Chapter 4

A Theoretical Analysis of Monetary Policy in The Last Two Decades: The Case of Malaysia

4.1 Overview of Economic and Monetary Developments in the Last Two Decades

The international economic and financial environment in the 1980s posed a new dimension of challenges for the national economic management and also for the operation of monetary policy for Malaysia. In the early 1980s, when the world economy was still undergoing one of its most severe recessions, monetary management in Malaysia then, had to counter such dampening effect while controlling the potential inflationary pressures. The monetary instruments that are associated to monetary policy in Malaysia included the traditional open market operations and variations in the reserve and liquidity requirements. In the area of monetary management, monetary policy in Malaysia in the 1980s and the early 1990s had emphasised more in terms of monetary targeting as their policy target but gradually change to an interest rate-targeting regime going into the mid-1990s. The rationale of such a move was partly due to the fact that monetary targeting was becoming increasingly complicated as a result of the instability of money supply and demand. According to Dornbusch et al (1998), if the output deviates from the equilibrium level mainly because the demand-for-money function shifts about, the authorities should operate monetary policy by fixing the interest rates. As for a theoretical monetary policy model, the Malaysian approach since the 1980s (up to the onset of the currency crisis) mirrored the Mundell-Fleming model with fixed exchange rate (although to a lesser degree since the country was previously pegged to the US dollar and later a basket of currencies) citing perfect capital mobility (as there were no capital controls). However, during the crisis, the model took the form of a **Mundell-Fleming** model with a fixed exchange rate (as the Ringgit was pegged to the US dollar) with imperfect capital mobility (as capital controls were implemented in 1998).

In any case, monetary policy in the early 1980s was selectively restrictive as the Central Bank sought to establish an environment to check the adverse tendencies in the monetary expansion, inflation and the balance of payments. Interest rates were then allowed to rise in accordance to the market forces. With the impending global recession then in 1982, the Central Bank actively promoted policies, which would help to consolidate the public sector expenditure and strengthen the Government's financial position in line with the available resources. Monetary policy was selectively accommodative in its overall stance in order to meet the liquidity requirement and also to channel such resources towards the promotion of exports and private investments which would strengthened output growth.

In the mid-1980s, the fall in commodity prices and subsequent fall in the terms of trade of the non-oil developing countries had exerted a significant impact on the Malaysian economy. The recession in the mid-1980s was a particularly challenging time for Malaysia, and also for its monetary management. During this period, the dilemma for the monetary authorities was that although there was the need to maintain high interest rates to mobilise savings and to discourage capital outflows, however, the maintenance of such a high interest rate was likely to crowd out the private sector investments. In any

event, monetary policy was expansionary during the recessionary period of 1985-86. However, once the economy began to recover, the liquidity conditions was flushed, the expansionary stance was subsequently abandoned, thus leading to monetary policy in 1987-88 being largely neutral in its stance.

The rapid economic growth after the recessionary period of 1985 – 87 began in 1988 and the economic boom soon led to rising price levels. Inflation rose in 1988 from 2.5% to a 4.7% level four years later thus prompting the Government to adopt a strong anti-inflationary stance throughout 1992-93. Such a move was deemed necessary then as the economy was already operating at full-employment while the growth rate was still robust. Monetary policy in 1990 was targeted at supporting the continued economic growth while ensuring that inflation was under control. Large capital inflows and export earnings led to ample liquidity. The authorities reacted by adjusting the reserve requirements to mop up the excess liquidity.

With the rapid improvements in the economy, monetary policy was confronted with multiple challenges. The GDP growth has been recording positive growth rate in excess of 7% every year from 1988 to 1997. Such rapid economic expansion subsequently saw the Central Bank adopting a tighter stance in the face of mounting inflationary pressures. In addition, the interest rate differential between Malaysia and the world led to substantial capital inflows. Throughout the 1989 – 93 period, the main task of monetary policy was the management of excess liquidity brought about by the economic expansion to control inflation. In this respect, the Central Bank was also continuously confronted with the conflicting objectives of maintaining stability in the foreign exchange market and the increasing of interest rates in the money market to contain the

rise in prices. The monetary management spectrum was also limited and constrained by the divergent monetary policies between Malaysia and many other countries. For instance, a too high of an interest rate may constraint growth while at the same time it was also likely to attract undesirable capital inflows, which at best, were only speculative. However, the period of the early 1990s saw major industrial countries adopting a more expansionary monetary policy as opposed to Malaysia's tighter stance thus causing significant interest rate differential in favour of Malaysia.

Monetary policy in 1995 continued to emphasize on the need for monetary restraint in the face of a continuous robust growth. Hence, the country's monetary management continued to maintain a stance of monetary restraint while ensuring the achievement of sustainable growth. In neutralizing excessive liquidity in the economy, the Central Bank utilized the use of direct money market borrowings and also the issuance of Bank Negara Bills (BNBs).

