

THE MALAYSIAN ECONOMY AND THE MONETARY POLICY:

A Historical Review

1.1 Introduction

This chapter focuses broadly on the issue of monetary policy and its developments, including its implications during pre- and post-liberalisation periods in Malaysia. The pre-liberalisation period is defined from the year Malaysia gained her independence from Britain in 1957 until the end of 1978 when domestic interest rates were deregulated. The post-liberalisation period (post-1978) is an era of financial reforms and is designed to enhance domestic monetary policy control in achieving economic growth. A chronology of events is outlined in Table 1.1.

In view of the above introduction and the impact of financial liberalisation on the Malaysian monetary policy, in particular, this chapter is designed to highlight its policy implementations and related issues for the past 38 years as follows. Section 1.2 discusses key economic indicators as a basis of discussion for the subsequent sections. Section 1.3 highlights the present setting of the Malaysian financial structure including an assessment of assets of the financial sector and its monetisation and financial deepening. Section 1.4 presents issues on money, interest and credit. Section 1.5 focuses on the Malaysian monetary policy stance during the pre- and the post-liberalisation periods. Finally, Section 1.6 offers several concluding remarks.

Table 1.1: Malaysia: Policy Package and Reform

A. General Policy Package

pre-liberalisation	post-liberalisation
<p>1958-70: launched market-led development policy</p> <p>1968-85: promotion of export-oriented policy</p> <p>1965-70: launched First Five-year Malaysia Plan</p> <p>1971-75: Second Five-year Malaysia Plan</p> <p>1976-80: Third Five-year Malaysia Plan</p> <p>1970: Establishment of Free Trade Zone</p>	<p>1980-90: heavy industrialisation push</p> <p>1983: beginning of Privatisation Policy</p> <p>1986-90 adjustment and liberalisation</p> <p>1986-95: Industrial Master Plan</p> <p>1981-85: Fourth Five-year Malaysia Plan</p> <p>1986-90: Fifth Five-year Malaysia Plan</p> <p>1991-95: Sixth Five-year Malaysia Plan</p> <p>1991: Launched Vision 2020 / New Development Policy</p> <p>1996-2000: Seventh Five-year Malaysia Plan</p>

B. Financial Liberalisation and Monetary Policy Reform

monetary policy reform	exchange rate & capital flow	financial system reform
<p>1978: deregulation of domestic interest rates</p> <p>1975 Quantitative control on credit was abolished but maintained credit to selected sectors</p> <p>Since 1987, sales & purchases of government and central bank securities have become increasingly important</p> <p>1991: removal of the Base lending rate that was introduced in 1983</p>	<p>1972: adoption of US dollar as intervention currency</p> <p>:1973: conversion from fixed to a flexible exchange rate regime</p> <p>:virtually, since 1978 there has been no restriction on capital inflows</p>	<p>1959: establishment of Central Bank</p> <p>1960: establishment of Malayan Stock Exchange (equity market) and the birth of Malaysian Government Securities</p> <p>1963: establishment of discount houses</p> <p>1973: Malaysia and Singapore agreed to terminate their common currencies and at the same time the stock market was disjointed</p> <p>1978: the birth of banks NCD</p> <p>1980s: the development of private debt securities market</p> <p>1990: actual splitting of The Kuala Lumpur Stock Exchange and Singapore Stock Exchange</p> <p>1990: establishment of the international offshore financial centre</p> <p>1997: establishment of future options market</p>

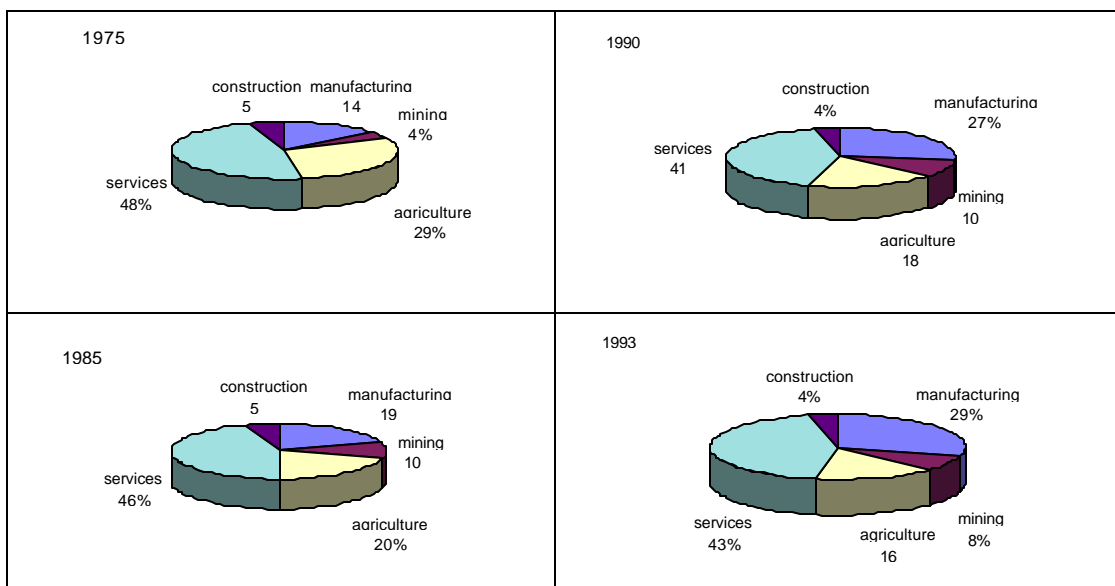
Source:

World Bank (1993), Appendix 3.1, pp. 150-151.
Tseng and Corker (1991) IMF, Occasional Paper 84, Appendix 1, pp. 35-41.
Malaysia, Economic Report, Ministry of Finance Malaysia, various issues.
Bank Negara Malaysia, Annual Report, various issues.

1.2 The Malaysian Economy: An Overview

Since Independence in 1957, the Malaysian economy has undergone rapid structural changes. As a result of profound emphasis on the manufacturing sector in the late 1960s and the establishment of a Free Trade Zone Area (FTZ) in the early 1970s, the economy has gradually turned from a trade-oriented economy based on agriculture commodities to a more diversified export-oriented country. Thus by 1993, the manufacturing sector accounted for nearly 29% of total *GDP*, compared to only 14% in 1975 and 19% in 1985. By contrast, the contribution of the agriculture sector dropped markedly from 29% in 1975 to 16% in 1993, while the contribution of the services sector remained stable at an average of 43% during the same period (Economic Report, 1994; pp.1-9). See, Chart 1.1 below.

Chart 1.1: Malaysia: Gross Domestic Product By Industry of Origin
(share of GDP (%))



Source: Malaysia, *Economic Report*, various issues

In terms of export structure, the contribution of manufactured products¹, and its share to total export value had risen sharply from 11% in 1970 to nearly 68% in 1993. During the same period, the contribution of major agriculture commodities² drastically dropped from 78% to 20% (Quarterly Economic Bulletin, BNM, Dec. 1994, pp. 74-93; and International Financial Statistics Yearbook 1995, p. 517, line 90c).

In line with the implementation of large-scale industrial programmes, as well as the large influx of foreign direct investment in the late 1980s and the early 1990s, the structure of imports also changed. For example, import of investment goods³ for the manufacturing sector rose sharply, from RM 1,097.2 million in 1970 to RM 47,684.5 million in 1993, and import of intermediate goods rose from RM 1,515.1 million in 1970 to RM 50,123.4 million in 1993 (BNM, 1994).

Presently, Malaysia is classified as a newly industrialised developing country (NIC) and is looking forward to being classified as a developed country by the year 2020. In line with this aim, the government has launched various new programmes as an extension of the previous policies, namely the Seventh Malaysia Plan as part of the New Development Policy, reinforcing the offshore financial centre and further modernising the capital market, in particular, as well as the financial sector in general, and, in addition, urging local firms to invest overseas in any area where they have comparative and technological advantages.

¹ Refer to Standard Industrial Trade Classification (SITC) 1+5+6+7+8. (BNM, 1994).

² Comprising rubber, tin, palm oil, saw logs, sawn timber and crude petroleum.

³ Refer to finished goods used for investment purposes, such as plant and machinery.

1.2.1 General Economic Indicators

As shown in Table 2.2, during the period 1957 - 1994 the yearly average growth rate of real *GDP* was quite favourable, at about 7.4%. However, the prolonged world economic recession, which began in 1979 and continued into the early 1980s slowed down the Malaysian economy considerably during the mid 1980s. For example, real growth rate of *GDP* fell by 2.8% in 1985 and shrank further in the following year by 8.4%.

As a result of the first world oil shock, that of December 1973⁴, the real growth rate of *GDP* in 1974 declined to 4.8%, compared to 18.3% in 1973; and more severely in 1975 when output fell by 6.5%. This event, eventually, had two major impacts on the Malaysian economy. First, since Malaysia is a trade-oriented country, it would be natural to expect the real growth rate of *GDP* to decline as export demands fall. The second effect would be an expected increase in the general price level due to higher imported goods prices as reflected by high shipping costs. Furthermore, as Malaysia was at the time at the beginning stage of its industrialisation programme where the import of investment goods is essential for the manufacturing sector, cost-push-inflation may have been one of the contributors for high inflation in 1974.

During the second oil price shock in 1979, however, Malaysia was not badly affected but in fact gained from this event when its export value of crude oil increased almost twofold, from RM 2.247 billion in 1979 to RM 4.2135 billion in 1980 (QEB, BNM, Dec. 1994, p. 88, Table VII.3). Hence, in 1979, the inflation rate was recorded at a low of 3.6%. For the

overall trend (see Table 2.2), the yearly average inflation rate over the period 1974-1978

was recorded around 6.7%, and this trend was much higher than for other sub-periods.

Nonetheless, over the whole period spanning 1957 to 1994, the average annual inflation rate

was relatively low at 3.0%. As regards to the unemployment rate, it was recorded at an

average of 5.3% over the period 1985-1994 with the lowest rate in 1994 at 2.9%.

⁴ OPEC's decision to increase the crude oil price from below US\$ 3 to US\$ 9 per barrel in December 1973 triggered the first world oil shock.

Table 1.2 Malaysia: Selected Economic Indicators

Period	1957-1967		1968-1973		1974-1978		1979-1988		1989-1994		average 1957-1994
average annual growth rate of real GDP (%)	6.1		8.5		8.4		5.5		8.6		7.4
average annual inflation rate (%)	0.3		2.7		6.7		3.7		3.6		3.0
average of export to GDP ratio ^b	0.49		0.44		0.51		0.59		0.78		0.55
average of import to GDP ratio ^b	0.46		0.42		0.50		0.59		0.78		0.55
average overall balance of payments (percentage of GDP) ^c	0.57		2.11		2.92		1.71		5.86		2.63
Year	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1985 - 1994
unemployment rate ^a	6.9	8.3	8.2	7.2	6.3	5.1	4.3	3.7	3.0	2.9	5.3

Notes: ^a data before 1985 unavailable.

^b period covered 1959 - 1993.

^c period covered 1961 - 1993.

Source: Economic Report, Ministry of Finance Malaysia, various issues.
 Quarterly Economic Bulletin, BNM, various issues.

1.2.2 Government Finance and Borrowing Position

The pre-liberalisation and post-liberalisation periods show that the government budget positions have been in deficit due to massive government involvement in many development projects or projects related to fiscal developments. The position is shown clearly in Table 1.3, particularly during the 1980s. For example in 1980, government deficit amounted to 14.2% of *GNP* and increased further to 19.88% in 1981; and gradually declined to 18.72% and 14.01% in 1982 and 1983, respectively.

