

Masters of Science (Banking)

UUM-IBBM

WBB 6013: SEMINAR IN BANKING

Malaysian Banking Sector Outlook during Global Financial
Crisis

By

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Abstract

This paper is to discuss the Malaysian banking sector outlook and examine whether Malaysian banks are well placed to weather this Global Financial Crisis. The current international financial turmoil has demonstrated the vulnerabilities in the financial systems of even the developed countries. As we have witnessed, the sub-prime mortgage crisis and the slowdown of the global economy originated from the United States which is regarded as the most developed and advanced financial market in the world. In this study, we attempt to exam whether Malaysian banks are being well placed to weather this Global Financial Crisis by testing the Capital Adequacy Ratio of Malaysian Banking System. Our finding shown that net NPL has significant relationship with risk-weighted capital ratio (RWCR), which means higher net NPL ratio will lead to higher probability of banking crisis. We believes that the Malaysian banks are fairly well placed to weather the weaker conditions ahead given the progress in the last two to three years in the clean up of their balance sheets and the buffer resulting from higher provision reserves and a generally stable capital position. While this should support the Stable Outlook on the ratings for most of the banks, the situation will have to be watched closely given the potential for further downward revision in global and regional growth prospects, particularly in 2009

JEL classifications: G01; G21

Keywords: credit underwriting; bank lending; lending standards, loan losses

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1.0 INTRODUCTION

This paper is to discuss the Malaysian banking sector outlook and examine whether Malaysian banks are well placed to weather this Global Financial Crisis. Risk-Weighted Capital Adequacy (RWCA) is the approach for the computation of minimum capital required by a banking institution in order to operate as a going concern entity. A bank's RWCA is used to be analysis the strength of the bank. The RWCA framework, which was introduced in 1989, is developed based on the international standards on capital adequacy introduced by the Basel Committee on Banking Supervision (BCBS) in 1988 (known as Basel I).

The current international financial turmoil has demonstrated the vulnerabilities in the financial systems of even the developed countries. As we have witnessed, the sub-prime mortgage crisis and the slowdown of the global economy originated from the United States which is regarded as the most developed and advanced financial market in the world.

The crisis which started in 2007 is characterised by an acute shortage of liquidity in the financial systems around the world. It was triggered by the failure of mortgage companies, banks and investment firms which had invested in subprime mortgages.

A recent report by Standard & Poor's (S&P) entitled, *Asia Equity Market Outlook 2009: Two Halves*, quoted that Malaysian banking sector had little or no exposure to the United State subprime mortgage and other toxic financial instruments. The report said that Malaysian banks to be well-capitalised and had insignificant deterioration in asset quality. The report also found that there is no evidence of any property or asset bubble in Malaysia.

1.1 Systemic Banking Crises

Banks are financial intermediaries whose liabilities are mainly short-term deposits and whose assets are usually short and long-term loans to businesses and consumers. When the value of their assets falls short of the value of their liabilities, banks become

insolvent. The value of a bank's assets may drop because borrowers become unable or unwilling to service their debt (credit risk). Further, default risk cannot be entirely eliminated without severely curtailing the role of banks as financial intermediaries. If loan losses exceed a bank's compulsory and voluntary reserves as well as its equity cushion, then the bank is insolvent. When a significant portion of the banking system experiences loan losses in excess of their capital, a systemic crisis occurs.

Luc Laeven and Fabian Valencia in their International Monetary Fund (IMF) Working Paper in October 2008 titled "Systemic Banking Crises: A New Database" defined systemic banking crisis as a country's corporate and financial sectors experiencing a large number of defaults and its financial institutions and corporations facing great difficulties in repaying contracts on time. Systemic Banking Crisis usually results in sharp increases in non-performing loans and all or most of the aggregate banking system capital is exhausted. It is also accompanied by depressed asset prices (such as equity and real estate prices) on the run-ups before the crisis, sharp increases in real interest rates, and a slowdown or reversal in capital flows. While in some cases, the crisis is triggered by depositor runs on banks, in most cases it is a general realization that systemically important financial institutions are in distress

2.0 LITERATURE REVIEW

Risk-Weighted Capital Adequacy (RWCA) is the approach for the computation of minimum capital required by a banking institution in order to operate as a going concern entity. A bank's RWCA is used to be analysis the strength of the bank.

The RWCA framework, which was introduced in 1989, is developed based on the international standards on capital adequacy introduced by the Basel Committee on Banking Supervision (BCBS) in 1988 (known as Basel I). The international standards which initially covered only credit risk was extended to cover market risk in the trading book in 1996.

