CHAPTER 3

A REVIEW ON THE REFORM PROCESSES AND THEIR IMPLICATIONS ON THE MALAYSIAN MONETARY POLICY FRAMEWORK

3.1 Introduction

It is generally accepted that financial liberalization and reforms undertaken in Malaysia have opened up new avenues and increased opportunities for financial market development. However, in the new environment with closer financial integration and strong capital flows, the effectiveness of monetary policy has often been questioned. Therefore, this chapter attempts to presents an overview of the reform processes and their implications on the Malaysian monetary policy framework.

It discusses how the monetary policy framework has evolved from pre-liberalization to post liberalization period in Malaysia. Thereafter, it reviews the effect of financial liberalization on the money demand behavior and the relationship between money and interest rates on income and prices.

3.2 Financial Development And The Conduct Of Monetary Policy Prior To 1978 Financial Liberalization

In the 1960s and 70s, Malaysian financial system has been subjected to the widely practiced mechanism of financial repression such as interest rate regulation and preferential credit schemes. The financial system prior to reform was characterized by a high degree of segmentation with unbalanced structure and with many types of financial restrictions. All these led to limited competition in the financial system and hence inhibited improvements and development in the financial intermediaries, financial innovations, monetary instruments and procedures.

The deliberate monetary management only began with the establishment of the Central Bank of Malaysia in January 1959. During this period, monetary policies were designed to strengthen and further develop the existing financial framework, besides establishing new institutions and markets. Basically the role of monetary policy was confined to promote strong stable monetary conditions consistent with growing needs of an expanding economy. The Central Bank accorded the monetary aggregates as important monetary policy variables in policy making. Empirical studies of the 1960s and 70s indicated that narrow definition of money (M1) appeared to be the most appropriate measures of money for policy-making purposes (BNM, 1994).[16] The selection of narrow money was based on three criteria that is the strength of the relationship between changes in money and the changes in the output or income, the stability of the relationship over time and the predictive power of this relationship.

[16] Definition of M1, M2 and M3 is given in the Tables B.1 and B.2 in Appendix B.

The availability of sufficient monetary instruments is a prerequisite for effective implementation of monetary policy. Prior to reform, the Central Bank primarily relied on the variations in the statutory reserves, liquidity requirements and periodic changes in interest rates as the main instruments of monetary management. During the period 1959-78, the minimum lending rates and the ceiling on deposit rates at commercial banks with maturity less than one year were determined periodically by the Association of Banks. The objective of the Central Bank then was to stimulate bank credit and savings, to promote the development of the Malaysian banks and to protect the balance of payment from being significantly affected by capital flows.

The maintenance of statutory reserve was first effected by the Central Bank in January 1959, when the ratio was fixed at 2.5% of total liability.[17] Statutory reserve was considered as a powerful instrument available to the Central Bank because it affects the level of deposits and loans that a bank can legally support given the size of its reserves. Liquidity requirement was first prescribed for commercial banks in November 1959 at 20% of deposit liabilities. In the earlier years these measures were used largely to influence the credit creation and to ensure that the banking institutions are liquid at all times to meet deposit withdrawals of their customers.

Apart from statutory reserve and liquidity requirements, moral suasion was also used frequently in 1970s as instruments of monetary management. Moral suasion was particularly used to change the attitude and approaches in banking and banking techniques. Overall, due to the narrow scope of the domestic money and capital market, the effective use of other popular instruments such as variations in the bank rates and open market operations were not possible.

3.3 Financial Development And The Conduct Of Monetary Policy After 1978 Financial Liberalization

Malaysia's financial liberalization process was approached gradually. It was implemented in stages so as to allow financial markets and consumers to adjust to the new environment. There were tentative steps taken towards liberalization in the early 1970s. However, these measures did not represent a continuous and steady policy to liberalize the system. The reforms were undertaken in response to the inflationary environment at that time, and were meant to encourage deposits and savings and discourage consumption. The major phase of liberalization commenced in October 1978 when the Central Bank allowed the commercial banks to freely determine the deposit and lending rates. The liberalization of interest rates in 1978 represented a conscious policy measure by the Central Bank to promote a more liberal and competitive financial system.

Four measures were introduced by the Central Bank during 1978-79 to modernize and deepen the market. The measures included the freeing of interest rate controls, reforming the liquidity requirement of financial institutions, bringing the merchant banks under the Central Bank's supervisory framework and the introduction of two new money market instruments that is banker's acceptance and negotiable certificate of deposit. According to Awang Adek (1992), the package of measures was a concrete step towards a more market-oriented financial system.

[17] Total liability is comprised of deposits including negotiable certificates of deposits and repurchase agreement and net inter-bank borrowings.