Shortly before the currency crisis (which began in July 1997), Malaysia recorded a high growth rate, stable prices and a healthy fiscal surplus thus reflecting a country with the effectiveness of a very sound macroeconomic management. Gross domestic product (GDP), based on market prices, registered a figure of 9.5% in 1995. However, since the middle of 1995, monetary policy has been kept tight due to the concerns by the monetary authorities of the sharp deterioration in the current account deficit. Some of the monetary instruments used were the raising of the interest rates and also the increase in the bank reserve requirements. However, as the effect of the financial crisis of 1997 began to unfold on the Malaysia economy during the second half of that year, the

economic growth subsequently slumped due to a decrease in aggregate demand while also to a certain extent owing to the restrictive monetary stance.

Although the inflation rate in 1997 was slightly higher than the previous year, the country's monetary policy still tried to accommodate strong growth in loans to the private sector in the hope of sustaining high growth in a stable price atmosphere. However, with the currency crisis setting in by July that year (leading to the strong downward pressure on the Ringgit), Bank Negara intervened by raising the interest rates. However, this only led to a crowding-out of private investment and by 1998, the Malaysian economy was clearly affected by the Asian currency crisis. Real GDP contracted by 6.2% that year while the consumer Price Index (CPI) rose to 5.3% the same year. The unemployment rate also rose in 1998 to 3.3% compared to 1997, which registered only a 2.5% (Asian Development Bank - Annual Report). With the crisis proving to be rather serious and much more difficult to negotiate, the Malaysian government further tightened its monetary policy and increased its reliance on marketbased monetary instruments. But in July 1998, in an attempt to stimulate the economy, the Government, relaxed its monetary policies with measures that seek to boost liquidity flows in the economy and to address the severe cash crunch confronting the corporate sector.

Recovery in the Malaysian economy began in to take place in 1999 with real GDP registering an expansion after the contraction in 1998. Consumer price inflation averaged 2.8%, almost half the value in 1998 reflecting the significance of greater exchange rate stability while unemployment rate eased slightly from 1998. Macroeconomic management then focused on aggressively stimulating domestic

aggregate demand with expansionary monetary policies taking priority, which resulted in the continuous decline in the interest rates led by a reduction in Bank Negara's intervention rate. Reflecting stronger economic activity, all three monetary aggregates M1, M2 and M3 expanded although Bank Negara Malaysia moderated the monetary expansion by mopping up liquidity.

The economy further improved in 2000 as improved consumer confidence saw growth in the private investment and private consumption. The employment rate somewhat improved slightly, with the unemployment rate tracking at 2.9%. The consumer price inflation in 2000, averaged at a level much lower than the previous years, averaging at just 1.6%. Monetary policies continued to be expansionary, as the government attempted to consolidate and further extend the economic recovery. Continuing its accommodative monetary stance in the face of subdued inflation pressures, low interest rates were maintained while the fixed exchange rate regime (the pegging of the Ringgit to US dollar) remained unchanged. In addition, the continuing progress of bank merging exercise ensured that the banking system's march towards becoming more effective and competitive.

4.2 Monetary Targeting Versus Interest Rate Targeting

Monetary policy in Malaysia in the 1980s and the early 1990s had emphasised more in terms of monetary targeting as their policy target but gradually change to an interest rate-targeting regime going into the mid-1990s. In essence, such a move was partly due to the fact that monetary targeting was becoming increasingly complicated as a result of the instability of money supply and demand. The high capital inflows during the late

1980s and early 1990s were largely the cause of such instability to the money supply and demand.

4.2.1 Interest Rate Management

The evolution of Malaysia's monetary policy can be characterized by the fact that the interest rate targeting regime only came into more prominence in the mid-1990s as prior to that, the stance was skewed towards monetary aggregates targeting. One of the reason interest rates targeting gained importance then was the fact that in the age of globalization, movements in interest rates abroad vis-à-vis domestic rates could no longer be totally ignored in the monetary policy implementation. In this respect, according to the **Mundell-Fleming** model, monetary policy under a fixed exchange rate was constrained by the interest rate differential implication, which could trigger off massive capital flows with the ultimate effect of pressuring the exchange rate. Since Malaysia's exchange rate was considered a quasi-peg (to the US dollar) and thus a proxy for a fixed exchange rate (although to a lesser degree), such limitations were indeed significant.

However, globalization and the increased sophistication in monetary aggregates have made it much more difficult to predict and forecast the demand and supply of money. In addition, data on interest rate are available in a more timely manner compared to monetary aggregates data which are available only once a month, thus suggesting that the management of interest rates was a more easier and accurate task compared to its monetary counterpart. In any event, according to **Dornbusch** et al, 1998, if the output deviates from the equilibrium level mainly because the demand-for-money function

shifts about, the authorities should operate monetary policy by fixing the interest rates. Such was the practice in the 1990s in Malaysia as the continuous capital inflows had rendered monetary policy via money supply targeting a more delicate affair as such phenomena had reduced the stability of the demand and supply of money. Out of the RM12.5 billion of net capital inflow in 1993, RM2.6 billion was short-term. In 1992, private capital inflows (short-term) were estimated at RM3.575 billion while the private long-term capital inflows were estimated at RM10.4 billion.

