THE INFLUENCE OF RISK MANAGEMENT ON COMMERCIAL BANKS' PERFORMANCE IN MALAYSIA

by:

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بِسْمِ ٱللَّهِ ٱلرَّحْمَٰنِ ٱلرَّحِيمِ

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ABBREVIATION

CDR	Cash Deposit Ratio
DER	Debt Equity Ratio
NIM	Net Interest Margin
ROA	Return on Assets
RWAR	Risk-Weighted Assets Ratio
RWCR	Risk-Weighted Capital Ratio

ABSTRACT

The purpose of this study is to examine the relationship between bank capital, liquidity, leverage and performance of commercial banks in Malaysia during 1997 - 2006. To assess the overall performance of commercial banks, one of the risk factors highlighted by Bank Negara Malaysia was used in this research which is risk-weighted capital ratio (RWCR) as a moderator. Secondary data were used and the sources of data are gathered from Bank Negara Malaysia annual report. Regression technique was employed to test the performance of these banks. The study revealed that the commercial banks performance can be further improved with the influence of risk management practices in the bank management. Results from the analysis disclosed that RWAR which is the component of capital and RWCR were found to be significantly influenced the overall bank performance whereas CDR and DER are not significantly related. To gauge the bank soundness, risk management measures are crucial and it is imperative for banks to study their risk exposure in order to achieve strategic business objectives.

ABSTRAK

Objektif kajian ini ialah untuk melihat hubungkait di antara modal bank (capital), kecairan (liquidity), leveraj (leverage) dan pencapaian bank-bank komersial di Malaysia daripada tahun 1997 hingga 2006. Dalam menilai pencapaian bank-bank komersial, satu daripada faktor risiko yang telah ditekankan oleh Bank Negara Malaysia adalah nisbah wajaran risiko kredit/pinjaman (RWCR). Kajian ini menggunakan data daripada laporan tahunan Bank Negara Malaysia. Teknik regresi telah digunakan di dalam kajian ini untuk menyelidik mengenai faktor-faktor yang mempengaruhi pencapaian bank-bank komersial di Malaysia. Penyelidikan ini telah membuktikan bahawa pencapaian bank-bank komersial boleh ditingkatkan dengan adanya pengaruh pengurusan risiko dalam pengurusan perbankan. Keputusan daripada analisis ini menunjukkan bahawa hanya RWAR yang merupakan komponen modal dan RWCR didapati mempunyai pengaruh yang mendalam kepada pencapaian keseluruhan bank- bank komersial. Sebaliknya CDR dan DER tidak memberi impak dalam penyelidikan ini. Untuk mempunyai bank yang kukuh, pengurusan risiko sangat mustahak oleh yang demikian setiap bank perlu menyelidik tentang pendedahan risikonya demi untuk mencapai objektif perniagaan yang lebih strategik.

CHAPTER 1

INTRODUCTION

1.0 Introduction

Risk management plays an important role in determining the overall performance of banking firms in Malaysia. Today most of the financial institutions are facing with a market that is extremely dynamic. Consequently, there will be many problems facing the financial services industry especially banks in order to achieve competitive excellence. In the light of the rapid changes in competitive situations and in market conditions, all banks, large and small, are placing increasing emphasis on risk management. Practising good risk management will offer greatest profit opportunity. On the other hands, conventional wisdom believes that relatively well-capitalized banks are less inclined to increase asset risk, because the option value of deposit insurance decreases as the capital to asset ratio increases (Jeung, 2003).

1.1 Background of the Study

Banking crises which have hit developed and developing countries in the last decades (Caprio, 1999) and the high operation cost have encouraged the authority to renew interest in the features of an effective financial regulatory framework. Bongini et al., (2001) found the evidence that deposit interest rates are higher for riskier banks in Argentina. Such evidence may in turn provide basis for revising the design of the safety net and other relevant regulatory frameworks.

Today bank risk management has come under increasing scrutiny. Banks and banks consultant have attempted to sell sophisticated credit risk management system that can account for borrower risk. Bank as one of the important sector in economy faces many risks and managed them jointly. Banks stand ready to provide liquidity on

demand to depositors and extend credit as well as liquidity to their borrowers through lines of credits (Kashyap et al., 2002). Due to this, banks always faced with both solvency and liquidity problem.

Ahmad (2004) highlighted that in the second half of 1999, Malaysian central bank called for the consolidation of the banking sector. The formation of ten domestic banks was announced to encourage the acquiring banks to get together with their potential merging partners. The merger exercise could significantly influence the ways in which consolidation will affect systematic risk. He argued that the emphasis on increasing bank capital of domestic banks either through capital regulation or mergers by regulators is understandable given that the domestic banks on average are of smaller size than the foreign-owned banks. The merger activity could help to strengthen the banks and put the banks in a more competitive position.

