

**THE IMPLICATIONS OF GAP AND  
RISK ON PROFITABILITY :  
COMMERCIAL BANKING INDUSTRY IN MALAYSIA**

**by**

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## **ABSTRAK**

Berlatarbelakangkan keadaan lanskap kewangan yang sering berubah dan bertambahnya ketidaktentuan, bank memerlukan pemantauan di dalam pengurusan risikonya di dalam memastikan keselamatan operasi hariannya dan polisinya yang terjamin. Setiap komersil bank di Malaysia mempunyai unitnya yang tersendiri di dalam memantau dan menganalisis risiko di dalam dunia perbankan yang mereka ceburi. Adalah penting bagi memastikan yang sistem kewangan mereka berada di dalam kedudukan terbaik di dalam ekonomi and kekal. Tujuan pembelajaran ini adalah bertepatan pada masanya di dalam mencari perbezaan di antara Pinjaman and Simpanan yang menyumbang kepada Pendapatan Bersih dengan menggunakan teknik regresi mudah. Empat bank tempatan dan empat bank asing dipilih berdasarkan pada pasaran pinjaman di dalam dunia perbankan di Malaysia dan data dihimpunkan dari penyata kewangan dari 1994 sehingga 2003. Kajian mendapati yang pinjaman kepada simpanan pada masa jangka pendek adalah signifikan terhadap pendapatan bersih bank tempatan sementara pinjaman kepada simpanan pada kadar jangka pendek dan jangka panjang adalah signifikan kepada bank asing. Pada masa yang sama, kajian ini juga melihat analisis jurang di antara Pinjaman dan Simpanan di antara bank tempatan dan bank asing dan didapati kedua-dua bank kedua-dua perkara tersebut tidak berpadanan pada jangkamasa sepuluh tahun.

## **ABSTRACT**

Against the backdrop of rapidly changing financial landscape and increased uncertainty, the bank will always need to regularly review its risk management process in order to ensure safe daily operations and sound policies. Every commercial bank in Malaysia is having its own unit in monitoring and analyzing risks in banking business that they are onto. It is vital in order to ensure that their financial system is best placed to serve the economy and survived. The aim of the study is timely in order to find the gap between Loans and Advances and Deposits and apart of that the research also wants to find the degree of maturity between Loan and Advances and Deposits that contributed towards their Net Income by using a simple regression technique. Four selected local banks and four foreign banks were chosen based on the loan market share in Malaysian banking market and the data were collected from their respective financial statements from 1994 until 2003. The findings reveal short term loans to deposits significantly relates to local banks profitability while both short term and long term loans to deposits is significantly relate to foreign banks. At the same time this study also looked into gap analysis between Loans and Advances and Deposits between both selected banks later it was found that both banks were mismatched between those two items for the past ten years.

## **Chapter 1**

### **INTRODUCTION**

#### **1.0 General Introduction**

“We don’t expect the Board members to be rocket scientist, but they do need to understand the bank’s basic risk exposure ...” Federal Reserve Board, 1996.

Banking is an essential industry and a backbone for any economy in the world. Bank may be defined as a financial intermediary accepting deposits and granting loans; offers the widest menu of services of any financial institutions (Rose, 2002). For a simple reason, banks take deposit and lend them out. If banks do not make loans, they do not make money, and if banks do not have deposits, they do not make loans. The entire process starts with deposit taking.

Increasing deposits or lending out money can increase the size of commercial banks in Malaysia. Apart from that bank also has the obligation to safeguard the depositors’ funds because depositors merely lend their money to the bank and they expect bankers to manage their money cautiously. If banks fail to perform these basic functions, other businesses may have the opportunity to move in and take over the bank’s activities.