As far as interest rate management is concerned, by the late 1970s, Malaysia had fully abolished the interest rate cartel by banks. Prior to this, the Central Bank had determined the interest rates on the bank deposits and the prime lending rates for bank credit in consultation with the banks. After October 1978, the interest rate for deposits and lending were determined by the market forces. However, by November 1983, recognising that the interest rates were "sticky" even in the face of declining cost of funds, a new system was necessary. In this respect, commercial banks were required to anchor their lending rates to the costs of funds, thus by October 1985, deposit rates of the commercial banks were pegged to the deposit rates of the two leading domestic banks. In the 1980s, with the trend skewing towards financial liberalization, monetary policy targets then began gradually to emphasize on interest rate targeting instead of the previously monitoring of monetary aggregates like M1, M2 or M3. By the mid-1990s, interest rate had been made the main targeting instrument in monetary policy.

The global recession in the late 1970s and early 1980s due to the energy crisis exerted an adverse impact on the Malaysian economy. However, the rising inflation and worsening external payments position led to a restrictive monetary stance in 1981. Although

economic slowdown was still prevailing, monetary policy then, was still contractionary and a major element of such a move was to allow a gradual rise in the interest rates to reflect market conditions. To enable the market to adjust to tighter liquidity in a more orderly and co-ordinated fashion, the Central Bank stepped in to moderate the rise in the interest rates in times of tight liquidity but at the same time ensuring that restrictive monetary policy was not compromised. The restrictive monetary stance via high interest rates was crucial to reverse the worsening balance of payment through the workings of the capital account.

With the weighted average lending rate of commercial banks moving upwards in 1982 amid a slackening of domestic activities, the Central Bank repeatedly exhort the banks to reduce the lending rates and cut their margins in 1982. Interest rate management was crucial during the recessionary mid-80s, as there was a need for high rates to mobilize savings and discouraged capital outflows while low rates were also important to stimulate private investments. However, in their bid to help corporations' debt servicing and to stimulate investments, the Central Bank also use moral suasion to bring down the interest rates thus leading to two leading domestic banks to reduce their deposit and base lending rate in 1985. In their bid to ensure a lower cost of funds, the Central Bank announced monetary package measures (which included the dismantling of interest rates pegging among others) to orchestra a more rapid reduction in the lending rates. Here, the interest rate management refers to the general stance of monetary policy, which uses the interest rate channel as the policy transmission. In this respect, the monetary policy mechanism operates within the conventional IS-LM framework and can be characterized by the traditional Keynesian view of the interest rates affecting the economic activity. In short, an expansionary monetary policy leads to a lowering of interest rate, which in turn stimulates investment thus leading to an increase in output. The interest rate channel of how an expansionary monetary policy is transmitted to the real economy can be characterized by the fact that an expansionary monetary policy will lead to a decrease in the interest rates thus expanding investment, which would then amplify output.

Towards the late 1980s and going into the following decade, the implementation of monetary policy was pre-occupied with dealing with the inflationary pressures after the economy had rode out of the recessionary mid 1980s period. However, with the global interest rate on the decline, monetary policy had to be administered amid a rather tricky environment. In this case, the interest rate differential between Malaysia's rate and world rates favouring Malaysia, in the early 1990s saw the inflow of substantial foreign funds thus making the task of monetary policy more difficult. In such an environment, monetary policy had several contrasting objectives, namely containing the inflationary pressures while ensuring that the higher interest rates did not crowd out productive investment and also at the same time, trying to avoid undesirable speculative foreign inflows which could upset the exchange rate competitiveness. Ultimately, the money supply targeting was gradually replaced by the more viable interest rate targeting.

Hence in the mid-1990s, the authorities of Malaysia began to concern about the sharp deterioration in the current account deficit while the continued short-term capital inflows (largely speculative) puts inflationary pressures on the economy thus proving to be a constraining factor for monetary policy. Subsequently, the authorities adopted a tighter monetary policy with several measures, among them raising the interest rates and increasing the bank reserve requirement. In theory, such a move entails the conventional monetary policy transmission, which states that the negative (contractionary) monetary

policy shocks working through the interest rate channel. In essence, the interest rate channel of monetary policy channel functions through the IS-LM framework. The negative monetary shocks limit the banking system's ability to sell deposits thus increases the demand for bonds. Money demand then falls. If prices are not fully adjustable, real money balances will decline thus leading to a rise in interest rates. Demand and output will decrease since the cost of capital has increased. Unsurprisingly, the GDP growth rate fell from a high of 9.5% in 1995 to growth rates of 8.6% and 7.7% in 1996 and 1997 respectively.

Since the middle of 1995, monetary policy has been kept tight due to the concerns by the monetary authorities of the sharp deterioration in the current account deficit. One of the monetary instruments used was the raising of the interest rates. However, as the effect of the financial crisis of 1997 began to unfold on the Malaysia economy during the second half of that year, the economic growth subsequently slumped (due to a decrease in aggregate demand). This, to a certain extent was to due to the contractionary monetary stance. The task of monetary policy became increasingly difficult in the second half of 1997 as the currency crisis began to sweep through the region. As currencies in the region all began to fall, Bank Negara Malaysia tried to restore the stability of the rates but this only led to a spillover to the money market in the form of higher interest rates. Subsequently, BNM introduced a temporary measure on 31 July 1997 requiring banking institutions to cap their Base Lending Rate (BLR) in August at the ceiling for July to help normalize the interest rates.