Evaluation of bank performance is important for all parties involved such as depositors, bank managers and regulators. In a competitive financial market, bank performance provided signals to depositors and investors whether to invest or withdraw funds from bank. Similarly, it flashes directions to bank managers whether to improve its deposit service or loan service or both. In the case of commercial banks in Malaysia, the bank's business has expanded over the years and its total assets have increased from RM 480 million in 1997 to RM 1,025 million in 2006. On the other hands, the financing loans and services increased from RM 289 million in 1997 to RM 558 million in 2006. Figure 1.1.1 shows that there was a tremendous increased in the banks' deposits and loans during the period of 10 years which indicates that the commercial banks' primary assets and liabilities move towards the same pattern. However, it also indicates that commercial banks in Malaysia are facing high risk where their primary liabilities which are deposits, increased sharply throughout the

years. In other words, the debt is significantly high as compared to bank's loans which are known as the most risky assets.

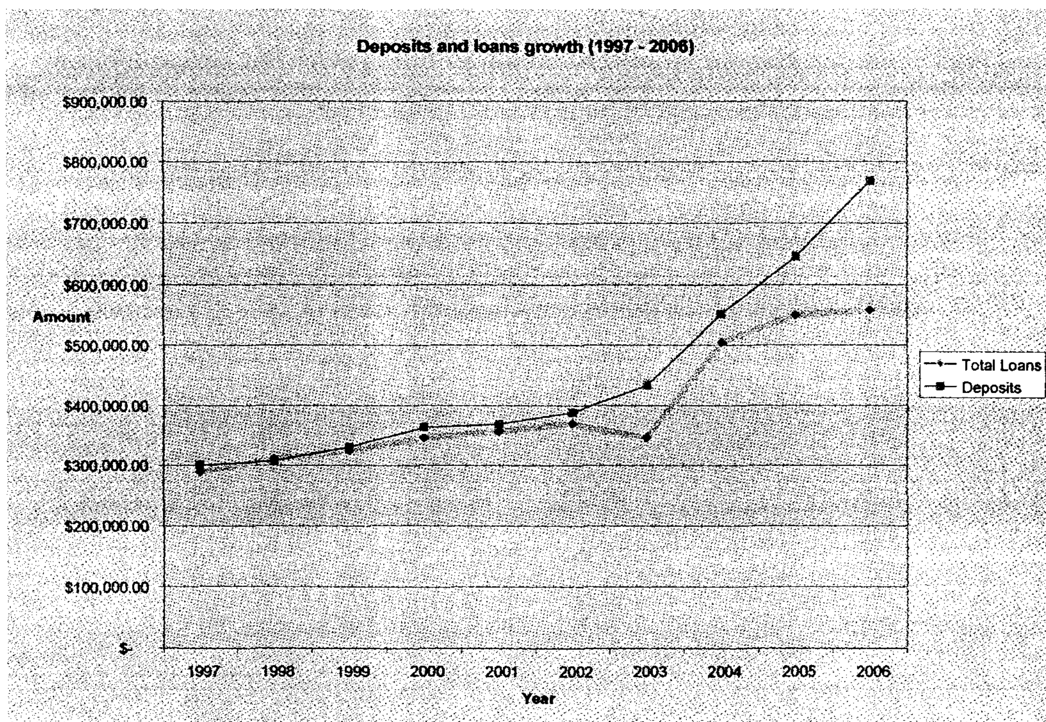

Figure 1.1.1: Deposits and Loans growth trend for 10 years (1997 – 2006)

Table 1.1.1: *Deposits and Loans from 1997 to 2006 (in million)*

Year	Deposits	Loans
1997	RM 300,558.10	RM 289,746.30
1998	RM 307,439.60	RM 310,291.40
1999	RM 329,953.30	RM 324,783.30
2000	RM 362,991.24	RM 345,619.50
2001	RM 368,791.82	RM 356,479.90
2002	RM 388,405.48	RM 369,842.70
2003	RM 433,007.52	RM 346,030.00
2004	RM 550,929.50	RM 504,443.40
2005	RM 644,891.08	RM 549,318.00
2006	RM 768,414.40	RM 557,742.95

Commercial bank is the largest financial intermediary that exists in the banking sector. Its main function is to raise funds which are done by collecting deposits from depositors and to provide loan services to the market. According to

Laeven (1999), commercial banks had more freedom to choose their business mix and faced similar restriction across countries. Thus, she decided to exclude finance companies and merchant banks as samples for her analysis and therefore her study focus only on commercial banks in East Asian countries.