In banking business, several risks may impact on its profitability. Oxford Dictionary defines risk as: “hazard : chance of bad consequences, loss, etc : exposure to mischance”. Whereas PricewaterhouseCoopers defines risks as uncertain future events that could influence the achievement of an organisation’s strategic, operational and financial objectives, and stresses that risk should no

longer be viewed only as a downside or hazard but also must be seen as clearly linked to opportunity and upside. Banks are now finding that managing risk is an integral part of generating sustainable growth in shareholders' value. Risk management in banking designates the entire set of risk management processes and models allowing banks to implement risk-based policies and practices (Bessis, 2002).

Cade (1997) defined risk in banking as an *exposure to uncertainty of outcome*. In which exposure denotes a position or a stake in the outcome. He also said that *outcome* is the consequence of a particular course of action while *uncertainty* can be reflected in the volatility of potential outcomes. Risk-taking is normal in banking and could be an important source of profit earning. However, excess risks might create serious threat to a bank's return and capital base.

### **1.1 Malaysian Commercial Banking Industry Scenario**

The financial sector restructuring that started during the Asian financial crisis is virtually completed. Important achievement in the financial restructuring process was the completion of the merger programme of the domestic banking institutions (BNM Annual Report, 2002). Upon the completion of these mergers, the domestic banking systems has been transformed from one that was highly fragmented with 71 institutions prior to the Asian crisis to 30 banking institutions under 10 domestic banking groups. Going forward, further mergers may take place, however, such mergers will be determined by the market, based on the business strategies (The Star, 18 January 2005).

Bank Negara Malaysia (BNM) policies have been imposed to further enhance efficiency, resilience and effectiveness of the financial system in meeting the needs of the entire spectrum of the economy (The Star, 18 January 2005). In this regard, the design of banking policies in 2003 was aimed at enhancing the foundations and environment for the banking institutions to efficiently deliver quality products and services, encouraging greater innovation and maintaining financial stability (BNM Annual Report, 2003). Therefore, the key financial indicators of the banking system remained favourable with no signs of vulnerabilities which lead towards a strong banking system in 2003 (BNM Annual Report, 2003). Against a backdrop of improving economic conditions, pre-tax profit of the commercial banks increased by 8.7% to RM6.9 billion in 2003 as compared to RM6.4 billion in 2002 (BNM Annual Report, 2003). It is shown that all the commercial banks have reap the benefits of the consolidation between the banking groups.

Today Malaysian banking system is less fragmented and the domestic banks are less vulnerable to external developments (The Star, 18 January 2005). However, in 2004, the internal mergers of commercial banks and finance companies within the same banking group has successfully taken place in order to capitalise on the synergy between the entities and the economics of scale and thus enhance the operational efficiencies within the banking groups (The Star, 18 January 2005).

### ***1.1.0 Malaysian Banking Industry Prior to the Financial Crisis***

Looking back at our banking industry, it was a situation where we have 71 institutions which was reduced to 30 banking institutions under 10 domestic banking groups (BNM Annual Report, 2002). It was when the banking industry in Malaysia was in relatively good health – a reflection of a strong macroeconomic conditions that prevailed prior to the crisis, and ongoing efforts to develop and reform the banking sector in line with the challenges associated with liberalization (Mohamed, 1999). The thrust of the development of the banking sector prior to the crisis was to create a core of well-managed and well-capitalized domestic banking institutions which are capable of competing effectively globally (BNM Annual Report, 1998).

Subsequently, the Two-tier Regulatory System (two-tier Regulatory System was introduced by BNM back in 1994 for Malaysian commercial banks in order to accelerate the pace of liberalisation for strong and healthy institution) was introduced and in addition, the regulatory, supervisory and legal framework of the banking system is being progressively strengthened to bring it in line with international standards and practices as outlined by the Bank of International Settlement (BIS) [Bank International Settlement is located in Basle, Switzerland. It is an international organisation which fosters international monetary and financial cooperation and serves as a bank for central government]. All these efforts placed the banking sector on a relatively strong footing regionally whereby non-performing loans (BNM through their BNM/GP3 Guidelines defines non-performing loans as non-performing when the principal or interest is due and

unpaid for 6 months or more from the first day of default) of the banking system was at a historic low at 3.6% of total loans and the risk-weighted capital ratio stood at 13.0% (BNM, 2003) which was above the minimum BIS requirement of 8%.

