FINANCIAL POSITIONING OF COMMERCIAL BANKS AND ITS IMPLICATIONS TO BANK MANAGEMENT

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INTRODUCTION

The banking system in Malaysia, like many of the banking systems in the developing countries, emerged to facilitate trade transactions either domestically or cross border and as a tool used by the authority to foster the country's economic growth and development through the process of financial intermediation. While market forces influence the development of individual banks, implementation of government policy will mean introduction of regulatory provisions in the banking system that in turn regulates banks activities and determines banking structure. In addition, changes in the capital formation spurred by the active management of the monetary and fiscal policies, have realigned the supply and demand for capital. A greater emphasis placed into accelerating the growth of the manufacturing and industrial sectors has raised the demand for the longer term funds. At the same time efforts made to manage the interest rate as well as the exchange rates has led to a higher cost of funds, particularly for the longer terms. In view of these developments, banks are expected to reposition their asset-liability structure in order to be in line with the supply and demand for capital. In this paper, we will examine the way banks reposition their assets and liabilities. Implications of these repositioning exercise on the management and profitability is explored.

DEVELOPMENTS IN THE MALAYSIAN BANKING SYSTEM

In brief, the history of Malaysian (then Federation of Malaya) banking development dates back to more than 130 years ago when the first commercial bank - the Chartered Mercantile Bank of India, London and China - was established in 1859. Later, in 1875, the Chartered Bank opened its first branch in Penang, then in 1888 followed by a branch in Kuala Lumpur and Taiping. Much of the early banking activities were in the finance of trade, working capital and foreign exchange remittances with London, India and China and predominantly relating to non-ferrous metals in particular tin. A rise in the international trades in rubber and tin in the early 1900's saw the banking system continuing to develop with more branches of foreign banks being opened and local banks being established by independent traders. Today, there are 38 commercial banks, 47 finance companies, 12 merchant banks, 7 discount houses and 8 money and Forex brokers operating in the system together with other non-bank institutions.

In 1959, with the recommendation of the World Bank Mission and under the advise of Sir Sidney Caine and Mr. G.M. Watson (both are British officials) the Central Bank (Bank Negara Malaysia - "BNM") was established under the Central Bank of Malaya Ordinance, 1958. The primary purpose of the establishment was to take over the power for issuing

currency and notes from the Currency Board. The Central Bank of Malaya Ordinance, 1958 also empowered the BNM to supervise the activities of commercial banks. Later, in 1988, with the amendments of the Insurance Act, 1963, together with the amendments of the Banking Act, 1973, the BNM was empowered over all the financial institutions in Malaysia, including finance companies, merchant banks, money market operations (brokerage houses) and insurance companies.

While market forces influence the development of individual banks, much of the developments in the Malaysian banking system may be attributed to the role played by the BNM in implementing the power granted by Parliament. These powers include the issue of banking licenses and controls on banking asset and activities. The early years of modern banking (1957-1967) saw the BNM concentrating on developing the financial structures. In this period local commercial banks were encouraged to establish and develop. New banking licences were issued primarily for local banks (foreign ownership participation is allowed but limited to a small percentage). By the end of 1988 number of locally established banks outnumbered foreign banks by 22 to 16. The local banks with better access to domestic deposits dominated the market. By 1988, three locally established banks held 40.6 percent of the total commercial bank assets. In addition, other development finance institutions were also established alongside commercial bank branches, which were growing into non-urban areas. Money and capital markets were also developed related to trading Treasury Bill and Government securities. Additionally, in October 1987, a national (government owned) mortgage corporation (Cagamas Berhad) was established with the primary function of acting as an intermediary between the primary lenders of housing loans and investors of long-term funds and to play the role of credible issuer of mortgage securities.

As the economy grew in the late 1970's through to the mid-1980's, the process of intermediation accelerated. At the same time, the BNM was becoming more direct in its approach to monetary and economic policy. Such efforts included those directed to promote the growth of financial services (e.g. consumer oriented banking as opposed to only institutional banking), to foster a "development-oriented" approach to banking (such as the adoption of term lending in place of overdrafts), and the development of new methods and procedures to ensure that credit was readily available to "priority" sectors or special groups. Internationally, the BNM achieved greater independence in its controls of monetary activities when in 1973, with the agreement of the other governments, it formalised the separation of common financial facilities and institutions with Singapore (such as the stock exchange) and the termination of currency (as well as bank funds) interchangeability arrangements with Singapore and Brunei. These developments was expected to open up more opportunities for the commercial banks to expand their foreign exchange operations and to equip the BNM with more flexibility to combat inflation (BNM, 1989:51).

