

CHAPTER TWO

LITERATURE REVIEW

This chapter reviews the theoretical aspects of how to evaluate the relative performance of banking institutions, using the CAMEL analysis. The CAMEL analysis is the acronym derived from the first letter of the five elements: **C**apital Adequacy, **A**sset Quality, **M**anagement Competency, **E**arnings Performance and **L**iquidity Position. The primary purpose of the CAMEL analysis is not to identify future bank failure, but to provide an assessment of the bank's overall conditions at the time of examination. The CAMEL rating framework, is used since 1979 and has been adopted by all three of the bank regulatory authorities - the Comptroller of the Currency, the Federal Reserve and the Federal Deposit Insurance Corporation (FDIC) in the United States to assess a bank's soundness (Marshall 1996, p.14). Banking institutions in Malaysia are assessed using the CAMEL rating framework as part of the criteria to qualify as either Tier I or Tier II under the two-tier regulatory system (Aziz 1999, p.3-22).

2.1 CAMEL Rating Framework

Bank examiners determine the bank's soundness based on the five-tiered analysis of CAMEL - giving each tier a rating of 1 (strong) to 5 (unsatisfactory). The bank is also given an overall composite rating of 1 (sound in almost every respect) to 5 (require immediate aid and corrective action). In assigning the composite and individual CAMEL component ratings, all relevant factors, both quantitative and qualitative, are considered and evaluated.

The regulators defined the composite rating's meaning as follows:

- Composite 1: Banks in this group are sound institutions in almost every respect.
- Composite 2: Banks in this group are also fundamentally sound institutions, but may reflect modest weaknesses correctable in the normal course of business.
- Composite 3: Banks in this group exhibit a combination of weaknesses ranging from moderately severe to unsatisfactory. Such banks are vulnerable and require more than normal supervision.
- Composite 4: Banks in this group have an immoderate volume of asset weaknesses, or a combination of other conditions that are less than satisfactory. A potential for failure is present, but is not pronounced.
- Composite 5: Banks in this group possess an intensity and nature of weaknesses that require urgent aid from the shareholders and other sources. The probability of failure is high for these banks.

As the composite CAMEL rating represents the overall financial and general condition of a particular banking institution. Banks that receive a composite rating of "4" or "5" are typically referred to as "problem" banks. This means that such banks are operating in a less than prudent manner and are subject to failure. Problem banks are monitored closely and are usually forced by the regulatory agency to alter both operating procedures and management (Scott, Jens and Spudeck 1991, pp. 58-59).

The CAMEL rating framework is intended to provide uniform supervision of individual banks and also to help identify institutions that warrant special supervisory attention and concern. The disclosure of the rating would actually provide an effective form of non-price competition among institutions. Depositors and investors would shift funds out of less efficient banks, prohibiting poorly managed banks from becoming too large. By identifying problems early, regulators are able to force correction action, or close the

institution in a manner that minimizes losses to depositors and the deposit-insurance fund, and that minimizes the disruptive impact on the economy.

The BNM has conducted the CAMEL rating framework, under the Two-Tier Regulatory System (TTRS) since 1994 (Aziz 1999, p.3-22). Under the TTRS, the banking institutions are classified into two groups - Tier-I and Tier-II, subject to a minimum requirement for their shareholders' funds and a stringent CAMEL rating framework. The rating of a bank is used as the basis to categorise each bank as either Tier-I or Tier-II under the two-tier regulatory system.

2.1.1 Capital Adequacy

Capital refers to the bank's ability to absorb losses. It has always been given prominent consideration in the assessment of financial soundness of a banking institution by central banks and creditors alike. If the losses are large enough to wipe out reserves and profit, then the bank is in danger of becoming insolvent. The ratio of book equity capital less bad loans to total assets, is the proxy for the capital adequacy component of the CAMEL rating (CAMEL) (Thomson 1989, p.11).

Capital plays a crucial role within a bank. It performs a number of functions, such as:

- To absorb losses while permitting the bank to continue operating;
- To provide confidence for depositors and other creditors;
- To finance physical assets necessary for the business;
- To provide long-term funds to lessen maturity mismatching;
- To ride out temporary periods of low earnings.

The larger the capital base, the greater the capacity of the banking institution to cushion itself against contingent losses in the event of financial shocks, for example recessions and debt write-offs. To achieve this aim, banks must maintain strong level of capital to provide for any adverse event. It also serves as the last line of defence against losses. It has been the policy of the BNM that a large and strong capital base will enable an institution to assume greater risks as it expands its banking operations and ventures into new business activities and markets (BNM 1996, p.106).

