

Chapter 6

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

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

The monetary policy in Thailand is controlled by its central bank, The Bank of Thailand. Its main objective centres on the stabilization of the country's economy. In essence, monetary policy is guided by targets for a range of monetary aggregates. The targets are basically determined by the authorities' objectives, which could be either for economic variables like unemployment or inflation. In this respect, the monetary authorities employ many different types of monetary measures to address any adverse or recessionary shocks in the economy. Although many monetary aggregates have been used as intermediate targets for policy-making, according to **Chaiyawat (1984)** the monetary base is regarded as an operational target since it is more readily controlled and monitored compared to the other monetary targets. However, besides the targeting of monetary aggregates through the use of instruments like the open market operations, the Bank of Thailand sometimes influences the monetary conditions through the interest rates as well as the intervention in the exchange rates. In the early 1980s, Thailand's monetary policy model took the shape of the **Mundell-Fleming** model in a fixed exchange rate (since its exchange rate in the early 1980s was pegged to the US dollar) with imperfect capital mobility (since there were capital controls). However, towards the late 1980s and early 1990s, capital controls were

gradually relaxed thus monetary policy then mirrored a **Mundell-Fleming** model in a fixed exchange rate (although to a lesser degree since the exchange rate then was a currency basket peg) with perfect capital mobility (since capital controls were gradually phased out during the deregulation in the late 1980s and early 1990s). After the currency crisis in 1997, Thailand's exchange rate was made flexible thus the monetary model took the form of a **Mundell-Fleming** in a flexible exchange rate citing perfect capital mobility.

? In reality - NO

Basically, the monetary policy in Thailand during the 1980s can be summed up according to the type of monetary policy pursued by inspecting the movement of the bank rate and the change in the growth rate of the monetary base. The trend of monetary policy has been expansionary in times of economic booms and contractionary in other periods, which are characterized by an economic slowdown. For instance, monetary policy was tightened during the period of 1978-81 because of a balance of payment deficit, which was partly due to the world slowdown and the effects of the second oil price "shock". The second oil price shock severely depressed Thailand's internal and external stabilities. Exports depressed while imports increased thus leading to the authorities to adopt more restrictive monetary policies which saw the interest rates being raised.

The unfavourable world conditions since 1980 also has an effect on the Thai economy, which saw the deterioration of external accounts subsequently leading to massive current account deficits. These prompted the authorities to formulate the short-term stabilisation measures, which took place between 1980 - 1986. Such measures included a move towards less restrictions in monetary policies and having

more flexible exchange rates. It is believed that the structural adjustment policies had contributed to laying a firm foundation for an unprecedented economic growth, which have occurred since 1986.

Between 1982 – 83, monetary policy was expansionary since economic growth was falling then. The slowdown in growth which subsequently led to the 1983 financial crisis which was then further aggravated by a tightening of monetary policy, especially for the more loosely controlled finance companies. The period of 1985-87 was also characterized by slow economic growth, with the GDP growth rate of 1985 (3.51%) being the lowest in the 1980s. During this period, the authorities tried to encourage further growth through monetary relaxation. Between June 1985 – January 1987, Thailand was assisted by a Fund-Supported program (International Monetary Fund). The recommended structural adjustments included the maintenance of interest rates broadly in line with the international market rates and to strengthen supervisory regulations.

Growth was especially rapid going into the later part of the 1980s as 1988 and 1989 proved to be so, with the GDP growth rate registering 13.22% and 12.21% respectively. These figures were the highest in the decade. However, the price level was also rising at an increasing rate during this time. The average inflation rate during 1988 – 89 was 4.61% compared to 1985-87 which recorded an average value of 2.25% while the 1982-83 period's rate was hovering at 4.49%. However, with the inflation at a tolerable rate, and the current account deficit being bridged by capital inflows, no major adjustments were initiated in monetary policy, thus during the 1988-89 period, monetary policy was considered neutral.

Strong domestic demand coupled with a surge in foreign direct investment has been the main determinants fuelling Thailand's remarkable growth since the late 1980s. The continuous economic expansion, which began in 1988 soon, led to a balance-of-payments surplus by 1990. Growth in the 1990s was rapid with the average real GDP for the period between 1990 – 1995 recording an average value of 10.84%. From 1987 to 1995, real GDP grew annually at rates in excess of 8%. However, due to the worldwide downturn, total exports declined and with tight monetary policies, the economy's rate of growth slowed down perceptibly in 1996 to about 6.7%.