The 38 years of post-Independence show that the government budget position has been critical, with an exception for the three years 1960, 1993 and 1994. The reasons explaining the overall deficit during the 1980s include high investment in development programmes, the large size of the public sector (over 850,000 workers), high debt servicing on the previous operating expenditure, and the large size of public enterprises which are not viable economically. These conditions have required the government to increase its borrowing either domestically or internationally.

By the mid-1980s the government had taken various measures to rectify this problem, such as downsizing the public sector and privatising some of the public enterprises and the government departments. At the same time, the financial sector was further modernised to provide a domestic source of funds for private investments. Other strategies included promoting trade with the South and Pacific countries, broadening the export products in order to increase the export earnings, and working hand-in-hand with the private sector. As

a result, the government budget position recorded a surplus in the two concurrent years 1993 and 1994.

Table 1.3: Government Budget Positions, 1959-1994

Year	overall deficit (-) / surplus(+) (RM million)	% of GNP	source of finance (RM million)		
			net domestic borrowing	net external borrowing ^a	change in assets ^b
1959	- 59	1.15	148	26	- 115
1960	+ 96	1.42	159	26	- 281
1961	- 30	0.46	125	14	- 109
1962	- 219	3.18	148	22	49
1963	- 335	4.58	210	11	114
1964	- 424	5.42	192	6	238
1965	- 482	5.62	420	72	- 10
1966	- 518	5.68	286	-10	242
1967	- 524	5.44	351	83	90
1968	- 478	4.78	425	63	- 10
1969	- 414	3.67	377	155	- 118
1970	- 458	3.88	306	-2	154
1971	- 1010	8.02	677	344	- 11
1972	- 1305	9.43	836	354	115
1973	- 1040	5.79	876	69	95
1974	- 1371	6.27	828	227	316
1975	- 1892	8.76	1209	904	- 221
1976	- 1996	7.37	1901	369	- 274
1977	- 2766	8.90	1619	534	613
1978	- 2896	8.01	1164	541	1191
1979	- 3863	8.96	2508	679	496
1980	- 7104	14.20	2311	310	4483
1981	- 11051	19.88	4072	3419	3524
1982	- 11171	18.72	6047	4894	230
1983	- 9183	14.01	4503	4569	111
1984	- 7075	9.54	3156	3093	826
1985	- 5708	7.92	3591	957	1160
1986	- 7506	11.23	4930	1348	1228
1987	- 6153	8.24	8693	-2438	- 102
1988	- 3891	4.54	7854	-3095	- 868
1989	- 5260	5.44	2492	-1038	3806
1990	- 5515	4.98	3861	-787	2486
1991	- 5640	4.59	3157	106	2377
1992	- 6243	4.47	1480	-3170	7933
1993	+ 354	0.23	375	-3134	11405
1994	+ 4409	2.50	1848	-4757	- 1500

Notes: ^a - sign to indicate loan repayment, ^b - sign to indicate assets accumulation

Source: BNM (1994), Table A.35, pp. 59-94.

IMF, IFS Year book, various issues.

Quarterly Economic Bulletin, BNM, various issues.

Economic Report, Ministry of Finance, Malaysia, various issues.

In terms of the sources of finance, mostly they come from domestic borrowing or external borrowing. As shown in Table 1.3, evidently the trend towards domestic borrowing became more significant, particularly during the 1980s, in turn, reducing the dependency on external sources of finance. In consequence, Federal government domestic debt issuance showed a similar trend in conjunction with the government's overall deficit positions. See, Table 1.4. Interestingly, the public debt market also expanded during the post-liberalisation period. However, the prime buyer of government securities was the Employee Provident Fund (EPF), which was also a main source of the 'captive' fund, while the financial sector remained important with an average holding at about 27%. Beside this, the commercial banks were the major buyer of the Treasury Bills especially during the 1970s and 1980s.

**Table 1.4: Federal Government Domestic Debt and Discount Rate
 On Treasury Bills (TBR), 1964 - 1993**

Year	Treasury Bills		Other Government Securities			TOTAL RM million	TBR ^a 3 [months]
	Sub-total Issued RM million	% held by the commercial banks	Sub-total Issued RM million	% held by the social securities	% held by the financial sector		
1964	221.5	13.1	1557.7	58.2	15.93	1779.2	5.00
1965	449.3	23.5	1733.5	54.8	12.73	2183.3	5.00
1966	578.1	39.0	1932.5	53.3	13.26	2510.6	5.00
1967	643.8	68.3	2353.3	51.4	15.07	2999.0	5.50
1968	778.6	78.4	2711.1	48.8	17.08	3491.6	4.00
1969	814.7	76.7	3091.4	49.0	17.85	3908.0	4.00
1970	791.9	68.6	3479.5	50.9	17.10	4273.3	5.13
1971	949.7	72.9	4049.4	50.1	17.93	5011.0	4.25
1972	999.0	64.0	4835.6	48.6	21.35	5921.2	3.75
1973	989.7	64.0	5722.1	48.0	24.59	6818.3	3.78
1974	1100	65.5	6444.2	47.3	26.35	7692.2	4.89
1975	1400	60.9	7354.5	46.1	27.07	8962.3	4.97
1976	1710	73.3	8680.7	45.6	29.21	10634.6	4.38
1977	1780	80.5	10497.4	45.3	31.41	12589.2	3.56
1978	1510	83.3	11931.9	48.7	32.18	13782.8	4.21
1979	1490	82.4	14459.1	48.5	35.47	16281.2	3.47
1980	1490	80.7	16795.5	48.7	37.55	18578.4	4.46
1981	1790	78.3	20586.4	47.5	32.03	22851.0	4.50
1982	2290	84.3	26170.4	45.7	30.77	28711.4	5.12
1983	2790	80.7	30037.3	44.8	31.95	33955.0	5.20
1984	2790	85.8	33090.2	48.8	35.16	37075.3	5.06
1985	2790	87.5	36681.1	53.0	28.77	40812.2	4.13
1986	3000	79.5	41300.8	54.9	25.00	45697.5	3.89
1987	4000	68.9	48794.0	54.1	24.81	54796.2	3.20
1988	4320	83.9	55830.8	53.7	23.52	63097.1	3.33
1989	4320	59.0	58213.4	54.2	27.22	65763.5	4.44
1990	4320	59.0	62106.1	54.0	26.38	69987.6	6.79
1991	4320	55.9	65263.1	54.3	26.30	73654.5	7.38
1992	4320	32.1	66642.6	54.7	25.93	76083.3	7.65
1993	4320	29.7	66018.1	53.9	26.41	76536.6	6.48

Note: ^a refer to yearly average.

Source: Quarterly Economic Bulletin, BNM, various issues
 Money and Banking, BNM, 1989, 1994; various Tables.
 International Monetary Funds, IFS Yearbook, December 1995.

1.2.3 Balance of Goods and Services Accounts

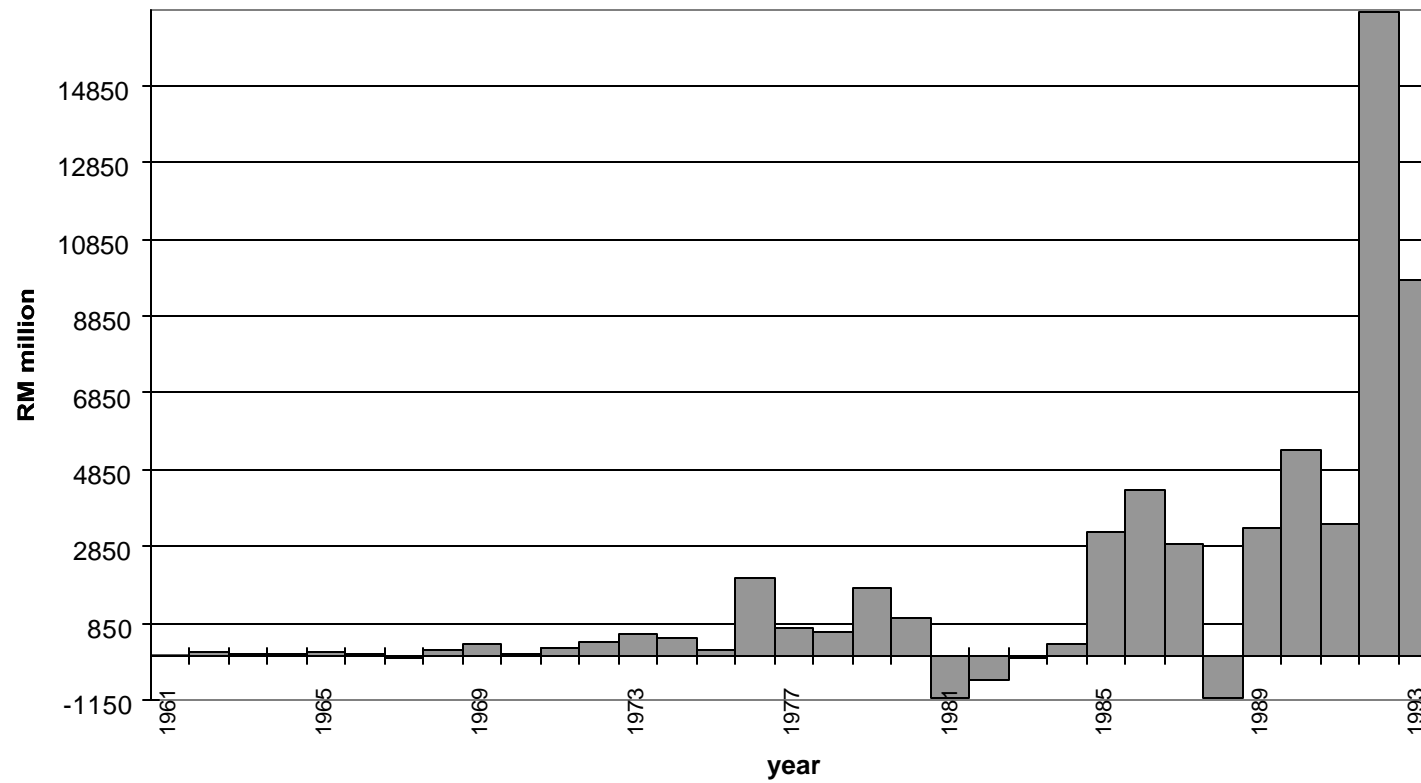
Essentially, Malaysia is a trade-oriented economy. As shown in Table 1.2, the average of the export value to the *GDP* ratio over the previous 38 years was nearly 55% and similarly the average of the import value to the *GDP* ratio was about 55%. The ratio shows that Malaysia can be classified as a small-open economy. The highest ratio was recorded during 1984-1994 for both exports and imports at an average of 78% per year.

As discussed briefly in Section 1.2.1, the performance of the overall BOP was very encouraging. For only 6 times in the 38 post-Independence years, had the overall BOPs' positions recorded a deficit; with the highest point at 1.3% of *GNP* in 1988 - a result of the sudden increase in Federal Government loans on foreign official long-term capital. During the same year, net change in central bank reserves decreased by RM 1,104 million, that was the highest during the pre- and the post-liberalisation era.

Generally, in the 1960s and 1970s, the overall BOPs had been largely favourable to Malaysia. The merchandise account was consistently in favour of Malaysia, with surpluses arising in the commodity export boom years of 1965-66, 1969-70, 1973, 1976-79, 1984, and 1987-88. In contrast, the services account had always been in deficit which had risen rapidly since the late 1970s, resulting in an overall deficit in the current account (BNM, Annual Report, 1990, p. 273).

However, since 1989 the performance of overall balance of trade had shown surplus positions until it reached the highest point in 1993 amounting to RM 29,239 million or nearly 19% of GNP. See, Chart 1.2.