Banks are learning to review their risk portfolios using the criteria laid down by Basel 2 (Bank for International Settlements). Basel 2 is the version of the Basel accord on bank capital requirements designed to succeed Basel 1, permitting banks to employ their own internal risk assessment methods and calculate their own minimum capital requirements in estimating the impact of changing market conditions on each bank's financial position (Rose, 1999). Since there was a dramatic increased in deposits and loans, Basel's goal is to induce bankers to improve their risk management capability including how the institutions pricing products, reserve for loss and control their operations. Besides, large capital outflows from Malaysia during 1997 as well as decline in equity values had induced Bank Negara to tighten up their regulation and supervision to ensure the bank stability in Malaysia.

As financial intermediary, banks should implement internal measure system in order to monitor the value added of lending activity at each stage. Employees' behaviour is crucial in determining the quality of the outputs. For instance, the specific internal measures are used to evaluate the accuracy of a loan officer's analysis of the borrower's capacity and conditions which are critical to reduce overdue loans and bad debts. Considerable research has proven that the borrower's strategies are the most important determinants of firm profitability and the firm's ability to repay the banking loan. The major benefit of using an internal measure to monitor the output quality of the employees in lending is a reduction in the likelihood

of employee moral hazard behaviours. This reduction in turn would ease the lending operational risk which is one of the main purposes of Basel 2 (Wei-Shong, 2006).

As the banking industry is concern, lending activity is the crucial function for the utilization of funds. This is because most of the banks earn their highest gross profit from loans. Therefore, the administration of loan portfolios seriously affects the profitability of banks. Besides, bank should actively monitor their credit risk exposure through loans which will also affect their capital structure. If the banks are able to rebalance their loan portfolio exposures, they may operate with greater leverage and may lend more of their assets to risky borrowers.

1.2 Problem Statement

Banks in many emerging market countries are increasing their focus on risk management in an effort to build more robust and sound financial systems, to remedy weaknesses that were exposed by recent regional problems, and to position themselves to participate more fully in the global economy.

Why is risk management important? This is because taking risk is an integral part of the banking business. The only real change is the degree of sophistication now required to reflect the more complex and fast-paced environment. The benefit of risk management is that the losses will be prevented and additional revenues will be generated.

The Asian financial crisis in 1997 illustrates that ignoring basic risk management can also contribute to economy-wide difficulties. For instance, there were large capital outflows from Malaysia, decline in equity value and Ringgit depreciation during the crises. The long period of remarkable economic growth and prosperity in Asia masked weaknesses in risk management at many financial

institutions. Many Asian banks did not assess risk or conduct a cash flow analysis before extending a loan, but rather lent on the basis of their relationship with the borrower and the availability of collateral despite the fact that collateral was often hard to seize in the event of default. Since many banks did not abide by limits on concentrations of lending to individual firms or business sectors, loans to over extended borrowers were often large relative to bank capital. As a result, when economic conditions worsened, these banks were weakened the most.

The Asian crisis also illustrates the potential benefit of more sophisticated risk management practices. Many Asian banks did not adequately assess their exposures to exchange rate risk. Although some banks matched their foreign currency liabilities with foreign currency assets, doing so merely transformed exchange rate risk into credit risk, because their foreign currency borrowers did not have assured sources of foreign currency revenues. Similarly, foreign banks underestimated country risk in Asia. Although avoiding failure is a principal reason for managing risk, global financial institutions also have the broader objective of maximizing rate of return on capital. This means not just avoiding excessive risk exposures, but measuring and managing risks relative to returns as well as to capital. By focusing on risk returns on capital, global institutions avoid putting too much emphasis on activities and investments that have high expected returns but equally high or higher risk. This has led to better management decisions and more efficient allocation of capital and other resources. Bank shareholders and creditors also expect to receive an appropriate rate of return.

Focusing on risk management contributes to the strength and efficiency of the economy. It does so by providing a mechanism that is designed to allocate resources which are initially financial resources but ultimately real resources and most likely to

be financed and to succeed. The result is more rapid economic growth. The ultimate gain from risk management is higher economic growth. Without sound risk management, no economy can grow to its potential. Stability and greater economic growth, in turn, lead to greater private saving, greater retention of that saving, greater capital imports and more real investment. All this, from sound risk management and without it, not only do we lose these gains, but we also incur the considerable costs of bank disruptions and failures that follow from unexpected, undesired and unmanaged risk-taking. The cost of delaying or avoiding proper risk management can be extreme failure of a bank and possibly failure of a banking system.