Towards the late 1970's the banking system was experiencing major changes. First, came the abolition of the system of administered interest rates for the commercial banks, the so-called "deregulation of interest rates". From October 1978, the banks have been allowed to determine the rates of interest which they would offer for deposits and the prime lending

rates (Prime rate) on their loans and advances. Prior to that, the BNM determined the maximum borrowing rates on bank deposits and the minimum (prime) lending rate for bank credit. However, the BNM retained the power to determine the maximum rates on loans offered to special groups or priority sectors. Interest rates for deposits with the finance companies were freed from regulation from August 1973. At almost the same time, the discount rate on Government Treasury bills was determined by open tender. This deregulation was design to bring in more competition in the banking industry.

However, the policy of interest rate intervention was reintroduced in 1987. This followed the new system of rate determination for the commercial banks introduced in November 1983. Under the new system, all lending rates, except those extended to the priority sectors, were anchored to a bank's declared base lending rate (BLR). Only the interest margin would be fixed depending on the borrower's credit standing, and the lending rate charged would move in line with a bank's BLR. The automaticity introduced into the system was intended to remove much of the commercial bank's discretion as to who should benefit or be penalised, and to what extent, when interest rate changed (BNM, 1989:59). Previously, the banks did not always change their lending rates in line with movement in BLR and deposit rates. In 1982 and 1983, for example, the benefits of declining deposit rates were not passed on fully to the borrowers, with the results that the gross lending margins of the bank increased at a time of widespread slack in the economy. However, the new arrangement did not improve the situation in 1986-87, when despite a sharp decline in deposit rates, lending rates remained high. Therefore, to bring about a narrowing of the interest margin between deposit and lending rates and to ensure that the reduction in the cost of funds was passed on to the borrowers, the BNM issued guidelines in September and October 1987, stipulating that the maximum lending margin for normal loans should not exceed four percentage points above the BLR. In addition, commercial banks were required to reduce their BLR to a maximum spread of 0.5 percentage point above BLR of the two lead banks. At the same time, the penalty rate imposed by the banks and finance companies on existing delinquent loans was reduced to a maximum of one percentage point.

In addition, in order to prevent competitive bidding from raising unduly the level of deposit rates during the tight liquidity period of 1985-86, the commercial banks and finance companies were required in October 1985 to peg their deposit rates (for deposits of up to 12-month maturity) to the interest rate of the two lead banks. The maximum differentials set between deposit rates of the lead banks and the other banks was 0.5 percentage point and the finance companies, 1.5 percentage point. The pegged interest rate arrangement was dismantled in February 1987 when the liquidity returned to the market. The formalisation of 'market leadership' role, as this suggests, might have material effects on bank performance as competition will focus on market leaders (banks with the largest assets).

The passage in the amendments of Banking Act 1973 and Finance Companies Act, 1969, has further empowered the BNM to affect the operations of commercial banks and finance companies. In this case, the BNM may determine the minimum liquid asset requirements and the composition of liquid assets. This includes the holding of liquid assets and lending to 'priority sectors' primarily small enterprises, house buyers and the newly emerged and inexperienced business groups. At September 1988, lending to these groups accounted for

slightly more than 29 percent for commercial banks (BNM, 1989:188) and slightly more than 31 percent for finance companies (BNM, 1989:219).

BANKING STRUCTURE AND THE FINANCIAL INSTITUTIONS

Since the nature of banks is to provide financial intermediation their main activities therefore, fall basically into two, the collection and distribution of funds. As such bank business strategy largely involved competing in both the deposit and the loan markets since a regular supply of deposits and a steady demand for loans will provide stable operating environment. Unstable market, however, will disrupt the established operating environment and may affect bank performance. Besides the macroeconomics conditions, increased competitions among financial institutions is also a source of market instability. There are three types of major financial institutions involved primarily in the intermediation process, and these are commercial banks, finance companies and Merchant banks.