Ironically, Thailand's era of high growth ended in 1997 when the crisis began to set in. The severe pressure on the Thai Baht together with the country's restrictive monetary policy soon led to a significant contraction in the economy. All these together with the political uncertainty prevailing throughout the currency crisis saw the GDP growth that year to hit a negative 0.4% growth. The depreciation of the Baht beginning August 1997 soon led to inflationary pressures, and by December that year, the year-on-year inflation rate was at 7.7%, although the average inflation rate for the whole of 1997 was 5.6%. Although Thailand was a recipient of a staggering US\$17 billion financial assistance from the IMF, the economy showed few signs of improvement even after the implementation of the "stabilization program". The economic crisis revealed flaws in the Thai economic policy and its institutional and sectoral structures especially the financial sector. Imprudent lending policies and inadequate supervision of banks and private finance companies were some of the main reasons which contributed to the currency crisis.

With the currency crisis setting in by July 1997, domestic demand contracted sharply, especially the private sector due to the prevailing uncertainty and also because of a rather tight credit crunch. Although the stabilization program adopted by the authorities managed to somewhat restore the exchange rate stability, the downward trend in economic activities continued its plunge going into 1998. Real GDP fell by 8% with the country recording high drops in the private investment and private consumption. Unemployment hit a historical high of 5.3% while inflation touch the 8% mark.

The adjustment program by IMF did somewhat restore macroeconomic stability but the demand management were unduly contractionary. Under the IMF's prescription, monetary policies were tightened, with the maintenance of high interest rates being the highlight. However, to stimulate the economy, monetary policy was later relaxed in order to ease the liquidity shortage. In this respect, interest rates were also allowed to reduce. Although interest rates eventually fell later, bank loans did not record significant increase, as the banks were reluctant to lend since they were already facing mounting non-performing loans. Since one of monetary policy's transmission channel was through the increase in bank loans to initiate expansionary effects on investments, the reluctance of banks in this aspect further contribute to the dwindling economy despite the accommodative monetary stance.

Although 1999 saw positive signs of recovery (as real GDP growth was estimated to be hovering at 4%), the unemployment still persisted at a rather high level, well above the pre-crisis level. The unemployment reached 5.9% of the total labor force while inflation was contained at 0.3%. Despite the easing of monetary policy, the growth of

money supply continued to slow down while the interest rates also fell, with the inter-bank rate trading at 1.2%. In any event, the credit crunch remained, as the local banks were still overly concerned about the high levels of the non-performing loans. This severely affected the lending channel (bank loans) of monetary policy transmission. The outstanding non-performing loans in the entire banking sector that year still recorded a staggering figure of B2,004.8 billion.

GDP grew by 5.9% in the first half of 2000, mainly due to strong export performance, the lagged effects of earlier fiscal stimulus and an accommodating monetary policy. This also led to the easing of the unemployment rate, which began to improve in 2000 compared to the previous year, registering a lower figure of 3.2%. However, the consumer price inflation increased by 1.6% compared to 1999. Overall, the monetary and liquidity conditions were supportive of economic recovery and in its bid to spur domestic demand, the Bank of Thailand maintained a low interest rate policy, while the year 2000 also saw a higher growth in M2 than the year before. In addition, the outstanding non-performing loans of the entire banking system also declined by 58.9%, registering a value of B823.3 billion.

Overall, the monetary policy framework before the crisis had at some point of time, centered on the targeting of the interest rates, monetary aggregates and also the exchange rates. However, the pegged exchange rate regime was somewhat of a nominal anchor from the time after the second World War until June 1997 when it was eventually replaced by the flexible (floating) exchange rate. During the currency crisis, the main monetary policy framework was the monetary base targeting while in

May 2000 the monetary authorities had announced the move towards an inflation-targeting regime.

6.2 Money Supply Targeting versus Interest Rate Targeting

In addition to the targeting of monetary aggregates through the use of instruments like the open market operations, the Bank of Thailand also sometimes influences the monetary conditions through the interest rates in the last two decades. During the 1997 currency crisis, Thailand engaged in a monetary targeting regime as part of the IMF “rescue” Package.

6.2.1 Interest Rate Management

Unlike Malaysia and Indonesia, the financial reform in the 1980s in Thailand did not result in the abolishment of the interest rate ceiling. The financial and trade liberalization of the 1980s era in Thailand resulted in many deregulation moves but interest rate ceilings remained although direct controls on credit was last initiated in 1984. The abolishment of direct credit control was crucial, as such policy was believed to impede the efficiency of the allocation of capital to the most productive sectors.