Prior to the adoption of the framework, the assessment of a banking institution's capital adequacy was undertaken through mechanisms such as free capital ratios, gearing ratios and risk assets ratios. With the introduction of this framework, supervisors and banking institutions had a common method to undertake the capital adequacy assessment.

In June 2004, the BCBS issued a revised international standard on capital adequacy (known as Basel II). With regard to Basel II, Malaysia has specified two implementation dates: January 2008 for the Standardized Approach and January 2010 for the Internal Ratings Based (IRB) Approaches (for credit risks). Banking institutions implementing the standardized approach in January 2008 (for credit risks) would also be required to adopt the simpler approaches for operational risks, either the Basic Indicator Approach or the Standardized Approach.

In the past two decades, many countries have experienced significant episodes of systemic banking crises. These crises have been more costly in developing areas than in industrial economies, so the prevention of such recurrent episodes has become a priority. The most acute among these recent experiences are the financial and banking problems in various Asian countries during the 1997/98. These problems renewed interest in academic and policy circles regarding the role that individual bank weaknesses play in terms of their fundamentals in contributing to bank failures. (Marco Arena, 2007).

Since the mid-1980s, banking crises have come to the forefront of international economics. Situation of banking distress have quickly multiplied, becoming one of the main obstacles of exchange rate stability and magnifying the severity of currency crashes (Kaminsky and Reinhart, 1996)

In the 1980s and early 1990s several countries, including developed economies, developing countries, and economies in transition have experienced severe banking crises. Such proliferation of large scale banking sector problems has raised widespread concern, as banking crises disrupt the flow of credit to households and enterprises, reducing investment and consumption and possibly forcing viable firms into

bankruptcy. Banking crises may also jeopardize the functioning of the payments system and, by undermining confidence in domestic financial institutions, they may cause a decline in domestic savings and/or a large scale capital outflow. Finally, a systemic crisis may force sound banks to close their doors.

In the research done by Marco Arena (2007), found that the bank-level fundamentals, proxied by CAMEL-related variables, not only significantly affect the likelihood of bank failure but also explain why banks are likely to fail. The systemic and macroeconomic and liquidity shocks that triggered the crisis not only destabilized the weak banks, but also the relatively stronger banks, in term of their fundamental

Asli Demirguc-Kunt and Enrica Detragiache (1997), found that weak macroeconomic environment with low growth and high inflation makes crises more likely; high real interest rates have also contributed to banking sector fragility, and so does vulnerability to balance-of-payments crises.

Graciela L. Kaminsky (1998) has examines 102 financial crises in 20 countries and concludes that the Asia crises are not of a new variety. Overall, the 1997 Asian crises, as well as previous crises in other regions, occur when the economies are in distress, making the degree of fragility of the economy.

3.0 MALAYSIA BANKING SECTOR

The Malaysian banking sector has played a leading role in indirect financing. For the last two decades, Malaysian banking systems have experienced a deep transformation under the pressure of internal financial liberalisation, increased openness to international capital flows and technological and financial innovations. The Asian financial crisis has also played a meaningful role in the process. As a result, the Malaysian financial system has emerged stronger and more diversified and competitive since the Asian financial crisis.

3.1 Banking Crises in 1980's

The Malaysian banking sector experienced problems throughout the 1980s. In 1982, Bank Bumiputra had to be bailed out by Petronas after making large losses on loans to Hong Kong SAR real estate developers.

In 1985–86 there were irregular bank runs and a number of deposit-taking institutions failed. Government had to recapitalize three mid-sized banks whose loans to finance real estate developments and share purchases had turned sour, and intervened in four finance companies and numerous deposit taking institutions and insurance companies.

In 1987–89, Bank Negara Malaysia (BNM) took control of another mid-sized bank and five finance companies. Non-performing loans were estimated at 32% of total loans in 1988. In 1989, Bank of Bumiputra had to be recapitalized again.

Following the above events, BNM was put in charge of prudential regulation and supervision, and regulation was tightened. BNM also tried to increase bank stability by fostering concentration. In 1994 a distinction was created between Tier I (larger and sounder banks) and Tier II (other smaller banks). This strategy, however, did not yield the desired consolidation as smaller banks rushed to raise new capital in the stock market to achieve Tier I status rather than merge. This process contributed to the rapid growth in bank credit, especially loans to the real estate sector and to finance

share purchases, and total bank assets grew at an average rate of over 20% per year in 1993–97. The two-tier system was abolished in April 1999.