The importance of risk management has been translated by the central bank in imposing the risk-weighted capital ratio (RWCR), certain rate of reserve requirements needed by all banks, exposure limit of loans lending to customers and other limitations as approved by the central bank with the objectives of putting the Malaysian banking system in a stronger and safer footing. Hence this research is mainly focussing on the issue of the impact between one of the internal risk management which is RWCR and capital, liquidity and leverage and its influence on bank performance. The main reason for choosing RWCR as a risk factor is because it includes market risk as well. Thus, RWCR will be used as a risk factor to study the performance of commercial banks in Malaysia as whole.

1.3 Research Objectives

There are two main objectives to be achieved in this study which are as follows:

1. To examine the extent of the relationship between the risk management with capital, liquidity, leverage and bank performance.

2. To determine whether RWCR could act as a moderator for the relationship between capital, liquidity, leverage and bank performance.

1.4 Research Questions

To achieve the above objectives, the study tries to answer the following research question:

1. What are the extent of the relationship between capital, liquidity and leverage and bank performance?
2. What are the extent of the relationship between capital, liquidity and leverage with risk management (RWCR) act as a moderator and bank performance?

1.5 Significance of the Study

This study will give a significant impact to bank managers in driving to improve the performance of the commercial banks in Malaysia by adopting the existing research done by other scholars. It may also help the financial institutions to closely monitor their activity management and pursuing risk management consistently will help them to deliver high and more stable returns over time. The importance of risk management to be carried out in the banks operation is to help the management in decision making and use the resources and capabilities for opportunities that are expected to create maximum return with minimum risk. In addition, this study is able to help the banks to be well prepared to deal with adverse economic changes and unexpected operational problems. It is also relevant to the government agencies as a regulator to ensure that the banks are performing well in the market and able to meet the demand consistently and efficiently. Besides, this study will contribute to a new literature on the importance of practicing good risk management or particularly a good risk-

weighted capital ratio (RWCR). The study only incorporate RWCR as the risk factor since it has been highlighted by central bank as the most important criteria in determining the bank performance and ensuring the bank is in a stable position. By adhering to this regulation, banks are forced to hold more capital in order to avoid from suffering any losses when engaging in risky lending. In addition to that, this paper will help to create awareness to the bankers and authority of the significant relationship between risk management and the internal factors as well as bank performance.

1.6 Scope of the Study

This study focuses on all commercial banks in Malaysia which comprises of the medium and big size banks and has been selected to be our sample unit of analysis. The reason of using commercial banks as the unit of analysis is because the bank management success is determined based on the result of their bank performance as a whole. Besides, commercial banks are the active players, measuring in terms of number of banks from the period between 1997 to 2006 (10 years). The objective measure like net interest margin (NIM) and return on assets (ROA) are common key performance indicators in measuring the performance of the bank in term of profitability.

1.7 Definition of Key Terms

For the purpose of this study, the following definitions of the variables were referred specifically:-

Risk Management - Risk Management is the process of measuring or assessing risk and developing strategies to manage it. Strategies include transferring the risk to

another party, avoiding the risk, reducing the negative effect of the risk, and accepting some or all of the consequences of a particular risk (*Wikipedia, the free encyclopedia*).

Bank capital – Bank capital can be defined as the difference between assets and bank's deposits assuming deposits are the only bank liabilities (Ahmad, 2004).

Liquidity – Access to sufficient immediately spendable funds at reasonable cost exactly when those funds are needed (Rose & Hudgins, 2005).

Leverage – The use of debt in the hope that the borrower can generate earnings that exceed cost of debt thereby increases the potential return to a business firm's owners or shareholders (Rose, 1999).

1.8 Organization of Remaining Chapters

This paper was organized in which the current chapter is the introduction and it discusses about the background of the study, research objectives, research questions problem statement and significant of the study. The second chapter contains the review of literature that outlines previous studies on risk management, methodology used, theoretical framework as well as hypotheses of the study. Chapter three will discuss on the research design of this study which includes sampling method and data analysis method used to validate the hypothesis. Chapter four will in fact present the results and findings of the analysis and last but not least, is chapter five which will discuss further about the findings and summarizes the implications of the study as well as conclusion.

CHAPTER 2

LITERATURE REVIEW

2.0 Introduction

For better understanding of this study, a comprehensive research of previous literature has been undertaken. This chapter presents the review of the past studies on risk management. As such, this chapter was organized in a manner to give an overview of literature review on risk management in different types of industry including financial institutions and the underlying theories. Next, the focus will be on some of the possible type of risks that may exist in financial institutions. Based on the literature, theoretical framework is constructed and hypotheses have been developed.