Despite the relative strength of the banking sector in the region, it was obviously not without its vulnerabilities (Mohammed, 1999). Years of high economic growth, fuelled by rapid credit growth, large foreign capital inflows, high private investment growth, an appreciating asset market all contributed to the buildup of risk for the banking sector. While some of these risks were less obvious during the 10 years of strong growth, the crisis revealed and exacerbated them. This was largely because the economy was overly dependent on the banking sector given the relative underdevelopment of the capital market (Mohammed, 1999).

This over dependence is reflected at the end-September 1998, whereby the banking sector accounted for 60% of the total liabilities of the nation, amounting to RM687 billion. The concentration of risks in the banking sector therefore contributed to increasing its fragility as the crisis deepened. It also impaired the ability of banking institutions to play their intermediation role effectively in providing the necessary finance to fund economic activities.

## **1.2 The Risky Business of Banking**

Banker's Journal Malaysia dated Oct/Nov 1996, indicated that from the earliest time "bankers' accepted deposits of gold from the public, they ran the risk that

some unscrupulous persons would try to get their hands on it; and when they lent that gold to a borrower, they ran the risk that they would not see the borrower or gold again. In short, they had security risks and credit risks. The business of banking involves the taking of risk.

Risks have always been the major interest for banks and financial institutions (Bessis, 1998). According to The World Bank (2003), banking risk falls into four categories : financial, operational, business, and event risks. These disciplines has been around for many years (Earnst & Young, 2004) but has achieved a much greater media and corporate distresses.

Some area of risk management such as Asset-Liability Management (ALM) is now well established and is evolving rapidly in the banking industry (Bessis, 1998). In the banking universe, risk is multidimensional and the main financial risks are interest rate risk, liquidity risk, credit risk and market risk (Bessis, 1998). Chegu (2004) has defined ALM as a risk management technique designed to earn an adequate return while maintaining a comfortable surplus of assets beyond liabilities.

### ***1.2.0 The Risk Management in Malaysian Banking***

Some people seem to believe that ‘**risk**’ is a bad word and others associate risk with negative events such as losses. So what is risk management ? Risk management as defined by Tan Sri Ali Abul Hassan, Bank Negara Malaysia Governor, 07 July 1999 as follows :-

*“Risk Management is taking prudent risk in line with a give Risk Appetite in order to maximize profit”.*

BNM Annual Report (2002) indicated that the inculcation of risk and control culture is emphasized in the context of the bank’s overall work culture and shared values. Hence all commercial banks in Malaysia have emphasis that risk management remained as one of their important units comprises Head of Departments and mostly lead by their CEO. Normally, with the set up of their committee, perhaps an independent oversight at the supervisory and operational levels will be put in place, it also establishes policies and processes for good practices, promotes organisation’s wide communication and emphasises continuous improvement. Risks in the bank are managed under a framework that promotes structured, systematic approach and consistent practice throughout all commercial Banks.

Against a backdrop of rapidly changing financial landscape and increased uncertainty, Malaysian commercial banks regularly reviews its risk management arrangements to ensure safe and efficient operations and sound policies. As a result of these, every year their Annual Report will be published to their shareholders, government and public at large. Most banks will have to disclose their risk management and how they serve and manage their risk exposure.

### **1.3 Types of Risk**

Risks are usually defined by the adverse impact on profitability of several distinct sources of uncertainty. The main focus of this study is on financial risks.