3.3.2 Monetary Instruments

In response to exogenous developments, notably the increased international capital mobility and the development of the financial system, Malaysia employed a wide range of monetary policy instruments, with the relative reliance on specific instruments varying over time. In Malaysia, theoretically the Central Bank has command over several policy instruments and thus has the power to adjust the "settings" on its instruments. A policy action is actually an alternative of the settings on one or more instruments (Woo, 1990).

As mentioned by Lin (1992), the limited use of open market operation and inflexibility associated with reserve requirements and liquidity requirements and the growing complexity of monetary management since the 1980s, required new and non-traditional policy instruments to deal more efficiently with the evolving new situation. Apart from the traditional open market operation and variations in the reserve and liquidity requirements, new instruments such as money market operations, discount facilities, limits on the commercial bank foreign exchange swap transactions, lending guidelines and moral suasion, were included. Over time these new instruments have been adapted gradually in support of a more market-oriented monetary policy.

Reserve requirements have continued to play an important role in Malaysia's monetary policy especially in the late 1980s when there was a need for large liquidity withdrawal to neutralize foreign exchange inflows. The Central Bank raised the reserve ratio several times. The reserve requirement was realigned in 1989 so that the different types of financial institutions were required to observe a common ratio instead of different requirements. This reflected the Central Bank's effort to level the playing field for all financial institutions and to eliminate any artificial barriers.

In the absence of a well-developed secondary market for government securities, Central Bank relied on shifting central government deposits between the Central Bank and commercial banks, and occasionally relied on direct borrowing from and lending to commercial banks in the inter-bank market. Greater reliance was also placed on the use of foreign exchange swap. The preference for using foreign exchange swap was to counter the effect of short-term capital flows on the balance of payments. Limits on foreign exchange swap transactions of commercial banks have been used both to contain foreign exchange outflow and restrain inflows. To limit foreign exchange outflows, the Central Bank fixed a maximum limit on the offer side of swap transaction while to limit inflows the limit was set on the bid side. The Central Bank also continued to the use moral suasion on bank lending policies to encourage lending for development and to avoid excessive speculation and risk taking.

3.3.3 Capital Market Development

The Central Bank played a key role in developing the capital market in Malaysia during the 1980s. The emphasis was on the creation of a viable secondary market in Malaysian Government Securities (MGS). The Central Bank undertook appropriate measures to increase the role of the market in providing liquidity to MGS, reduce the scope of captive markets and move towards a market-based pricing of primary issues of MGS. These measures boosted the number of money market participants and created an avenue to establish the electronic trading system.

Following that, several major reforms were undertaken in January 1989. The reforms included the appointment of principal dealers, the issuing of MGS by auction, conducting Central Banks' open market operations through principal dealers and freeing of discount house operations (Awang Adek, 1992). In mid 1980s, the Central Bank also played a key role in the development of the corporate bond market. The measures undertaken by the government such as the setting up of the National Mortgage Corporation in 1986, the corporatization of the stock-broking industry in early 1987 and the launching of a second board on the Kuala Lumpur Stock Exchange in November 1988 were in line with the government's effort to deepen the financial system.

The period also witnessed several significant developments with far reaching impact on the development of capital market. As part of the Central Bank's continuing efforts to develop the private debt securities market, the country's first credit rating agency, the Rating Agency Malaysia Berhad was established in 1990 to rate debt issues by corporations. Another significant development in the capital market was the setting up of the "market watch dog" in the form of the Securities Commission in March 1993.

3.3.4 Financial Deepening And Velocities Of Monetary Aggregates

The purpose of financial liberalization was mainly to enhance the development of an efficient financial system through a greater reliance on market forces as well as to improve the effectiveness of monetary policy. Measures that were taken to develop a sound and diversified financial structure with coordinated money and capital market increased the financial deepening and monetization of the economy. Financial deepening in Malaysia reflected an upward movement in the ratios of M2/GNP and M3/GNP (refer to Graph B.1 in Appendix B).

As noted by Bordo & Jonung (1987), the increase in the financial deepening and monetization of the economy caused the velocity of broad money to decline in the developing countries. In Malaysia, velocities of all three aggregates M1, M2 and M3 not only showed a declining trend but the degrees of fluctuation in velocities have also increased since the early eighties (refer to Graph B2 in Appendix B). Increased volatility in the three velocities is mainly attributed to the development in the bond and stock market and due to the rising demand for ringgit in the offshore market.