The inflation rate in 1997 was slightly higher than 1996 but with the country aiming to sustain high growth in a stable price atmosphere, the country's monetary policy tried to

accommodate strong growth in loans to the private sector. However, with the currency crisis setting in by July that year leading to the strong pressure on the Ringgit, Bank Negara intervened by raising interest rates. However, this only led to a crowding-out of private investment and by 1998, it was clear that the Malaysian economy was severely affected by the Asian financial crisis. Real GDP contracted by 6.2% in 1998 while the consumer Price Index (CPI) rose to 5.3% in 1998. The high interest rates was crucial in stemming the erosion of the Ringgit thus the higher local rates was needed to reverse the capital outflows in an economic system with no capital controls.

Compared to Indonesia and Thailand, Malaysia's monetary developments during the crisis centered more on an interest rate targeting rather than the monetary base targeting which was the feature highlight in the monetary policies of the former two countries. Basically the tight monetary policy pursuit of 1997 was largely maintained going into 1998 as a measure to contain the inflationary expectations (which were largely derived from the continuing depreciation of the Ringgit) as well as to stabilise the financial markets, including the Ringgit exchange rate. In essence, the interest adjustments were necessary to contain the price pressures while ensuring a positive real rate of interest to the savers.

In the absence of demand pressures, the inflation rate averaged 5.2% for the first 8 months of 1998, thus giving the room for an easing of monetary policy to stimulate the real economy. Thus, the Bank Negara Malaysia (BNM) 3-month intervention rate was continuously reduced from 10.5% level on 3 August to a low figure of 7.5% by 5 October 1998. In addition, banking institutions were also required to reduce the maximum margin over the quoted Base Lending Rate (BLR) to 2.5% points from the

4% points with effect from 1 October 1998. All these measures were in initiated to ensure that loanable funds were available at a lower rate. However, one of the problems of economic slowdown (as far as monetary policy is concerned), is that during recessionary periods, banks are more reluctant to lend for fear of further compounding the already serious non-performing loan (NPLs) scenario, thus hampering the efforts of an expansionary monetary policy (through interest rate channel). However, the slowdown of loans could have just been a slowdown in demand in the economy as even if the rates were low, borrowers may still shy away as their expectations of the economy may still be conservative.

In order to overcome such problems, the authorities had to ensure that there were sufficient funds to finance the economic recovery, thus the banking institutions were required to achieve a minimum annual loan growth of 8% by the end of 1998. In this regard, banking institutions were also advised to reinstate credit lines, which had been withdrawn towards the end of 1997. These were necessary since in theory, if the supply of bank loans are disrupted for whatever reasons, then the bank dependent borrowers may be affected as over time, banks will terminate old loans and refuse to make new ones for fears of worsening their existing NPL problems. Thus, in line with the theoretical basis of monetary policy transmission using the bank lending channel, any decrease in the supply of loans are likely to increase the external finance premium and reduce real economic activity. In this respect, the government's move was to stimulate the economy through the expansionary monetary policy via the bank lending channel. In theory, monetary policy through this channel works through the mechanism of affecting the external finance premium by shifting the supply of credit, particularly loans by

commercial banks. In short, the expansionary monetary policy leads to increased bank loans which in turn affect the investments (increased) and ultimately increased output.

1999 also saw the government continued with the efforts to further foster economic recovery. In this respect, a low interest rate regime was needed to stimulate domestic spending as well as to reduce the cost of financing economic activities. From Fig. 2.5 and 2.6 in Chapter 2, the interest rate-targeting regime saw the LM curve as a horizontal line, LM (r₀). By lowering the interest rate, LM will shift downwards hence leading the intersection point between the IS and LM curve occurring at a higher national income. Hence Bank Negara Malaysia (BNM) further lowered its 3-month intervention rate to a low of 6% on 3 May and 5.50% on 9 August. The intervention rate of the BNM was unchanged until September 2001 when the BNM further reduced it to 5%. With such a move, the BLR ceiling of the commercial banks and finance companies fell further. This was deemed necessary in the light of weakening global economic growth and also in response to similar interest rate cuts by other central banks. From 1999 onwards, the economy began to experience positive real GDP growth again.

4.2.2 Money Supply Management

In Malaysia, there are three types of money: coin, paper money (currency notes) and current or demand deposits held by the private sector. Narrow money or M1 is defined by the Central Bank of Malaysia as consisting of coin, currency notes and demand deposits held by the private sector while the broad money, M2 and M3 has varied over the years due to the introduction of new financial instruments. M2 is defined as M1 plus the following financial assets; Savings deposits of the private sector at commercial

banks, fixed deposits of all maturities of the private sector at commercial banks, net issues of negotiable certificates of deposits (NCD) to the private sector by the commercial banks and repo transactions effected by the commercial banks. Meanwhile, M3 is 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 (Bank Negara Malaysia, 1994).