### ***1.3.0 Interest Rate Risk***

The Basle Committee on Banking Supervision (The Basle Committee on Banking Supervision is a Committee of banking supervisory authorities which was established by the central bank Governors of the Group of Ten countries in 1975. It consist of senior representatives of banking supervisory authorities and central banks from Belgium, Canada, France, Germany, Italy, Japan, Luxembourg, Netherlands, Sweden, Switzerland, United Kingdom and the United States. It usually meets at the Bank for International Settlements in Basle, where its permanent Secretariat is located) through their Basle Core Principles has defined interest rate risk as an exposure of a bank's financial condition to adverse movements in interest rates. This risk impacts both earnings of a bank and the economic value of its assets, liabilities and off-balance sheet instruments. Although such risk is a normal part of banking, excessive interest rate risk can pose a significant threat to a bank's earnings and capital base. Changes in interest rates affect a bank's earnings by changing its net interest income and the level of other interest-sensitive income and operating expenses (Basle, January 1997). Accepting this risk is a norm in banking and can be an important source of profitability and shareholder value. However, excessive interest rate risk can pose a significant threat to the bank's earnings and capital base.

### ***1.3.1 Liquidity Risk***

Basle also has defined the liquidity risk as a situation where the bank is unable to accommodate decreases in liabilities or its inability to fund increases in assets.

When a bank is illiquid, it cannot obtain sufficient funds, either by increasing liabilities or by converting assets promptly, at a reasonable cost, thereby affecting profitability. In extreme cases, insufficient liquidity can lead to the insolvency of a bank. As a result of liquidity risk, banks have to make sure that enough liquidity is available to meet fund requirements in situations like liquidity crisis in the market, policy changes by central bank etc. So, a bank's balance sheet should have enough liquid assets for meeting contingencies.

### ***1.3.2 Operational Risk***

Operational risk is the risk of direct or indirect loss due to an event or action causing the failure of technology, processes, infrastructure, personnel and other risks having operational impact. In the absence of efficient tracking and reporting of risks, some risks can remain ignored, do not trigger any corrective action, and can result in disastrous consequences such as virus attack on the computer system.

### ***1.3.3 Credit Risk***

Credit risk is the risk that counterparty will not settle its obligation in accordance with agreed terms. Credit exposures include borrowers, connected groups of counterparties and portfolios on the banking book and trading book. Specific procedures for managing credit risk are determined at the business levels with specific policies and procedures being adapted to different risk environment and business goals. Credit analysis includes review of facility detail, credit grade determination and financial spreading/ratio analysis.

#### **1.4 Role of ALM in Malaysian Commercial Banks**

Today bankers have learned to look at the asset and liability portfolio as decision-making package. This type of package is known as asset-liability management (ALM). Rose (2002) defined ALM as a control of a bank's sensitivity to changes in market interest rates to limit losses in its net income or equity. According to Rose (2002), the tools of ALM provide commercial banks with the defensive weapons to handle business cycle and seasonal pressures on its deposits and loans. The offensive weapons are to construct portfolio of assets that promote the bank's goal. Also the purpose of ALM is to formulate strategies, to take actions to shape the bank's balance sheet, to protect the value of its assets, equity, and net income that contributes to the bank's desired goal.

Included are the interest rate risks and liquidity risks that are taken over by ALM. Responding to this Malaysian banks has now established ALM Committee (ALCO) to look after the respective risks in their respective department. The full responsibility of the ALM falls not solely under the CEO of the bank per se, but also under all the Board of Directors of the respective banks. ALCO is responsible for balance sheet (asset-liability) risk management. Managing the asset-liability is the most important responsibility of bank because it does not run the risks for the bank but also the thousands of depositors who put money into it (Bangladesh Bank Focus Group, 2003).

With further liberalisation of the Malaysian banking sector, all commercial banks that have announced its end results will fall under the limelight as to whether it has been practicing the correct standard that lead them to achieve profit

or losses. Traditional ALM applies to all commercial banks involved in deposit taking and lending activities.

In general in the Malaysian banking scenario, the corresponding section of the balance sheet is not balanced. It generates excess funds for both foreign and local players in terms of deposits collected from their customer as compared to the loan given out to their prospective customer. This sector is where the ALM comes into play, the banking portfolio will generate liquidity and interest rate risk which will be monitored by their respective ALM unit.