CHART 1.2: MALAYSIA: OVERALL BALANCE OF TRADE, 1961-1993



1.2.4 Savings-Investment Gap: An Assessment of the Public and Private Sectors

In Malaysia, the savings-investment gap is one of the crucial issues that needs to be addressed urgently. The main argument is that as the role of the private sector becomes prominent in a domestic investment, it requires a sound financial system to play a supporting role. As Table 1.5 shows, during the late 1980s and the early 1990s the gross domestic capital formation increased steadily, while growth gross national savings were almost unchanged at 32.5% of GNP, which is less than the level required to match the investment growth. Thus, as investment increased and savings remained almost unchanged, the savings-investment gap became wider. For example, in 1991, the resource gap accounted for nearly 9.3% of the *GNP*, and on average during 1988-1994, the gap reached about 4.8% of the *GNP*. If the savings-investment gap is continuously to be financed from borrowings of foreign capital, the economy will continuously be exposed to external risks, in particular, on the Malaysian net trade and services account (see, Table 1.5). Thus the researcher believes that in this case monetary policy could play an important role by means of modernising the credit and security markets, and hence widening the spectrum of assets and market players, in addition to attract more savings from the private sector.

Table 1.5 Savings-Investment Gap, 1981-1992

Year	1988	1989	1990	1991	1992	1993	1994
(Ringgit Malaysia, RM million)							
Total Gross domestic capital formation	23,584	29,271	36,155	49,306	52,104	62,460	76,822
Gross national savings	28,323	29,749	33,672	37,662	46,482	54,534	64,746
surplus/deficit (-)	4,739 (5.5)	478(0.5)	- 2,483 (2.2)	- 11,684 (9.3)	- 5,622 (4.0)	- 7,926 (5.1)	- 12,076 (6.7)
annual percentage change in GNP	14.9	12.7	14.6	13.5	11.9	11.7	15.2
Gross National savings/GNP ratio	33.0	31.5	30.7	29.4	32.6	34.7	35.8
Consumption/GNP ratio	67.4	69.2	69.7	70.1	67.2	65.6	64.4
Net trade on goods and services (RM)	4,344	479	- 2,630	- 11,746	- 5,959	- 8,439	- 12,464
per capita GNP (RM)	5,063	5,572	6,229	6,770	7,490	8,024	9,204

Note: Figures in parentheses to denote as % of GNP

Source: Quarterly Economic Bulletin, BNM, various issues; Table VI.1.

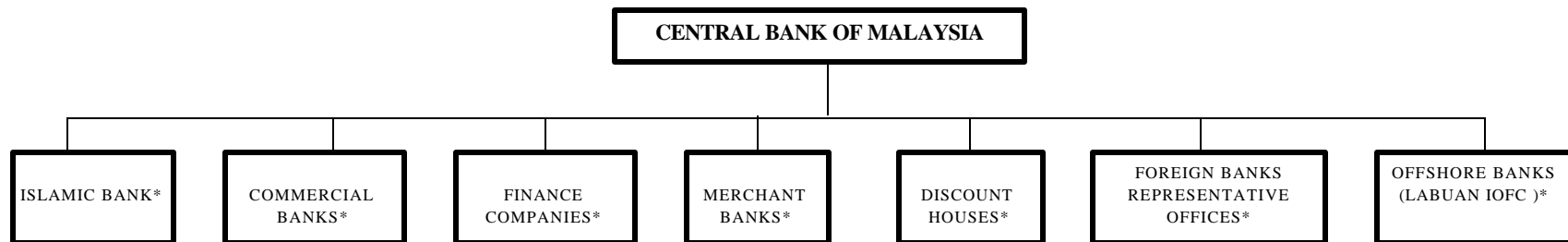
1.3 The Financial Structure

The derivation of the present setting of the Malaysian financial structure began after Independence. During the first decade after Independence the Malaysian financial system and the monetary policy were relatively underdeveloped and the banking system was dominated largely by foreign banks. Currently its structure can be divided into three segments, namely the banking sector, the non-bank financial intermediaries and the financial markets (BNM: 1988 and 1994). See, Chart 1.3. The following sub-sections present brief descriptions and outline developments for each segment and the motivation behind financial liberalisation.

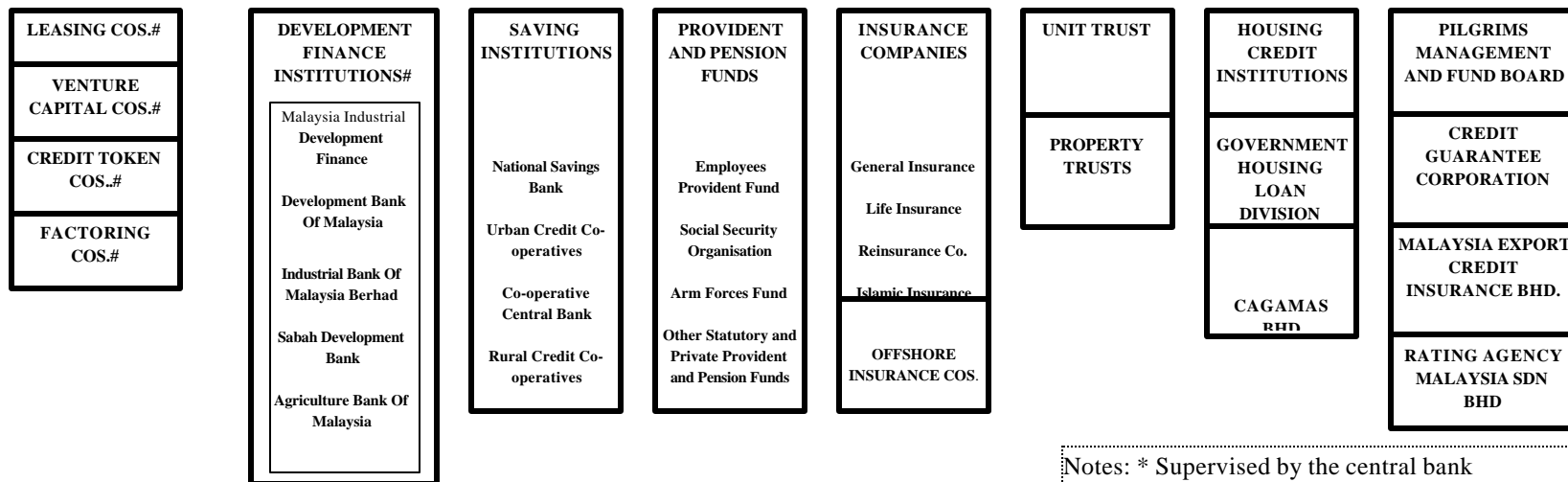
Chart 1.3

THE FINANCIAL SYSTEM STRUCTURE

The Banking Institutions



Non - Bank Financial Intermediaries

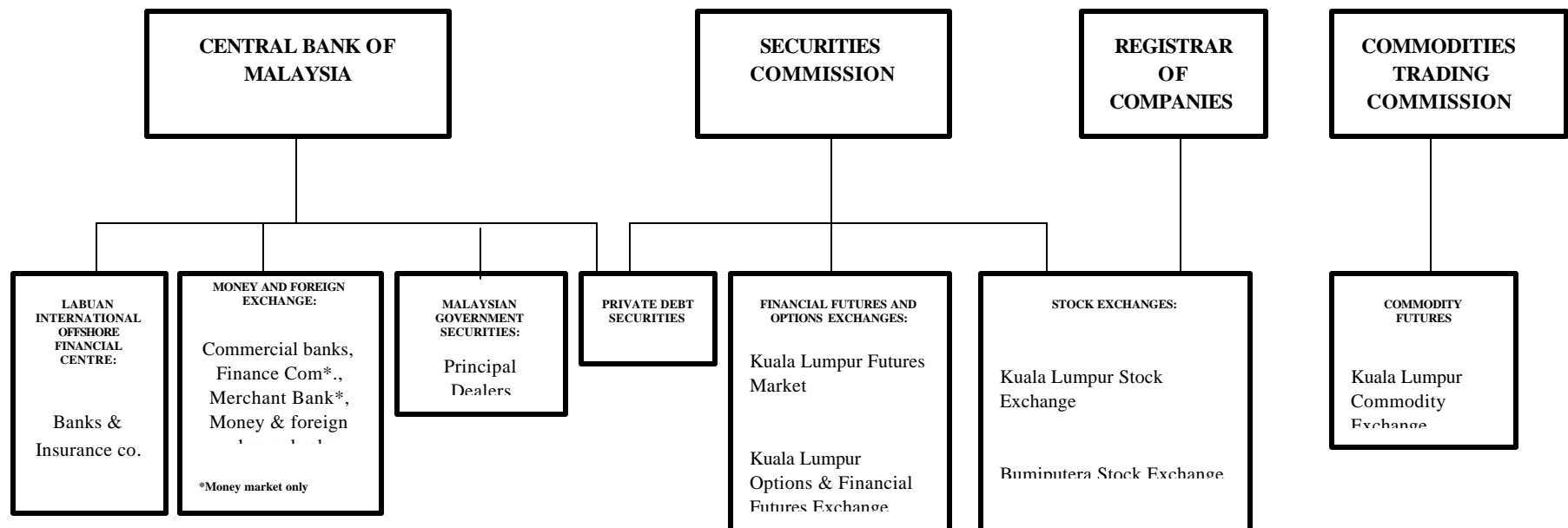


Notes: * Supervised by the central bank
 # Registered with the central bank

Chart 1.3 [continued]

THE FINANCIAL SYSTEM STRUCTURE

The Financial Markets



Source: Bank Negara Malaysia, 1994; Chart 2.1

1.3.1 Issues Leading to Financial Liberalisation

Tseng and Corker (1991) reported that the Malaysian financial system during pre-liberalisation was mainly characterised by regulated interest rates, domestic credit control, high reserve requirements, segmented financial markets, underdeveloped money and capital markets, and controls on international capital flows.

However, in the early 1970s, as more emphasis was directed to promote the industrialisation programme, the regulated financial system was perceived as inadequate, as a result of the creation of distortions in investment decisions and in its failure to mobilise domestic sources of funding.

The motivation to liberalise the financial system was also influenced by the need for a flexible and effective policy response to external shocks. Moreover, because Malaysia is a trade-oriented country, much of the trade services are supported by the commercial banks.

Thus, the basic policy reforms started in the late 1970s were aimed at liberalising the interest rate, adopting a flexible exchange rate, lifting controls on credit, lifting restrictions on international capital flows, enhancing competition and efficiency in the banking system, and modernising the open market operations and capital markets. (As shown previously in Table 1.1, Part B). Basically, financial liberalisation was directed to liberalising the domestic interest rates with the aim of efficiently mobilising the domestic sources of funds. Lifting controls on credit allows the banking sector to respond to the market forces. Lifting

restrictions on international capital flows allows foreign investors to participate efficiently in the domestic industrial programmes.

Further reforms in the 1980s included modernising the financial system such as transforming the banking system and the credit market, and the capital and money markets. This increased competition in the financial system and at the same time provided a flexible means for managing liquidity through open market operations (Tseng and Corker, 1991). By and large, the financial system reforms witnessed significant developments in the capital market. In the 1960s and 1970s, the banking system was the key player in financing the economic activities, in addition to the equity and the public debt markets. After the birth of negotiable certificates of deposits (NCD) in 1978, the private debt markets started to show its impact effect on the economy in the 1980s. In the early 1990s, further development included the development of future and option markets.

1.3.2 The Financial System

The present structure of the Malaysian financial system is divided into three segments, namely, the banking sector, the non-bank financial intermediaries and the financial markets.