2.1 Overview of Risk Management

In Malaysian context, Ernst & Young Malaysia executive director for risk and business solutions Ramesh Rajaratnam said adhering to the Basel 2 accord would ensure banks effectiveness in managing risk and hence able to further refine the pricing of their products and services. "This could potentially result in lowering of the prices of products and services to consumers. Since Basel 2, among other things, places greater emphasis on credit and operational risks, it will help consumers obtain credit facilities at a lower cost. The adoption of the regulations will also allow banks to manage their loans portfolio efficiently, resulting in lower non-performing loans in the industry. This is because banks are able to manage their credit risk more effectively'' (Dhesi, 2006). He also reported that all the local and foreign banks will be able to price their products as well as manage their operations more effectively

when they implement and adopt Basel 2 regulations. In the case of Malaysian banks, the deadline to comply with Basel 2 is either 2008 or 2010.

The main risks faced by Bank Negara Malaysia is when managing the external reserves which includes market, credit and operational risk which are monitored independently by the Middle Office, a unit separate from the dealing function. The function of Middle Office is to assess the risks by monitoring economic and financial developments affecting major asset classes and sizeable market developments that could have implications on the bank's external reserve portfolio (BNM Annual report, 2003). This reflects the important of risk management for banks and it also had been emphasized by the central bank of Malaysia as one of the important factor to look at.

Harrow (1997) defined risk as both uncertainty and the results of uncertainty. On the other word, it refers to a lack of predictability about a problem structure, outcome, or consequences in a decision or a planning situation. Meanwhile, Hollman and Forrest (1991) defined risk management as the protection of a firm's assets and profits. It is a systematic method of using a firm's resources such as physical, financial, and human capital in order to understand certain objectives concerning loss exposures. They also highlighted that risk management contemplates the elimination or reduction of potential losses and the financing of losses if and when they occur.

On the other hand, as quoted by Williams et al., (2006) from the Committee of Sponsoring Organisations (2004), definition of risk management is as follows:

> "Enterprise Risk Management (ERM) is a process, affected by an entities [sic] board of directors, management and other personnel, applied in strategy setting and across the enterprise, designed to identify potential events that may

affect the entity, and manage risk to be within its risk appetite, to provide reasonable assurance regarding the achievement of entity objectives".

In a simple phrase, risk management produces a systematic approach to the decision makers so that they are able to coping with risk and uncertainty. The idea of risk was originated in the mathematics associated with gambling in the seventeenth century. Risk refers to a probability that combine with the magnitude of potential gains or losses (Frosdick, 1997). Meanwhile, risk management in supply chain of an organization is also important in order to reduce the firm total risk. Cucchiella and Gastaldi (2006) had highlighted that according to several approaches in managerial literature, before selecting the correct strategy of supply chain, it is necessary to identify the sources of uncertainty in the network, and then focus on the most correct or individualize it for reducing such level of uncertainty.

From the perspective of knowledge management, risk management is interrelated to knowledge management because it helps the organization to manage the risk effectively and ethically. In an era of corporate scandal and expanding global supply chains, knowledge management is witnessing a renaissance as a key tool for managing corporate risk (Neef, 2005). He also mentioned that when effective risk and incident management has become so integral to corporate well-being and knowledge management has become a most important and strategic management tool. For instance, Miles (1995) suggested than an information asymmetry between bank managers and depositors could produce a market failure that provides a rationale for government or central bank intervention in the financial system. Thus, information asymmetry could leads to a bank capital adequacy problem.

Market signals play an important role in sending information to the organization about the possible risk. Smith and Williams (1991) found that in a

market where securities analysts face the incomplete information to forecast future earnings, firm's risk management policies can send important signals to claim-holders about the firm's attitude toward matters affecting their long-term interest. By providing assurance to holders of the firm's long term securities, such as mortgage debt, a risk manager's policies can increase their willingness to hold onto them. This translates into higher market values for these holdings, which in turn lowers the cost of raising funds for the firms. Therefore, it is very crucial for the risk managers to communicate on the importance of risk management to other managers in the organization.

Williams et al., (2006) have also highlighted that typically risk have been managed mainly by intuition, experience and gut feel. What is new in the aforementioned definitions is the systematic approach. He gave an example on the dot.com financial problems at the end of the last century with it boom and bust and the legal actions taken against various top managers in the USA and Europe. The effect has been a major multiplication of legislation and governance body recommendations, especially in the financial field where Basel 1 has quickly been followed by Basel 2.