ALM has actually paved the way for the banking sector in taking a precautionary measure in order to provide commercial banks with a better view of the future and the ability to define their business policy accordingly. The knowledge of risks is a vital input to finding out appropriate prices to charge customers. Increased in competition, volatility of financial markets and diversification exposed banks to new risks and challenges, requiring all commercial banks to continuously innovate ways to manage their business and its associated risks in order to remain competitive in the Malaysian market. ALM is the purview of ALCO reporting to the Board. In term of reference include managing the banks' balance sheet to maximize earnings while managing the interest rate risk and liquidity risk in line with the banks' appetite (OCBC Bank Annual Report, 2002).

## **1.5 Problem Statement**

Profitability is the bottom line for every commercial bank in Malaysia. The focus of this study is to evaluate the relationship by looking at the basic function of commercial banks in collecting resources and lending and whether these two factors contribute a significant relationship towards their profitability. Risk taking is necessary condition for future profitability therefore it is vital in order to look for example developing high margin loans to risky customers which will increase the earning in the short run but it also increases the chances of future losses. This will lead to the business of quality loan but how the bank is actually looking of quality loan that will lead to profitability is another area that have to look at. Most major banking problems have been either explicitly or indirectly caused by weaknesses in risk management in several areas such as concentrations, failures of due to diligence or inadequate monitoring. Consequently, banks should had have their risk measuring techniques in order to look at this huge area which might lead banks to losses or profitability.

## **1.6 Research Questions**

The purpose of this study is to provide empirical evidence on a particular aspect of the debate which has not been documented yet (so far), namely how local and foreign commercial banks in Malaysia perform relatively in managing their risk. To this end, this paper would examine the experience of commercial banks in Malaysia for the past 10 years and addresses the following questions :-

- i) How the gap management contributed towards matching of Loan and Advances and Deposits for selected local and foreign banks ?
- ii) Can short term Loan and Advances and Deposits contribute to bank profitability ?
- iii) Did the Loans and Advances and Deposits contribute towards profitability for selected foreign and local banks ?
- iv) Is there any difference in the contribution of Loan and Advances and Deposits to local and foreign banks ?

### **1.7 Research Objective**

The main purpose of this study is to relate the implication of loans and deposits against their profitability with various scenarios. The period of the study is from 1994 to 2003. Perhaps within a 10 year period we may be able to see the significant changes within the industry. The objectives of the study are :

- a) To find the effect of risk and profitability.
- b) To examine whether there are any differences in the management of loans and deposit by the selected banks between the better time (before 1997) during the crisis and after the crisis.

### **1.8 Definition of Key Terms**

#### **Gap Analysis**

Gap analysis is a technique or process for quantifying exposure to adverse consequences from changes in interest rate. A comparison of the total quantity of

a financial institution's rate-sensitive assets (RSAs) and rate-sensitive liabilities (RSLs) for each of a number of different future time periods or bucket.

## **1.9 Organisation of This Study**

This report is structured into five major chapters. The first chapter is the overview of the study. The second chapter highlights the information on previous studies by well known researchers. Chapter Three discussed research methodologies used in this study and the sampling techniques. In the fourth chapter, the results of the study are depicted and discussed. Finally, Chapter Five summarizes, discussion and the conclusion of the study. The limitations of the study and suggestions for future researches are also provided in this final chapter.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **2.0 Introduction**

Risk management has attracted attention as a result of the repeated and well-publicized failures associated with its implementation. Despite the increased academic and professional attention paid to risk management, frequent instances still occur when sophisticated investors or firms experience sudden, unexpected, and devastating losses (Kimball, 2000). Thompson (1997) has emphasized that banking essential consists of processing information and managing risk. He noted that while the average person in the street probably has a more prosaic - not to say jaundiced – view of banks, risk management is indeed very much a core activity for bankers. There are similar arguments between Thompson and Choudhury (2000).