Table 1 shows the aggregate market share of the three major financial intermediaries. These three types of institutions together in 1987 accumulated a sum of MR$112.3 billion of assets. The merchant banks, first established operations in 1973, held the smallest share (in 1987, 5.6 percent of total combined assets) with the commercial banks holding 75.4 percents and finance companies 18.0 percents. The small share was primarily due to the specialised market they are forced to serve as a result of the regulations. Their main lending and borrowing activities involved only the corporate clients and in stipulated minimum amount, as opposed to the commercial banks and finance companies which are free to deal with both the corporate and retail customers. Apart from that the merchant banks are required to maintain a relatively high minimum level of fee-derived income, as opposed to commercial banks and finance companies activities which are primarily interest-based income. Thus, a large portion of their activities is concentrated in fee-based activities which include funds and investment management as well as corporate advisory services.

Table 1: Total assets of major financial institutions (figures are RM mil)

	1970	%	1975	%	1980	%	1987	%
Commercial banks	4460.2	89.4	10811.2	83.0	32186.1	80.4	84720.2	75.4
Finance companies	531.0	10.6	1683.9	12.9	5636.1	14.1	21266.9	18.9
Merchant banks	na	-	530.9	4.1	2228.7	5.6	6340.0	5.6
Total	4991.2	100.0	13026.0	100.0	40050.6	100.0	112327.1	100.0

Source: BNM Money and Banking in Malaysia (1989); BNM reports, various issues
na = not available

The distinctions in their major markets and activities therefore underlines the differentiation between merchant banks and the other financial institutions. As such, merchant bank activities seem to be quite distinct and will unlikely to compete in the same market as commercial banks and finance companies. Our interest, therefore, is focused on the commercial banks and finance companies. Finance companies and commercial banks

activities, however, becoming indistinguishable which suggest that analysis on bank performance should include both types of institutions together.

The only distinction which remained between commercial banks and finance companies is the ability of commercial banks, provided by the regulation, to accept current accounts (demand deposits). Since banks are prohibited from paying interest rates on these accounts, this provides a cheap source of funds and has been thought as the main advantage of commercial banks over their rivals. However, technological development and market sophistication seem to have undermined this advantage. As indication, in 1987, demand deposits provided less than one-sixth of the total funds acquired by commercial banks compared to more than 30 percent in 1970, and the trend is declining (see Table 2). A number of reasons can be offered to explain this trend. First, the introduction of automated teller machines (ATMs) since 1981 has granted customers convenient access to cash thus providing finance companies the flexibility in its deposit products which make them able to attract customers to switch to savings accounts. For instance, by the end of 1988, a network of 57 ATMs was available to the finance companies. Computerisation too has enhanced other savings products, particularly when interest rates are credited on daily basis. Secondly, the development of money market for short-term investments has encouraged active funds management by corporate customers, who have become accustomed to moving funds from current account balances to short-term money market funds. Thirdly, the introduction of automated cheque clearing system (from 7-day to same-day clearing) has also reduced the 'float' that could provide cheap source of funds to the commercial banks. Finally, development towards a lesser relationship banking has promoted instability in the supply of demand deposits and made it more expensive to maintain current accounts customers, thus causing some banks to put less emphasis on this area.

Table 2: Trends in commercial banks deposits mix including NCD (RM Mil)

	1970	%	1975	%	1980	%	1987	%
Demand deposits	1068.1	31.5	2197.4	27.1	5326.2	22.0	9017.3	15.7
Fixed deposits	1729.2	51.0	4318.9	53.3	13816.8	57.0	30427.0	52.6
Savings deposits	594.5	17.5	1583.2	19.5	4183.3	17.2	10226.0	17.8
NCD issued	na	na	na	na	931.1	3.8	7295.1	12.7
Other	na	na	na	na	na	na	642.0	1.1
Total	3391.8	100.0	8099.5	100.0	24257.4	100.0	57607.4	100.0