Meanwhile, Bandyopadhyay et al., (1999) had identified in his research that there are four major components of risk management which are risk identification, risk analysis, risk-reducing measures and risk monitoring. Basically he emphasizes on the integrated risk management in information technology at application level, organizational level as well as interorganizational level. He also stated that risk management in IT becomes crucial since organizations are increasingly becoming more dependent and vulnerable to IT threats. However, based on his citation from March and Shapira (1987), there were some problems and issues arise from the

inability of most managers to visualize risk from a decision theory perspective. Therefore, IT managers must start to change their way of thinking about risk. For example, they must actively involve in the estimation of their organization's overall IT risk.

On the other hand, according to Harris (2000), the management of risk in the health care context is an approach designed to identify, assess, reduce and control hazards to patients, staffs and visitors and the aim is to avoid expenditure of scarce resources on insurance and litigation and instead use them for the improvement of patient care. However, he argues that managers seemed to miss the important link between litigation costs and minimizing risk as part of cost containment on a broader perspective. This may reflect low levels of engagement in corporate risk management work. From the view of professional accountability, it was found that there are few managers viewed clinical risk management as irrelevant to them.

Even though it has been proven from the above studies that risk management is crucial in all area, there are still some reasons for not implementing risk management which include cost, benefits and expertise. The most common rationalizations are either the project is too small or too large to justify the time and expense of a review that the benefits cannot be determined and, therefore, the costs are assumed to exceed the benefits and the effort is unlikely to uncover anything that is not already well known to everyone involved in the project (McGrew & Bilotta, 2000).

2.2 Risk Management in Financial Institutions

Laeven (1999) postulates the financial crisis that hit the East Asian countries in 1997 revealed substantial vulnerabilities and gives greater impact in the financial sector. The fact is most of the financial institutions had a large amount of non-performing

loans, which were the result of poor risk management and excessive lending to some parts of the real sector. On the measurement of bank performance, she stated that it is not sufficient enough to measure the overall bank performance using efficiency measures but risk factors should be taken into consideration as well.

The main function of Central Bank are to sets the guidelines for banks and other financial institutions, monitors liquidity level, issues government securities, formulates exchange-control guidelines, manages foreign reserves and control the statutory reserve requirements. They intervene directly in the market to influence interest rate movements by borrowing and lending. Government also supports the banking sector by injecting capital when there is a need. In fact, foreign banks received less government support than domestic banks and this was probably because the banks are able to support the subsidiary when they were in weak financial position. Relating to the government intervention, Osterberg (1990) highlighted that shareholders would need to maintain high level of capital as a buffer against losses in the case of no government guarantee on the capital regulations. This is to avoid risk-related increases in their cost of funds.

According to Ahmad (2004), risk-weighted capital ratio (RWCR) has a direct implication for capital-asset ratios of domestic commercial banks. One of the consequences would be it would lead to subsequent structural shifts in bank's systematic risk and future performance. Moreover, RWCR was revised back in 1996 to include market risk and thus, central bank has strengthened the enforcement of RWCR right after the economic crisis.

Estrella et al., (2000) postulate that the most effective predictor of bank failure is RWCR. They also argue that this ratio is costless to implement and could provide signal for bank supervisory action. RWCR in fact could provide an accurate measure

of the appropriate capital level for a bank. On the other hand, the Basel Accord introduced the concept of risk-weighted assets as the denominator of the capital ratio in 1998. This measure contains a component representing off-balance-sheet exposures and also adjusts for differentials in credit risk. Therefore, the Basel ratio signifies a well-known example of a risk adjustment to the basic scale of the denominator. In weighting risk effectively, it requires financial institutions to charge more capital for riskier assets, discouraging them from holding risky assets. Bank can increase the risk-weighted ratio without raising capital by acting in response to the risk-reducing incentives. Failure to respond would result in a low risk-weighted ratio. Therefore, if risk weights accurately reflect the riskiness of assets, the risk-weighted ratio should better distinguish between risky and safe banks and should be a more effective predictor of bank failure.

Salami (2006) cited from his previous paper in 2000 about his view in banking. He defined banking as an international economic activity which provides an array of risky financial decisions involving activities such as acceptance of money and credit, incurring financial obligations to acquire claim such as guarantee, bond and providing a debt clearing mechanism that ensures economic growth in industry and commerce. This shows that basically banks need an appropriate system in order to achieve the objective of their stakeholders. Almost all the banks have in place training and retraining program for staff. However, he justifies that such training was not adequate to manage the risk effectively.