See, Chart 1.3 in the introduction of Section 1.3.

1.3.2.1 The Banking Sector

Based on the recent report by the Bank Negara Malaysia (1994, Chp. 2), the Central Bank of Malaysia (Bank Negara Malaysia, hereafter BNM), definition of the banking sector consists of the monetary institutions and non-monetary institutions. The monetary institutions are classified as those institutions whose principal liabilities are generally accepted as money and the only institutions allowed to operate current accounts. These institutions consist of the central bank, the commercial banks, the foreign banks, and the offshore banks in the International Offshore Financial Centre.

Non-monetary institutions include those institutions which are closely linked to the monetary institutions and whose liabilities are generally accepted as near-money, and fee-based activities. These institutions are the finance companies, the merchant banks and discount houses.

In its early stage of development, the banking sector was relatively undeveloped and the banking system was dominated by foreign banks (BNM, 1994, pp. 29-51). As shown in Table 1.6, in 1959, of the 26 commercial banks, only 8 were domestic-owned, the remainder were foreign-owned banks. In line with the Central Bank's priority to create a basic financial infrastructure and develop a truly Malaysian-oriented banking system, as of June 1993, there were 21 commercial banks fully owned by Malaysians and consisting of 1018 branches. At the same time, the numbers of foreign-owned banks were reduced to 16 as opposed to 18 in 1959, as these were merged with or bought-over by the local banks.

Table 1.6 Commercial Banks and Branch Offices, 1959 - 1993

Year	Banks			Branch offices		
	Total	Domestic	Foreign	Total	Domestic	Foreign
1959	26	8	18	111	12	99
1960	28	10	18	131	29	102
1970	38	16	22	336	177	159
1980	38	21	17	546	398	148
1990	38	21	16	998	852	146
June 1993	37	21	16	1164	1018	146

Source: BNM (1994); Table 6.1, p. 140.

Significant reforms in the Malaysian banking system took place between the end of the 1970s and during the 1980s. As a result of the reform process the banks' behaviour has gradually changed, from merely deposit-taking and loan-making to a modern banking system of so-called market-based systems. This has further widened the source of funds of the banking system through other means such as selling repos, banker acceptances (BA), Negotiable Certificates of Deposits (NCD) and also Treasury Bills and other government securities. In term of loans and advances, the banking system has moved from overdrafts to medium term and long term loans. See, Table 1.7 below.

Table 1.7: Banking System: Uses of Funds

	1970	1980	1990
Ratio to total resources (%)			
traditional deposits	76.2	74.5	53.0
NCDs	-	2.4	8.2
Repos	-	1.2	5.6
BAs	-	2.4	1.7
Share to traditional deposits (%)			
Fixed	55.9	66.4	68.0
Demand	28.0	18.1	15.2
Savings	16.1	15.5	16.2
overdraft/term loans	4.6	1.1	0.4
term loans/overdraft	0.2	0.9	2.7

Source: Bank Negara Malaysia, Annual Report 1990, Table C2, p. 75

As the government policy began to emphasise the manufacturing sector, the post-1978 period exhibited significant changes in the direction of credit by the banking sector. Furthermore, the banks also began to extend their credit to long-term compared to short-term during the early stages of development. The majority of long-term credit was extended to the manufacturing, real estate and housing sectors. For example, total credit extended to the manufacturing sector, rose at an average annual rate of 20.9% over the period 1971-1990, while credit to construction and real estate rose at an average annual rate of 24.9%. However, credit to the agricultural sector declined from 11% in 1970 to 4.9% in 1990 (BNM, Annual Report, 1990, p.77).

In turn, this scenario changed the composition of the financial system assets. Table 2.8 shows the assets of the financial system and its components over the period 1960-1992. Over this period, total assets of the financial system rose from a mere RM 3.553 billion in 1960 to RM 446.632 billion at the end of 1992. This rapid increase in assets was attributable to the rapid build-up of the banks' branches, the introduction of new banking instruments and services. However, the assets' holding pattern among the institutions remain unchanged. For example, throughout this period the banking system had been contributing nearly 68% of the total resources and the balance contributed by the non-bank financial intermediaries. This indicates that the monetary institutions under the banking system that consist of the commercial banks and the central bank, can be considered the most important financial intermediaries in Malaysia. Similarly, the non-monetary institutions such as the finance companies, merchant banks, and discount houses, continuously exhibit an impressive impact on the financial sector. The record shows that the total assets' holdings of the non-

monetary institutions gradually rose from RM 10 billion at the end of 1960 to RM 75.16 billion at the end of 1992 or, equivalently, from 0.3% of total assets contributed by the banking sector in 1960 to 16.8% in 1992.

Table 1.8 Assets of the Financial System, 1960 - 1992

	as		at		end		of			
	1960		1970		1980		1990		1992	
	RM million	%	RM million	%	RM million	%	RM million	%	RM million	%
Banking system	2356	66.3	7455	64.1	54336	73.3	226954	68.9	310265	69.5
:monetary institutions ^a	2346	66.0	6882	59.2	45180	60.9	171584	52.1	235105	52.7
:non-monetary institutions ^b	10	0.3	573	4.9	9156	12.4	55370	16.8	75160	16.8
Non-bank Financial Intermediaries	1197	33.7	4167	35.9	19817	26.7	102359	31.1	136367	30.5
:provident, pension and insurance funds	836	23.5	3156	27.2	13846	18.7	61607	18.7	84225	18.8
:Development finance institutions	1	..	133	1.1	2193	2.9	6142	1.9	7163	1.6
:Savings institutions	267	7.5	645	5.5	2463	3.3	8489	2.6	12297	2.8
:Other financial intermediaries	93	2.7	233	2.1	1315	1.8	26121	7.9	32682	7.3
TOTAL	3553	100	11622	100	74153	100	232513	100	446632	100

Note: .. too small,

^a comprised of central bank and commercial banks,

^b comprised of finance companies, merchant banks and discount houses

Source: Computed from BNM (1989), Table 3.1, p. 70 and BNM (1994), Table 2.1, p. 34.

1.3.2.2 The Non-bank Financial Intermediaries

The non-bank financial intermediary is a group of institutions supervised by various government departments and agencies but which remains under the jurisdiction of the central bank. It can be classified into four major sub-groups, namely: (1) the development finance institutions, (2) the savings institutions, (3) the provident and pension funds and the insurance companies including offshore insurance companies, and (4) a group of financial intermediaries (comprising building societies, unit and property trusts, leasing companies, factoring companies, credit token companies, venture capital companies, special investment agencies, and several special financial institutions such as the National Mortgage Corporation (Cagamas) and Credit Guarantee Corporation).

Table 2.8 shows that the contribution of the non-bank financial intermediaries in terms of total assets of the financial system, was almost unchanged at about 30% during the period 1960-1992. However, looking at the composition of assets, the provident and pension funds remained a key player in this group with a percentage of contribution about 20% during the same period.

1.3.2.3 The Financial Markets: Capital and Futures Markets

The financial markets consist of the money and foreign exchange markets, the capital market (the Kuala Lumpur Stock Exchange, hereafter known as KLSE), the commodity futures market (the Kuala Lumpur Commodity Exchange, hereafter known as KLCE), and the financial futures and options markets. See, Chart 1.3 (Continued).

The Malaysian money market comprises an inter-bank market and a market for short-term funds involving discount houses, money brokers and other intermediaries. Only the commercial banks are licensed to deal in foreign exchange in Malaysia. The capital market comprises a primary securities market, in which new issues of government and corporate securities are offered to the public. The stock and shares are traded in the KLSE.

During the pre-liberalisation period the capital and future markets were relatively small and remained underdeveloped in terms of their contribution amongst the financial institutions. By contrast, the banking system provided a major source of financing and the capital market product was limited primarily to the issuance of Malaysian Government securities. However, by the early 1980s, the equity market, the government securities market, and the corporate bond had developed strongly. For example, at the end of 1993, the Malaysian equity market capitalised at US\$ 91.6 billion, an increase of 58% compared to its position in 1991 or twice as large as the Singapore equity market (International Finance Corporation (IFC), 1992, p. 135). Findings by the IFC (1992) revealed that the Kuala Lumpur Stock Exchange was ranked among the top 10 positions in an appraisal of the performance of global equity markets. A more recent publication of the Bank Negara Malaysia in 1994 indicated that funds raised in the capital market had increased steadily, at an average annual growth rate of 16% over the past three decades (1962-1992). As Table 1.9 reveals, contribution by the private sector debt had also been growing steadily, particularly towards the end of the 1980s. In 1992, nearly 90% of the total funds raised in the capital market were contributed by the private sector. In another development, on 23 October, 1980, The

Kuala Lumpur Commodity Exchange was officially launched to provide a futures contract market mainly for palm oil, crude palm kernel oil, cocoa, tin, and rubber. In Malaysia, the financial futures and options markets began their operation in 1997, namely the Kuala Lumpur Futures Market (KLFM) and the Kuala Lumpur Options and Financial Futures Exchange (KLOFFE).

Table 1.9: Funds Raised in the Capital Market

	1970	1980	1985	1988	1989	1990	1991	1992	1995 3rd qtr.
	RM million								
by public sector									
government securities, net	329	2311	3591	7034	2459	3916	3157	1380	1800
investment certificates, net	-	-	-	500	-	- 100	-	100	250
Malaysia savings bond, net	-	-	-	-	-	-	-		- 9
Net Funds Raised	329	2311	3591	3591	2459	3816	3157	1480	2041
by private sector									
shares	76	137	645	931	2508	8649	4329	9181	5009
debt securities	-	20	-	1795	1953	2603	1966	4112	3631
less redemptions	-	-	-	-	50	325	125	991	930
Net funds raised	76	157	645	2726	4411	10927	6233	12302	7710
TOTAL	405	2468	4236	10261	6870	14743	9390	13782	9751

Source: BNM, Annual Report, 1994, Table 16.1, page 373;
 BNM, Quarterly Bulletin, Third Quarter 1996; p. 84.

1.3.3 Monetisation Process and Financial Deepening: An Assessment

To measure the process of financial deepening in Malaysia, two methods are used, namely, the stock approach and the flow approach.

The stock approach analyses the relationship between the total assets of the financial system and the *GNP* at current prices as a crude proxy of the stage of financial intermediation in a country (BNM, 1994: pp. 52-57). Among the common methods used in comparing the degree of monetization is the comparison of the ratio of broad money supply (*M2*), which comprises private sector holdings of currency and deposits with the commercial banks, and the central banks, net negotiable certificates of deposit (NCDs) issued and Repos, to *GNP* at current prices.

In addition, the ratio of narrow money supply (*M1*), which comprises currency in circulation and demand deposits of the private sector, to *GNP* at current prices is also used.

The flow approach uses the income elasticity of assets of financial institutions. The income elasticity measures the ratio of the average annual growth rate of total assets of the financial system to the average annual growth of *GNP* at current prices. Table 2.10 summarises the selection of indicators for both approaches.

From the early 1960s to the mid-1980s, the stock approach ratios revealed that speed of monetisation process was slightly slower than that after the mid-1980s. These results are closely related to various monetary policy reforms as previously shown in Table 2.1 and in

tandem with the growth of the domestic economy. Hence, the ratio of $M1/GNP$ gradually rose from 0.172 in 1960 to 0.201 in 1975, and to 0.318 in 1994. A similar trend was also recorded by the $M2/GNP$ ratio, from 0.243 in 1960 to a drastic rise of 0.937 in 1994. In other words, the ratio implied that the non-monetary output as a percentage of GNP was about 6.3% in 1994 and the balance of 93.7% was contributed by the monetary output. Moreover, these ratios evidently indicated that the speed of the monetisation process in Malaysia quickened particularly during the 1980s and the early 1990s.

