CHAPTER 2
LITERATURE REVIEW

This chapter has two main sections. The first section reviews the past studies of what causes the banking crises and recovery measures employed to rescue the banks. Valuable lessons can be learned from the events of the past as Santayana's words: 'Those who cannot remember the past are condemned to repeat it' (Schubert, 1991:1). The second section covers the banking system in Malaysia.

2.1 Causes of Banking Crises and Recovery Measures Taken

This section will cover four main banking crises: (i) The Austrian Credit-Anstalt (CA) Bank Crisis (ii) The Nordic Banking Crises (iii) The Mexican Banking Crisis and (iv) The Asian Banking Crises. This will be followed by a review of some cross-country studies of banking crises.

2.1.1 The Austrian Credit-Anstalt (CA) Bank Crisis

The CA was one of the largest bank in Central and Eastern Europe collapsed in 1931. The unexpected failure of this largest bank resulted in a general bank panic that spreads to other parts of the world (Schubert, 1991). The bank crisis occurred during the economic depression. Minsky (1977) finds out that there is a relationship between banking crises and the business cycle.

Schubert, 1991 analyzes the causes of the CA bank crisis and find out it originated from the asset side of the bank's balance sheet. Its net worth was negative. As the asset side problems became publicly known, a run caused an immediate spread to the liability side. As Minsky (1982: 146) points out, "a decline in a net worth- perhaps the result of revaluation of assets-can lead to a decreased willingness to hold debts of a unit and hence to difficulties when it needs to refinance a position. It would further caused liquidity problem."

Schubert, 1991 further distinct the causes of CA into two categories: the proximate causes and the fundamental causes. The main proximate causes are the effects of the business depression and management errors. The main fundamental causes were the consequences of hyperinflation, and the maturity mismatch between the bank's assets and liabilities.

According to the author, "the hyperinflation had left its marks on the balance sheets of the Austrian currency (to about 1/14,400th of its pre-war level, 1913) deprived the banks of their capital base. The CA had lost between 77.5% and 84.6% of its pre-war equity. Further, the failure of the banks to restore adequate capital endowments after the hyperinflation resulted in a continual worsening of their debt/equity ratios, so that the increasing balance sheet totals were based on a shrinking relative capital basis, and the ventures of these banks were increasingly debt financed- that is, the depositors' funds were being put at risk, instead of the shareholders'"(Schubert, 1991:33). The debt/equity ratio of the CA reflects this development quite clearly (Appendix: Table A1, page i).

Another fundamental cause of the CA was its biased debt structure. The small capital endowment together with the relatively small volume of domestic deposits, forced the CA to rely very heavily on foreign credits. For the CA more than a third of its creditors were of foreign origin. Appendix: Table A2 in page i shows the approximate breakdown of the origin debt. These foreign private debt was on a short term basis but were tied up in long-term assets (to finance capital investments). The banking system became vulnerable. Any unexpected event that would result in reduced inflows or in larger than usual withdrawals could render the banks illiquid, and could consequently lead to runs and panics.

In rescuing the bank, the government and the central bank acts as lender of last resort and guarantees the deposits. The author suggested structural reforms which focus on strengthening the banking sector, enhancing transparency with regard to the disclosure of key economic, financial and corporate sector information.

2.1.2 The Nordic Banking Crises

Drees and Pazarbasioglu (1998) study on the Nordic banking crises which occurred in Finland, Norway, and Sweden in the early 1990s reveal that the crises was not caused by the banking deregulation. The main causes of the crises were the delayed policy responses, the structural characteristics of the financial system, and banks' inadequate internal risk-management controls.

Prior to the banking deregulation (in the early 1980s), the Nordic banking systems were heavily regulated. They were to maintain the stability of the banking system, low and stable interest rate to channel subsidized credit to specific priority sectors, such as housing and government (Drees and Pazarbasioglu, 1998). "As a result, the Nordic countries in the late 1970s and early 1980s were characterized by widespread credit rationing. The chronic excess demand for credit fostered close and long-term relationships between borrowers and their banks and allowed banks to be highly selective in choosing relatively safer credit risks. At the same time, bank profitability was largely ensured by restrictions on competition from other domestic and foreign financial institutions" (Drees and Pazarbasioglu, 1998: 3).