3.2 Asian Financial Crisis (1997/98)

The Malaysian economy was performing strongly during the 1990s prior to the 1997 financial crisis, growing at an average annual real growth rate of 8.5%. The first signs of the crisis appeared in beginning of 1997, there were large capital outflows from Malaysia in the first quarter of 1997. The capital outflows accelerated in July 1997, when the Thai baht was devalued. The ringgit depreciated sharply, and equity and real estate values plunged. Investment by the highly leveraged corporate sector collapsed, while negative wealth effects and general uncertainty took their toll on consumption. Economic difficulties in the region reduced export demand and magnified the slowdown. The widespread use of shares as collateral for bank loans exacerbated problems.

The banking sector was hit by the downturn, with non-performing loans rising from 6% at end-1997 to 22% at end-1998. Some of the largest Malaysian conglomerates also experienced financial difficulties. Finance companies and merchant banks registered the sharpest worsening in asset quality. Initially, the policy response was to tighten fiscal and monetary policy to stem exchange rate depreciation. Thus, inter-bank interest rates rose from 7.5% in August 1997 to 11% at the beginning of 1998. As the situation of the corporate and financial sector deteriorated rapidly, a generalized guarantee for bank depositors was introduced in January 1998; to inject liquidity into the banking system, the statutory reserve requirement (SRR) was cut from 13.5% to 10% in February 1998 and again to 8% in July 1998. BNM also strengthened prudential requirements, issued guidelines to preserve credit flows to priority sectors (small and medium enterprises and low-medium cost housing), and announced mergers among troubled finance companies.

As the economy continued to deteriorate, in June 1998 two special purpose agencies were created, Danaharta and Danamodal. Danaharta was in charge of buying non-performing loans at a discount from banks, while Danamodal was to inject new capital

in selected institutions. By June 1999 Danaharta was managing RM39.3 billion in non-performing loans (about 13% of GDP), over half of which belonged to two financial groups, Sime Bank and Bank of Bumiputra, while Danamodal injected a total of RM7.1 billion (2.4% of GDP) in 10 institutions.

3.3 The Current Banking Outlook

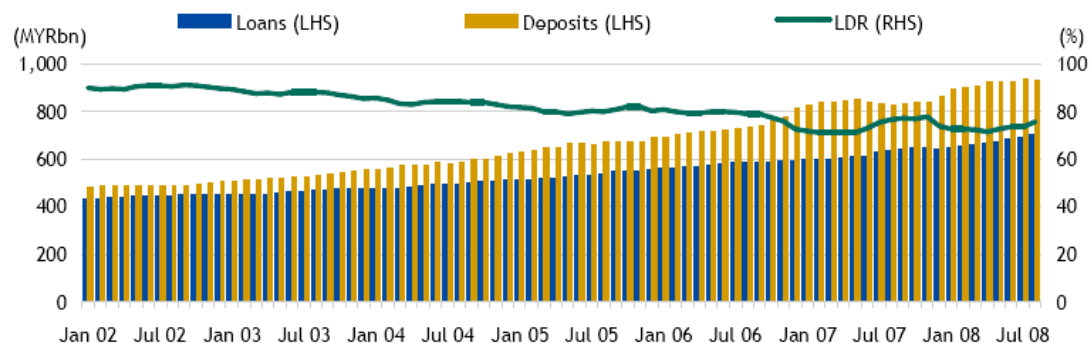
A recent report by Standard & Poor's (S&P) entitled, *Asia Equity Market Outlook 2009: Two Halves*, quoted that Malaysian banking sector had little or no exposure to the United State subprime mortgage and other toxic financial instruments. The report said that Malaysian banks to be well-capitalised with the risk-capital ratio at 13.0% and had insignificant deterioration in asset quality with non-performing loan (NPL) showing a declining trend to 2.4% at end of September 2008 from 3.4% on last year and 5.1% two years prior. The report also found that there is no evidence of any property or asset bubble in Malaysia.

BNM's reported that the Malaysian banking sector on the whole is sound. Local banking institutions, have benefited from the broad-based reforms and capacity building measures that had been undertaken following the Asian financial crisis. Notably, the consolidation of the banking sector by merger, the strengthened board and senior management oversight functions within banks, and the more risk-sensitive capital and the stress-testing requirements have contributed towards reinforcing the core foundations for a more resilient banking system. Banking institutions have also made significant advances in the adoption of improved risk management infrastructure and practices.