The BNM has adopted the Bank for International Settlements (BIS) committee accord capital on the weighted risk asset approach in assessing capital adequacy of banking institutions. The minimum capital adequacy ratio is necessary to help regulators pursue the overall stability of the banking industry. Further, it also makes quite impossible that liabilities of banks will exceed assets (Stiglitz and Uly 1996, p.257). All Malaysian banking institutions must maintain the minimum requirement of risk-weighted capital ratio (RWCR) of 8 per cent on annual basis (Aziz 1999, p.3-17). With effect from financial quarter ended 31 March 1998, all banking institutions were required by the BNM to comply with the consolidated RWCR on a quarterly basis (BNM 1998, p.141).

All assets held involve a chance of loss or decline in value. An effective way of managing capacity adequacy is through a change in leveraging. Higher earnings have effect of both conserving the present needs of capital and providing the basis of expansion for its future growth. Studies had shown that credit expansion led to high earnings (Wong and Raja Lope 1999, p.98). However, according to conventional wisdom in banking, a higher capital asset ratio (CAR) is associated with a lower after-tax return-on-equity (ROE). In other words, there is a negative relationship between capital and earnings (Berger 1995, p. 432).

2.1.2 Asset Quality

Asset quality is directly related to the market value of the assets of a banking institution and the adequacy of provisions against assets losses. Loan losses are often the primary source of large bank losses. The main factors affecting assets quality are the degree of diversification of assets, the size and duration of loans, the growth of loan portfolios, quality of collateral backing each loan, the presence of directed or policy leading and related party leading.

The need and importance of containing asset risk exposure was recognised even before the Great Depression. Irving Fisher (1911) stated that: "... *insufficiency of cash is so troublesome a condition - so difficult to escape when it has arrived, and so difficult to forestall when it begins to approach, - a bank must so regulate [its portfolio] as to keep on hand a sufficient cash reserve,..., the more the loans in proportion to the cash on hand, the greater the profit but the greater the danger also.*"

MBf Finance had lent heavily to finance property and stock purchase transactions in the 1990s and when the country tipped into recession in 1997, the price of property and stock plummeted. Non-performing loans (NPLs) increased by more than four billion ringgit or about 30 per cent of its entire loan portfolio at the end of June 1999 (Pura 1999, p.1).

Therefore, credit and risk management in banks plays a pivotal role in evaluating leading activities, avoiding high lending to specific industries, lending without prior evaluation of the businesses and also recognising that not all types of loans and advances have the same level of risk. Inadequate credit and risk structure in the individual bank will usually lead to bank collapses.

Crosse and Hempel (1980) very aptly summarizes the basis criteria for making sound bank leading policy:

"It should be clear a bank's lending policies and practices will be sound if its directors and management lay down firm guidelines that specify appropriate purpose for which the bank's credit may be used, relate the bank's repayment to those purpose and make certain that the bank obtains sufficient protection against unforeseen risks."

The proxies for assets quality and portfolio risk in the asset quality component of the CAMEL rating (CAMEL) are as follows:

- (a) The credit quality of the loan portfolio measured by the net losses per dollar of loans;
- (b) Portfolio risk measured by the weight of risky assets in the total asset portfolio or the diversification of the risky asset (Thomson 1989, p. 11).

2.1.3 Management Competency

Management competency dictates whether a bank is managed effectively and efficiently. Good management can result in stable profit or significant market share or an increase in equity value of the bank, as measured by market capitalisation. Bank management should display a high standard of integrity, professional competence and quality of service. In other words, crucial to the maintenance of a sound banking system are the elements of confidence and competence. They are determined to a large extent by integrity, quality of the board of management of banks, the level of professionalism, and the nature and range of services provided to the public (Aziz 1999, p. 3-25).

Banks need to demonstrate the need for much better standard in corporate practice such as the improvement in corporate governance and protection to

minority shareholders. Also there should be absolute transparency in the lending process. Lending proposals should be evaluated on merit and not on any extraneous considerations (Kasmiah Mustapha, 1999, p.21).

Operating efficiency and fraud or insider abuse are the two proxies for management component of the CAMEL rating (CAMEL). Operating efficiency is measured by operating expenses (staff cost plus overheads) over total assets, while fraud or insider abuse is measured by loans to insiders over total assets (Thomson 1989, p.11). Graham and Horner (1988) found that for national banks that failed between 1979 and 1987, insider abuse was a significant factor, contributing to the failure of 35 per cent of the closed institutions; material fraud was present in 11 per cent of these failures.

