CHAPTER FOUR

RESEARCH RESULTS

This chapter discusses the research findings using the CAMEL rating framework to analyse the relative performance of commercial banks, finance companies and merchant banks. The capital adequacy analysis uses the risk-weighted capital ratio (RWCR) to indicate the capital position of the banking institutions. The well-capitalised banks would able to remain viable as a going concern during the difficult times. The non-performing loan (NPL) is used as the indicator to evaluate the asset quality. The health of the banking institutions is analysed from the risk assets by weight categories, which forms the bulk of total assets. The sound management of operating expenses is evaluated using the operating efficiency as the management competency indicator. The return-on-assets (ROA) is used to indicate the earnings performance. Finally, the liquidity ratio is used to analyse the liquidity position of banking institutions. Shifting the funds among the institutions during the crisis caused a repercussion on the bank's liquidity.

4.1 Analysis of the Capital Adequacy

The capital adequacy of the banking institutions is measured by the RWCR. The RWCR for commercial banks, finance companies and merchant banks is shown in Table 4.1.

Table 4.1: Risk-Weighted Capital Ratio (RWCR) for Commercial Banks, Finance Companies and Merchant Banks

(Percentage)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
CBs	10.6	10.5	11.6	12.4	11.3	11.1	10.8	10.3	11.7
FCs	7.5	8.6	9.2	8.8	10.1	9.7	9.8	10.3	11.1
MBs	9.4	9.1	10.1	10.0	8.3	11.9	11.7	13.3	15.2

CBs refers to commercial banks, FCs refers to finance companies and MBs refers merchant banks

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

The RWCR for commercial banks fluctuated between the range of 10.3 per cent to 12.4 per cent during the 1990-1998 period. The highest RWCR recorded was in 1993 whereas 1997 recorded the lowest RWCR for commercial banks. The RWCR for finance companies reflected an increasing trend, from a low 7.5 per cent in 1990 to a high 11.1 per cent in 1998 over the same corresponding period. The RWCR for merchant banks fluctuated between the range of 8.3 per cent to 15.2 per cent over the 1990-1998 period. The year 1998 recorded the highest RWCR, whereas 1994 recorded the lowest RWCR for merchant banks.

The Malaysian banking institutions are required to comply with a minimum RWCR of at least 8 per cent based on the risk-weighted assets of their operations. Before the crisis started in 1997, the RWCR for commercial banks, finance companies and merchant banks was far in excess of the 8 per cent required by the BNM and the Basle Convention.

Despite that Malaysian banking institutions were badly hit by the bleak times of 1997 and the 1998 downturn, the commercial banks, finance companies and merchant banks remained adequately capitalised as indicated by a RWCR of more than 8 per cent. This cushioned them from the 1997-98 financial crisis. The RWCR for commercial bank stood at 10.3 per cent at the end of 1997 and 11.7 per cent at the end of 1998, whereas for finance companies, it stood at 10.3 per cent at the end of 1997 and 11.1 per cent at the end of 1998. And for merchant banks, it stood at 13.3 per cent at the end of 1997 and 15.2 per cent at the end of 1998. Thus, these banking institutions had adequate capital to support their risk assets in accordance with the RWCR framework.

4.2 <u>Analysis of the Asset Quality</u>

The level of NPLs is a key indicator of the magnitude of the banking institution's asset quality. The bank's earnings ability and survival in the long run is dependent on its lending and quality of its loan asset. Based on Table 4.2, the finance companies had the highest NPLs in terms of percentage of total loans, followed by commercial banks and merchant banks. The NPLs over the 1990 -1998 period for these three groups of banking institutions displayed a similar tread. In 1990, the NPLs for commercial banks, finance companies and merchant banks were 20.1 per cent, 21.3 per cent and 12.6 per cent of total loans, respectively. Thereafter, their NPLs fell to the lowest at the end of 1996, which was at 3.6 per cent, 4.7 per cent and 1.7 per cent of total loans for commercial banks, finance companies and merchant banks, respectively.