Source: BNM Money and Banking in Malaysia (1989)
na = not available

Banks (as well as finance companies) can expand their operations through a number of strategies. They can compete for growth in the large (corporate) market or else with medium corporate or small business. Large customers usually demand competitive pricing which translate into small margin. On the other hand it is necessary to invest in branches in order to attract a large customer base in mid corporate or small business lending. Table 3 shows comparative statistics for commercial banks and finance companies. In 1987 there

were 38 commercial banks and 48 finance companies operating in the Malaysian market with 1313 branches between them. However, in terms of growth in the number of branches finance companies were growing at a slightly faster rate than commercial banks, suggesting that a strong rivalry in the intermediation market for banking services and deposits. Similarly, slower growth in terms of deposits and loans in commercial banks than the finance companies further indicates the growing competition the commercial banks were facing. That is the commercial banks are not only have to contend with the traditional banks but also with non-bank institutions, namely the finance companies, some of which have large resources, similar competence and asset structure as the commercial banks.

Table 3: Comparative statistics of commercial bank and finance companies

	Commercial banks	Finance companies
Number of institutions (End 1987)	36	47
Number of branches (End 1987)	863	450
Average growth for assets (1970-87)	19.25%	24.56%
Average growth for deposits (1970-87)	17.45%	25.28%
Average growth for loans (1970-87)	20.50%	26.48%
Average growth for number of branches (1970-87)	5.73%	6.10%
No. of inst. with assets > MR$1Bil (End 1987)	17	7

Figures are calculated from BNM (1989)

It is also apparent from Table 3 that in 1987, 7 of the finance companies owned assets above RM$1 billion while 17 of commercial banks were in this asset size. This suggests that the finance companies compete not only in the deposit but also in the assets market. The fact that the finance companies have successfully repositioned their lending business into the commercial sectors, as shown in Table 4, may support this inference. In 1987 slightly more than 60 percent of finance companies loans are to the commercial sectors compared to about 52 percent in 1970.

Table 4: Trends in finance companies lending business mix (in MRM million)

	1970	%	1975	%	1980	%	1987	%
Commercial sectors	128.4	51.9	546.6	59.9	2056.4	57.7	8136.5	60.1
Private individuals	119.2	48.1	367.0	40.1	1508.0	42.3	5414.4	39.9
Total	247.6	100.0	913.6	100.0	3564.4	100.0	13550.9	100.0

Figures are calculated from BNM (1989)

Apart from increased competition for loans and deposits, other development in the markets may affect also affect bank operation. One such development is the emergence of new industries and demise of the existing ones. These changes are predicated by the government policy towards developing secondary industries as the economy base to replace the

traditional agricultural and primary industries. As such manufacturing and services become increasingly important while growth is stagnant in the agricultural sector and almost disappearing for the non-ferrous metal industry. In the next section we will analyze these changes systematically (statistical analysis) to identify with confidence these sectoral changes.

ASSETS-LIABILITIES REPOSITIONING OF COMMERCIAL BANKS

A clustering methodology is applied to examine whether the funding structure and the assets structure of the banking industry have changed over the period. The rationale is that as development in the financial markets accelerates uncertainty in capital caused by disintermediation will increase especially when capital is mobilised between the money and capital markets. A structural change in the supply of funds is expected to have a corresponding effect on asset structure, as the asset-liability management theory suggests. When market is liquid banks are expected to earn higher profits as interest rates are low and volume is large. On the other hand when money supply is tight then marginal cost of funds rises which will affect margin and profits. Any attempt by banks to maintain interest margin would lead to a worsening problem of non-performing and defaulted loans.