The economic slowdown in the early 1980s saw the Bank of Thailand pursuing interest rate policies. In fact, prior to 1992, monetary policy in Thailand involved heavily the control of interest rates in managing the economic directions of the country. The early 1980s slowdown saw the Bank of Thailand raising the interest rate

ceilings on commercial banks and also the Bank Rate. This was seen as necessary as the slowdown saw low exports, a worsening balance of payment and also high inflationary pressures. Economic stabilisation policies then entailed the move to increase the interest rates ceiling by 1% and also saw the introduction of a 3-tier system replacing the 2-tier system, which was previously implemented in 1979. The higher ceiling rates were necessary to reduce the capital outflow to improve on the balance of payment. The move for higher interest rate ceiling (contractionary monetary policy) was also seen as crucial to stem the inflationary pressures, which saw the 1980 consumer price index registering a staggering value of 20%. The higher interest rates will put a dampen on investment hence lowering the aggregate demand. Such a move is likely to arrest the upward inflationary pressures. In addition, high interest rates were needed as the policy then was to keep domestic interest rates in line with international ones in order to prevent capital outflows. In any case, the structural adjustment policies between 1982 – 86 included the move for credit allocation to priority sectors. In this case, interest rate charged to priority sectors were usually below the market rates. The interest rate or so-called “bank rate” for last resort was normally fixed above money market rates and the Bank had also used the alteration of the Bank rate to indicate the direction of the monetary policy stance. In this respect, the Bank also used interest rate adjustment as a supplementary tool to control money and credit. This was done through the adjustment of ceilings on deposit and lending rates of commercial banks to reinforce the effects of its target framework of controlling the reserve money. Using the analysis of the money market, the demand and supply of money curves (refer to Fig. 2.2 and 2.3) will interact to determine the level of the interest rates. Thus, as the nominal interest rates are determined by the demand and supply of money, a move towards adjusting the nominal interest rate

would ease the demand for money thus directly controlling the amount of credit issued. Accordingly, such a move will affect the money supply and reserve money. The adjustment of interest rates as the highlight tool in controlling credit (and ultimately investment) and inflation bears a "Keynesian influence" as far as the theoretical view in this area is concerned. In this case, the low demand for money will result in banks (commercial) having more reserves. The Bank of Thailand started to issue the Bank's bonds (with 1 year of maturity) for sale to the commercial banks for the first time in 1987 to mop up excess liquidity.

The early 1980s continue to see the interest rate as the policy framework with the Bank of Thailand revising the rates downwards in 1982 although towards the end of 1983 the trend was reversed due to the unfavourable balance of payment position. However, the interest rate ceiling (for the first-tier and second-tier Banks) were again subsequently reduced in 1984. Improving balance of payments in 1985 continue to see the government easing the interest rates. The Bank of Thailand reduced its loan rate to first-tier banks from 12% to 11% and for second-tier banks from 13.5% to 12%. Excess liquidity in the financial system again forced the banks to reduce interest rates as deposits outnumbered loans. The mid-1980s continue to see expansionary monetary stances, with the policies aimed at expanding credit and promoting production and investment. Although the country was experiencing several structural adjustment measures during the years of 1985-86, the economy managed to restore some stability which then saw the monetary policy stance shifting to less restrictive hence focusing on reviving economic growth. The Bank of Thailand played a leading role in bringing down domestic rates by reducing interest rate ceilings on several occasions hence 1987 saw the interest rates moving downwards. Thus, until 1986, the

most frequently used monetary instrument was the Bank of Thailand's lending rate, with the adjustments of it being used to fine-tune the economy when necessary, i.e. to restrain inflation or stimulate growth. With interest rate ceilings and also the pegged exchange rate, hence monetary policy in Thailand in the earlier part of the decade was unsuccessful in its role. Thus eventually, to promote more flexibility, interest rates ceilings were later abandoned.