Turning to the flow approach, the figures support a similar trend to that found in the stock approach. This indicated that the process of financial deepening and innovation of the Malaysian financial system had undergone rapid changes during the post-liberalisation period. Furthermore, since the mid-1980s, the rapid expansion of finance companies, merchant banks, and discount houses and the introduction of electronic transaction had increased the financial activities and widened the range of banking instruments and services. These changes presented and will continue to present a major challenge for monetary management.

Table 1.10 Selected Measures of Monetisation and Financial Deepening, 1960-1994

Year	1960	1965	1970	1975	1980	1985	1990	1992	1993	1994
A: STOCK APPROACH										
M1/GNP	0.172	0.176	0.175	0.201	0.195	0.196	0.229	0.254	0.310	0.318
M2/GNP	0.243	0.284	0.350	0.462	0.548	0.679	0.692	0.729	0.946	0.973
M2/M1	1.408	1.614	1.994	2.299	2.812	3.461	3.017	3.255	3.048	2.940
Currency/M1	0.582	0.558	0.492	0.514	0.487	0.458	0.414	0.399	0.323	0.346
Total financial asset/GNP	0.610	0.700	0.990	1.230	1.440	2.340	2.100	3.180	3.730	3.740
B: FLOW APPROACH^{a,b}										
	1957- 1967	1968- 1973	1974- 1978	1979- 1988	1989- 1994					
	0.92	1.86	1.20	2.02	1.49					

Note: ^a Ratio of the annual average growth rates of total financial assets to average annual growth of nominal GNP

^b Full sample period 1958-1994 = 1.50. Calculation by the Central Bank of Malaysia for period 1975 - 1992 = 1.64

Source: BNM (1994), Table 2.3, p. 55.

Quarterly Economic Bulletin BNM, various issues.

Economic Report, Ministry of Finance, Malaysia, various issues.

1.4 Money, Credit, and Interest Rates

This section consists of four main sub-sections. Section 1.4.1 provides the definitions of monetary aggregates in Malaysia. Section 1.4.2 presents the deposit-loan gap in the banking system. Section 1.4.3 reviews the credit aggregates and their operation, and Section 1.4.4 presents the exchange rates and interest rate trends.

1.4.1 The Definition of Monetary Aggregates

In Malaysia, there are three definitions of monetary aggregates, namely, narrow money (*M1*) and two measures of broad money, *M2* and *M3* (BNM, 1994, pp. 410-432). Narrow

money, $M1$ is defined as currency and demand deposits held by the private sector. $M2$ is currently defined as $M1$ plus the following financial assets of the private sector:

- savings deposits of the private sector at commercial banks;
- fixed deposits of all maturities of the private sector at commercial banks;
- net issues of NCD to the private sector by the commercial banks; and
- repo transactions effected by the commercial banks.

Broad money, $M3$, which has been constructed since 1978, is currently defined as $M2$ plus the following assets, excluding placements among these institutions:

- savings deposits of the private sector at finance companies, merchant banks, discount houses and Bank Islam;
- fixed deposits of the private sector at finance companies, merchant banks, discount houses and Bank Islam;
- net issues of NCD to the private sector by finance companies, merchant banks, discount houses and Bank Islam; and
- repo transactions effected by finance companies, merchant banks, discount houses, and Bank Islam.

Table 1.11 summarises the growth of monetary aggregates and its components for the period 1959-1994. Over the past three decades, money supply and its components have expanded quite substantially. In a report by BNM (1994, pp. 420-432), various factors have contributed to the growth; in general, an increase in the role of money in the economy, the rapid monetisation process, the expansion of financial networks, the widening of the

range of banking instruments and services, and the acceleration of credit activities of the banking system. Thus, the money supply has risen, in line with the growth of real output in the domestic economy particularly, during post-1978. For example, as shown in Table 1.12, a double-digit growth in the demand deposit following the rise in domestic interest rates, to reflect higher transactional demand by business enterprises and individuals, had steadily contributed to the growth of $M1$. The highest growth in demand deposits was in 1993 and accounted for about 54.82%. Therefore, $M1$ grew to 35.26% from 27.27% in 1992. A similar trend was also recorded for $M2$. The growth of private sector liquidity or $M2$ was due to the sharp growth in the commercial bank loans and advances extended to the private sector. As the loans and advances extended by the banking system to the private sector increase, the growth of $M2$ increases accordingly.

**Table 1.11 Growth Rates of Monetary Aggregates,
 Credit, Real GDP, and Inflation Rate**

Year	M1 (%)	M2 (%)	M3 (%)	Domestic Credit (%)	Inflation (%)	GDP (%)
1960	5.4	11.6		32.0	-3.8	10.7
1961	2.3	6.7		50.1	-0.3	14.1
1962	4.8	6.0		7.2	-0.3	5.7
1963	7.0	9.7		30.3	0.3	6.2
1964	5.6	8.2		8.8	5.2	1.9
1965	6.8	10.5		6.9	-4.7	15.1
1966	9.1	11.7		25.9	1.0	5.2
1967	-7.4	3.5		16.5	4.6	-0.6
1968	12.3	15.6		27.3	-0.2	4.2
1969	11.4	14.1		-1.4	-0.2	14.7
1970	8.3	10.9		21.5	1.7	2.7
1971	4.9	13.0		19.3	1.7	4.8
1972	24.9	23.7		27.2	3.1	6.5
1973	37.6	31.2		49.3	10.7	18.3
1974	8.6	15.3	17.8	21.1	17.2	4.7
1975	7.3	14.6	15.6	18.5	4.5	-6.5
1976	20.9	27.7	28.0	16.5	2.7	22.4
1977	16.5	16.4	16.5	18.3	4.8	9.8
1978	18.2	17.9	20.0	24.2	4.8	11.8
1979	17.2	24.1	25.6	10.3	3.6	14.8
1980	15.0	26.2	28.4	60.5	6.7	7.7
1981	12.9	17.9	16.4	35.0	9.7	1.3
1982	13.3	16.3	16.6	21.6	5.8	2.7
1983	7.7	9.4	16.6	16.1	3.7	7.8
1984	-0.6	11.4	15.6	18.5	4.0	9.4
1985	5.8	6.7	9.8	5.8	0.3	-2.8
1986	2.8	11.0	8.8	8.9	0.8	-8.4
1987	12.8	3.80	4.9	3.9	0.2	11.0
1988	14.4	6.70	8.1	5.3	2.3	11.6
1989	17.3	15.2	20.6	19.9	3.1	9.5
1990	15.6	10.6	18.2	37.4	2.7	10.0
1991	9.9	16.9	15.3	18.5	4.4	7.1
1992	27.3	29.2	19.6	16.6	4.7	9.0
1993	35.3	26.6	23.5	12.3	3.6	6.5
1994	16.8	12.7	12.7	14.8	3.7	9.6

Source: Quarterly Economic Bulletin, BNM, various issues
 BNM (1994), Table A2 and A3
 IMF, IFS Yearbook 1995.

Table 1.12 Trend in the Growth of Money Supply

	1959-1960	1961-1967	1968-1973	1974-1978	1979-1989	1990	1991	1992	1993	1994
	average	annual	annual	growth	rates (%)	annual	annual	growth	annual	rates (%)
currency	5.52	4.18	14.75	15.84	9.05	9.6	9.8	9.9	11.46	12.69
demand deposit	5.12	6.46	13.23	13.08	11.78	17.4	11.8	15.1	54.82	7.62
M1	5.41	4.04	16.57	14.30	11.17	14.1	9.93	27.27	35.26	16.84
quasi-money ^a	30.5	14.75	19.76	21.92	16.55	12.3	16.0	21.5	16.56	12.46
M2	11.58	6.99	18.07	18.36	13.27	16.1	16.88	29.15	26.64	12.71
broad quasi-money ^b	-	-	-	23.31	17.75	19.4	16.3	21.4	20.19	11.36
M3 ^c	-	-	-	19.60	14.91	20.6	15.32	19.57	23.52	12.67
real GDP	13.9	6.8	8.5	8.4	5.5	9.6	7.7	8.5	6.5	9.6
Inflation	- 3.68	0.85	2.79	6.80	3.57	3.1	4.40	4.69	3.57	3.71

- Notes:
- ^a Defined to include commercial bank loans and advances, bills discounted or purchased, bills receivable which are payable in Malaysia and private securities as well as Central Bank refinancing and rediscounting facilities.
 - ^b Defined to comprise private sector savings and fixed deposits placed with the central Bank, commercial banks (including Bank Islam), finance companies, merchant banks and discount houses, including private sector holdings of negotiable certificates of deposit and Central Bank Certificates, excluding placements among these institutions.
 - ^c The definition of M3 started from 1973.

Source: Quarterly Economic Bulletin, BNM, various issues.
 BNM (1994), Tables A2 and A3.

International Monetary Fund, IFS Yearbook 1995.

With regard to $M3$, since its introduction in 1978, its growth has also trended upwards. The fastest growing component of $M3$ during the post-1978 was broad quasi-money in the form of fixed deposits due to the increase in fixed deposit rates (BNM 1994, pp. 423-425).

However, the most significant forces which influence the level of money supply in Malaysia originate from three main sources, namely, the financial operations of the government, the lending operations of the banking system to the non-bank private sector, and the overall position of the country's balance of payments (BNM, 1989, pp. 405-417 and BNM 1994, pp. 420-432).

Firstly, financing of the government's deficit by the banking system will have the same effect on money supply as the banking system's loan to the non-bank private sector. The expansionary or contractionary impact on money supply arising from bank financing of government expenditure will be reflected between the level of government deposits with the banking system and the bank lending to the government or bank holdings of government debt. If government deposits with the banking system are larger than the bank holdings of government debt, then the public sector's financial operations have imparted a contractionary impact on the money supply, and *vice versa*.

Secondly, in Malaysia, the banking system is the only institution which creates money through its loans to the private sector and is a major source of liquidity for the private sector. However, the limit to which the banks can extend credit depends on the size of their statutory reserves at the central bank and their capitalisation.

Thirdly, any excess of foreign exchange receipts over payments through the balance of payments will raise the money supply. By receiving more inflow of funds, the domestic deposit in the central bank and banking system will increase, in turn increasing the money supply.

1.4.2 Deposit-Loan Gap in the Banking System

Before 1985-86, total deposits placed with the banking system always exceeded the total loans extended by the banking systems. However, after that and until the end of 1992, the banking sector for the first time recorded the loan-deposit gap. See, Table 1.13. This scenario was consistent with the growing demand for funds from the private sector as the economy started to recover after experiencing a severe recession in 1985-1986. During this period, the government had to discourage the banking sector from extending any loans for speculative purposes. To bridge the loan-deposit gap, the banking sector had to rely on non-deposit sources of funds, such as the drawdown of their excess liquid assets and through borrowings from the interbank market. Consequently, throughout the period 1988-1992, in line with tight liquidity conditions in the banking system, interest rates generally trended upwards (Table 1.14). For example, the average lending rate of the commercial banks gradually rose from 7% in 1989 to 10.26% in 1992. To attract more savings, the commercial banks raised the deposit rates, from an average of 4.6% in 1989 to 7.65% in 1992. Similarly, the short-term interest rate or the money market rate of commercial banks trended upwards from 4.72% in 1989 to 7.825% in 1992. This trend has narrowed the interest rate margin between the deposits rate and lending rates during the 1990s.

Nevertheless, the withdrawal of government deposits from the banking system in the 1990s, while the demand for credit remained strong, could also have contributed to the opening up of the resources gap (BNM, 1990, p.115).