As a whole, the robust performance in the economy is translated into improved loan quality as reflected in the decline in proportion of NPLs from 20 per cent of total loans in 1990 to 3.7 per cent of total loans in 1996. The significant decline in NPLs contributed to the improved profitability of banking institutions. The onset of the East Asia financial crisis in mid-July 1997 and the subsequent contraction of the economy led to the deterioration in the quality of the asset portfolio of banking institutions. The NPLs in the banking system rose significantly at the end of 1998. NPLs of merchant banks, finance companies and commercial banks increased significantly by 982 per cent, 312 per cent and 247 per cent, respectively between 1996 and 1998.

As the NPLs share of loan portfolio increased and capital became impaired, the banking institutions were less willing and able to lend, in turn causing a credit crunch and severe economic and banking crises. As underscored by Bernanke, Gertler and Gilchrist (1996), the flight to quality in bank lending may, in turn, trigger a *financial accelerator* effect along the following causal chain: the negative shock pushes the economy into a recession; the recession tightens borrowing constraints; tighter borrowing constraints amplify the recession, and the cycle goes on. The NEAC expressed concern over the contraction in credit. "The ... credit squeeze has serious implications for the economy. It stifles private sector growth and dynamism, while preventing the manufacturing sector from performing the much needed role as the engine of growth, when the other sectors are in the decline, and increasing exports to improve the balance of payments position. Even more worrisome is that businesses are driven into deep financial straits, which could result in widespread corporate bankruptcies and undermine the stability of banking institutions." (NEAC 1998, p.80) Undoubtedly, the economic and banking crises were self-reinforcing. Thus, bank restructuring and recapitalisation programmes were necessary to arrest the economic and banking crises. The potential seriousness of the situation required banking institutions to take serious action to sustain the rising NPLs and rebuild balance sheets, if they are to restore earnings, liquidity and public confidence in the integrity of the banking system.

In view of the rising NPLs which probably best characterize the problems plaguing the banking sector, the Government established the Danaharta, an asset management company, to purchase NPLs from banking institutions and manage these NPLs in order to maximise their recovery value. The banks will write off the portion of the NPLs that is not bought up by the

Danaharta. Whereas, the establishment of the Danamodal is to address the constraints faced by shareholders to recapitalise the banking institutions to healthy levels. The funds injected into the banking institutions will improve the asset quality of banks, the liquidity and the risk weighted capital adequacy of the banks. Importantly, the formation of these two new agencies - Danaharta and Danamodal is to recapitalise the banks and to strengthen the banks by encouraging mergers and acquisitions. This would ensure that banking sector would be more resilient, competitive and efficient.

The BNM announced that with effect from financial year beginning 1 January 1998, the default period for classifying a loan as non-performing was lengthened from three months to six months (BNM 1998, p.140). This would give a smaller loan default in terms of percentage of total loans as shown in Table 4.2 for the 1998 financial year. Thus, the lengthening of classification period for NPLs gave borrowers time to regularise their accounts, which ultimately benefited the banking institutions by improving asset quality. However, one might argue that the earlier recognition of loan default would give the banking institutions ample time to plan and work out recapitalisation solutions before eroding further to the capital base. The increase in the share of NPLs can lead to a gradual deterioration of bank's capital.

The health of the banking institutions can be observed from the quality of its loan portfolio, i.e. risk assets by weight categories, which forms the bulk of total assets. Examining the assets by risk weight for 100 per cent category (shaded area) in Tables 4.3, 4.4 and 4.5, the finance companies had the highest risky assets as compared to the other two groups. One can make a strong conclusion there is a high chance of finance companies going bust, when crisis hits. The excessive risk-taking by finance companies is detrimental to the interest of depositors. The nature of finance companies that focuses mainly on higher volatile investments such as hire-purchase financing, leasing financing, housing loans, consumption credit and lending for the purchase of securities, resulted in these financial companies being adversely affected in the aftermath of the financial crisis. The 1997-98 financial crisis affected the cash flow of borrowers, and thus default loans just skyrocketed. In an environment of rapid economic growth, borrowers would be able to service the increasing amount of debt through increased cash flows but with growth declining in 1997-98, borrowers faced problems in servicing their debts, especially when coupled with a liquidity squeeze, a credit crunch and an asset price deflation. Therefore, NPL ratio rose significantly.