Choudhury (2000) strongly feels that most financial institutions executives would agree that commercial banks are essential in the business of risk taking. and it is no doubt that commercial bank invested heavily in risk management as their core competence. Santomero and Allen (1999) argued that banks have always been in the risk management business, suggesting that the origins of banking lie in their risk transforming and management functions. Both agreed that the financial system performs the functions of reallocating the resources of economic units with surplus funds (savers) to economic units with funding needs (borrowers). There are similar arguments between Allen and Santomero (1999)

and Scholtens and Wensveen (1999), all of whom agreed that risk management has become one of the main activities of banks and other financial institutions in recent years and it has been at the heart of what financial intermediaries do since their origin.

Sullivan and Spong (1998) added that bankers are often characterized as being in the business of managing risk. And they said that in order to be successful, bank managers, stockholders and directors must work closely together in deciding what risks their bank will assume and how they will control that bank's overall risk exposure. The goals of risk management are to refine the measures of risk, better match economic capital to the overall risk profile, allocate capital efficiently among the respective bank enterprises, and to price loans and other products and service consistent with their marginal contributions to economic capital and risk-adjusted returns on capital (Matten (2000); Beisses (2002; Smithson (2003); Saunders (1999)).

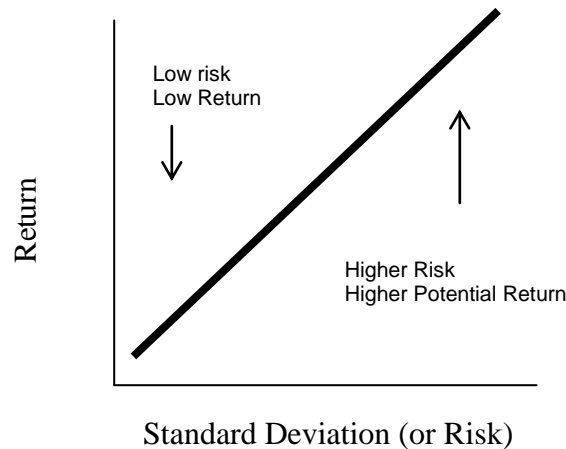
In today's complex financial services environment, the nature and potential severity of risks to which financial institutions are exposed, irrespective of size, location, or business strategy, have increased significantly. Taking risks without understanding them can have far reaching implications for the bank's future success (Proctor, 2003).

## **2.1 Review of the Theory in Relation to Bank Risk-Taking**

Lesser competition in banking results in higher deposit rates, bank profits go up, and banks intentionally seek lower risk (Boyd & Nicoló, 2003). They also added

that at the same time, lesser competition in banking means higher loan rates, borrower's profits go down, and commercial banks intentionally seek more risk.

While Alzaidanin (2003) on his empirical study on United Arab Emirates (U.A.E) commercial banking system found that banks with larger market concentration power may have inclined to rely on loans that are less profitable (and at the same time, possibly less risky). Low levels of uncertainty (low risk) are associated with low potential returns. High levels of uncertainty (high risk) are associated with high potential returns.



*Figure 1 : Risk/Return Tradeoff*

*Source : <http://www.investopedia.com/university/concepts/concepts1.asp>*

The risk/return tradeoff is the balance between the desire for the lowest possible risk and the highest possible returns. There is a famous paraphrase that high-risk investments must offer the prospect of high returns to attract investors (Smart, Megginson & Gitman, 2004). Back to the competition issue, which was mentioned earlier, the basic idea is that, when banks can earn monopoly status, they become relatively conservative (Boyd & Nicoló, 2003). In their findings,

they found that when banks become more competitive, the risk of failure unambiguously decline.