The banking sector has maintained a steady growth momentum since the Asian financial crisis, with profitability of the Malaysian banking system growing by 36.7% to record RM17.7 billion in 2007. The exposure of the Malaysian banking sector to the sub-prime market has been minimal amounting to only 0.3% of the capital base of the banking sector. Their enhanced capabilities are backed by stronger balance sheets, with the risk-weighted capital ratio of the banking sector at 13.0% and net non-performing loans ratio of 2.4%.

Liquidity in the domestic financial system remains ample as evidenced by the accommodative financing-deposit and loan-deposit ratios. Financial institutions have sufficient liquidity to fund their lending activities. Total loans outstanding expanded at an annual growth rate of 10.3% as at end- October 08.

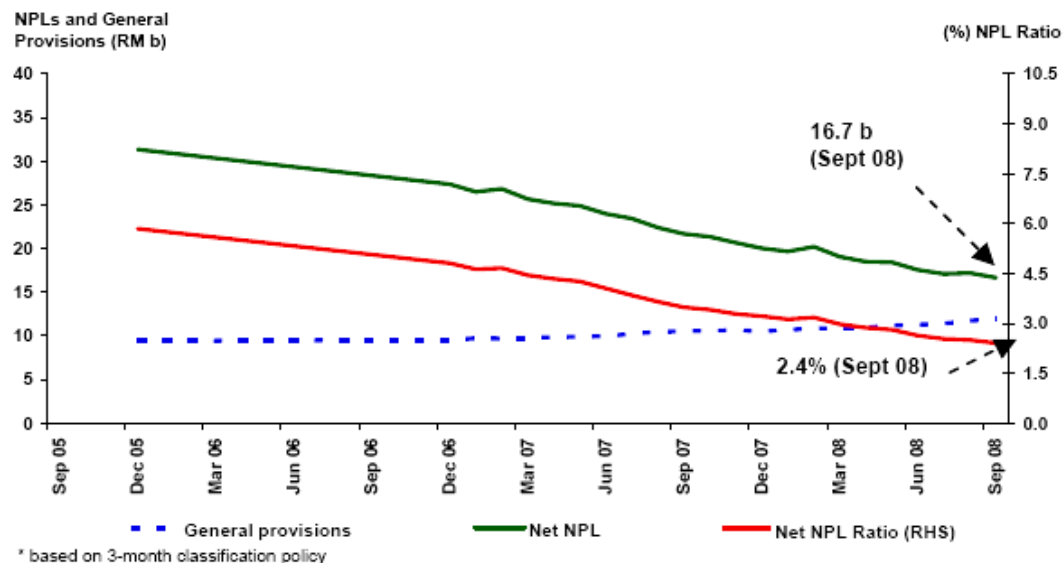
Chart 1 –Banking System Loans and Desposits



Source: Bank Negara Malaysia

The net non-performing loans (NPLs) ratio of the banking system was reduced to RM16.7 billion or 2.4% of total loans.

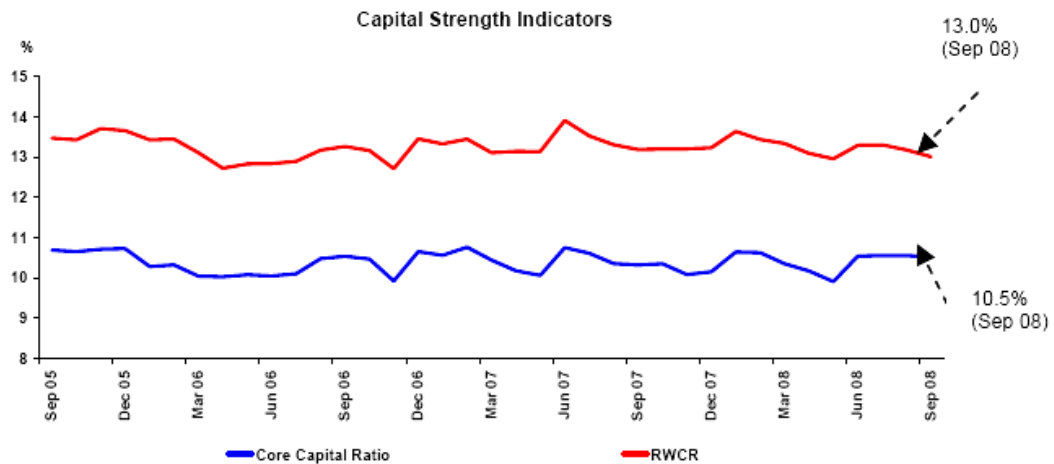
Chart 2 – Banking System - Net NPL and General Provision



Source: Bank Negara Malaysia

The capitalization of the banking system remained at a strong level with a risk-weighted capital ratio (RWCR) of 13.0% and Core Capital Ratio of 10.5% in September 08.