Table 4.2: Non-Performing Loans (NPLs) for Commercial Banks, Finance Companies and Merchant Banks

	For the financial year											
	1990		1991		1992		1993		1994		1995	
	RM m	% of total loans	RM m	% of total loans	RM m	% of total loans	RM m	% of total loans	RM m	% of total loans	RM m	% of total loans
Commercial Banks	16,567	20.1	15,447	15.5	15,926	14.6	16,145	13.0	13,676	9.8	8,932	4.9
Finance Companies	5,858	21.3	5,634	17.8	5,975	16.0	6,133	14.5	5,331	11.2	4,285	6.6
Merchant Banks	792	12.6	724	10.7	583	7.3	576	6.2	1,142	10.8	1,103	7.8
Banking System[1]	23,217	20.0	21,805	15.8	22,484	14.6	22,854	13.0	20,149	10.0	14,320	5.5

Table 4.2 (Continued)

	For the financial year									
	1996		1997		1998					
	RM m	% of total loans	RM m	% of total loans	RM m	% of total loans	3-month Classification	% of total loans	6-month Classification	% of total loans
Commercial Banks	8,163	3.6	14,159	4.9	32,279	12.5	44,896	9.7	32,086	5.9
Finance Companies	4,002	4.7	9,797	9.0	17,901	19.4	25,889	22.7	16,092	11.9
Merchant Banks	315	1.7	1,096	4.8	4,083	18.4	7,197	25.6	3,888	10.9
Banking System[1]	12,480	3.7	25,052	5.9	54,263	13.1	77,982	18.9	52,066	12.6

[1]Refers to commercial banks, finance companies and merchant banks

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

Table 4.3: Commercial Banks: Assets by Risk Weights

	For the financial year											
	1990		1991		1992		1993		1994		1995	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	21.7	17.2	23.3	15.0	34.1	18.8	63.2	27.1	55.0	20.5	56.7	16.9
10%	1.4	1.1	2.1	1.35	3.0	1.7	3.4	1.56	6.2	2.3	7.8	2.3
20%	23.5	18.6	30.8	19.9	34.3	18.9	37.7	16.2	46.6	17.3	59.0	17.6
50%	11.8	9.3	13.5	8.7	16.6	9.1	20.8	8.9	23.9	8.9	29.0	8.7
100%	67.9	53.8	85.4	55.1	93.4	51.5	108.0	46.3	136.9	51.0	182.6	54.5
Total	126.3	100.0	155.1	100.0	181.5	100.0	233.2	100.0	268.6	100.0	335.0	100.0

Table 4.3 (Continued)

	For the financial year					
	1996		1997		1998	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	58.6	14.1	95.1	16.0	71.9	13.5
10%	14.5	3.5	23.3	3.9	20.1	3.8
20%	70.0	16.9	98.7	16.7	81.8	15.3
50%	33.4	8.0	47.8	8.1	49.5	9.3
100%	238.9	57.5	327.7	55.3	309.6	58.1
Total	415.4	100.0	592.6	100.0	532.9	100.0

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

Table 4.4: Finance Companies: Assets by Risk Weights

	For the financial year											
	1990		1991		1992		1993		1994		1995	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	3.4	9.1	4.9	10.8	6.6	13.0	8.9	14.8	9.1	12.9	10.8	11.6
10%	0.7	1.9	0.9	2.0	1.5	3.0	1.8	3.0	2.2	3.1	4.0	4.3
20%	6.9	18.5	7.4	16.4	6.6	13.0	7.1	11.8	9.9	14.0	12.9	13.9
50%	3.9	10.5	4.7	10.4	5.8	11.5	7.1	11.8	8.1	11.5	9.4	10.1
100%	22.3	59.9	27.2	60.2	30.1	59.5	35.2	58.7	41.4	58.6	55.8	60.1
Total	37.2	100.0	45.2	100.0	50.6	100.0	60.0	100.0	70.6	100.0	92.8	100.0