3.4 Operation Of Monetary Policy

Financial liberalization had important implications for both the transmission mechanism and the operating procedure of monetary policy in Malaysia. The most significant policy measure, which affected the transmission mechanism of monetary policy, is the deregulation of interest rate. As mentioned by Mulayana (1995), the deregulation of interest rates have actually removed one of the Central Bank's powers to influence directly the interest rate. As a result, the Central Bank now depends on open market and money market operations to achieve its monetary policy goals.

In 1980s, the monetary policy strategy has been based on targeting monetary aggregates and it was more of an internal strategy and thus was not formally announced to the public (BNM, 1999). This strategy was selected based on evidences that monetary aggregates were closely linked to the ultimate goals of monetary policy. By controlling the supply of money, Central Bank will be able to influence the major market variables of aggregate demand and inflation. Up to 1987, the emphasis was on narrow monetary aggregate (M1), and it had been empirically tested to have a stable and consistent relationship with aggregate income.

However, the substantial financial liberalization and innovation in 1980s has rendered M1 less reliable for policy targeting. Moreover, changes in the liquidity preferences of the public and persistently high interest rates led to structural changes in the demand for money. Rising sophistication in the financial system and the demand for money by the public, resulted in savers becoming increasingly sensitive to interest rate movements. Consequently, the traditional relationship of M1 to aggregate income was compromised and the focus inevitably shifted to the broader monetary aggregates.

According to the recent Central Bank report, a correlation test conducted using quarterly data from 1980-1992, showed a positive and high correlation between broad monetary (M3) growth and inflation (BNM 1999). Since price stability was an ultimate goal of monetary policy, broad monetary targeting was seen as a suitable target. In 1984, the Central Bank selected M3 as policy target.

In the 1990s, the far-reaching changes in the economy and the financial system weakened the relationship between monetary aggregates and the ultimate goal variables. This highlighted the problems associated with using monetary aggregates as policy target. The annual growth of money supply as measured by

M3 was extremely volatile during the period of large capital flows (1992-1993) and the large swings in the monetary aggregates reduced the viability of M3 as intermediate target. In addition, during this period, monetary velocities and ratios of nominal GDP to various monetary aggregates have shown frequent and marked departures form their historical patterns making the monetary aggregates unreliable as indicators of economic activity and as guides for stabilizing prices. Correspondingly, the Central Bank concluded that monetary growth no longer provided any additional explanatory power beyond that provided by the output gap.

3.5 The Effects Of Financial Liberalization On The Role Of Money In The Malaysian Monetary Policy Process

In Malaysia, a number of studies have been carried out, namely Kwek (1990), Mulayana (1995), Azali (1998), Azali & Matthews (1999) and Farizah (1999), to examine the impact of financial liberalization on the traditional intermediate targets and to investigate the effectiveness of monetary policy. Most of these studies however upheld the role of monetary aggregate as intermediate target in the monetary policy transmission mechanism.

Kwek (1990) explored the plausible influence and impact of the financial aggregates on economic activity. Her study mainly examines the relative stability between money-to-income and credit-to-income relationship in order to cast some light on the weight of these movements in the conduct of monetary policy. The period of the study is from first quarter of 1973 to fourth quarter of 1989. Causality test and Vector Autoregressive methods namely impulse response function and variance decomposition approach were used to review the usefulness and predictability of the target-goal relationship in the short-run. Meanwhile, the bivariate co-integration test was used to draw some quantitative evidences on the long-run movements of the financial variables that maybe fundamentally related to the output and price fluctuations.

Kwek concluded that M2 is an appropriate intermediate target because it displayed a reasonably systematic relationship overtime to growth rate of output. Moreover, for intermediate target to predict output well, the target needs to be causally prior to the goal variable that is "exogenous". In the study, M2 seems to hold such relationship whereby it "Granger caused" output in an uni-directional relationship. In the bivariate co-integration test, the null hypothesis supported the presence of long-run relationship between the financial aggregates and the output level. However, the null hypothesis of no co-integration was not rejected between the different financial aggregates and price level. This indicates that a large part of the movements in the financial aggregates are not anchored by the long run movements of the price level.

Overall, the study postulated that the monetary aggregates are relatively more important than the credit aggregates or exchange rates in predicting output changes. Further it showed that the exchange rate is relatively more important for predicting inflation. This clearly indicates that the more open is an economy, the less will be the Central Bank's ability to control the money supply and thus less will be the monetary aggregates ability to influence the price level.

Mulayana (1995) investigated the role of monetary aggregate as an intermediate target and subsequently explored other alternative targets for effective implementation of monetary policy. The study mainly focuses on the information content of money or other financial variables with respect to the future movements of prices and real incomes as goals of monetary policy. Empirical framework largely follows that of Friedman & Kuttner (1992).