The structural adjustment policies between 1987 – 91 saw the move to adjust the interest rates to be in line with the real cost of funds since the previously directed credit schemes had raised the commercial banks' operating costs. In addition, such a move was also initiated to remove the inefficient usage or abuse of credits. In 1989, the interest rate ceiling on bank deposits with over 1-year maturity was lifted in order to encourage mobilisation of long-term savings and to increase the operational flexibility for banks. The continuous economic expansion, which began in 1988 soon, led to a balance-of-payment surplus by 1990. The interest rate differential between Thailand's rates and international rates soon led to massive capital outflows. Such developments had constrained monetary management since the continued inflows exerted pressures on the baht to appreciate. However, by comparison with Indonesia, capital controls was still part of Thailand's financial system hence the capital flow problem was not as critical as the former. Thus the interest rate ceiling policies are less constrained by the problem of unlimited capital outflows/inflows should the local rates differed from the international ones. The price inflation and external imbalances began to emerge again thus The Bank of Thailand had to adjust the interest rate twice; partly to contain inflationary pressure and also partly to increase flexibility in the interest rate adjustments. In any case, the excess liquidity was building as capital

inflows increased. In early 1992, the ceiling on savings' interest rates were removed and by June that year, the Bank of Thailand removed the ceiling on deposit and lending rate for commercial banks. Hence by mid-1992, all types of interest rate have been market-determined. These were in line with country's plan to make the country as a regional financial center – which was part of the Bank of Thailand's 3-year Financial Reform Plan for 1990-92. In essence, by removing the interest rates ceilings, hence leading to more realistic and market-determined rates, monetary policy then have a powerful direct effect on aggregate demand through credit availability. It also has an indirect effect on the lending rates to affect economic activity via the Keynesian view.

Essentially the interest rate ceilings were previously crucial in the country's monetary policy as it was partly meant to protect borrowers since the banking industry then was characterized by an oligopolistic market structure. In any case, it was finally abandoned since the fast changing monetary condition had necessitated constant adjustments in the ceiling rates. Besides, as the oligopolistic banking system had gradually declined, the real need for interest rate ceilings slowly lost its significance.

During the currency crisis, monetary policy was restrictive (in its bid to curb inflation and maintain exchange rate stability) as the baht was under continuous intense pressure. The interbank rate rose to 29% per annum on January 12th 1998. As the baht was under serious speculative attacks, a rise in the local interest rates was crucial in stemming the downward trend. In line with the **Mundell-Fleming** model (perfect capital mobility), an increase in the local interest rates above the world rates can help to reverse the capital flow. The capital mobility was considered as perfect as the

financial reform plan during the period of 1990 – 92 led to the relaxation of the exchange controls. Thus the maintenance of high interest rates was considered as crucial to stabilize the exchange rates through the increased in capital inflows. Such a move will lead to the appreciation of the local currency (baht). In any event, the maintenance of a low inflation rate itself would help to appreciate the local currency as a low inflation will reduce the demand for foreign goods. In this respect, the move for higher interest rates was seen as the way for macroeconomic stability.

However, the improved conditions a year later saw the authorities increasingly softening its stance on monetary policy. The domestic interest rates declined in the second half of 1998 while the much improved liquidity also led to a continuous decline of the interbank rates as it fell from an average of 20.6% per annum in the first quarter of the 1998, 18% in the second, 9.6% in the third and only 3.8% in the in the last quarter of year. As the monetary policy continued to be softened in its stance, the commercial bank deposit and lending rates continued to decline in 1999. By the end of the year, the 3-month time deposit rates of the 5 largest Thai commercial banks were at a mere 3.75% compared to a 6 – 6.25% per annum at the end of 1998. However, the problem of adverse selection experienced earlier (one of the main source, which led to the problem of non-performing loans in 1998) led the banks to engage in more conservatism in the case of extending credits and loans. Inevitably, the expansionary monetary policy transmission via the low interest rate to increase bank loans (hence stimulating the investments) was hampered as mounting non-performing loans led banks to shy away from extending credits. As a result, the commercial bank credits declined by 2.8% in 1999 compared to an expansion of only 1.2% in 1998. The liquidity in the financial system remained high in 2000 thus

leading to a continuous downward trend in terms of the interest rates. In the first 6 months of the year, the average 3-month deposit rate of the 4 largest commercial banks remained at 3.50% and by September the 3-month deposit rates of the 4 largest commercial banks averaged at only 3% per annum.

6.2.2 Money Supply Management

The central bank's target of monetary policy seeks to control the growth of both money and credit as intermediate objectives. In this respect, the Bank sets targets for the growth of M1 and M2 and domestic credits consistent with the annual targets of economic expansion, domestic prices and the balance of payments. In addition, the reserve money had also been set as the Bank's operational target. In controlling the reserve money, the Bank concentrates on controlling its lending, particularly to the commercial banks.