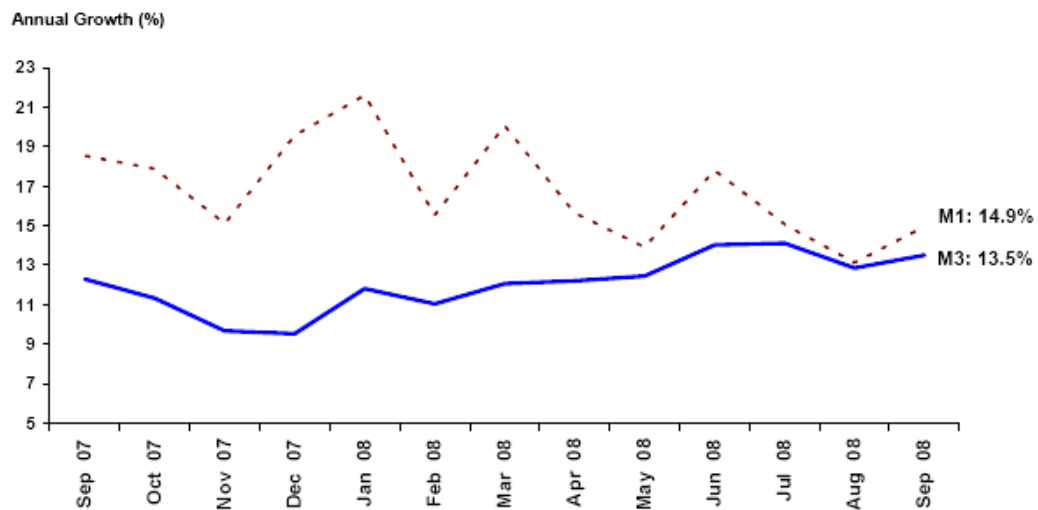
Chart 3 – Capital Adequacy Ratio of Malaysian Banking System



Source: Bank Negara Malaysia

In latest third quarter BNM report, M3, or broad money, expanded by RM13.7 billion during the quarter or 13.5% on an annual basis as at end-September (end-June: 14%). The growth in M3 was underpinned by the continued expansion in credit, reflecting the sustained pace of private sector demand.

Chart 4 – Monetary Aggregate



Source: Bank Negara Malaysia

4.0 MOTIVATIONAL BACKGROUND OF THE STUDY

In recent decades, a majority of countries have experienced a systemic banking crisis requiring a major and expensive cost to overhaul their banking system. There is important of a country to ensure their banking system is safe and sound as bank failures impose external costs on uninvolved parties as resulting from undiversified interbank credit exposures.

Basel II was designed with the primary goal of making capital requirements reflect bank risk exposures. More credit risk would require an appropriate amount of additional capital to keep the bank's default probability. The introduction of capital adequacy rules will strengthen bank capital and, thus, improve the resilience of banks to negative shocks.

In this paper, we will try to explore whether Malaysian banks are well placed to weather the current Global Financial Crisis, which has demonstrated the vulnerabilities in the financial systems of even the developed countries.

5.0 RESEARCH METHODOLOGY

- i) This study is to examine whether Malaysian banks are being well placed to weather this Global Financial Crisis by testing the Capital Adequacy Ratio (RWCR) of Malaysian Banking System against several predictions: ratio of net non-performing loan (NPL), rate of return on equity (ROE) and ratio of loan against customer deposit (L/D ratio), Gross Domestic Product (GDP) and the growth of Board Money (M3).
- ii) To asses the RWCR positions of banks in Malaysia over 2002 to June 2008 period.
- iii) To estimate the Malaysian banking sector outlook in 2009.