Table 4.4 (Continued)

	For the financial year					
	1996		1997		1998	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	16.4	13.2	20.9	13.2	10.8	8.7
10%	4.3	3.4	6.5	4.1	4.6	3.7
20%	14.7	11.8	20.5	12.9	19.5	15.7
50%	11.0	8.8	12.7	8.0	12.4	10.0
100%	78.4	62.9	98.0	61.8	76.8	61.9
Total	124.7	100.0	158.5	100.0	124.1	100.0

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

Table 4.5: Merchant Banks: Assets by Risk Weights

	For the financial year											
	1990		1991		1992		1993		1994		1995	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	1.5	13.3	1.7	12.3	1.9	12.1	3.6	17.6	2.9	11.3	2.5	7.9
10%	0.7	6.2	0.6	4.3	0.7	4.5	0.8	3.9	1.3	5.1	1.6	5.0
20%	3.1	27.4	3.7	26.8	3.6	23.1	4.6	22.5	8.0	31.1	10.1	31.8
50%	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.5	0.5	1.95	0.6	1.9
100%	6.0	53.1	7.7	55.8	9.3	59.6	11.1	54.4	13.1	51.0	17.1	53.8
Total	11.3	100.0	13.8	100.0	15.6	100.0	20.4	100.0	25.7	100.0	31.8	100.0

Table 4.5 (Continued)

	For the financial year					
	1996		1997		1998	
	RM m	% of risk share	RM m	% of risk share	RM m	% of risk share
0%	3.7	8.8	6.2	11.5	5.0	11.3
10%	2.7	6.4	1.8	3.3	1.5	3.4
20%	11.0	26.2	14.2	26.4	8.4	19.0
50%	0.6	1.4	0.7	1.3	0.5	1.1
100%	24.0	57.1	30.9	57.4	28.9	65.2
Total	42.0	100.0	53.8	100.0	44.3	100.0

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

4.3 Analysis of the Management Competency

The operating efficiency is the indicator of the management competency and is measured by operating expenses (staff cost plus overheads) over total assets. The operating efficiency for commercial banks, finance companies and merchant banks is shown in Table 4.6.

Table 4.6: Operating Efficiency for Commercial Banks, Finance Companies and Merchant Banks

(Percentage)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
CBs	1.68	1.68	1.67	1.51	1.68	1.47	1.48	1.33	1.50
FCs	1.18	1.23	1.36	1.39	1.46	1.43	1.26	1.42	1.44
MBs	0.84	0.80	0.83	0.76	0.83	0.75	0.67	0.79	1.14

CBs refers to commercial banks, FCs refers to finance companies and MBs refers to merchant banks

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

The operating efficiency for commercial banks, finance companies and merchant banks fluctuated between the range of 1.33 per cent to 1.68 per cent, 1.18 per cent to 1.46 per cent and 0.67 per cent to 1.14 per cent, respectively over the 1990-1998 period. Based on the operating efficiency analysis, the merchant banks had the lowest operating expenses, followed by finance companies and commercial banks. In other words, merchant banks are the most efficient in terms of operating expenses. This was partly attributable to the limited branch expansions undertaken by merchant banks over the 1990-1998 period. Lack of branch networking means that lesser operating expenses. At the end of 1998, the number of merchant banks remained at 12 with 22 branches.

4.4 Analysis of the Earnings Performance

The earnings of the banking institutions can be measured by the ROA. Table 4.7 shows the ROA for commercial banks, finance companies and merchant banks.