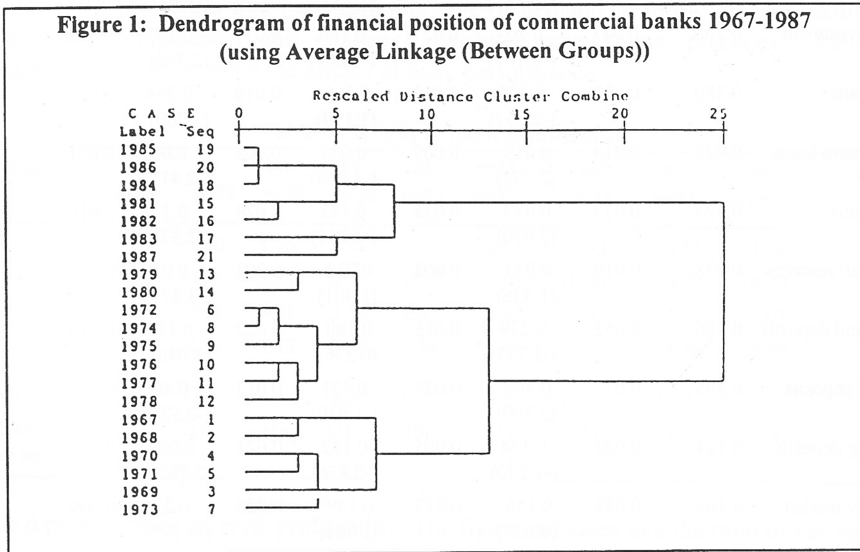

Figure 1: Dendrogram of financial position of commercial banks 1967-1987 (using Average Linkage (Between Groups))

In order to determine if structural changes occur in the funding and assets portfolio structure, a cluster methodology is applied on assets and liability position data. These data covering the period between 1967-1987 were collected from Central Banks reports and publications. The proportion of assets in the category was calculated for each year over the

period. These are classified into (1) Cash and bank balances (2) Short term investment (3) Securities investment (4) Short term loans (5) Medium term loans (6) Long term loans. Similarly, the proportion of items in each liability category was calculated over the period, and these include (1) Capital and reserves (2) Demand deposits (3) Fixed deposits (4) Savings deposits (5) Money market (interbanks) funds. As before these variables were standardized as z score (mean=0; s.d.=1).

Cluster analysis results are shown in Figure 1. The dendrogram indicates three clusters 1967-1974, 1975-1982, and 1983-1987 and are labelled Period 1, Period 2, and Period 3, respectively.

Table 5: Financial positioning of Commercial Banks 1967-1987 (Cluster means of financial variables as proportion of total assets)

	Entire Period (1967 - 1987) n=21		Period 1 (1967 - 1974) n=8		Period 2 (1975 - 1982) n=8		Period 3 (1983 - 1987) n=5	
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D
Cash and bank balance	0.056	0.018	0.072 (-2.086)**	0.016	0.054 (0.324)	0.008	0.035 (2.535)**	0.005
ST investment	0.130	0.030	0.132 (-0.161)	0.024	0.110 (1.575)	0.274	0.158 (-1.911)*	0.023
LT investment	0.166	0.047	0.204 (-2.105)**	0.027	0.166 (-0.009)	0.037	0.105 (2.792)**	0.012
ST loans	0.380	0.030	0.409 (-2.557)**	0.018	0.366 (1.190)	0.018	0.354 (1.760)*	0.021
Med-term loans	0.028	0.014	0.013 (2.772)***	0.009	0.033 (-1.016)	0.005	0.043 (-2.417)**	0.001
LT loans	0.124	0.077	0.039 (2.970)***	0.035	0.153 (-1.011)	0.024	0.215 (-2.572)**	0.016
Capital/ reserves	0.038	0.010	0.033 (1.335)	0.003	0.032 (1.401)	0.004	0.055 (-3.471)***	0.004
Demand deposits	0.186	0.052	0.239 (-2.737)**	0.016	0.180 (0.336)	0.022	0.112 (3.046)***	0.014
Fixed deposits	0.398	0.032	0.369 (2.209)**	0.025	0.421 (-1.930)*	0.013	0.406 (-0.524)	0.031
Saving deposits	0.124	0.022	0.134 (-1.270)	0.005	0.132 (-0.876)	0.021	0.094 (2.762)**	0.015
Money market funds	0.165	0.038	0.156 (0.625)	0.017	0.139 (1.765)*	0.026	0.221 (-3.199)***	0.009
			liquid/ high yield		low cost/ active trading		long term/ low yield	

Note: Significance of difference from mean of entire period in the sample:
* p<0.1; ** p<0.05; *** p<0.01. Parenthesis denotes t-value.