Since the liberalization of interest rates was perceived as one of the reforms that could alter the transmission mechanism of monetary policy, Mulayana carried out the study using only sample period after the major interest rate reforms. As for Malaysia, the period of study covers from 1979 to 1992. Based on the F-statistics, the empirical results revealed that currency, M1 and reserve money are significantly related to prices and income. However, in this study, the empirical results show that M2 is not significant and according to Mulayana, it could be due to the disintermediation of deposits from the commercial banks to the other non-financial institutions. Overall the study concluded that M1 is the best intermediate target for Malaysia.

Azali (1998) researched to examine the role of money and credit in the Malaysian monetary policy transmission mechanism process during the pre and post liberalization periods. The period of study covers from 1972 to 1993, whereby the post liberalization period is the period covering after 1978. In his study, the Granger causality tests were used mainly to provide preliminary evidence relating to the relationship between money and income. The results of F-test during the pre liberalization period clearly indicated that the bank credit Granger caused output while there was no feedback from output to the bank credit. Since the causality is uni-directional from credit to output, the empirical results supported the presence of the exogenous credit-rationing channel during the pre liberalization period.

As for the post liberalization period, the results of the study upheld the presence of the money channel as well as the credit channel. Unlike Mulayana's work, the test results in this study however suggested that M2 as a more appropriate intermediate target then M1. In addition, based on the impulse response function, the study also indicated the presence of the interest rate as another potential channel of the monetary policy transmission mechanism in the post liberalization periods.

Another study done by Azali & Matthews (1999) was aimed at investigating the importance of money and credit for the macroeconomic activity of the Malaysian economy during the pre and post liberalization periods. The post liberalization period is the period covering after 1978. Their work largely follows that of Sim-Bernake's contemporaneous structural VAR model. Unlike Azali's earlier work, in this study the model was based on economic theory rather than a-theoretical convenience.

The empirical results also implied that during the pre-liberalization period, the output was significantly influenced by credit. In the post liberalization period, monetary aggregate M2 dominated credit in the monetary authority's counter-cyclical policy. Moreover, the forecast error variance decomposition also displayed another interesting result that is evidence supporting the importance of short-term interest rates in the monetary policy transmission mechanism.

Farizah (1999) studied whether fluctuations in money or interest rates are useful in predicting subsequent fluctuations in income or prices. Just like Mulayana, her work also adequately follows that of Friedman & Kuttner and the sample period covers from 1973 to 1999. Unlike the studies discussed above, in this study, the post reform period is represented by the period covering from 1989 to 1999. Prior to 1989, it was considered as pre-reform period.

Although the study unveiled that there exist a long run relationship between M1 and M3 with real income and prices, the VAR test however shows that M1 and M3 are statistically insignificant in their ability to explain the movements in income or prices. The study supported the use of interest rates as policy variable because both the VAR test and the co-integration test revealed that interest rate is significant in its ability to explain the movements in income or prices.

Globalization of financial markets and the financial developments have greatly influenced the money demand behavior in Malaysia. An important prerequisite for operating a policy framework centered on monetary target is to have a stable and predictable demand for money. However, demand for money, especially in the short run was unstable and thus making it very difficult for the Central Bank to predict the quantitative effects of monetary policy on the ultimate goal of price stability.

There are many studies that support the view that financial liberalization has caused the demand for money in Malaysia to be unstable as mentioned in Tseng & Corker (1991), Tan (1996) and Dekle & Pradhan (1997).

Tseng & Corker (1991) investigated the effect of financial liberalization on money demand in the SEACEN countries with a focus on the stability and predictability of narrow and broad monetary aggregate during the 1980s. In this study, the co-integration procedure and error correction model was used to determine the long run and short run money demand behaviour respectively. Both authors concluded that although in the short run financial liberalization has clouded the predictability of monetary development, in the long run, for most of SEACEN countries at least one monetary aggregate appears to have a stable relationship with income and interest rate.

As for Malaysia, the period of study included 1970-1989 and the empirical results showed that the existence of a stable money demand equation is much more compelling for narrow money than for broad money. The long run broad money demand function appeared to be weak because the estimated long run income elasticity substantially exceeds one and the long run semi-elasticity of interest rates is also large.[18]

Another study done by Tan (1996), attempted to model the long run real money demand relationship and their associated short run dynamics in Malaysia by using the Johansen co-integration procedure and the error correction model. The empirical results of this study, suggested that a co-integration existed between real money demand (variously defined) on one hand and real gross domestic product, interest rates and expected exchange rate movement on the other. This means, there is a stable long run relationship among the monetary aggregates and the economic variables.