Table 4.7: Return-on-Assets (ROA) for Commercial Banks, Finance Companies and Merchant Banks

(Percentage)

	For the financial year							
	1990	1991	1992	1993	1994	1995	1996	1997
CBs	1.2	1.1	1.2	1.5	1.5	1.7	1.9	1.9
FCs	1.0	1.1	1.1	1.1	1.4	1.7	1.9	1.3
MBs	1.4	1.8	1.7	1.6	2.4	2.5	2.7	2.3

Table 4.7 (Continued)

(Percentage)

	For the calendar year	
	1997	1998
CBs	1.4	0.1
FCs	0.9	-1.6
MBs	1.7	-1.5

CBs refers to commercial banks, FCs refers to finance companies and MBs refers to merchant banks
Source: Computed from Bank Negara Malaysia, Annual Report, various issues

The ROA for commercial banks, finance companies and merchant banks was positive from 1990 to 1996. Thereafter, the commercial banks maintained at 1.9 per cent ROA in 1997. Whereas, the ROA for finance companies and merchant banks declined marginally to 1.3 per cent and 2.3 per cent, respectively in 1997, as compared to 1.9 per cent and 2.7 per cent, respectively in 1996. For the calendar year as a whole for 1997 and 1998, the three groups of banking institutions recorded a decline in ROA. The

ROA for commercial banks, finance companies and merchant banks registered a 0.1 per cent, -1.6 per cent and -1.5 per cent, respectively in 1998 as compared to 1.4 per cent, 0.9 per cent and 1.7 per cent, respectively in 1997. The decreased mainly due to (a) bigger apportionment for loan losses and bad debt provisioning being set aside, (b) the shrinking interest margins on fixed rate loan portfolio (finance companies) and (c) the sharp fall in traditional fee-based activities (merchant banks) could be singled out as the main contributory factor for the losses in 1998.

The positive in ROA for commercial banks, finance companies and merchant banks during the 1990 - 1996 period was due to the buoyant economic growth that was investment driven, and the privatisation programme that created a strong demand for loans. A booming economy that began in the late of 1988 had contributed strongly to the rising profits.

Between the period 1990 - 1996, merchant banks had the highest ROA as compared to commercial banks and finance companies. Robust economy, sharing corporate earnings growth and large inflows of direct foreign investment especially in the early-90s' contributed towards to the rapid price appreciation on the stock market. Because of this, the number of public listings and rights issues also increased, which led to expansion in the lucrative fee-based activities of the merchant banks. This augured for the high ROA for merchant banking industry.

4.5 Analysis of the Liquidity Position

The liquidity position of the banking institutions is measured by the amount of liquid assets as a percentage of their eligible liabilities. The liquidity ratio for the commercial banks, finance companies and merchant banks is shown in Table 4.8.

Table 4.8: Liquidity Ratio for Commercial Banks, Finance Companies and Merchant Banks

(Percentage)

	1990	1991	1992	1993	1994	1995	1996	1997	1998
CBs	18.4	18.0	18.0	18.0	17.9	17.5	20.3	17.8	17.0
FCs	12.1	12.0	12.1	12.0	12.4	12.5	13.1	12.0	12.0
MBs	16.5	16.8	17.9	18.3	15.8	15.3	18.9	14.6	15.3

CBs refers to commercial banks, FCs refers to finance companies and MBs refers to merchant banks

Source: Computed from Bank Negara Malaysia, Annual Report, various issues

From Table 4.8, the liquidity ratio for commercial banks fluctuated from a high 20.3 per cent in 1996 to a low 17.0 per cent in 1998 during the 1990-1998 period. Whereas, the liquidity ratio for finance companies varied from a high 13.1 per cent in 1996 to a low 12.0 per cent in 1991, 1993, 1997 and 1998 for the same corresponding period. And, the liquidity ratio for merchant banks fluctuated from a high 18.9 per cent in 1996 to a low 14.6 per cent in 1997 over the 1990-1998 period. These banking institutions are required to observe a minimum liquidity ratio. As for commercial banks, the minimum liquidity ratio is 17 per cent, whereas for finance companies and merchant banks, the minimum liquidity ratio is 10 per cent. Table 4.8 shows that the liquidity ratio for commercial banks, finance companies and merchant banks was far in excess of the minimum requirements set by the BNM.