The financial liberalization in 1980s changed the competitive environment of financial institutions. The lifting of lending and deposit rate restrictions and credit ceilings opened the door to more competition. To secure their positions in the deregulated environment, many banks expanded their lending aggressively. The banks shifted their loan portfolios toward more cyclical sectors, such as real estate, construction, and services and toward loans denominated in foreign currency (Drees and Pazarbasioglu, 1998). The higher risk taking was also supported by incentives that stemmed from moral hazard resulting from explicit or implicit state policies that no bank will fail.

As bank lending opportunities expanded, banks' capabilities to fund the rapid credit expansion improved significantly. Evidence from other countries suggests that, in the aftermath of financial liberalization, the volume of loans grows significantly faster than the volume of bank deposits (Bisat, Johnston, and Sundararajan, 1992). The same phenomenon took place in the Nordic countries (Appendix: Table A3, page ii). The Nordic banks financed their asset growth through borrowing in the domestic and international interbank markets (Drees and Pazarbasioglu, 1998).

In addition, the authorities failed to see the need to tighten prudential bank regulation in areas such as real estate and foreign currency lending; and monetary conditions were not tightened sufficiently. For example, Norway Bank sharply increased central bank credit to banks, from 3% to 23% of the private credit extended by banks in 1986, following the 10% devaluation of the Norwegian krone that was triggered by a decline in oil prices. The decline in oil prices in 1986 caused a recession in all three Nordic countries which in turn accelerated the asset price deflation. In addition, the depreciation of currencies increased the domestic currency value of debt denominated in foreign currency. The depreciation was particularly burdensome for firms in the sheltered sectors that lacked foreign currency earnings. Bankruptcy rates reached record levels in all countries; in Norway, the number of corporate bankruptcies rose by 40% a year during 1986-89. This in turn triggered banking crises. In Norway, banks' loan losses climbed from 0.7% of total loans in 1987 to 6% in 1991. In Finland, loan losses rose from 0.5% in 1989 to 4.7% in 1992. Lastly, in Sweden, loan losses jumped from 0.3% in 1989 to 7% in 1992.

To deal with the crisis, all three Nordic countries, the government and the central bank supported the banking systems. The government took over a number of large banks but only a very few banks were liquidated. In the majority of cases, the authorities either assumed ownership (most often with the intention of finding a buyer for the bank in the near to medium term) or provided funds (mainly as equity injections) to banks that continued to operate as private institutions.

In Finland and Sweden, non-performing bank assets lifted into asset-management companies; such arrangements were not utilized in Norway. The main objective for separating non-performing assets from the viable part of a bank is to correct risk-taking incentives. Another argument in favour of transferring non-performing assets to a separate agency lies in the fact that it is a once-and-for all solution because the remaining healthy bank should be able to manage without further government involvement. Meanwhile, in Norway, two separate agencies, the Government Bank Insurance Fund and Government Bank Investment Fund, were set up to deal with the banking problems. The former provided support mainly through the banks' own deposit insurance funds and the later through direct capital investment in banks. The bank restructure is successful in rescuing the banks.

In short, the banks need to strengthen their internal management controls, risk management and enforce an adequate supervisory framework in line with the banking deregulation to prevent bank problems from emerging.

2.1.3 The Mexican Banking Crisis

Espinosa and Russell (1996) examine the Mexican financial crisis, 1994 and find out that the Mexican banking crisis has multiple causes. Among the factors were excessive loan growth, pegged exchange rate regimes and political problem.

Prior to the crisis (during the late 1980s and early 1990s), Mexico had chosen a development strategy of externally financed growth. This is because rapid economic growth requires large investments in plant, equipment, and technology which could not provided by domestic savings (Espinosa and Russell, 1996).

Mexico's externally based financing strategy allowed the share of its gross domestic product (GDP) devoted to domestic investment to rise from 20% to 23% from 1988 to 1992, despite the fact that private savings fell from roughly 18% of Mexican GDP to under 9%. Between 1990 and 1993, Mexico received $91 billion in net capital inflow (Espinosa and Russell, 1996). Thus, preceding the crisis, an inflow of foreign funds allowed Mexico to enjoy substantial increases in both consumption and investment.