5.1 Data description

Risk-Weighted Capital Adequacy Framework (Basel II), which is applicable for banking institutions adopting the revised approaches according to the stipulated timelines.

$$\text{RWCR} = \frac{\text{Capital Base}}{\text{Credit Risk-Weighted Asset (RWA) + Large Exposure Risk RWA for Equity Holdings + Market RWA}}$$

RWCR as measure of the strength of a Bank, therefore we used as dependent variable, whereas independent variables including Bank's specific variable i.e. ratio of net non-performing loan (NPL), rate of return on equity (ROE) and ratio of loan against customer deposit (L/D ratio), and also country's macroeconomic variables i.e. the percentage change in real Gross Domestic Product (GDP) and the growth of Board Money (M3) included to analysis. We attempt to establish the relationship between these independent variables with RWCR and to test whether these variables have impact on the RWCA ratio.

Ratio of net non-performing loans is percentage of non performing loans against gross loans, advances and financing less specific allowance. Net NPL ratio is used to measure the asset quality of a bank, whereas L/D ratio is used to measure the liquidity of a bank as well as whole banking system.

The efficiency of banks can be measured through the use of the ROE ratio, which shows to what extent banks use reinvested earnings to produce future profits. In general, the growth of ROE may depend on the capitalisation of banks. When a bank is highly capitalized, through the Tier-1 capital adequacy ratio (CAR) or the risk-weighted capital adequacy ratio (RWCR), then the expansion in the ROE metric is retarded. The reason is excess capital is not distributed back to stakeholders, but instead it is retained for future expansion. At present, the Tier-1 CAR is a minimum of 4%, while the RWCR is 8%.

Previous research had debated whether macro or micro and institutional factors "caused" banking crises, and Danirguc-Kunt and Detragiache revealed that both play a

role in the drama, consistent with the finding of Caprio and Klingebiel (1997) that out of 80 cases, both macro and micro factors regularly were cited as causes of systemic crises (Gerard Caprio, Jr, 1998)

From a study by Asli Demirguc-Kunt and Enrica Detragiache (1998), the evaluation of banking sector fragility performed subject to several potential errors common to all exercises based on forecasts:

- a) The regression coefficients used to compute crisis probability forecasts are only estimates of the true parameters.
- b) New crises may be of a different nature than those experienced in the past, so that the coefficients derived from in-sample estimation may be of limited use out of sample.
- c) Source of errors is that forecasts of the explanatory variables are likely to incorporate forecast errors. Large forecast errors, in turn, may severely distort the fragility assessment.

5.2 Statistical Method

Our data derived from audited report for a sample of 5 banks (top 4 banks plus a smallest bank) in Malaysia and also from various sources like Bank Negara Malaysia (BNM), Department of Statistics and Fitch Ratings. These information covers the period from year 2002 to June 2008.

a) Risk Weighted Capital Adequacy Ratio

Bank	FYE2002	FYE2003	FYE2004	FYE2005	FYE2006	FYE2007	Jun 2008
Maybank	15.56%	15.25%	15.10%	14.20%	14.30%	15.90%	15.80%
CIMB	12.38%	14.79%	13.81%	15.23%	12.87%	12.45%	14.44%
Public Bank	21.30%	19.40%	17.80%	17.10%	15.80%	13.60%	12.40%
RHB Bank	14.51%	13.89%	14.68%	13.73%	13.06%	12.19%	12.80%
Affin Bank	9.30%	12.32%	14.58%	14.83%	13.55%	13.88%	12.92%

Under Basel II, minimum RWCR of Bank is 8.0%. From the above table all of the Bank's RWCR remain stable at the ratio of above 12%. Maybank has higher RWCR with 15.8% followed by CIMB (14.44%). However, recent acquisitions of regional banks by Maybank and CIMB Bank have been, in the short to medium term, it is crucial to restore their capital. In this regard, the banks are tapping the hybrid Tier 1 structure, which helps restore capital and does not dilute shareholder value. CIMB Bank has made good progress in this area having raised more than half its targeted additional capital, while for Maybank this is likely to prove more challenging due to the larger acquisitions made at high prices. Maybank has thus far, raised about RM6.0 billion, mainly through three hybrid issues in 2008.

b) Net NPL ratio

Bank	FYE2002	FYE2003	FYE2004	YE2005	FYE2006	YE2007	Jun 2008
Maybank	7.20%	6.20%	5.38%	4.90%	3.80%	3.03%	1.92%
CIMB	6.10%	5.50%	7.00%	5.80%	5.49%	3.85%	3.07%
Public Bank	2.40%	2.00%	2.10%	1.70%	1.60%	1.20%	1.00%
RHB Bank	9.48%	8.51%	5.95%	5.11%	4.60%	3.40%	2.75%
Affin Bank	25.71%	24.60%	23.60%	13.74%	11.72%	7.69%	6.10%