In the second half of the 1980s, the monetary base and M1 expanded faster than the first half, as a result of the expansionary measures undertaken during the downturn period of 1985–87. The average growth rate of the monetary base and M1 between 1986 – 1989 were 16.05% and 19.49% respectively while the average growth rate of these two monetary variables during the period of 1979 – 1985 were 10.53 and 6.82 respectively (Warr, 1993). As a result, the average real GDP (at 1992 prices) between 1986 – 1989 grew by a staggering 9.95%. In this respect, the expansionary monetary policies (using money supply/base targeting) to revive the national income resembles the monetarist view, one which view the existence of a systematic relationship between the money supply and the national income. However, since the

growth of money was faster than the growth of output, inflation began to build up. From 1987 – 1990, M1 grew at an average of 22.5% compared to the average growth of output (using gross domestic output) in the same period, which registered only 11.625%. As far as nominal income is concerned, the average rate of growth over the same 4-year period was 14.05%. Unsurprisingly inflation or the price level rose from a figure of 2.5% in 1987 to about 6% in 1990.

Following the financial crisis of 1983 – 84, liquidity in the financial system began to gradually increase as bank and other financial institutions were still cautious on their loans. By 1987, money supply was growing in tandem with the fast improving economic conditions. Liquidity was also ample as the balance of payment surplus and rapid domestic credit expansion led the way. M1 grew by 23%. To absorb excess liquidity, the Bank of Thailand, for the first time ever on 26 May 1987, issued Bank of Thailand bonds worth 2 billion baht sold to commercial banks' and foreign banks' branches. A second batch of Bank of Thailand bonds (also valued at 2 billion baht) were issued in 1988. Such demonstrates the authorities' move towards the usage of more indirect and market-determined monetary instruments.

In 1989, the liquidity in the monetary system was rather eased compared to previous years as both M2 and M1 accelerated by 26.2% and 17.3% compared to 18.2% and 12.2% respectively in the previous year resulting from rapid credit expansion and record surplus in the balance of payments. In addition, the inflationary pressures during the early 1990s as a result of continuous economic expansion and the surging capital inflows soon convinced the government to slow down the growth of the money supply. The growth of M2 fell from a high of 26.7% in 1990 to 19.8% in 1991

and finally 15.6% in 1992. The contractionary monetary stance was able to contain inflation as the rates fell from 6% in 1990 to 5.7% (in 1991), 4.1% (in 1992) and finally only 3.3% in 1993.

After the adoption of a flexible exchange rate system and the decision to receive the IMF support package in the wake of the 1997 currency crisis, Thailand adopted the monetary targeting regime as part of the IMF program. The monetary targeting regime was embraced during the period of July 1997 to May 2000. Under such a regime, the central bank targeted the domestic money supply in order to ensure macroeconomic consistency and also to ensure that the growth is sustainable with stable prices. In this respect, the Bank set the daily and quarterly monetary base targets on which its daily liquidity was based. Such was necessary to ensure against excessive volatility in the interest rates and liquidity in the financial system.

The monetary base grew by 4.7% in 1997, a figure which was lower than the previous year of 12%. With the slowdown in the expansion of the monetary base, both narrow money and broad money also exhibited a lower growth rate. Just before the crisis emerged in July 1997, the authorities then, were still practising the basket peg exchange rate regime. In essence, the peg exchange rate mirrors a close “proxy” to the textbook definition of the fixed exchange rate. Under the fixed exchange rate, according to the Mundell-Fleming model (with perfect capital mobility), the authorities have no control over the money supply as any changes in the money supply will lead to an interest rate differential between the local interest rate and world rates which will ultimately influence the exchange rate. However, previously the expansionary monetary policy was less constrained since there were exchange

controls hence limiting the capital flows as a result of the interest rate differential between the local rates and the international ones. However, financial deregulation had led to the relaxation of capital controls in 1990 thus complicating the avenues for monetary management.

Thus, for the Bank of Thailand, prior to the crisis, the authorities' move to defend the basket peg exchange rate regime in the face of mounting speculation and attacks led to a substantial amount of foreign exchange being sold by the authorities. These actions drained the baht liquidity out of the financial system. The tight liquidity was partly responsible for the increased in the interest rates which peaked at over 30% in the second half of September 1997. Thus, with move towards a floating exchange rate regime in August 1997, the value of the baht was left free to market determination. Such a move led to the easing of the constraints for monetary policy.