In addition, a large fraction of the foreign funds were provided on a short-term basis. In 1993, at the peak of the foreign investment inflow, only 32% of the foreign funds went into the country's stock market and only about 13% was devoted to direct investment by foreign firms (Banco de Mexico, 1995). Most of the rest of the funds were lent out to Mexican firms engaged in investment projects.

The Mexican government was committed to an exchange rate peg that required it to sell reserve assets in the exchange market whenever the peso's dollar value threatened to fall below a prescribed level. The fraction of Mexico's foreign debts that were denominated in pesos had been increasing, and the exchange rate peg also provided assurance to foreign holders of these debts that exchange rate depreciation would not drastically reduce their dollar value.

The assassination of the presidential candidate, Luis Colosio, in March 1994 shook the confidence of foreign investors. As the foreign deposits of the Mexican banks were short-term and required semi-continuous refinancing, this loss of confidence created immediate difficulties for Mexican banks and put downward pressure on the dollar price of the peso (Espinosa and Russell, 1996). The government responded by selling large quantities of foreign exchange reserves and allowing domestic interest rates to increase sharply. These moves seemed to be successful, in the sense that the government was able to defend its peso peg without exhausting its foreign reserves (Espinosa and Rusell, 1996).

The authors further recommend that the Mexican government impose reserve requirements on the short-term liabilities of banks and other financial intermediaries and also on any direct short-term liabilities of Mexican firms. Besides, they also suggest Mexico to stick with its current flexible exchange rate. One approach to reduce the exchange rate risk is for the Mexican government to encourage the country's banks and other borrowers to issue dollar-denominated debts.

2.1.4 The East Asian Banking Crises

The East Asian banking crises, which included Thailand, Indonesia, South Korea and Malaysia occurred in 1997 following the currency attacked that first started in Thailand (Bacha, 1997).

Prior to the currency attack, the banking system in Thailand, Indonesia, Malaysia, and South Korea had developed a weakness: over-extended loans (Bacha, 1997). This was due to too loose of monetary policy. A rapid growth of monetary aggregates, average annual growth in both M1 and M2 had been more than twice the growth in real gross domestic product, 6% for those affected countries (Bacha, 1997). The link from growth in monetary aggregates, (M1, M2) to investment growth worked through bank credits. Over the seven years period (1990-1996), Thailand and Indonesia had had an annual average domestic credit growth of 21% and 25% respectively. Malaysia and South Korea had had slightly lower rates of 19.5% and 17.7% respectively.

The rapid growth of monetary aggregates were due to huge capital inflows. The combined long-term and short term net inflow of funds into East Asian increased from $20.8 billion in 1991 to $108.7 billion in 1996 (Kwan, Vandenbrink and Chia eds, 1998). Though foreign direct investment (long-term) inflows constituted a major portion of capital inflows, short term inflows in the form of portfolio investments and borrowings were increasing (Bacha, 1997). Total foreign loans as a percentage of GDP approached 40% for Thailand and exceeded 25% for Indonesia and South Korea. Malaysia's foreign loans stood at 22% of GDP as at December 1996 (Bacha, 1997). Clearly, the four countries had been a heavily reliant upon short-term inflows.

The sudden speculative attack on currencies caused investors to panic. They pulled out their investments. The flight of foreign portfolio investments put a halt to the ability of banks to create credit and the Central Bank to print money. This in turn caused depositors to panic and withdraw their deposits.

To cope with the crises, Thailand, Indonesia, Korea and Malaysia tightened their monetary and fiscal policy. "Rising interest rates were intended to increased the price of domestic assets and make them more attractive to holders of foreign currency funds. But, this raised difficult trade-offs. High rates compounded the problem of the debt-laden corporate sector. Interest costs rose at exactly the time their profits were falling with the advancing recessions, and many could not service their debts. Non-performing loans on the balance sheets of the banks increased, forcing them to call in loans in a struggle to maintain cash flow" (The World Bank, 1998:13). Thus, it was not a successful policy.