For the past six years, loan quality has been continued to improve with net NPL ratio reduced to single digit as at June 08. The net NPL improvement reflected continued bank efforts to improve risk management standards. Public Bank has lowest net NPL ratio due to prudent risk management. The NPL burden has declined most sharply for the smallest and/or previously weakest bank, Affin Bank mainly due to the leadership of a stronger management team and the more advanced technical expertise of new strategic shareholders.

c) LD ratio

Bank	FYE2002	FYE2003	FYE2004	FYE2005	FYE2006	FYE2007	Jun 2008
Maybank	93.06%	93.65%	88.59%	97.20%	101.20%	90.11%	91.51%
CIMB	70.85%	76.96%	84.48%	92.97%	81.14%	75.06%	76.15%
Public Bank	78.30%	90.85%	77.12%	79.42%	74.05%	71.60%	74.29%
RHB Bank	101.29%	87.48%	87.53%	96.70%	92.82%	71.98%	82.03%
Affin Bank	80.70%	70.46%	82.69%	92.14%	75.19%	71.77%	77.05%

Overall, all banks have been maintaining healthy and comfortable LD ratio of below 90% as at June 08 except Maybank with LD ratio of 91.51%, however, it has been

improved from 101.2% in year 2006. Public Bank has lowest LD ratio of 74.3% indicated ample room for its liquidity.

d) ROE Ratio

Bank	2002	2003	2004	2005	2006	2007	2008
Maybank	13.11%	14.80%	14.87%	16.10%	16.90%	16.55%	15.17%
CIMB	1.08%	6.22%	10.40%	10.68%	12.76%	16.57%	15.15%
Public Bank	12.00%	13.50%	18.20%	21.40%	21.90%	26.30%	26.76%
RHB Bank	3.40%	6.48%	10.49%	7.03%	8.89%	10.12%	16.71%
Affin Bank	5.94%	5.68%	10.39%	7.98%	8.75%	9.24%	12.56%

The five commercial banks have been performance well in term of return on equity (ROE) with 12.56% to 26.76% for the period ended June 2008.

GDP Growth	2002	2003	2004	2005	2006	2007	Jun 2008
	5.4%	5.8%	6.8%	5.3%	5.8%	6.3%	6.7%

The Malaysian economy was achieved stable growth during 2002 to 2008 with GDP growth from 5.3% to 6.8%.

M3 Growth	2002	2003	2004	2005	2006	2007	Jun 2008
	6.87%	9.70%	12.33%	8.31%	13.00%	9.53%	7.97%

M3 has been in positive growth for the past six years reflected expansionary Government operations and increased lending by banking institutions.

5.3 Description Analysis – SPSS output

	Mean	Std. Deviation	N
RWCR	.1445	.02169	35
Net NPL	.0669	.06277	35
LD Ratio	.8606	.10328	35
ROE	.1269	.05918	35
GDP	.0601	.00562	35
M3	.0967	.02127	35

From the output of SPSS for 5 sample banks during the period of 2002 – June2008, the mean RWCR was 0.1445 (14.45%), indicated that Malaysian bank's capital

adequacy ratio was at the comfortable level as compared with minimum requirement of 8% under Basel II. The mean net NPL ratio was 0.669 (6.69%), however, the ratio has been in reducing trend indicated that the banks' loan quality has been improving for the past six years. The mean LD ratio was 0.8606 (86.06%), indicated that banks liquidity level was at healthy level, but standard deviation was noted at 0.103, it might due to small amount of sample size. ROE's mean was 0.1269 indicated that Malaysian banks were well performed for the past six years with average return on equity of 12.69%.

5.4 Correlation Analysis

Correlation matrix		RWCR	Net NPL	LD ratio	ROE	GDP	M3
RWCR	Pearson Correlation	1	-.420*	.053	.234	-.088	.014
	Sig. (2-tailed)		.012	.762	.177	.617	.936
	N	35	35	35	35	35	35
Net NPL	Pearson Correlation	-.420*	1	-.164	-.553**	-.160	-.010
	Sig. (2-tailed)	.012		.347	.001	.359	.956
	N	35	35	35	35	35	35
LD Ratio	Pearson Correlation	.053	-.164	1	.042	-.131	-.056
	Sig. (2-tailed)	.762	.347		.811	.453	.748
	N	35	35	35	35	35	35
ROE	Pearson Correlation	.234	-.553**	.042	1	.358*	.137
	Sig. (2-tailed)	.177	.001	.811		.035	.434
	N	35	35	35	35	35	35
GDP	Pearson Correlation	-.088	-.160	-.131	.358*	1	.351*
	Sig. (2-tailed)	.617	.359	.453	.035		.039
	N	35	35	35	35	35	35
M3	Pearson Correlation	.014	-.010	-.056	.137	.351*	1
	Sig. (2-tailed)	.936	.956	.748	.434	.039	
	N	35	35	35	35	35	35

