Annual Reports 2000-2001 of BNM, MAS, BOT, BI and websites of Malaysian and Singaporean banks)

Based on Table 13 above, it can be concluded that in most instances Singaporean banks have shown relative competitiveness in the various aspects compared to Malaysia, Thailand and Indonesia.

Despite the effects of the Asian financial crisis and the September 11 terrorist attack on some countries in the World, particularly some East Asian countries, Singapore’s local banks remain some of the strongest in Asia. Singapore banks were ranked number one in terms of bank capital, average CAR, bank assets, average LPR, average cost/income ratio, average ROA and ROE when compared to Malaysia, Thailand and Indonesia, hence indicating Singapore local banking sector’s relative competency in management and also in generating profits to their shareholders. Such competency and stability were among the reasons why Singaporean banks were least
affected by the Asian financial crisis. Singapore was slightly behind in terms of average NPL/TI, branch network and average LDP due to some probable reasons that had been explained in the earlier section. Despite the slowing down of the overall economy in Singapore and the fact that many have gone jobless, the local banking sector is still ranking high in the Asian top 10 list. As such, it is clear that the Singaporean banks are still the most competitive and least monopolized among the 4 countries under study.

In general, Malaysian banks were ranked second in the overall competitiveness although in certain aspects, improvement would be necessary. Malaysian banks were ranked number one in terms of average NPL/TI and average LDR. As such, it can be indicated that the Malaysian banks are good in terms of asset quality and in managing liquidity. Malaysian banks have also ranked number 3 in terms of bank capital, bank assets and average CAR among the 4 countries, hence highlighting that focus should be placed on improving the CAR and asset base which would enhance the stability and resilience of the local banking sector. On the issue of profitability, Malaysian local banks were ranked second with a fair ROA and ROE though still very much distant from that achieved by Singaporean banks. In terms of efficiency and effectiveness measured in average cost/income ratio and branch network, Malaysian local banks were ranked second and to further improve these areas, Singaporean banks should perhaps be used as benchmarks.
Overall, Thai banks were ranked at number three in relative competitiveness, after Singapore and Malaysia. Thai banks were generally better than Indonesian banks in their management and overall competitiveness. However, great attention should be given in improving profitability and reducing operating costs as Thai banks had been particularly poor in terms of profitability as reflected by their last ranking in ROA and ROE. Profits are essential to banks as they provide confidence to depositors and the general public as well as the shareholders. Actually, the negative profits of Thai banks were the effects of the 1997 Asian financial crisis where Thai banks have still yet to fully recover, though they are on the track as there were clear improvement in profitability and NPLs level. Nevertheless, the other inherent weaknesses which had caused the Thai banks to be hard hit by the financial crisis are still present in the banking system. The Thai government had crafted various measures and effort to improve and strengthen the banking sector and it is expected that positive results can be obtained in the near future.

In sum, the overall financial position of the domestic commercial banking system in Indonesia is solvent and income margins are positive. However, strains remain and the system is vulnerable. Although solvent, the system is undercapitalized as the thin capital base gives little cushion to shocks. Overall profitability and efficiency is low. Poor loan performance and the slow pace of restructuring means that credit intermediation would continue to be weak. Since there is insufficient data on average CAR and average LPR, it is therefore difficult to correctly assess the strength of the capital adequacy and loan loss provision position of Indonesian banks. However, BI
Annual Reports 2001 had provided that these ratios are still not satisfactory though the minimum CAR of 8% was achieved by most banks but not all banks. In addition, CAR of Indonesian banks are still rather low to ensure the safety and soundness of banks. As such, Indonesian banks are considered the least competitive among the 4 countries under study. Many banks are running on losses with high level of NPLs and operating costs. With the increased effort in restructuring the Indonesian banks, it is hoped that the overall performance and competitiveness will be improved so that they can remain strong in the era of globalization.