Table 5 presents results of t-test. Period 1 (1967-1974) indicates a liquid assets position, coupled with a short term funding. Assets were in short term loans, short term investments and securities investments. Financing source were primarily in demand deposits and savings. Capital sources -- equity, subordinated and normal debts -- was significantly below the average of the entire period. Period 2 (1975-1982) seems to be the "average position" with financial structure are not significantly different from the average of entire period. Period 3 (1983-1987) represents a significant change in financial structure with lending significantly higher in long term, and short term lending below the average of entire period under study. The financing structure also changed towards money market activities and less reliance on demand and savings deposits. Own funds, in terms of equity and reserve also increased significantly.

SUMMARY AND CONCLUSIONS

To summarise, we have outlined the changes in the Malaysian banking environment. We have identified regulatory changes with respect to interest rate deregulation and reregulation as well as bank asset structure determination. We also showed increasing competition in both the loan and deposit markets predicated by advancement in technology (ATMs) as well as the growing customers sophistication in the needs for banking services. We have also shown the structural changes taking place in the economy base. These changes form the forces that pose different sort of demand in terms of bank skills and management competence, and challenge existing management practices. With this background we will examine the effects of bank performance.

Table 6: Trends in bank profitability

Year	78 n=29	79 n=29	80 n=29	81 n=32	82 n=32	83 n=32	84 n=33	85 n=33	86 n=33
Mean (%)	1.29	1.30	1.76	1.46	1.37	1.57	0.93	-0.52	1.52
Low (%)	-3.60	-4.91	-2.27	-0.13	0.24	-6.03	-10.36	-23.37	18.30
High (%)	4.75	4.71	4.31	3.19	2.61	6.42	3.33	2.28	2.03
S.D	1.26	1.51	1.17	0.69	0.54	1.64	2.25	4.76	5.18
% with	6.9	3.5	3.5	3.1	0	3.1	15.2	25.0	33.3
-ve ROA (actual number)	(2)	(1)	(1)	(1)	(0)	(1)	(5)	(8)	(11)

Table 6 presents data on bank profitability. The figure indicates that the ratio of net income to assets, or return on assets (ROA) first increased, on average, in the late 1970s and then has fallen, in the 1980s, with a negative returns in 1985 and 1986. What stands out as a phenomenal departure from past data is the number of banks with negative ROA, which rises steadily from one bank in 1983 to 11 in 1986. The rise in the number of negative earners could be well related to the changes in the asset-liability structure which was pre-empted by the changes in the environment. These issues could be further investigated in order to determine their relationship.

NOTES

[1] The method was also used in Cool & Dierickx (1986) study of US pharmaceutical industry. The aim of this method is to identify the "years" with similar characteristics, such as the combination of assets and liabilities. In this method the "years" are grouped so that each year is very similar to others in its group or cluster. For example, the years with high fixed deposits will be grouped together while those with low fixed deposits will be in another cluster. The resulting clusters of years, or periods, should then "exhibit high internal (within cluster) homogeneity and high external (between cluster) heterogeneity. Therefore, if the classification is successful, the objects within clusters will be close together when plotted geometrically and the objects in different clusters will be far apart" (Hair, Anderson & Tatham, 1990:294)

REFERENCES

Abell, D.F. (1980). *Defining the business*, London: Prentice-Hall.

Abell, Derek & J. Hammond (1979). *Strategic Market Planning*, Engelwood Cliff: Prentice-Hall.

Bettis, R.A. & V. Mahajan (1985). Risk/return performance of diversified firms, *Management Science,* Vol. 31, No. 7 (July), 785-799.

Bowman, J. (1970). A risk/return paradox for strategic management, *Sloan Management Review*, 21, 3 (Spring), 17-31.

Cool, K., Dietrickx, I. & D. Jemison (1989). Business strategy, market structure and risk-return relationships: a structural approach, *Strategic Management Journal*, Vol. 10. No. 6, (Nov-Dec), 507-522.

Cool, K. & Dietrickx, I. (1986). :Negative risk-return relationships in business strategy: Paradox or truism?, *Working Paper no. 86/27*, INSEAD.

Guttentag, J.M. & E.S. Herman (1967). Banking structure and performance, *Bulletin*, New York University (February).

Hair, J.F., R.E. Anderson & R.L. Tatham (1990). *Multivariate Data Analysis With Readings*, New York: Macmillan.

Hambrick, D.C. (1983a). An empirical typology of mature industrial product environments, *Academy of Management Journal*, 253-276.