Since there are different monetary aggregates (M1, M2 and M3), choosing the most appropriate empirical measure of money is critical thus, the Central Bank has adopted M3 as the intermediate monetary target for the purpose of monetary management. Prior to 1987, the monetary target was set at focusing on M1. The Central Bank of Malaysia monitors the rate of money supply expansion as the forces of demand and supply of money will dictate the level of interest, which will subsequently affect the level of private investment. The consequence of financial globalization had been the erosion of autonomy in domestic monetary policy formulation as domestic policies needed to take into account of external factors. One of them had been the fact that the continuous globalization of the world economy had complicated the monetary economic matters, in example, the large speculative short-term inflows had led to volatility swings in the M3. Ultimately, the country resorted to an interest rate-targeting regime. However, as the 1980s economic developments were mainly characterized by global economic slowdown (especially during the early part of the decade) and falling commodity prices

(which affected the country's exports thus leading the country into the recessionary mid 1980s), the use of monetary targeting was understandable then since these unpredictable economic developments had led to a less predictable IS curve. According to **Dornbusch** *et al* (1998), if the deviation of income stems from the unpredictability of the IS curve (i.e. unpredictable investment demand or net exports), the authorities should set monetary targets in stabilizing output. This theory validates the rationale of using monetary aggregates targeting by the government.

The Central Bank influences the money supply since this will enable it to influence the level of private investment, which will determine the level of output. Such monetary targeting was aimed at ensuring that any excess liquidity does not translate into an acceleration of loans, which would only expand the money supply beyond its target rate and ultimately lead to inflation. As financial liberalisation became more prominent into the 1980s, the central bank later (after 1987) eventually placed more importance on the broad monetary aggregate, M3 as the policy target as opposed to the earlier target of M1.

During the lean period of 1985-87, monetary policy was made expansionary to alleviate the deflationary impact of declining commodity prices while containing the upward pressures on interest rates thus stabilizing the economic environment. The Central Bank made available to the market a net amount of RM0.5 billion in 1985 and RM4.4 billion in the first ten months of 1986. In this respect, the statutory reserve ratio was reduced from 5% to 4% of total eligible liabilities with effect from April 15, 1985. Between the years 1985, 1986 and 1987, M1 recorded growth rates of 1.7%, 2.8% and 13% respectively. The increased in the money supply to put downward pressures on the

interest rates in this case leads to the money supply curve (refer to Fig. 2.2 and 2.3) and LM curves (refer to Fig. 2.5) to shift rightwards hence leading to equilibrium positions with a corresponding lower interest rate. Such lower cost of funds hence provided the stimulus to increasing output. The GDP for 1988 and 1989 recorded growth rates of 7.4% and 8.8% respectively.

After the recessionary mid-80s period between 1985 - 87, the economy of Malaysia began to improve from 1989 onwards and the monetary policy after that aimed to ensure that the increase in liquidity continued to be channeled towards more productive sectors. However, the ample liquidity soon convinced the authorities to mop up excess liquidity as the inflationary pressures began to kick in. Hence monetary policy focused on raising the amount of reserves that banks are required to maintain as deposits. Thus the move to reduce money supply was mainly done through the use of policy instruments like open market operations which were conducted by selling Government securities, through direct borrowing from the market and the raising of statutory reserves (the statutory reserve was increased from 3.5% to 4.5%). In 1989, the statutory reserve for commercial banks, finance companies and merchant banks were raised to 4.5% of eligible liabilities. However, the continuous expansion of the economy led to M3 expanding by 20.6% in 1989 and 18.2% in 1990. Thus, monetary policy in 1991 onwards aimed at supporting growth while ensuring that inflation is controlled and the price level stable. For instance, in 1993, with the interest rate differential favoring Malaysia and a strong stock market activity, capital inflows had led to excess liquidity. Therefore, the central bank intervene through the use of open market operations - the issuance of the Central Bank's Malaysia Savings Bonds (MSB) in February 1993 and Bank Negara bills to mop up the excess liquidity to ensure that inflation was contained.

By 1994, the sharp inflows of foreign funds (though largely speculative) had complicated the task of monetary policy. Thus the central bank implemented several measures in their monetary restrain which included increasing the statutory reserve. By 1994, M3 grew only by 13.1% compared with the figures of 1992 and 1993, which registered growth figures of 19.6% and 23.5% respectively. The monetary targeting regime had ensured that the inflation rate remained stable. Inflation during these few years were under control as the inflation rates recorded values of 3.1%, 4.4%, 4.7%, 3.7% and 3.4% respectively between 1991 to 1995. With the economy already operating at full-employment (the unemployment rate between 1991 to 1993 recorded an average rate of about 3.7% while in 1994, the country recorded an employment growth of 3.2% compared to only 2.8% in the growth of the labor force), money supply had to be contain to ease inflationary pressures. From the Monetarists' point of the view, inflation can be contain if the rate of money growth is equal to output growth at full-employment. With the annual growth of GDP (a proxy for output) from 1991 to 1995 hovering around the 8% - 10% figures, the growth rate of money supply had to be somewhat restrain if inflation is to be contained.