Table 1.13 Loans and Deposits In the Banking System, 1959 - 1993

	Total Deposits Placed With the Banking System	Total Loans Extended by the Banking System	Resource Surplus (+) / gap (-)	Loan-deposit Ratio
Year	(RM million)			(%)
1959	818.0	387.1	430.9	47.3
1960	941.1	510.4	430.7	54.2
1961	1043.1	628.3	414.8	60.2
1962	1092.0	694.1	397.9	63.6
1963	1215.3	802.9	412.4	66.1
1964	1521.5	1083.7	437.8	71.2
1965	1732.0	1141.1	590.9	65.9
1966	1977.1	1286.2	690.9	65.1
1967	2237.6	1432.9	804.7	64.0
1968	2664.0	1763.6	900.4	66.2
1969	3304.5	2216.8	1087.7	67.1
1970	3778.1	2622.6	1155.5	69.4
1971	4405.9	3015.8	1390.1	68.4
1972	5278.1	3611.2	1666.9	68.4
1973	7139.4	5523.1	1616.3	77.4
1974	8533.6	6448.2	2085.4	75.6
1975	9919.4	7670.6	2248.8	77.3
1976	12876.2	9713.4	3162.8	75.4
1977	15135.9	11642.1	3493.8	76.9
1978	18334.0	14895.9	3438.1	81.2
1979	23788.0	18977.8	4810.2	79.8
1980	29382.3	25734.9	3647.2	87.6
1981	36157.2	31673.7	4483.5	87.6
1982	42878.3	37322.8	5555.5	87.0
1983	49525.0	47149.8	2375.2	95.2
1984	59240.6	56877.9	2362.7	96.0
1985	64977.4	65048.0	- 70.6	100.1
1986	69068.2	69017.6	50.6	99.9
1987	70869.6	69324.7	1544.9	97.8
1988	76627.2	76860.2	- 233.0	100.3
1989	87973.5	91914.7	- 3941.2	104.5
1990	96117.6	113458.0	- 17340.4	118.0
1991	117341.0	138143.1	- 20802.1	117.7
1992	139365.2	151735.8	- 12370.6	108.9
1993	176461.9	170143.7	6318.2	96.4

Source: Quarterly Economic Bulletin, BNM, various issues
 Money and Banking, BNM, 1994, various tables.
 International Monetary Funds, IFS Yearbook, December 1995.

Table 1.14: Inflation Rate, Discount Rate, Money Market Rate, Average Deposit Rate, Average Lending Rate, and Short-term Real Interest Rate^a.

Year	Inflation rate	Discount rate	Money market rate	Average deposit rate	Average lending rate	Short-term real interest rate
1965	-4.7	5.0	n.a	3.0	7.0	9.7
1966	1.0	5.0	n.a	3.0	7.5	4.0
1967	4.6	5.5	n.a	3.5	8.0	0.9
1968	-0.2	4.0	3.31	3.5	8.0	4.2
1969	-0.2	4.0	3.63	3.5	8.0	4.2
1970	1.7	5.13	3.81	4.5	8.0	3.4
1971	1.7	4.25	3.3	4.5	8.0	2.5
1972	3.1	3.75	3.2	5.5	7.5	0.6
1973	10.7	3.78	2.8	6.5	8.0	-6.9
1974	17.2	4.89	2.7	6.5	10.0	-12.3
1975	4.5	4.97	4.2	6.0	10.0	0.5
1976	2.7	4.38	2.6	5.5	8.5	1.6
1977	4.8	3.56	4.83	5.21	7.92	-1.3
1978	4.8	4.21	2.47	5.13	7.5	-0.6
1979	3.6	3.47	4.37	5.5	7.5	-0.2
1980	6.7	4.46	3.31	6.23	7.75	-2.3
1981	9.7	4.5	3.47	9.67	8.5	-5.2
1982	5.8	5.12	7.9	9.75	8.79	-0.6
1983	3.7	5.2	8.97	8.02	11.08	1.50
1984	4.0	5.06	8.96	9.54	11.35	1.10
1985	0.3	4.13	7.57	8.81	11.54	3.80
1986	0.8	3.89	8.03	7.17	10.8	3.1
1987	0.2	3.2	2.85	3	8.19	3.0
1988	2.3	3.33	3.22	3.5	7.25	1.1
1989	3.1	4.44	4.72	4.6	7	1.4
1990	2.7	6.79	6.81	5.9	7.17	4.1
1991	4.4	7.38	7.83	7.18	8.13	3.0
1992	4.7	7.65	7.825	7.65	10.26	3.0
1993	3.6	6.48	6.13	6.5	9.85	2.9
1994	3.7	5.07	4.55	5.5	7.62	1.4

Note: n.a - not available

^a short-term real interest rate is defined as discount rate on 3-months Treasury Bills minus inflation rate.

Source: Quarterly Economic Bulletin, BNM, various issues
 International Monetary Funds, IFS Yearbook, December 1995.

1.4.3 Credit Aggregate and Operations

As discussed in the last sub-section above, a bulk of credit extended by the banking sector went to the private sector. When the economy started to recover from the prolonged recession of 1985-1986, credit extended by the bank sector grew rapidly at an annual average of 13%. As shown in Table 1.15, on an annual average, more than 80% credit extended by the banking system went to the private sector. This trend was in line with the government objective to reduce its involvements in investment projects, as they were supposedly taken over by the private sector. As a result, the credit claims on the public sector declined drastically from 30.8% in 1978 to only 7.2% in 1994, and that on the private sector rose from 75.9% to 92.8% during the same period.

To monitor strong growth in credit operations in the 1990s, the authority gradually changed the statutory reserve requirements⁵ (*SRR*) on the commercial banks from 3.5% in January 1990 to 9.5% in January 1994, simultaneously reducing the liquidity ratio from 18.4% to 17.9% during the same period. Another measure taken by the authority was to align the *SRR* of the finance companies with that of the commercial banks in October 1989. Furthermore, they were requested to observe the *SRR* and the minimum lending requirements (*MLR*) based on the average daily amount of eligible liabilities held over a fortnightly period as a base period (BNM, 1990, p. 130).

⁵ Statutory Reserve requirements are one of several tools used by the Central Bank to implement monetary policy. The Central Bank establishes a specified fraction, k , of deposit liabilities banks must hold as reserves, typically in non-interest-bearing form, such as vault currency and deposits at the Central Bank.

Table 1.15 Banking Sector-Credit Operations, Liquidity Ratio and Statutory Reserve Requirements, 1959- 1994

Year	Total Credit Operations (RM million)	Credit Claims On		Liquidity Ratio %	Statutory Reserve (%)
		Public Sector (%)	Private Sector (%)		
1959	488.4	15.5	84.5	n.a	Jan 2.5, Dec 4.0
1960	624.1	16.3	83.7	n.a	uc
1961	795.6	13.2	86.8	n.a	uc
1962	883.1	12.0	88.0	n.a	uc
1963	1093.4	16.0	84.0	n.a	uc
1964	1209.8	12.1	87.9	n.a	uc
1965	1371.9	18.2	81.8	23.0	Feb 3.5
1966	1663.1	23.6	76.4	28.3	uc
1967	2124.8	33.9	66.1	38.3	uc
1968	2646.0	36.1	63.9	41.7	uc
1969	2872.3	35.9	64.1	35.2	July 5.0
1970	3202.1	29.9	70.1	30.1	uc
1971	3745.2	31.3	68.7	33.5	uc
1972	4371.1	31.0	69.0	33.3	Oct 8.5
1973	6238.4	26.5	73.5	31.6	uc
1974	7276.7	27.5	72.5	34.9	Jan 10.0
1975	8676.5	30.0	70.0	36.2	April 8.5
1976	10831.2	30.7	69.3	39.6	Feb 6.0
1977	13013.6	30.8	69.2	41.8	uc
1978	15609.1	24.1	75.9	36.0	Dec 5.0
1979	19617.7	23.2	76.8	25.8	uc
1980	26929.3	21.3	78.7	23.4	uc
1981	32380.5	19.4	80.6	27.0	uc
1982	38469.5	21.6	78.4	26.4	uc
1983	48599.2	23.4	76.6	23.3	uc
1984	57960.0	24.3	75.7	24.2	uc
1985	61111.2	18.5	81.5	22.5	April 4.0
1986	64410.9	16.8	83.2	20.4	Feb 4.0, Oct 3.5
1987	68168.6	20.5	79.5	24.1	uc
1988	74155.1	20.3	79.7	23.1	uc
1989	84498.4	15.8	84.2	19.9	Jan 3.5, May 4.5, Oct 5.5
1990	101892.7	14.3	85.7	18.4	Jan 6.5
1991	119162.9	11.7	88.3	18.0	Aug 7.5
1992	125860.9	9.4	90.6	18.0	May 8.5
1993	139135.5	7.6	92.4	18.2	uc
1994	154693.0	7.2	92.8	17.9	Jan 9.5

Notes: where n.a. not available and uc unchanged

Source: Quarterly Economic Bulletin, BNM, various issues;
 Money and Banking, BNM, 1994, various tables.
 International Monetary Funds, IFS Yearbook, December 1995.

1.4.4 Exchange Rates and Domestic Interest Rate Trends

During the fixed exchange rate regime, the then Malayan dollar was pegged to sterling. From June 21, 1973, the fixed rate was abandoned following the floating of pound sterling in 1972 and also the floating of Singapore currency in June, 1973. Since the adoption of a flexible exchange rate, the value of the Malaysian Ringgit has been determined in terms of a 'composite' of the principal currencies of Malaysia's trading partners. Under this arrangement, any movements of exchange rate will reflect the balance of payment's position.

In order to develop the foreign exchange market, the Association of Banks was free to determine its own exchange rates in respect of any foreign currency based on the composite rate. However, only commercial banks were given a licence to operate foreign exchange business under the condition that its foreign reserves holdings be consistent with the banks' optimal needs.

In general, the performance of the Malaysian Ringgit (RM) has been one of mixed fortunes after 1973. See, Table 1.16 and Chart 1.4. Between 1973 and 1978, the performance of the Ringgit was weakened due to inflationary pressure from imported inflation particularly through the import of investment goods as a result of the first oil shock in 1973-1974. During 1980-81, the Ringgit remained weak, to reflect the unfavourable condition of BOPs' positions. However, despite the appreciation of the Ringgit against other major trading partners between 1982-84, the values of the Ringgit remained weak compared to the US dollar to reflect a strong US dollar abroad. From 1985-1991, the Ringgit proved to be depreciated against Malaysia's trading partners' currencies, owing to the weak domestic