On the other hand, Tan's analyses on the short run real money demand functions, revealed that the demand for real money is unstable. Since, a stable money demand function is a prerequisite for monetary policy to attain its short run targets, Tan called for a restructuring of short run demand function over more recent

[18] Low-income elasticity of the demand for money reflects the advancement of financial development in the stock and capital market while low interest elasticity reflects the degree of sophistication and maturity in the money and capital markets.

periods. This has necessitated a re-estimation of demand functions over more recent periods namely 1981 fourth quarter to 1991 fourth quarter for M0, 1978 fourth quarter to 1991 fourth quarter for M1 and 1976 third quarter to 1991 fourth quarter for M2.

Dekle & Pradhan (1997) examined the extent to which financial market development and the liberalization in the SEACEN countries have affected money demand and their implication on the operation of monetary policy. Their empirical result based on Johansen co-integration model also suggested continuing instability in the interaction of money growth, economic activity and inflation. They concluded that money growth rates might be poor predictor of future inflation and output trend.

As for Malaysia, their findings however showed stable long run relationship for real narrow money and nominal and real broad money. This explains why Malaysia still continued to monitor the broad money in the later part of the 1980s and in the early 1990s. However, both authors revealed that in both the narrow money and broad money equations, income and interest rate variables are not weakly exogenous. In statistical sense, this means the relationship between these variables are not uni-directional that is movement in income may lead to movement in the monetary aggregates and vice versa.

Another important feature to take note is the movement of exchange rate, which have become increasingly important in determining a country's long-term growth prospect as well as its short-term macroeconomic stabilization policy. Since the external competitive position of a country is primarily determined by the exchange value of its currency, the movement in exchange rate will have a significant bearing on the country's external balances. Subsequently, this will affect the national income level. Using the unit root test, Goh (1990) investigated the time series behaviour of the ringgit foreign exchange rate. The study revealed that the fluctuation in ringgit largely dominated by permanent random walk movements implying that the exchange rate fluctuates widely with no tendency to return to a predetermined path. Such unpredictable movements of exchange rate have become increasingly important because it affects money demand behaviour and also affects real variables such as price level and output.

Woo (1990) attempted to investigate the degree of autonomy enjoyed by Bank Negara Malaysia in a managed floating exchange rate regime and how successful it has been in steering or placing the monetary aggregates into the targeted region. The period of study starts from June 1974 to December 1988. According to Woo, Bank Negara strives to achieve monetary autonomy and thus so far has been achieving a great degree of it. Monetary autonomy here is defined as the ability of the Central Bank to attain a particular set of targets.

The study reveals that the management of base money by Bank Negara has been successful thus implying that the Central Bank can exert control over the growth path of domestic money stock. In addition, the empirical investigation also shows that it is within Bank Negara's control to undertake sterilized intervention in the foreign exchange market to influence the exchange rate movements.[19] The study concluded that, in the short run the sterilization operations can be used to preserve interest rate and exchange rate stability while in the long run the sterilization activities can be used to stabilize the growth of domestic money stock to control inflation and to accommodate income growth.

[19] For example, the Central Bank tends to sterilize the inflow of capital by inducing a reduction in credit to commercial banks or through its lending to the government

According to BNM (1999) report, in Malaysia, the relationship between monetary aggregate and nominal gross domestic product and price appeared to be insufficiently stable towards the mid-1990s and thus the Central Bank shifted its focus from monetary targeting to short term interest rate targeting. Interest rate targets are preferred because of their controllability and measurability. Not only the data on interest rates are easily available; its deviation from the trend is also low. In the long run, the Central Bank still monitors monetary aggregates very closely along with other monetary indicators such as credit growth, price developments and indicator of consumption and investment.

As reported by the Central Bank, the shift in the monetary policy strategy towards interest rates was precipitated mainly because it holds the view that the interest rate stability is an essential policy variable to advocate a stable financial system. Moreover, the move towards a liberalized financial system enhances the role of interest rates in the monetary transmission mechanism. Another notable factor is the financing pattern of the economy whereby the structural changes in the mid-1980s shifted the financial market towards an interest sensitive market.

Based on the empirical evidence gathered so far, it will not be unreasonable to conclude that the evolution of the economy and the financial system had a great impact on the way monetary policy is conducted in Malaysia. In a globalized economy, monetary policy is conducted through market based instruments. Therefore the development of the bond and equity markets are essential for Central Bank to undertake more effective open market operation and reduce the reliance on the direct instruments such as the statutory reserve and liquidity requirements. Overall, in view of the changing environment, the monetary policy framework must be adapted accordingly so that it remains as an effective policy in promoting economic growth and maintaining monetary stability.