## **2.2 Other Kinds of Risks Faced By Commercial Banks**

In his study, Santomero (1997) said commercial banks are in the risk business and the banks assume various kinds of financial risks in providing financial services. Bessil (1998) argued that among others, credit risk, liquidity risk, interest rate risk, market risk, foreign exchange risk and solvency risks remained a major importance which is related to the business of banking. He also said that the above risks have become paramount because of the new competition, product innovations, the shift from commercial banking to capital markets, increased market volatility, and the disappearance of old barriers which limits the scope of operations for the various financial institutions.

Kashyap, Rajan and Stein (1999) stated that by its very nature, banking is an attempt to manage multiple and seemingly opposing needs. Banks stand ready to provide liquidity on demand to depositors through checking account (checking account is widely used in United States (US) but in Malaysia it is known as current account) and to extend credit as well as liquidity to their borrowers through line of credits. What has been commented by Kashyap, et. al (1999) is consistent with Cebenoyan and Strahan (2001) that there is another sector of the economy (where it is unimaginable) where there are many risks are managed jointly as in banking.

### **2.3 Asset-Liability Management (ALM) in Banking**

ALM is the process of regular managing of the financial risk of a company's surplus, and then rebalancing the composition and risk characteristics of its financial assets and liabilities (Golub, 1995). In Malaysia, BNM through their GP10 (BNM on 27/01/1997 has defined GP10 Guideline as a minimum audit standard for internal auditor of financial institution) directive requires that clear and comprehensive policies and operating procedures for treasury operations should be established. "These policies should be approved by the Board" (1997 : 43). This provides a framework for establishing the role of ALM in the financial system. Kunreuther (2001) explained on how there is a need to incorporate the data from risk assessment studies and the factors that have been shown to influence risk perception in developing risk management strategies for reducing losses and providing protection against extreme events.

Standard financial theory suggests that the main purpose of financial markets is to improve risk sharing (Allen & Santomero, 1999). Chamber and Charnes (1961) is the pioneer in ALM by using the deterministic linear programming model as their methodology. Chambers and Charnes were concerned with formulating, exploring and interpreting the use and construction which may derived from a mathematical programming model which expresses more realistically than past efforts the actual conditions of current operation. Their model corresponds to the problem of determining an optimal portfolio for an individual bank over several time periods in accordance with requirements laid

down by bank examiners which are interpreted as defining limits within which the levels of risk associated with the returns on the portfolio is an acceptable one.

Kosmidou and Zopounidis (2000) argued that in deterministic models which applied linear programming, it is assumed that particular realization for random events, and are computationally tractable for large problems. These are related to the earlier study by Chambers and Charnes (1961), which has been using linear programming model in their study. Over the years, many models have been developed in the area of financial analysis and financial planning techniques. Booth, Bessler and Foote (1989), Giokas and Vassiloglou (1991), Seshdari, Khanna, Harche and Wyle (1999) presented bank models using goal programming (goal programming model is a method for modeling, solving and analyzing real problem involving multiple, conflicting goals and objective). These studies focus on areas of banking and financial institutions and the use of data from the banks financial statements.

### ***2.3.0 Loan and advances***

Loan and advances are by far the most significant component of a bank's assets. This include loans for general working capital (overdrafts), investment lending, asset-backed installment and mortgage loans, financing of debtors (accounts receivable and credit card accounts), and tradable debt such as acceptances and commercial paper (Greuning & Bratanovic, 2003). According to Rose (2002), for most of the banks, loans account for half or more of their total assets and about half to two-thirds of their revenues. Moreover, risk in banking tends to be

concentrated in the loan portfolio. Brown (1994) argued that the failure of banks is because they made too many bad loans. From the above argument, loans and advances play a significant role in determining the success of every commercial bank.

### **2.3.1 Deposits**

Deposits usually constitute the largest proportion of a bank's total liabilities. Deposits from customers – the amount due to other customers and depositors – represent money accepted from the general public such as demands and savings, fixed and notice, and foreign deposits (Greuning & Bratanovic, 2003). Brown (1994) added that without deposits, there is no bank. Rose (2002), mentioned that deposits are the foundation upon which banks thrive and grow. He further added that deposits provide most of the raw materials for bank loans and, thus, represents the ultimate source of the bank's profits and growth.