The commercial bank and International Banking Facilities (IBF) credit outstanding declined sharply in 1998 partly due to the increased prudence and stringency of commercial banks in extending credits even though the country was slowly adopting an accommodative stance by 1998. The problem of the monetary policy which works through the banking/lending channel is that during recessions, even if the interests are maintained low, investments may still be lacking simply because the banks are reluctant to extend out loans for fear of worsening the already large number of bad loans. Of course, the decrease in loans could simply have due to a weaker credit demand in line with the sharp economic downturn. In any event, although monetary policy was accommodative towards the end of 1998, the amount of commercial bank loans (excluding the exchange rate revaluation effect of IBF credits) declined by 3.2%

compared with a 10.3% growth at the end of the previous year. In 1999, the growth of commercial bank loans declined by 2.8%. Hence the theoretical analysis which states that in times of a recession, even if the interest rates are low, the banks may be reluctant to lend thus stagnating any expansionary policy which works through the lending channel. In the case of Thailand, banks became more cautious in extending credits since there was widespread concern that this might further exacerbate the non-performing loans problems which ultimately require further provisioning and impose greater burden on recapitalisation to meet the required standard.

In 1999, the growth of both the monetary base and money supply was on an upward trend. Narrow money (M1) grew by 30.1% at end-1999 compared to 3% at the end of 1998. The large demand for cash during the month of December prompted the government to accommodate liquidity via the repurchase and foreign exchange swap markets thus leading to a large increase in the monetary base to B622 billion which exceeded the target of B478 billion. By the end of the year, the 3-month time deposit rates of the 5 largest Thai commercial banks were at a mere 3.75% compared to a 6 – 6.25% per annum at the end of 1998. With the IS-LM framework, the increase in the money supply shifts the LM curve to the right hence leading to the intersection between the IS and LM curve at a lower rate of interest and a higher level of output (refer to Fig. 2.5). However, the credit crunch remained, as the local banks were still overly concerned about the high levels of the non-performing loans thus leading to a mild estimated positive real GDP growth of only 4%. The monetary base outstanding for 2000 averaged at B483 billion, up from B463 billion in the previous year. Although both the broad money M2A (money supply in the banking and finance co-systems) and M3 was declining earlier in the year, subsequently both registered a

growth towards year-end. M2A went up by 2.2% from 1999 while M3 went up 4.4% from 1999.

However, with the continuous global financial innovations and deregulations in the system, the volatility and unpredictability nature of the relationship between nominal income and money was increasingly stark. Thus, the effectiveness of quantity targets like the monetary base and money supply had severely been constrained. In addition, the unpredictable money demand also render the difficulty to derive the LM position thus further undermining the effectiveness of the monetary policy framework based on quantity targets. Ultimately, the Bank of Thailand has announced the move towards an inflation-targeting regime in May 2000.

6.3 Exchange Rate Management

The exchange rate regime for Thailand in the 1980s was characterised by the US dollar peg before 1984 and a currency basket peg after that. The currency basket pegged regime that was adopted from November 1984 to June 1997. In this respect, the monetary policy in Thailand's case during these periods was "locked in" by their "nominal exchange rate" anchor. Thus the burden of any adjustment fell on fiscal policy. In fact, the hike in the international rates and local rates (monetary policy then pursued high interest rates to keep in line with international ones) had put further burden on the Government in terms of their current expenditure then. In any case, the Government deficits were financed by Bank of Thailand thus causing high-powered money to expand rapidly ultimately offsetting the high interest rate policy. Ultimately,

the Government had to resort to cautious fiscal policy and even initiated several austerity measures through out the 1980s.

Previously (from 1955), Thailand's rate was pegged to the dollar but even then, the government still had the tendency to move the baht with the dollar even after the formal pegging was removed. During the days of pegging to the US dollar, the Bank of Thailand had previously devalued the baht vis-à-vis the US dollar by 1.07% and 8.7% in May and July 1981 respectively to boost exports and to solve the current account deficits. In addition, the daily fixing system was replaced by a fixed exchange rate between the Thai baht and the US dollar. Although Thailand's exchange rate regime was pegged to the US dollar in the early 1980s, it was changed to a currency basket peg in effect from 2 November 1984 because of the appreciation in the US dollar. The Thai baht value was previously fixed to the US dollar in 1981.

Before the switch to a currency basket peg, the exchange rate for the country was a fixed rate (pegged to the US dollar) hence the system closely followed the Mundell-Fleming model with a fixed exchange rate (refer to Fig.2.9). Thus, the devaluation, which was initiated in 1981 and 1984 both, served to increase exports. Essentially from Fig. 2.9, a devaluation in the exchange rate would shift the $\varepsilon = \varepsilon^*$ line upwards hence intersecting the IS curve at a higher level of income. In addition, the increased in net exports would stimulate aggregate demand (expenditure) thus leading to a higher national income. Both exports and hence output will increased. The change to a currency basket peg also saw the devaluation of the Baht against the US dollar by 15% (or setting an initial mid-rate of 27 baht per US dollar) on 5 November 1984. Then, the daily variation in the exchange rate would reflect developments in the

international foreign exchange market according to the prescribed weight attached to each currency in the basket. After the switch to a currency basket, Bank of Thailand had given more attention to monetary targets. Previously the emphasis was on the exchange rate stability and the interest rates ceilings.