From the result above, there is noted that RWCR has negative correlation with Net NPL and GDP ratio and positive correlation with LD ratio, ROE and M3. The results were significant at 5% level for Net NPL ratio but the other four independent variables are not significant at the 5% level. The finding shown that net NPL has negative correlation with RWCR, the increase in net NPL will lead to decrease in RWCR.

5.5 Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.420 ^a	.176	.151	.01999	.176	7.048	1	33	.012

From the model above, 5 variables collectively explain 17.6% variation (15.1% adjusted V^2) in net NPL. The remaining 82.4% is explained by other factors.

ANOVA^b

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.003	1	.003	7.048	.012 ^a
	Residual	.013	33	.000		
	Total	.016	34			

From the models above, the significant level is at 0.012 which is less than 0.05, so it is concluded that there is significant relationship between net NPL and RWCR.

5.6 Coefficient Estimations

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
	B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
(Constant)	.200	.055		3.651	.001					
Net NPL	-.146	.070	-.422	-2.095	.045	-.420	-.363	-.346	.671	1.491
LD Ratio	-.009	.036	-.042	-.250	.805	.053	-.046	-.041	.948	1.055
ROE	.025	.077	.067	.320	.751	.234	.059	.053	.618	1.618
GDP	-.810	.729	-.210	-1.111	.276	-.088	-.202	-.183	.763	1.311
M3	.074	.180	.072	.408	.686	.014	.076	.067	.872	1.146

a. Dependent Variable: RWCR

Based on the above table, the standard estimations as follow:-

$$\begin{aligned}
 \text{RWCR} &= \beta + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 \\
 &= \text{Constant} - 0.422\text{NPL} - 0.042\text{LD} + 0.067\text{ROE} - 0.21\text{GDP} + 0.072\text{M3} \\
 &\quad \text{Value}
 \end{aligned}$$

Form the model above, 0.422 points decrease in net NPL ratio will lead to 1 point increase in RWCR. 0.042 points and 0.21 points decrease in LD ratio and GDP respectively will lead to 1 point increase in RWCR; and increase of 0.067 points of ROE and 0.072 points of M3 will lead to increase 1 point of RWCR.

6.0 CONCLUSION

Our finding shown that net NPL has significant relationship with RWCR, which mean higher net NPL ratio will lead to higher probability of banking crisis. From the finding, we suggested that the bank should control and properly manage its NPL because increase in NPL will erode the capital of the bank. Deteriorate in RWCR, will lead to higher insolvency risk. However, net NPL ratio has been in reducing trend for the past six years with mean of 6.69%.

Although the net NPL ratio of the Malaysian banking sector has reduced significantly to only 2.4% as at end-September 2008, we are opinion that there is still the risk of it spiking up again. The prolonged period of low interest rates have led to higher loan growth rate. For the past 5 years, high liquidity in the financial system and the intense competition with thin margins has prompted a number of banks to pursue a high growth strategy. In their enthusiasm to achieve greater growth, it might lead to excessive risk taking and poor underwriting standards. Nonetheless, mean of RWCR was 14.4%, which still at the comfortable level as compared with minimum requirement of 8%, with significant cushion to absorb the risk-abnormal shocks.

We believes that the Malaysian banks are fairly well placed to weather the weaker conditions ahead given the progress in the last two to three years in the clean up of their balance sheets and the buffer resulting from higher provision reserves and a generally stable capital position. While this should support the Stable Outlook on the ratings for most of the banks, the situation will have to be watched closely given the potential for further downward revision in global and regional growth prospects, particularly in 2009.

Our study has several limitations, some of which we hope to address in future work. Aspect such as the degree of concentration and the structure of competition of the market for credit, the quality of regulatory and the liquidity of the inter-bank and bond market are so on ought to be controlled for but are neglected here because of lack of data. Perhaps a study with longer period that included more structural variables could yield the more interesting and strong results.

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