Basically, the volatility and declining commodity prices the mid-1980s had affected Malaysia's export incomes while the boom period of the late 1980s and early 1990s saw large capital inflows and high foreign direct investment. Such developments are likely to witness more volatility in net exports and also investment demand and consequently led to disturbances in the IS curve. During these times, monetary policy was more focused on monetary targeting with the initial targeting being M1 in the early part of the 1980s before switching to M3. In this respect, from our theoretical analysis in Chapter 2, according to Dornbusch *et al.*, 1998 if output deviates from its equilibrium level mainly

because of IS curve shifts about (the unpredictability of the IS curve), output is stabilized by keeping the money stock constant. In this case, the monetary authorities should have monetary targets.

4.3 Exchange Rate Management

Prior to the currency crisis, the Malaysian Ringgit, along with many other East Asian economies, was pegged to the US dollar. In essence, the actual reason of why the Ringgit was pegged to the US dollar can be found in Malaysia's common monetary history with Singapore. After Malaysia abandoned the Singapore dollar as its nominal anchor (1:1 basis), the arrangement became less strict throughout the 1970s and in the earlier part of the following decade, a target zone of a maximum 10% depreciation was in place. Thus, with the Singapore authorities pegging their currency to the US dollar, Malaysia indirectly followed suit. However, after 1985, the Singapore dollar was no longer employed as the nominal anchor.

As far as the exchange rate management prior to the 1997 crisis is concerned, the exchange rate management in Malaysia follows a currency basket pegging although Malaysia targeted its currency more loosely than Indonesia or Thailand, mainly by combining discretion and market pressure with varying weights. The pegging of the Ringgit in theory, can be considered as a fixed exchange rate (although to a lesser degree). In this respect, under a fixed exchange rate system, high capital mobility is likely to frustrate the aims of monetary policy. Hence, monetary policy in Malaysia in the late 1980s and early 1990s faced a dilemma as the need for a contractionary stance to curb inflationary pressures soon led to rising interest rates. In this respect, the interest

rate differential between local and international rates was feared to induce speculative capital inflows thus leading to the appreciation of the exchange rates. Basically, as capital inflows increase, tension will most likely develop between the authorities' desire, on one hand to contain inflation while on the other hand to ensure a stable and competitive exchange rate.

Essentially, by pegging to a currency basket, a country can reduce the vulnerability of its economy to fluctuations in the values of the individual currencies in the basket. However, in a world of floating exchange rates among the major currencies, the case for a single-currency peg may be stronger if the peg is to the currency of the dominant-trading partner. In any event, Malaysia's exchange rate regime has been pegged to a currency basket comprising of its major trading partners since the mid-1970s and stayed this way until September 1998 when the Ringgit was fixed to the US dollar in addition to the specific capital controls being imposed.

Since the middle of May 1997, the Ringgit was under heavy bouts of speculative attacks and by 30 September 1997, it declined to a low of US\$1=RM3.1975. In the first 8 months of 1998, the movement of the Ringgit was generally volatile. Thus following the imposition of selective exchange controls on 1 September 1998, the Ringgit has since 2 September 1998, fixed at RM1=US\$0.2632 (US\$1=RM3.80). In any event, the selective capital controls and the pegging of the Ringgit was meant to bring back the stability and finally, the confidence in the financial markets.

In theory, monetary policy is considered effective only under the circumstances of a flexible exchange rate regime since it is only under this exchange rate regime that is able to facilitate a monetary independence atmosphere for the authorities. Since the pegging of the Ringgit to the US dollar is a proxy to a fixed exchange rate (although to a lesser degree), monetary independence is limited since any policies on the monetary side would have led to interest rate differentials, which would then, affect the exchange rates. However, in the case of Malaysia, this has not been the case since, the pegging was accompanied by the selective capital controls hence limiting any implications of capital flows (due to interest rate differentials) which would otherwise have affected the exchange rate. These measures eventually brought back the stability and the confidence into the financial markets hence paving the way for a recovery in the economic activities. In theory, with the selective capital controls in place, the situation will no longer be a perfect capital mobility situation, but rather an imperfect one. In an imperfect capital flow case, the IS curve is flatter than the conventional IS curve (refer to Fig. 2.10). This suggests that there is more room for monetary policy as any change in the money supply will no longer lead to a large interest rate differential while also leading to a larger change in output whenever the LM curve shifts thus greater effectiveness in monetary policy. Hence, during the crisis, Malaysia had been able to conduct monetary policy with greater effectiveness through a combination of a fixed exchange rate and capital controls thus utilizing a model similar to the Mundell-Fleming model with a fixed exchange rate and imperfect capital mobility.