Like many other countries, Thailand had previously pegged their rates to the US dollar but opted for a currency basket by the mid-1980s largely because the dollar was appreciating rapidly. In this case, the sharp appreciation of the US dollar in the early 1980s had led to current account deficits, a situation especially critical back in 1983. In addition, the pegging of the exchange rates can also be attributed to the fact that these countries was facing rapid inflation early in the 1980s. In 1980, the inflation rate in Thailand recorded a value of 20%. In theory, the pegging of exchange rate can sooth inflationary tendencies as the expectations of inflation is restrained since the move will eliminate any uncertainties prevailing the stability of the local currency. In theory, countries with inflation rates higher than its main trading partners often depreciate their currencies to prevent a severe loss of competitiveness.

Before the implementation of the exchange rate policy (based on a basket of currencies) in November 1984, the burden of adjustment fell largely on monetary and fiscal policies, thus resulting in very restrictive stance. However, after the new exchange rate policy was put into effect, the restrictive stance could be relaxed to support economic recovery. Previously, the pegged against the US dollar had constrained the ability of monetary policy as any changes in the monetary stance would result in interest rate differential between the Thai rates and the world rates

subsequently disturbing the peg. With a fixed exchange rate, monetary policy would have been powerless to influence the economy.

In any event, the pegged exchange rate provides an unambiguous objective “anchor” for economic policy – can help establish the credibility of a program to bring down inflation. This is likely because the authorities are faced with a fiscal restraint in order not to disturb the peg. Hence, the structural adjustment program in Thailand in the mid-1980s stressed on government expenditure restraint thus underlining the significance of the peg. In addition, Thailand’s exchange rate policy also included the restriction on capital outflows and these controls had been a feature in the Thailand exchange rate system in the 1980s. In this respect, capital controls would have been useful during this period as such controls mean an imperfect capital mobility. Since the case of imperfect capital mobility implies a flatter IS curve (refer to Fig. 2.10), any monetary changes will not lead to large interest rate differentials. Since any changes in money supply will lead to a shift in the LM curve, a flatter IS curve would mean that the movements of the LM curve (either leftwards or rightwards depending on whether monetary policy is expansionary or contractionary) will lead to a smaller change in the interest rates when it intersect with the IS curve. Such implication is significant as one of the targets of the Fund-supported structural adjustments program stressed on the need to maintain interest rates broadly in line with international ones. With capital controls in place, there are more room for monetary maneuvering whether the regime is in fact subscribing to a single peg or otherwise a group of currencies. Hence, with the imperfect capital flows, monetary policies during these period was less constrained in terms of the need to maintain the interest rates equality. However, from 1990, in line with the Financial Reform Plan for 1990-92, the foreign

exchange control deregulation was gradually initiated in the light of the impending influence of globalization to the world economy. In essence, the exchange controls relaxation has increased the flexibility of the system. The official acceptance of IMF's article 8 and the relaxation of exchange controls in 1990 would increased the flexibility of the system. However, such a move made monetary management even more complicated as these movements will cause unexpected fluctuations in the money supply. The relaxation of exchange controls had in fact, made monetary management more complicated in a pegged (currency basket) regime. During the early 1990s, capital inflows were significant, due to the low international interest rates. In this respect, the capital inflow will lead to the appreciation of the real exchange rate (through domestic inflation). With a pegged regime, the authorities were faced with the dilemma of whether to maintain the exchange rate value (or face a drop in competitiveness) or be concerned over the inflation rate. In any case, the authorities could always offset the effects of the capital inflows by "sterilizing" them (through open market operations) but this would only lead to more inflows as the sterilization move would prevent the interest rate from falling. In any case, the continuous capital inflows would further lead to a local inflation.

In their bid to restore back public confidence in the exchange rate policy and also to try to lay the groundwork for a more sophisticated and open economy after the onslaught of the currency crisis, the authorities changed the exchange rate regime from a basket of currencies to a managed float in 1997, thus rendering the Baht's value to the determination by the market mechanisms and dynamics. However, in this respect, although the demand and supply forces are at play, the Bank of Thailand intervenes occasionally in the foreign exchange markets from time to time to stabilize

the value of the Baht. In addition, under the new exchange rate system, the Bank of Thailand announced the average market exchange rates between the baht and foreign currencies in the previous day as a reference for conversion rates.