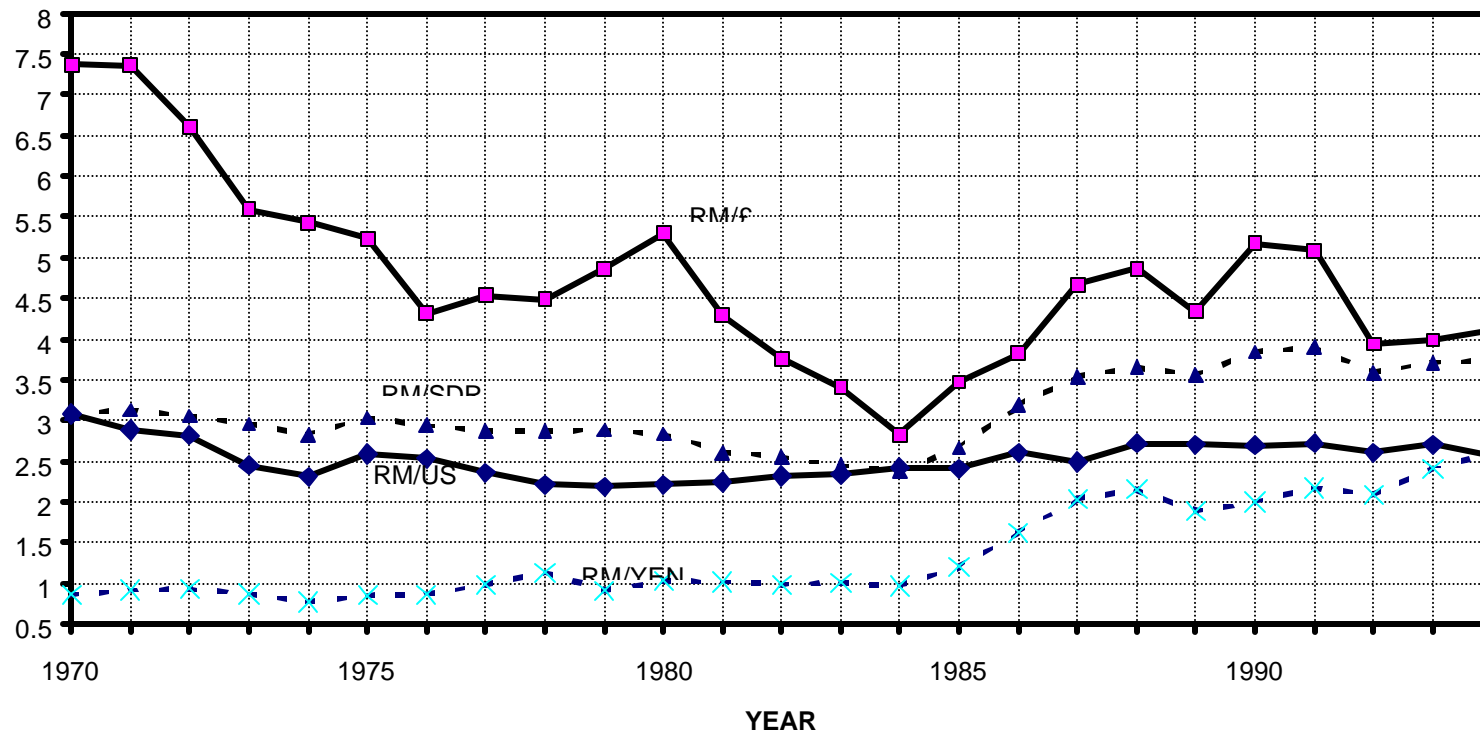
economic performance and pressure on the external debt burden. In addition, large capital outflows also occurred because of interest rate differentials disadvantageous to Malaysia. In 1992-93, the Ringgit appreciated slightly after the monetary authority took steps to rectify the interest rate differential problems and stop the short term capital outflows.

Table 1.16: Exchange Rates of the Malaysian Ringgit Against Selected Currencies

YEAR	RM per unit			RM per 100 units Yen	Real effective exchange rate (1990=100)
	US\$	£ Sterling	SDR		
1961	3.0418	8.5429	3.0500	0.8407	
1962	3.0476	8.5429	3.0600	0.8508	
1963	3.0593	8.5524	3.0592	0.8451	
1964	3.0710	8.5714	3.0710	0.8571	
1965	3.0593	8.5714	3.0592	0.8477	
1966	3.0710	8.5714	3.0710	0.8472	
1967	3.0563	7.3551	3.0563	0.8445	
1968	3.0650	7.3063	3.0650	0.8575	
1969	3.0750	7.3838	3.0750	0.8600	
1970	3.0775	7.3663	3.0775	0.8613	
1971	2.8863	7.3638	3.1334	0.9175	
1972	2.8170	6.6121	3.0585	0.9359	
1973	2.4545	5.5908	2.9580	0.8689	
1974	2.3095	5.4267	2.8317	0.7696	
1975	2.5878	5.2370	3.0300	0.8483	
1976	2.5352	4.3150	2.9452	0.8660	
1977	2.3640	4.5330	2.8734	0.9848	
1978	2.2077	4.4904	2.8740	1.1346	
1979	2.1887	4.8643	2.8836	0.9129	138.3
1980	2.2175	5.2988	2.8345	1.0290	133.2
1981	2.2433	4.2903	2.6099	1.0201	133.8
1982	2.3185	3.7595	2.5606	0.9858	142.2
1983	2.3387	3.4016	2.4481	1.0083	149.0
1984	2.4263	2.8254	2.3770	0.9663	154.7
1985	2.4135	3.4755	2.6653	1.2048	147.0
1986	2.6015	3.8242	3.1840	1.6250	123.4
1987	2.4915	4.6679	3.5364	2.0347	117.0
1988	2.7152	4.8683	3.6540	2.1548	106.1
1989	2.6990	4.3407	3.5526	1.8835	104.2
1990	2.6980	5.1735	3.8433	1.9971	100.0
1991	2.7235	5.0862	3.8965	2.1745	97.2
1992	2.6065	3.9405	3.5915	2.0902	103.3
1993	2.7010	3.9901	3.7107	2.4127	102.3
1994	2.5579	4.1063	3.7372	2.5975	98.7

Source: Quarterly Economic Bulletin, BNM, various issues
 BNM, Annual Report, (1994)

CHART 1.4: EXCHANGE RATES OF THE MALAYSIAN RINGGIT- RM per unit of US\$, £ Sterling, SDR, and RM per 100 units of Yen



1.5 Monetary Policy In Retrospect

Since the establishment of the Central Bank in 1959, the objective of monetary policy in Malaysia has been adjusted in tandem with domestic economic development. In the first decade following Independence, the management aim of monetary policy was to set up a sound financial infrastructure and control inflationary pressure. Thus, the role of monetary policy was limited to merely a complementarity to fiscal policy. Currently, its roles are more demanding, particularly after financial liberalisation and monetary policy reforms were implemented. In line with this development (also, see, Table 1.1), the main objective of monetary policy is to promote the highest sustainable rate of output growth, consistent with domestic price and exchange rate stability (BNM, 1992).

Consistent with the domestic and the external events, the monetary measures in Malaysia have been implemented to safeguard the financial system in particular, and the country in general. As mentioned in the introductory section of this chapter, analysis of monetary measures is divided into two periods, namely the pre-liberalisation and the post-liberalisation periods.

1.5.1 Monetary Measures During the Pre-Liberalisation Period

The first decade after Independence saw a gradual transition in the monetary and banking system in Malaysia. During this period, the monetary policy was mainly designed to strengthen and to develop a sound financial system. During the early 1970s, when various development policies were being implemented (see, Table 1.1), the demand for banking

services began to increase accordingly, such as the demand for credit, particularly the demand for the long-term loan from the business sector.

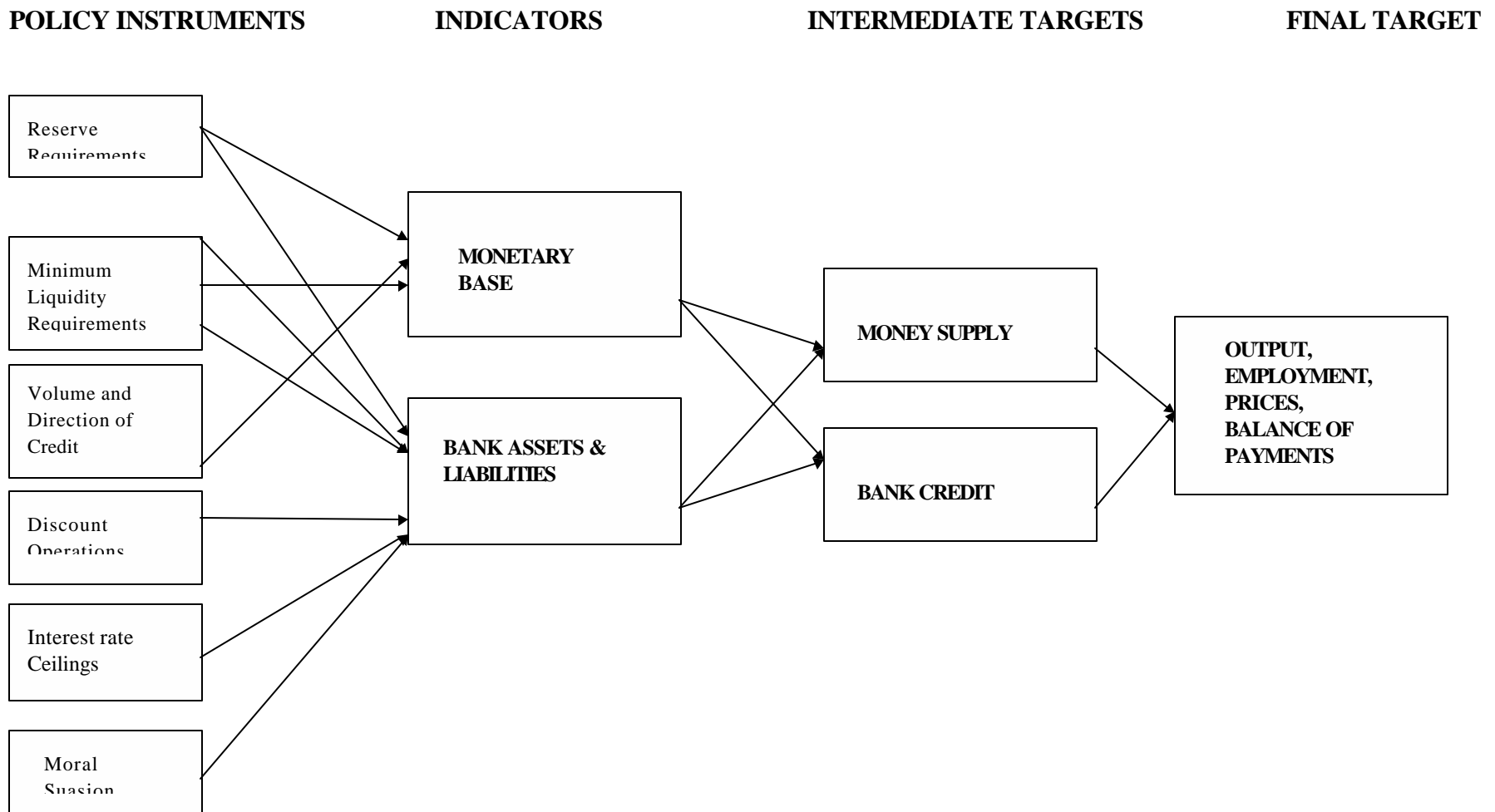
Monetary policy framework during the pre-liberalisation period can be explained using the following chart (see, Chart 1.5⁶). During this period there were five policy instruments at the disposal of the central bank and these were used to control the money supply and the bank credit creation process in order to achieve the final targets (goals). These traditional policy instruments are the statutory reserve requirements (SRR); the liquidity ratio or minimum liquidity requirements (MLR); the volume and direction of credit (VDC); interest rate ceilings (IRC); discount operations (DO); and moral suasion. The SRR which is expressed as a ratio of reserves to eligible liabilities, can directly influence the level of deposits and loans extended by the banking system. Even though the SRR is regarded as less flexible, this tool has proven to be an effective means of monetary regulation during the pre-liberalisation period (BNM, 1994). The MLR and VDC are the credit control instruments. In Malaysia, the MLR was established to protect the bank depositors and to safeguard the banks' liquidity. In certain cases, the MLR is used to ensure that banks channel their funds for financing the government's budget deficits through holdings or 'forced' buying of public short-term debts.