The Malaysian economy in 2000 rebounded strongly after the decline in 1998 and early 1999. This was in large, attributed to the more stable environment made possible by the selective capital controls and the pegging of the Ringgit. Incidentally (after the controls were erected in September 1998), the GDP growth turned positive in the second quarter of 1999 and have seen then recorded strong growth for 7 consecutive quarters. The GDP

in the year 2000 saw an 8.3% growth. In the year 2001, the pegged Ringgit remained relatively strong, in tandem with the strong US dollar in the first 7 months of the year although it depreciated slightly following the September 11 episode. With the peg still in force, it continues to provide an environment of stability and predictability in facilitating economic activities. In theory, so long as the fixed exchange rate is credible (in this respect, if the market believe that the rate will be maintained) expectations of inflation can be minimised. This is crucial as the expectation element plays a significant role in the cause of chronic inflation.

The alarming rate of capital inflow (a large portion being speculative) beginning in the early 1990s led to the government's intervention in this area. In essence, there is the general recognition that an increase in the short-term inflows will lead to a situation analogous to the "Dutch Disease" - whereby net inflows (particularly short -term) could lead to a rapid increase in national reserves. Unless sterilization is conducted, such inflows could ultimately triggered off a real appreciation of the exchange rates that could erode competitiveness. As the short-term external debt of the private sector and the banking sector was low, the short-term destabilising capital inflows were mainly portfolio ones (which were destabiling), government intervention was needed to smoothen excessive fluctuations in the exchange rate. The interest rate difference between Malaysia's rates and the world rates favouring Malaysia, saw massive capital inflows into the country and in 1992 and 1993, thus the Central Bank performed "sterilisation" to preserve the stability of the exchange rate, such short term capital flows may prove tricky in the establishment of long term plans and policies. In essence, sterilization of inflows means - using offsetting open market operations to try and "mop up" the inflowing liquidity). In theory, when capital inflows accelerate, if the exchange rate is prevented from rising, inflationary pressures will build up and the real exchange rate will appreciate through higher domestic inflation. Sterilization of these capital inflows can be used to prevent the loss of competitiveness in the exchange rate. However, such operations may only be restricted to the short-term as although sterilization is able to prevent the domestic interest rates from falling, this will only serve to induce further inflows and disturbs the exchange rate.

In this respect, the short-termism of such inflows, if are allowed to affect the exchange rate may eventually run the risk of overshooting the exchange rate. From Chapter 2, the implications mooted from the analysis of overshooting is that the domestic currency may be worth less than it will be in the long run after an initial monetary contraction or in this case the inflows of capital due to the higher local rates. In theory, the currency must have appreciated by so much at the time of the monetary shock that it has overshot its expected long run value. To avoid the sudden reversal of the capital inflows, the central bank, in 1994, administered a few measures, which included the use of selective capital controls. One of the measures was that the commercial banks were not permitted to undertake non-trade related swaps (including overnight swaps) and outright forward transactions on the bid side with foreign customers beginning 23 February 1994. This was necessary to prevent offshore parties from establishing a speculative long ringgit position at a time when the ringgit was perceived to be undervalued. However, this measure was lifted with effect from 16 August 1994.

4.3.1 Exchange Rate Management: The Case for Capital Controls

During the currency crisis, among the countries that were critically affected, Malaysia was the only country to initiate the move to use currency controls. In this respect, during the currency crisis, one of the critically affected areas for Malaysia was that its currency, the Ringgit, was heavily devalued due to speculative attacks. The unstable Ringgit subsequently led to an outflow of portfolio funds. After almost 15 months from the start of the crisis, the Malaysian government finally resorted to a wide range of direct capital and exchange controls on September the 1st 1998 with the main objective being to regain monetary policy independence by containing speculation on the Ringgit through the elimination of the offshore Ringgit market and to stabilise short-term capital flows. The Ringgit was pegged officially at RM3.80 per US dollar. Clearly, the Ringgit peg brought a welcome respite to many businessmen as the country was enduring over a year of currency volatility although the exchange rate volatility in the region did somewhat reduced after that. However, the Malaysian authority effectively abandoned the main capital control measures that were introduced earlier (September 1998) in mid-February 1999. While the earlier control stated that foreign investors were not allowed to withdraw funds from Malaysia before September 1999, the revised capital controls regulation allowed them to withdraw from mid-February 1999 with the condition of paying a scaled exit tax (pay less for keeping funds longer in Malaysia). This, the authorities hoped that such a move will be able to reduce the outflow impact once September 1999 arrived. In any event, there is no conclusive argument on the issue of whether the capital controls in Malaysia were successful or otherwise in turning the economy around. It is however, clear that the country was recovering by 1999 with the

real GDP expanding by 5.4% compared to a contraction of 7.5% in 1998 (Asian Development Bank – Annual Report 1999).