According to Enrica and Gupta (2004), foreign banks in Malaysia were able to perform better during the economic distress because of their nature. Foreign banks are much more efficient and better capitalized than the domestic banks. Besides, foreign banks might find it easier to raise capital or liquid funds on international financial

markets as informational barriers are likely to be more for these entities. In their research, they measure the bank soundness and performance in comparison of foreign banks with domestic banks using bank capital, profitability, cost efficiency and asset quality which consist of non-performing loans. Besides, they also take into consideration on the effect of Malaysian economic crisis where it clearly shows the trend of the profitability level which declines sharply during 1998.

Osterberg (1990) on the other hand revealed that deposits play a role in both the real and financial decisions of banks. He stated that deposits are not only an input into banks' production but also a component of debt in their capital structure. Meanwhile, Koehn and Santomero (1980) concluded that increased capital requirements lead banks that are risk-averse expected utility maximizers to restructure their portfolios so as to decrease the probability of bankruptcy. By maintaining high level of capital, it shows that the bank is in a good position and reflects the bank's good performance. However, if depositors cannot assess a bank's capital strength, then a bank can no longer induce depositors to accept lower interest rates in return for higher capital, and therefore the optimal capital ratio of the bank will be lower (Dowd, 1999).

A function of the quality management, political, and macroeconomic environment are the success of any banks instead of the type of banking system being operated by the bank. Therefore, there is need for banks to have sound management under a favorable political and macroeconomic environment (Salami, 2006). Besides that, financial market signals which are both debt and equity should have an important role in the bank supervision process in order to assess the underlying bank risk (Furlong & Williams, 2006). Based on their findings, market signals did reflect the bank risk where there were studies conducted to examine whether risk measures such

as interest rate spreads on banking-related subordinated debt are sensitive to various accounting risk indicators including problem loan ratios and charge-offs.

Proctor (2003) mentioned that during the 1990 - 2001, banks' actions resulting interest rate changes has led to an alarming increase in credit, interest and liquidity risk. He also stressed on the adequacy of the bank internal audit and controls against potential fraud. This scenario shows that there is risk everywhere in the banking system and without a proper control and management, it would leads to disaster. As suggested by Cebenoyan and Strahan (2004), banks that improve their ability to manage their credit risk may operate with greater leverage and may lend more of their assets to risky borrowers. Thus, the benefits of advances in risk management in banking may be greater credit availability, rather than reduced risk in the banking system. On the other hand, Cebenoyan and Strahan (2004) cited from Modigliani-Miller where they argue that firms generally should not waste resources managing risks because shareholders can diversify their portfolio efficiently.

Some of the indicators of a good risk management in Malaysian financial institutions are as follows (Country Finance Malaysia, 2003):

1) Malaysian banks have trimmed their once large piles of bad loans, but they remain reluctant to extend credit. Loans are more readily available for short term maturities rather than in long maturities. This was a good indicator where the banks can minimize their credit risk.
2) Malaysian banks succeeded in reducing their levels of non- performing loans in 2002, alleviating a persistent problem they have suffered since the Asian financial crisis from 1997 to 1998.
3) Most banking groups spent in year 2002 consolidating their operations while enjoying healthy profits. In 2003 they are expected to consolidate further

because of the possibility of a new round of mergers while trying to maintain operating profits as net interest margins are further squeezed.

4) Banks which able to align the entity's risk appetite and strategies.
5) Effectively uses their resources.
6) Reducing the frequency and severity of operational surprises and losses.
7) Fewer shocks and surprises received by banks.
8) Put more focuses for internal audit to ensure that they are in compliance.
9) Bank Negara Malaysia is also urging local banks to improve their customer service in 2003.

2.3 Type of Risks

According to Proctor (2003), we can categorize the types of risk into two. They are speculative risks and non-speculative risks. Following are the type of risk under each category with their respective definition.

Speculative risks include the following:

1. Credit risk – This type of risk is very much associated with lending activities. It is a risk to earnings and capital arising from an obligor's failure to meet the term of any contract with the bank.
2. Interest rate risk – It is a risk to earnings, the value of rate sensitive assets and liabilities or capital resulting from movements in interest rates.
3. Liquidity risk – It is a risk arises from the inability of the bank to meet its obligations when they come due, without incurring unacceptable losses.
4. Operational risk – It is also known as transactional risk and it is result from the problems with product or service deliver to customers.

5. Compliance risk – It is a risk resulting from violation of laws, regulations, or prescribed practices, industry or ethical standards.
6. Reputation risk – This is a risk where if the publics have bad or negative assumptions on the institutions resulting from poor customer services, compliance violations, legal problems and so on.
7. Strategic risk – It is a risk to earnings or capital from adverse business decisions or improper implementation. For example, failure to achieve economies of scale would leads to strategic risk.