During the 1997-98 financial crisis, the banking institutions were facing liquidity pressures. Finance companies and merchant banks were struggling to stay afloat during the crisis. Finance companies, in general, tend to exhibit higher potential of liquidity shortfall compared with commercial banks, as their deposit base was less stable. Whereas merchant banks, whose funding structure relies on a small number of large corporate depositors, also faced a higher degree of risk in encountering potential shortfalls. Based on Figures 4.2, 4.3 and 4.4, the shift of deposits from finance companies and merchant banks to commercial banks during the 1997-98 financial crisis, resulted in an aggressive bidding up of the cost of deposits to woo depositors as shown in Table 4.9.

Table 4.9 shows that the average cost of deposits for commercial banks, finance companies and merchant banks rose significantly after 1996.

Table 4.9: Average Cost of Deposits for Commercial Banks, Finance Companies and Merchant Banks

(Percentage)

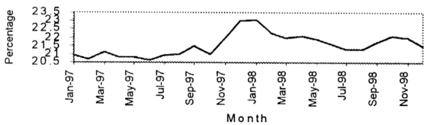
	1990	1991	1992	1993	1994	1995	1996	1997	1998
CBs	4.50	5.89	6.15	4.95	3.78	4.67	5.30	7.41	7.50
FCs	6.92	8.02	8.05	6.96	4.45	6.31	7.08	8.28	10.30
MBs	7.16	7.76	8.02	6.60	4.78	6.34	7.18	9.35	9.80

CBs refers to commercial banks, FCs refers to finance companies and MBs refers to merchant banks
Source: Computed from Bank Negara Malaysia, Annual Report, various issues

This was partly due to the flight of deposits, especially in the finance companies and merchant banks, leading to a shift of funds from the smaller institutions to the larger banking institutions. The competition for funds by these institutions contributed to the sharp increases in money market interest rates, which resulted in higher rates for the industry as a whole. In addition, the contractionary monetary policy kept the domestic interest rates at a high level, and this further attracted the inflow of capital to the country in the aftermath of the crisis.

For the individual bank, the problem of liquidity can become quite acute, because transfers of deposits between banks, which do not affect the aggregate liquidity of the banking system, may be of major concern to the individual bank from which the deposits are withdrawn. This was happened in the fourth quarter of 1997, there had been a flight to safety by depositors who moved substantial funds into foreign-owned and larger domestic banks, thereby creating liquidity problems for some banks. A reshuffling of deposits across banks took place as depositors enacted a flight to safety. Perceived by depositors to be less likely to fail, foreign-owned banks experienced an inflow of deposits from domestic banks between December 1997 and January 1998. The flight from domestic to foreign-owned banks has been pronounced as the market share of foreign-owned banks in total deposits has increased from 20.9 per cent in January 1997 to 21.5 per cent in December 1998, reaching its peak of 23.1 per cent in January 1998 (see Figure 4.1 below). Although there were rumors of runs on banks as evidenced by the withdrawal of deposits, no banks became insolvent or closed. There was general confidence in banks because of government guarantees on deposits. To minimise any systematic impact on the banking sector due to the movement in deposits, the Government issued a blanket guarantee on all deposits in late 1997, covering both the principal and interest amount of deposits placed in all banking institutions. This move succeeded in restoring confidence and stabilised conditions in the banking system.

Figure 4.1: Share Foreign-Owned Banks in Total Bank Deposits



Source: Computed from Bank Negara Malaysia, Annual Report, various issues

Figure 4.2: Fixed Deposits at Commercial Banks[1]

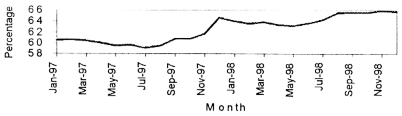


Figure 4.3: Fixed Deposits at Finance Companies[1]

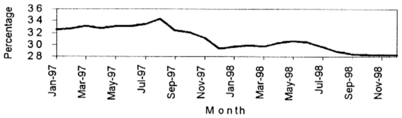
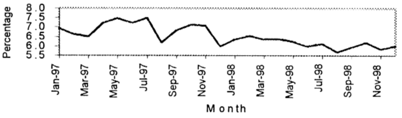


Figure 4.4: Fixed Deposits at Merchant Banks[1]



[1] Refers to percentage share in the total banking system

Source: Computed from Bank Negara Malaysia, Annual Report, various issues