### **2.3.2 Profitability**

Commercial bank is simply a business corporation organized for the purpose of maximizing the value of the shareholders' wealth invested in the firm at an acceptable level of risk (Rose, 2002). According to Rose too, most of profitability ratios involves the calculation of total assets and equity which comprises loans and advances and deposits into their components. The example of profitability ratios is Return on Assets (ROA) and Return of Earnings (ROE). ROA by simplest word is the ability of the bank to generate income from assets and ROE

is a measure of the rate of return flowing to the bank's shareholders (Rose, 2002). Greuning and Bratanovic (2003) mentioned that profitability is a revealing indicator of a bank's competitive position in banking markets and of the quality of its management. Both of them further added that it allows bank to maintain a certain risk profile and provides a cushion against short-term problems.

Meanwhile, Bobáková (2003) has indicated that that profitability is dependent more on a bank's ability to eliminate risk in asset operations and to ensure a correspondence between assets and liabilities.

#### **2.4 The Important of ALM for Malaysian Commercial Banks**

Dogan and Fausten (2002) in their study commented that commercial banks are authorized to take demand deposits and to conduct business in retail and corporate banking and they provided services like merchant banking, stock brokering and insurance through their subsidiaries. At the end of 1998, Dogan and Fausten (2002) indicated that Malaysian commercial banks clearly dominated the financial sector in terms of portfolio size by holding 74% of total assets. Malaysian commercial banks currently engage in risk management in order to look after their complex business as risk management has emerged as a major industry in the last ten years.

Again, it is true as what has been said by Bobáková (2003) that it is the aim of every bank's management to optimize the structure of assets and liabilities with regards to the bank's specific policies which determines profits, as well as the evaluation of the level of risks which the Malaysian commercial banks are

willing to bear. Currie and Velandia (2002) argued that the ALM framework also suggested that if risks cannot be hedged it can be controlled through diversification. Most Malaysian commercial banks apply this principle by spreading their loan portfolios by industry and geographic locations. Currie and Velandia (2002) added that the ALM framework helps firms to analyze situations that can threaten their main objective of profit maximization, by processing the information contained in the balance sheet and deriving the potential risks, quantifying them, suggesting ways to reduce risks and providing them guidelines to manage residual risks. The same thing happened between what has been commented by both of them via the ALCO meeting held by each of them on all the commercial banks in Malaysia today.

## **2.5 How does Commercial Banks Get Away With The Risks**

If savers and investors, buyers and sellers, could locate each other efficiently, purchase any and all assets costlessly, and make their decisions with freely available information, then financial institutions would have little scope to be mediating direct transactions and therefore risk is minimal (Oldfield & Santomero, 1997). There are so many factors to explain in their research why risks are being transferred to other parties or absorbed by themselves. But once risk is absorbed, they must be managed efficiently (Oldfield & Santomero, 1997).

## 2.6 Hypotheses

### Hypothesis 1

H1(a) : Increase in loandep1 will increase the profits

H1(b) : Increase in londep1 will decrease the profits

### Hypothesis 2

H2(a) : Increase in loandep2 will increase the profits

H2(b) : Increase in londep2 will decrease the profits

### Hypothesis 3

H3(a) : Increase in loandep3 will increase the profits

H3(b) : Increase in londep3 will decrease the profits

### Hypothesis 4

H4(a) : Increase in loandep4 will increase the profits

H4(b) : Increase in londep4 will decrease the profits

### *Notes :*

1)      Loandep1      =      Loan to deposit maturing within one year.

2)      Loandep2      =      Loan to deposit maturing between one year to three  
years.

3)      Loandep3      =      Loan to deposit maturing between three  
years to five years.

4)      :Loandep4      =      Loan to deposit maturing over five years.