By using the SRR, which was first introduced for commercial banks in January 1959, the Central Bank can monitor the banking sector liquidity. For example, during the late 1960s due to the export boom and the expansion of public sector expenditure, the Central Bank

⁶ Based on the work of Dennis (1981)

changed the SRR three times, from 2.5% in 1959 to 3.5% in 1965, and to 5.0% at the end of 1969 (see, Table 1.15). The low changes in the SRR were in line with the moderate growth of money supply and domestic credit expansion over this period. Similarly, as interest rates remained under the control of the monetary authority, the average lending rate changed at a slower pace, from 7% to 8% in 1970 (see, Table 1.14). Prior to 1984, the Central Banks' emphasis was on narrow money, *M1*, which comprises currency in circulation and private sector demand deposits. To influence the monetary base or high powered money, the monetary authority used special deposit placements in the banking system and reserve requirements.

Chart 1.5: The Targets and Instruments of Monetary Policy, Pre-1978



Between 1968 and 1973, the monetary and banking environment was gradually transformed, resulting in a greater degree of financial intermediation and an improvement in the transmission mechanism of monetary policy (BNM, 1994, pp.448-478). Consequently, the role played by monetary policy was slightly more deliberated than in the previous period.

In addition, the floating of the Malaysian Ringgit in June 1973 has directly expanded monetary policy management. As a result of the Central Bank allowing the commercial banks to accept medium-term fixed deposits with maturities of up to 36 months, the average annual growth of monetary aggregates (*M1* and *M2*) rose from an annual average of 7% in the previous period (1957-67) to an average of 18% per year between 1968-1973.

With rising liquidity in the banking sector, for the first time in 1971, the finance companies were also subject to the minimum liquidity requirements of 10%, as part of the package to control the credit creation process. Also, as a result of imported inflation due to the boom in export prices associated with the first oil shock, the *SRR* for the commercial banks had been raised from 8.5% in October 1972 to 10% in January 1974. To tighten the liquidity condition among the finance companies, the Central Bank then introduced the *SRR* for the first time in 1972 at 2.5%, based on the total deposits held by them. The requirements were then raised to 5% in August 1973, and to 7% in 1974.

During the period 1974-1978, several events led to unique circumstances which required active Central Bank intervention and more deliberate monetary management. In 1974, the rate of inflation was recorded at 17% which was largely due to the imported inflation. The

monetary aggregates, *M1* and *M2*, expanded rapidly at average annual rates of 14.3% and 18.36%, respectively, while the monetary aggregate *M3* grew at an average 19.6% yearly. Given this economic environment, the monetary measures taken by the Central Bank were aimed at reducing the financial systems' liquidity and also the inflationary pressure. As a result, measures such as raising the *SRR* for commercial banks as mentioned above, were taken. To contain the credit demand, the lending rate of commercial banks was raised from 8% 1973 to 10% in 1974. Towards 1978, when the inflation trend movement was under control, at an average of 4.8% yearly, the *SRR* was gradually reduced to 5% in December 1978 for the commercial banks. Subsequently, the *SRR* for the finance companies was reduced to 4.0% in 1977 and 2.5% in 1978. However, the *SRR* for merchant banks which was first introduced in 1975 remained at 1.5%. In addition, the quantitative control on credit that was first introduced in the early 1974 was also withdrawn in February 1975. Moreover, the impact of the currency's revaluation after it had been floated in 1973, further moderated the rising prices of imported goods. The measures taken above, effectively managed to contain the inflationary pressure.

1.5.2 Monetary Measures During the Post-Liberalisation Period

This section highlights the monetary policy stance of post-1978, that is after the deregulation of interest rates. Post-1978, in fact, can be divided into two periods: firstly, the monetary policy stance during the period towards maturity (1979-1988) and secondly, during the challenging period 1989-1995.

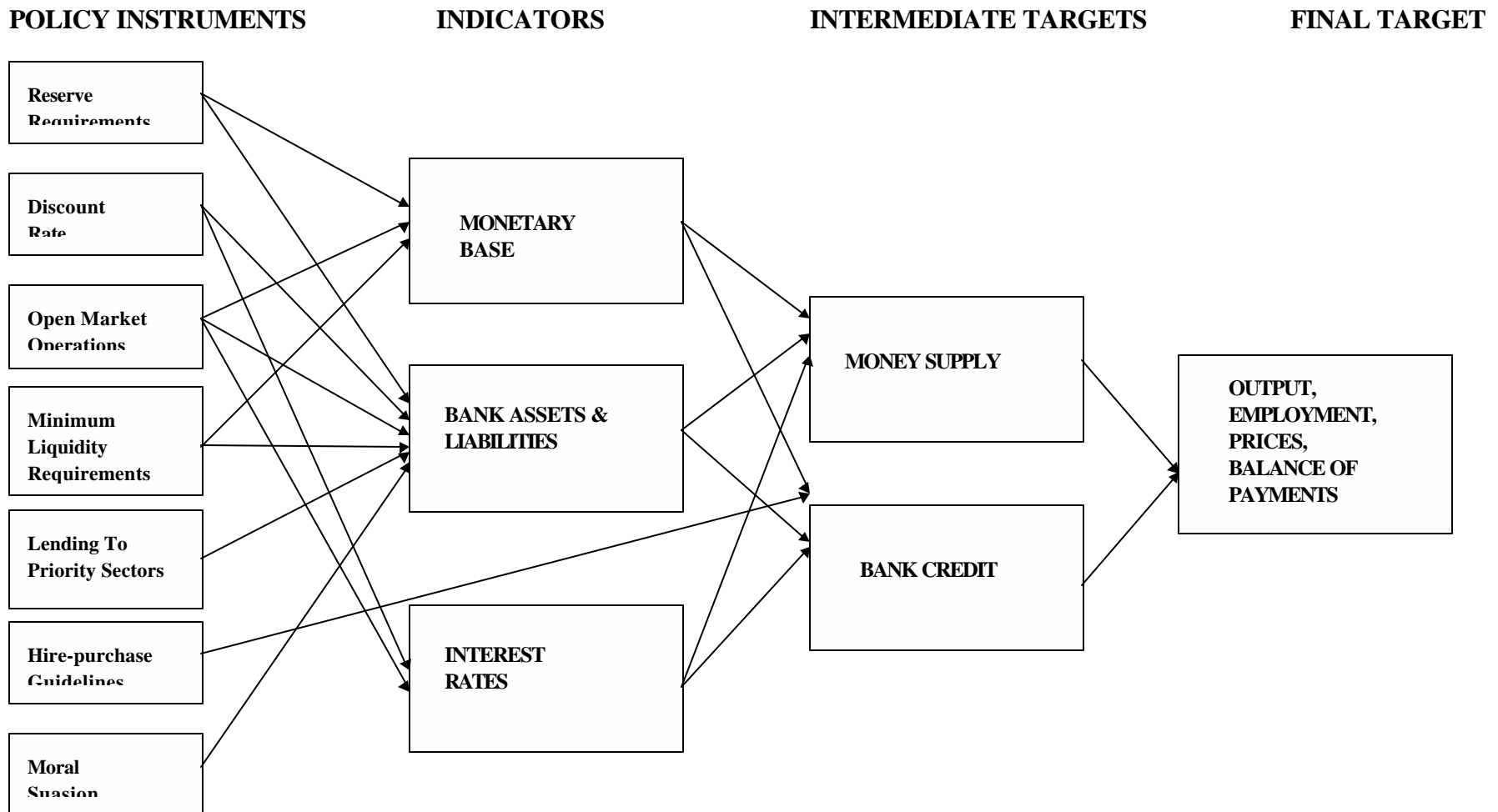
As at the end of 1978, the domestic interest rates were fully liberalised to allow the banking sector to determine the interest rate based on cost of funds. As most of the monetary policy reforms were implemented after 1978, there were some changes in the target and instruments of monetary policy. See, Chart 1.5. For example, as shown in Chart 1.6, the inclusion of open market operations (OMO) offered more impact on the implementation of monetary policy by the monetary authority. The OMO could be used for three purposes, namely, to change the size of the monetary base or high powered money, to alter the structure of public debt without changing the monetary base, and to influence the market interest rates.

Throughout this period (post-1978), the MLR had been reduced many times as it was being replaced by the OMO. Credit rationing had also been abolished but lending to priority sectors, such as housing loans and credit to small-scale industries remained under the protection of Central Bank. However, the target objective remained either the money supply or bank credit by monitoring the market indicators such as monetary base, bank assets and liabilities, and the market interest rates.

During the period 1979-1988, the average annual inflation rate was recorded at 3.7%, while the average annual growth of real GDP at 5.5% (see, Table 1.2). In the banking sector, the average lending rate of the commercial banks reached nearly 11.6% in 1985, that was the highest point since Independence, but this gradually declined to 7% in 1989. During this period, the average annual growth of monetary aggregates had also declined indicating the tight monetary policy stance taken by the Central Bank. This action was in line with the

unsettled condition of the international economic environment due to a lag effect of global recession in the early 1980s. But at the same time, the Central Bank was confronted with conflicting objectives of maintaining stability in the foreign exchange market and reducing interest rates in the domestic money market. This was because, during this period, the banking sector had been experiencing resource gaps indicating a shortage of deposits placed with them in order to support the credit requirements (See, Table 1.13). The resource gap became even more critical in 1989, with a shortage of nearly RM 4.0 billion. Therefore, several additional measures were implemented, amongst others, through open market operations, foreign exchange swap facilities, recycling of Government deposits and the reduction of the SRR.

Chart 1.6: The Targets and Instruments of Monetary Policy, Post-1978



The period 1989-1994 was characterised by six consecutive years of rapid economic growth. The average annual growth of real GDP was recorded at 8.6%, while the average annual inflation rate was recorded at 3.6%. As the economy moved towards full employment as reflected by a low unemployment rate of 3.0% in 1993 and 2.9% in 1994, this created further pressure on prices and money demand. Consequently, this position caused an upward pressure on the money supply. As shown previously in Tables 2.11 and 2.12, the monetary aggregates expanded twofold between 1992 and 1994 to reach the highest peak in 1993 at 35%, 27% and 24% for *M1*, *M2*, and *M3*, respectively. Therefore, after 1989, the Central Bank adopted a tight monetary policy stance to reduce excess demand in order to contain inflationary pressure (BNM, 1994). As a result, the major thrust of monetary policy during this period was to ensure economic growth whilst, at the same time, maintaining price stability.

The monetary measures implemented included revising the *SRR* of the banking institutions, introducing new short-term market-based instruments, similar to the Treasury Bills, called Bank Negara Bills, placing the excess funds of the Employee Provident Fund (EPF) in the Money Market Account, and using open market operations (Economic Report, Ministry of Finance 1994/95; BNM, Annual Report 1994, and Money and Banking in Malaysia 1959-1994).

1.6 Summary

As has been argued by Tseng and Corker (1991), the implementation of financial liberalisation and monetary policy reforms have led to a reassessment of how monetary policy should be conducted. In general, there has been a greater reliance on interest rate and money supply target as well as on credit and exchange rate. Greater emphasis has also been placed on indirect market-based instruments, such as open market operations in influencing the domestic monetary conditions rather than the credit controls.

Nonetheless, the development in the banking sector has also played a major part in mobilising domestic funds and influencing the spending and investment decisions. The 1980s reforms in financial markets also brought about structural changes in the capital markets and widened the range of instruments available to the business sector and investors. Thus, in view of these developments in general, and the effect of liberalisation on the economy in particular, there are several questions which can be asked, providing the basis for at least four potential research hypotheses (PRHs) that can be developed. They are:

- Did the credit channel diminish after 1978?
- Does credit rationing continue after 1978?
- Does the money channel become more important than the credit channel during the post-1978 period?
- Is there any role for the liberalised interest rate during the post-liberalisation period?

As a result of the questions raised above, the following chapter presents a literature review in order to generate the testable research hypotheses (TRHs).