Meanwhile, non-speculative risks include robbery, fraud and natural disaster. All of these are the key risks that bankers should manage in the organization in order to ensure the effectiveness in banking system.

Banks may manage and mitigate risk in several ways such as follows.

1. Credit risk – Establish procedures for reporting and collecting delinquent loans, define and provide guidelines for concentrations of credits develop and maintain control mechanisms to grade portfolios, ensure accuracy of data, and monitor laws and policies in compliance to credit risk and etc.
2. Interest rate risk – Assess the character of risk, such as the volume and price sensitivity of various products, monitor, and control interest rate risk relative to futures, forwards, and options risk.
3. Liquidity risk – Detail the sources of asset-based liquidity in relation to the liability structure that encompasses money market assets. Besides, to develop a comprehensive funding contingency plan and update whenever necessary.
4. Operational risk – Establish control mechanisms to monitor data integrity and accuracy, proper accounting treatment, and compliance with bank policies as

well as laws and regulations. It develops the technical knowledge and skill levels of management and staff to stay abreast of changes in financial services industry operations.

5. Compliance risk – preparation of checklist to assist bank staff to perform their work in compliance with rules and regulations. Use of training material would be helpful. Also, application of GAAP to ensure accurate reporting and monitoring of compliance requirements.
6. Reputation risk – Ensure there is a comprehensive review of financial information before it is released to the press and to monitor customers' complaint.
7. Strategic risk – Develop strategic business goals and objectives that take risk into account. Integrate risk management practices into the strategic planning process.

Failure to manage all these risks can expose the bank to regulatory sanction, financial loss, litigation or damage to its reputation, and impair its ability to establish new customer relationships, or to service existing relationships. On the other hand, if the bank is able to manage their risk successfully, it will improve their performance and leads to growth. According to White (1995) there is a theory known as the theory of risk homeostasis which propose that accidents are a result of behaviour which attempts to balance an accepted target level of risk against perceived risk that is if the level of subjective risk perceived is higher or lower than the level of risk desired, an individual will take action to eliminate this discrepancy. This theory has also been highlighted by Frosdick (1997) where he suggests that this is a kind of subconscious cost benefit analysis in which an individual's level of acceptable risk is a qualitative

issue determined by both personal and situational factors such as personality, role, economic circumstances, peer group pressure and cultural background.

2.4 Theoretical Framework

This study will use agency theory as well as intermediary theory to explain why bank capital, liquidity and leverage level with the moderating effect of risk management could help the bank performance.

Agency Theory

Fama and Jensen (1983) mentioned that agency theory is all about relationship between shareholders (principals) and managers (agents). According to Jensen (1986), managers who work in a firm with high free cash flow and limited investment opportunities find it very hard to challenge the temptation to grow, even when expected returns fail to exceed the cost of capital. He further added that leverage could reduce the agency problems of overinvestment because debt service reduces the free cash flow available for discretionary spending.

Laeven (1999) viewed ownership as to be related to the bank's performance. This is because the incentives for managers to efficiently allocate resources might differ under different ownership arrangements. Thus, if owners do not have the capability to monitor the activity of management, then agency problems and subsequent costs will be increases. On the other hand, agency conflict may arise from the possible divergence of interest between shareholder (principal) and managers (agents). For instance, the amount of capital a bank holds depends on the risk preference of bank managers and shareholders. Bank manager may prefer a lower level of risk than the shareholders as they have a great deal to loose personally, for

example lost of their competitive salary or other attractive benefits. According to Tan (1997), since management have access to information that others may not have, they will be able to make decisions pertaining to running the business. He also argued that in order to differentiate ownership and control, the principal needs to have some financial information which can assist him or her to monitor the performance of the agent.

When there is a problem arises between the agent and principal, agency cost will be incurred. One obvious example of agency cost would be monitoring costs. For instance, the bank capital depends on the risk preference of bank managers and shareholders. However, managers may have preferences diverging from shareholders interests. Manager may prefer to have a lower default risk compared to the shareholders as they have a great deal to lose personally in the event of bankruptcy. Their disutility is therefore increasing in asset risk and leverage. Overall, mitigate risk would help to maximize profits or wealth to the shareholders.

Intermediary Theory

The intermediary is a simple form of an exchange or as a regulator who monitors banks' positions. These positions often involve complex transactions whereby the investors and regulators always find them hard to analyze. However, the theory suggests that a regulator can improve welfare by collecting voluntary reports from banks but in some cases the regulator must not make these reports public (Leitner, 2005). Bank is also acting as an efficient redeployer of their capital. In credit market for instance, the information on firms collected is crucial to implement an efficient capital reallocation.