2.1.5 Cross-country Studies

Goldstein & Turner (1996) in a survey of the empirical literature, argue that banking crises have multiple causes. They outline eight common factors that appear to be present in economies facing banking problems. Among the factors are excessive loan growth and increased reliance of banks on foreign currency credit, serious asset-liability mismatches and poor disclosure requirements. Financial liberalization that were not preceded by adequate preparation, heavy government involvement, connected lending and pegged exchange rate regimes were also found to be contributory factors.

As there are multiple causes, the authors argue that various policy options should be adopted. They propose stricter asset classification, higher bank capital and higher personal liability for poor management.

Capri and Klingebiel (1996) use empirical data of eighty-six episodes of bank insolvency to examine the causes and how government have responded. They find that both macro and micro factors have figured prominently in banking crises. They identify, speculative bubbles resulting from excessive credit growth, financial liberalization and macroeconomics volatility- particularly of gross domestic product (GDP) and inflation as the macro factors. The common micro factors appear to be, asymmetric information or moral hazard, asset liability mismatches, and connected lending.

The authors suggest that authorities should develop a more complete regulatory framework that provides banks with increased flexibility in facing crises and ensures proper management. The bank management, shareholders should be made to bear the losses to reduce the moral hazard.

Dziobek and Pazarbasioglu (1997) analyze the experience of twenty-four sample countries derive lessons applicable to successful resolution of banking crises. Systemic banking problems had multiple causes and requires a comprehensive approach to address not only the cash flow problems but also supervisory, accounting and regulatory framework. Prompt action on the part of authorities makes a difference. Deficiencies in bank management were an important cause. Operational restructuring to correct the deficiencies should preferably be in the form of a lead agency independent of the central bank. The government financial support of insolvent banks is necessary. The central bank must stand ready to provide liquidity. The removal of NPLs from bank balance sheets by transferring them to separate loan recovery agency was found effective.

In short, a banking crisis has multiple causes. Policy makers have to identify the causes and set up appropriate policy options to rescue the banks. This is because policy prescriptions that work for one problem cannot be replicated as a recipe for success in other situations, particularly where the economies have become more integrated in a globalized world. For example, though the Mexican banking crisis was quite similar to the East Asian banking crises, the tight monetary policy worked well for Mexican but not for the East Asian.

2.2 Banking System in Malaysia

The banking system in Malaysia comprises of Commercial Banks, Islamic Bank, Finance Companies, Merchant banks, Discount Houses and Money and Foreign Exchange Brokers. As at 31 December 1999, they are 35 Commercial Banks included Bank Islam, 23 Finance Companies, and 12 Merchant Banks (Appendix: Table A4, page iii and iv). Meanwhile, they are 7 Discount Houses and 8 Money and Foreign Exchange Brokers as at 31 December, 1998 (BNM Annual Report, 1998). They are registered and supervised by the Central Bank, Bank Negara Malaysia. In October 1989, the Banking and Financial Institutions Act (BAFIA) was enforced.

2.2.1 The Commercial Banks

In 1959, there were 26 commercial banks, 18 were foreign-owned with 99 branches operating in Malaysia (Money and Banking in Malaysia, 1994). They expanded to 35 of which 22 are domestic commercial banks and 13 foreign banks as at 31 December 1999 (BNM Monthly Statistical Bulletin, December 1999). The decline in the number of foreign financial intermediaries were due to the restriction on the issuance of bank licenses by the Central Bank and the merging and restructuring of foreign banks (for example, the closure Bank of China in 1959) (Rubi, 1998).

In terms of total assets, the commercial banks are the largest component in the Malaysian banking system. In 1998, they accounted for 59% of the total financial assets in the banking system (BNM Annual Report, 1998). Total asset of commercial banks in 1998 declined 7.3% compared to previous year (BNM Annual Report, 1998). The banks accept deposits from individuals and institutions and make loans subject to certain constraints laid out by the BNM.