With the adoption of the floating exchange rate system on 2nd July 1997, Thailand received the financial assistance of the IMF. The adoption of a flexible rate was crucial since in theory, monetary policy is effective under such a regime. This move was significant as one of the prescriptions of the IMF was the adoption of higher interest rates to curb the downward pressures on the exchange rate. Essentially, the policy that was adopted after the IMF package was agreed upon was the targeting of the monetary base. Theoretically, if the exchange rate was “fixed” (prior to the crisis, the authorities had advocated a pegged exchange rate towards the US dollar and later a basket of currencies) then the monetary authorities will not have the luxury of monetary independence.

With the exchange rate left to the market forces, the baht continued on a downward trend as the speculative attacks led to the escalating capital outflows due to the irrational herd-like behaviour of investors. Between 2 May to 30 September 1997, the baht depreciated by nearly 29% against the US dollar. In this respect, as the falling trend in the exchange rate was one of the major problems for the Thai economy, the authorities resorted to a contractionary monetary policy in their bid to check the inflationary tendencies and the mounting pressures on the exchange rate. In theory, the increased in interest rates as a result of a contractionary monetary policy can help to reverse the capital outflows. In this respect, the situation here would take the form of the **Mundell-Fleming** model with flexible exchange rate citing perfect capital

mobility. With the baht fast depreciating, the move to reverse the trend using the adoption of higher interest rates (contractionary monetary policy) was possible with the flexible exchange rate regime since the monetary authority will not be constrained by the lack of monetary autonomy.

By 1999, the baht was more stable than the previous 2 years, with the monthly average reference exchange rates fluctuating between 36.59 – 39.88 baht per US dollar. The baht averaged 37.84 baht per US dollar, appreciating considerably from 41.37 baht per US dollar in 1998. In fact, by December 1998, the baht stood at 37.18 baht per US dollar. However, the baht depreciated for much of the year 2000 but strengthened at year-end due to both internal and external factors. Factors which contributed to such fluctuations included the rising US interest rates and the depreciation of the regional currencies in the first half of the year while the slowdown of the US economy at the end of the year (which depreciated the US dollar) appreciated the baht.

6.4 After The Crisis: Inflation Targeting

After the IMF program, the Bank of Thailand, after an extensive analysis of the domestic and external environment, decided to adopt an inflation targeting framework instead of the previously used approach of monetary targeting. Having ascertained that the relationship between money supply and output growth was becoming less stable in the wake of after the currency crisis (which has led to a drastic change in the domestic financial sector), the government announced the adoption of an inflation-targeting regime under the existing legal framework in May 2000.

In this context, the Monetary Policy Board (MPB) was appointed in April 2000 and vested with the powers by the Governor to decide on monetary policies. The Board has nine members and consists of distinguished external experts and the top management of the Bank and is also entrusted with the authority to set the direction of monetary policy with the price stability as the overriding objective. In addition, their role also includes refining the inflation-targeting framework to suit the Thai economy. With the change of governor of the Bank of Thailand in May 2001, the Monetary Policy Committee (MPC) replaces the MPB in July 2001. As of November 2001, the MPC has 8 senior officials from the Bank of Thailand and 2 distinguished experts from outside serving as advisers. These indicate the move towards an increase in the level of central bank independence and more transparency. Such is important for the inflation-targeting regime as recent economic literature (e.g. Alesina, 1988) has stressed on the negative relationship between central bank independence and the inflation rate.

The recent establishment of the Data Management Group (created by combining the data management responsibilities of various groups within the Bank of Thailand, the Monetary Policy Group, Financial Institutions Policy Group, Financial Market Operations Group, Supervision Group and International Department) is likely to contribute to more efficiency in the collection, processing and use of data while providing high quality information to internal and external users to support decision-making. This will increase the level of transparency which is a crucial ingredient for inflation targeting to work. As far as accountability is concerned, it is crucial that the Bank convey information to the public transparently.

Generally, the recent developments in the Thai financial sector has indicated that more independence has been given to the central bank both to set the inflation target (goal independence) and to apply the various monetary instruments (instruments independence). In this respect, these developments appear to support the move towards an “inflation targeting” framework thus reinforcing the government’s new direction in monetary policy. Ultimately, the success of this new regime would depend on whether the transparency and independence of the central bank can be successfully implemented.