2.1.4 Earnings Performance

Earnings and profitability are interchangeable in the context of bank's performance evaluation. Profitability is a ratio of earnings to the funds used in the bank. It measures the success of a bank in its use of this investment. Profitability measures affect bank's income and it is referred to as "flow" measures. Profitability is the first line of defence against loan defaults and other unforeseen events. The return-on-assets (ROA) is the proxy for the earnings component of the CAMEL rating (CAMEL) (Thomson 1989, p.11). The ROA is important to bank management to monitor its efficiency in asset acquisition.

The quality and trend of earnings of an institution depend largely on how well the management manages the assets and liabilities of the institution. A banking institution must earn reasonable profit to support asset growth, build up adequate reserves and enhance shareholders' value. Good earnings

performance would inspire the confidence of depositors, investors, creditors and the public.

Theoretically, the banks focused strongly on loan growth because it was the direct generator of good banking profitability and banking strength. The unprecedented growth of Malaysian banking profitability could be seen from its profit before tax, which rose more 10-fold, from RM 0.58 billion in 1988 to a peak of RM7.95 billion in 1997. In terms of ROA and ROE, ROA was less than 1 per cent in 1988 as against 1.8 per cent in 1997 while ROE rose from less than 10.0 per cent in 1988 to 24 per cent in 1997 (Wong and Raja Lope 1999, p. 98). Such a high profit return growth provided a strong incentive for Malaysian bankers to focus on credit growth.

The Asian Business, September 1993 issue quoted that the Development & Commercial Bank had expanded aggressively in recent years, with lending swelling a whopping of 29 per cent in 1992 year. As a result, the bank's loan-to-deposit ratio climbed to 118 per cent - the highest in Malaysia. But this gearing has also translated into strong profit growth: Pre-tax earnings jumped more than 33 per cent to RM156.9 million in 1992.

Studies had shown that market growth over the last decade appeared to have contributed more towards Malaysian finance companies profitability as compared to commercial banks. This is due to the nature of business for finance companies, which have been actively involved in providing financing for volatile and risky investments such as shares and properties during the market boom. This is the real-world investment phenomenon - high risk has to be compensated for high return. Because of this, finance companies have been growing at a faster rate over the last 15 years from 1980-1996. During this period, the finance companies share of total assets of the Malaysian banking system had increased from 5.6 per cent to 19 per cent. However,

during this same period, the share of commercial banks had declined marginally from 59 per cent to 58 per cent (Balachander and Shanmugam 1997/1998, p. 25).

2.1.5 Liquidity Position

Liquidity refers to a bank's ability to meet depositors' withdrawals, maturing liabilities and loan requests without delay. This is to assess based on the bank ability to match its short-term liquidity requirement arising from maturing obligations with maturing assets. When a large unexpected volume of withdrawals occurs, a bank that cannot meet the demand with existing reserves and highly marketable assets must try to sell less marketable assets. The result can be sizeable losses that lead to bank failures and a disruption of the banking system and the economy in general. A liquidity analysis is to provide the primary means of judging a bank's liquidity position. This is a risk facing banks because a liquidity crisis may result in the failure of a solvent bank.

Maintaining adequate liquidity is the most important constraint upon a bank's primary objective - maximising shareholder wealth. If a bank's depositors and other liability holders do not have confidence that the claims can be met, they will refuse to deposit or lend funds to the bank. By having a liquidity cushion, the bank can avoid payment problems. This signals stability, forestalling future bank runs or lack of confidence episodes that can increase the cost of external financing to the bank, that is, higher costs to raise new capital or a higher pledged interest rate to depositors.

Liquidity measures primarily affect banks' balance sheets and it is referred to as "stock" measures. A banking institution must have sufficient cash balances, liquid assets such as money at call, investment in Government

paper and interbanks deposits at all times as contingency for periods of liquidity distress, arising either from overall market conditions or from institution specific crisis. Any of such events may lead to a loss of confidence in the banking sector, creating possible panic withdrawal of deposits by customers. Non-deposit liabilities over total cash and investment securities is the proxy for liquidity component of the CAMEL rating (CAMEL) (Thomson 1989, p. 11).

Needless to say, the performance of banking institutions is not only affected by the change in their assets, deposits, capital, the structure of their assets portfolio and the compositions of their deposits. Economic factors such as inflation, business cycle, and a rise or fall in interest rates or a tightening of credit, are also contributing factors towards the banking institutions' performance (Cacy and Bedford 1972, p.15).