In 1985-86, the commercial banks suffered financial distress due the economic recession. After a decade, in the mid 1997, they suffered financial distress again (BNM Annual Report, 1998). The indiscriminate lending activities during the boom times and poor risk management landed a few of them with large NPLs. It will be discussed with more details in Chapter 3. The previous crisis caused four commercial banks to be rehabilitated through capital injection by BNM (BNM Annual Report, 1998). For the 1997 crisis, the government adopted four approaches to strengthen the banking sector which included a merger programme, the setting up of an asset management company, Danaharta; a special purpose vehicle, Danamodal; and the CDRC (BNM Annual Report, 1998).

2.2.2 The Finance Companies

As at 31 December 1999, there are 23 finance companies in Malaysia. The number had been reduced from original 39 (in 1997) due to the merging and restructuring directed by the government in April 1998 (The Star, 8 April 1998).

The finance companies are the second largest group of deposit taking institutions in Malaysia after commercial banks. They can accept savings and fixed term deposits but prohibit from neither offering current account to the general public nor dealing in gold and foreign exchange.

The finance companies were badly affected during the 1985-86 recession and the 1997 financial crisis. The finance companies recorded a pre-tax loss of RM2,150 million in 1998. Total assets declined 23.2% between 1997-1998 (BNM Annual Report, 1998).

2.2.3 Merchant Banks

There are twelve merchant banks in Malaysia and three of the merchant banks are foreign-owned in 1999 (BNM Annual Report, 1998). The merchant banks perform the function of issuing house, provide underwriting facilities for new issues, and provide investment portfolio management services. They are also actively involved in the primary and secondary money market and trade in money market instruments (Money and Banking In Malaysia, 1994).

The merchant banks were badly hit by the 1997 crisis. Total asset and pre-tax profit declined 13% and 200% respectively between 1997-1998 (BNM Annual Report, 1998).

2.2.4 Discount Houses

The discount houses were established to specialize in short-term money market operations. Their role is to mobilise surplus short-term funds in the market for investment in Malaysian Treasury bills, Malaysian Government Securities (MGS), bankers acceptance (BAs), negotiable certificates of deposit (NCDs), Cagamas bonds and Floating Rate Negotiable Certificates of Deposit (FRNCDs), as well as to provide an active secondary market for these securities (Money and Banking in Malaysia, 1994:215). They are also known as "keepers of liquidity" because they are the only financial institutions that are allowed to accept corporate deposits for less than one month in maturity.

Total resources of the seven discount houses declined by RM970 million or in 1998, compared with an increase of RM3.8 billion or 22% in 1997 (BNM Annual Report, 1998). The bulk of the decline was due to lower deposits placed by commercial banks with discount houses.

2.2.5 Money and Foreign Exchange Brokers

The money and foreign exchange brokers are intermediaries for short-term funds. The main difference between the two is that in the money market trading is conducted in domestic currency, whereas in the foreign exchange market trading is conducted in foreign currencies. The price quoted in the money market is the rate of interest and in the foreign exchange market, the rate of exchange (Money and Banking in Malaysia, 1994:341).

The money market comprises the inter-bank market and the market for Malaysian Government Securities (MGSs), Treasury Bills, Cagamas Mortgage Bonds, Bankers' Acceptances, Negotiable Instruments of Deposit (NIDs), Repurchase Agreements, Government Investment Issues and Bank Negara Bills. The major players are Commercial Banks, Merchant Banks, Finance Companies, Discount Houses and Cagamas Berhad.

The foreign exchange markets comprises of currency notes and coins, telegraphic transfers (T.T.s), bills of exchange and bank drafts denominated in foreign currency. The authorised dealers in foreign exchange under the Exchange Control Act, 1953, are the Commercial Banks and Bank Islam Malaysia. The licensed moneychangers under this Act are allowed to buy and sell foreign currency notes and coins. Finance companies have also been allowed, subject to the Act, to provide money-changing facilities, including the sale of travellers' cheques since November 1991.

Following the imposition of the selective exchange control measures and the fixing of the Ringgit exchange rate against the US dollar in September, 1998, the average daily volumes of interbank foreign exchange transactions declined by 32.1% from RM5.4 billion in 1997 to RM3.7 billion in 1998.