In the case of the currency crisis, the capital controls used by the Government of Malaysia was inevitable as the heavily devalued/unstable Ringgit had led to an outflow of funds. Clearly, the peg was also a welcome move for businessmen as the crisis had presented almost a year of currency volatility. The fact that the economy was already picking up by 1999 suggested that the capital controls were crucial in stemming the alarming rate of capital outflows. In essence, it is believed that free flowing capital flows controls can undermine a country's stability and the currency crisis of 1997 had proved such an argument. Although capital controls are frown by capital account liberalisation advocates, they may be the most acceptable alternative to the destabilising effects of capital flows on inadequately regulated financial systems, a characteristic especially prevalent in developing countries. Hence capital controls can be used to limit capital flow volatility to achieve greater economic stability by checking outflows in the event of a crisis or influencing the volume or composition of inflows. The example of Chile, which successfully negotiated a crisis similar to the one in East Asia in 1982 with the use of capital controls suggest that there may be benefits to using such an approach.

In theory, the classic economic theory argues that the international capital mobility allows investors to diversify their investment portfolios, thus spreading their risks more broadly while also promoting intertemporal trade. Ideally, increased capital mobility means that firms (or country) are able to borrow money from abroad when incomes are low in the home country and repaying when incomes are high. In addition, firms (or country) can reduce their vulnerability to domestic economic disturbances. However, as

the currency crisis has demonstrated, in times of economic turmoil, unrestricted capital mobility eventually led to irrational capital outflow. Malaysia, together with Indonesia and Thailand were some of the countries, which were facing such a problem during the crisis. Thus, the move by the Government of Malaysia to implement capital controls was to stabilise the short-term capital flows. In any case, critics to free capital movements questioned about whether these free flows can actually deliver an efficient allocation of resources. For instance, the critics of "efficient markets" view argued that liberalized financial markets may be suffering from the problems of incomplete information like moral hazard and adverse selection. In this respect, problems of incomplete information could lead to inefficiencies, which at worst, could result in costly financial crises. In any event, capital account liberalization runs the risks of a potential sudden reversal of capital flows, something quite evident during the currency crisis. Governments can and may want to intervene to deal with the problems of herd behaviour in the context of capital flows. In this respect, Governments can introduce taxes or policies that have taxlike effects to discourage a particular category of capital account transaction such as excessive dependence on short-term foreign debt. In the case of Malaysia, capital controls regulation to deal with the short-term capital outflows during the currency crisis included the condition of paying a scaled exit tax (i.e. pay less for keeping funds longer in the country). In any case, capital controls may have the advantage of complementing monetary policy in fixed exchange scenarios by limiting the capital outlows should there be any interest rate differential in favour of foreign rates.

Thus, with the pegging of the exchange rate to the US dollar during the currency crisis, the use of capital controls would have in fact, complemented the monetary policy by restricting the potential outflows of capital (due to the interest rate differentials) which

could apply pressure on the fixed exchange rate. In any case, capital controls have always been considered as one of the instruments for balance of payment management. In any event, Alesina et al (1994) and Grilli and Milesi-Ferretti (1995) argued that capital controls are more likely to exist in countries with fixed or managed exchange rate regime. In this context, Malaysia's exchange rate prior to the currency crisis had been pegged to a currency basket while after the crisis, it was fixed to the US dollar. Thus, in both regimes, Malaysia's exchange rate had been characterised by a fixed or managed regime atmosphere (although to a lesser extent) so it is no surprise that capital controls had been administered during the crisis. In fact, temporary capital controls was introduced early 1994 after the sudden reversal of massive net portfolio capital inflows in 1992-93. However, the 1994 measures sought to deter capital inflows rather than the 1998's move of restricting the outflows.

However, many critics of capital controls have voiced out that it is through capital mobility that enable investors to achieve a higher risk-adjusted rates of return. In short, the restriction of capital flows will prevent capital from being utilised where it is most demanded. In theory, financial liberalization facilitates free capital movements and ultimately, this will deliver an efficient allocation of resources. However, critics of the "efficient markets" view argue that liberalized financial markets are so distorted thus leading to the problems of incomplete information (adverse selection and moral hazard), which will yield outcomes that are harmful and inefficient. Over the years, the use of limits on short-term foreign borrowing have been gaining popularity with the experience of Chile's capital control's success showing the way. With the many implications that is associated with financial liberalization and free flowing capital comes the suggestion that these are risky propositions and that it makes perfect sense especially for economies

with inadequately regulated financial systems to open up to foreign capital more cautiously. The experience of the East Asian crisis showed that free-flowing capital could throw up unforseen difficulties. Although capital account liberalizing may not have been solely responsible for the Asia crisis, liberalizing the capital account before strengthening the domestic financial system certainly creates an environment conducive to serious economic problems and potentially to a financial crisis. In the case of Malaysia, although many believe that the capital controls have not done much to its real economy, the controls have, in fact been associated to the recovery in the stock market as Malaysia, with the fixed exchange rate and capital controls offers a portfolio investment haven that is relatively sheltered from the volatility of global capital markets.

However, capital controls alone may not be the only answer in time of a financial crisis like the one in East Asia. It is perhaps far more important for countries to strengthen their domestic financial systems so that they can fully enjoyed and reap the benefits of a free flow of capital brings without subjecting themselves to all the costs. In the case of Malaysia, besides the implementation of capital controls during the crisis, it has since then embarked on measures to strengthen its financial systems, with the on-going commercial bank merging attempting to consolidate the banking industry in its objective to be more competitive.