Chapter 2

The Nature of Exchange Rate in Thailand

The international monetary system in Thailand was first under the *Sliver Standard System*, before the Gold Standard was used following the monetary system of European countries. Before the first World War , England played the key role in the politic and economy. The value of baht was then fixed with the Pound Sterling and the condition of the exchange rate of baht was then stable steadity until the second World War . Because of the war, the exchange rate of baht and Thailand's economy were in trouble.

Then Thailand became the member of the International Monetary System and the monetary system of Thailand changed to the *Gold Exchange Standard.* The United States became the world power and the US currency were used as the international reserve. The value and *the exchange rate of baht were pegged to the US dollar*[1].

From 1971 up to 1973, the balance of payment deficit of the United States created the international money crisis, causing the devaluation of the US dollar twice. The international exchange rate was then changed. The par value of baht, in comparison with the US dollar, had undergone 3 realignments.

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[1] Somying Phusathorn, " Exchang Rate Policy of Thailand 1971- 1978," (Master's Thesis, Faculty of Economics, Chulalongkorn University , 1980)

Up to March 1978 , the exchange rate system war under a fixed exchange rate against the US dollar. Afther that, the baht war pegged briefly to the basket of currencies from March to November 1978 before moving to a " daily fixing " for a short period . The *daily fixing system* allowed commercial banks to paticipate in determining the exchage rate , thus reducing the role of the Exchange Equalization Fund as a sole agent in setting the bid and offer rates .

From 1981 to 1984 , the baht was again pegged to the US dollar .The experiences gained and the policy used by Thailand especially during the international money crisis indicated the instability of the exchange rate as a result of pegging the baht value to the US dollar. So the foreign exchange rate policy must be more flexible. The Bank of Thailand then adopted the new exchange rate system - *Fixing the baht value with the Basket of the Currencies.*

Table 1 : Exchange rate between Baht and US dollar

	Rate on Jul 15, 81	Rate on Nov 2, 84	Rate on Nov 5,84
US dollar	22.9	22.9	26,9

Source : Reuter

Since November 2, 1984, the baht had been set in reference to a basket of currencies of Thailand's major trading partners[2]. The exchange rate of the baht against the US dollars was announced daily by the Bank of

[2] Thai Investment and Securities Public Company Limited , " A Float at last ," TISCO Thailand Research (July 1997)

Thailand's Exchange Equalization Fund, which stood ready to buy and sell US dollar with commercial banks. The US dollars, as such, became one of the most stable currencies in the world and supported Thailand's rapid growth over the years. The stable exchange rate greatly benefited Thailand's economy but the stable baht also encouraged inflows of "hot money" and interest rate arbitrage. Minimal exchange rate risk coupled with the wide interest rate gap attracted short-term capital inflows to gain the interest rate differentials. As the short term inflows accumulated, domestic liquidity increased substantially. As a result of abundant liquidity, lax lending practices and improper credit supervision, a bubble economy is still being felt throughout the economy. Furthermore, the tight monetary policy observed by the Bank of Thailand since 1995 in order to contain incipient pressures on inflation and the current account has had the desired effect on economic stability.

In March 1996, when export growth slowed sharply, concern about the large current account deficit put the baht under steadily growing pressure. With the country's economic fundamentals looking shaky, liquidity drained from the market and interest-sensitve sectors such as property was badly hit. The sectors's problems were compounded by a large oversupply of residential and office properties in Bangkok. As developers failed to repay their loans, the domino effect weakened many financial institutions and pushed the Thai stockmarkets to an eight-year low. Meanwhile, the United States's economy entered a sustained period of high growth with low inflation and unemployment rates. As Thai and United States economies were at different stages of the cycles, the baht came under attack from speculators, since its value did not reflect the real economic fundamentals. Instead, because of the peg it moved up consistently with the US dollar which was appreciated against other major currencies, due to the strength of its economy.

Consequently, the baht came under more frequent and sustained attack as speculators wagered that the government could not afford to support it for much longer. As the scale of the non-performing loan problems faced by financial institutions, mainly a result of lending to the property sector, became clearer, financial panic in deposit runs at many finance houses, and a severe liquidity crunch. The country's foreign exchange reserves fell sharply in May 1997 as the Bank of Thailand tried desperately to defend the currency.

Following major attacks by speculators on the baht twice since the start of the year, the Bank of Thailand decided to adopt a two-tier Foreign Exchange market system. From May 15, 1997, domestic financial institutions were asked not to transact with currency speculators in offshore markets, thereby creating two exchange rates for onshore and offshore markets. The measure appear to have succeeded despite having many loopholes. It has given the Bank of Thailand breathing room to find ways to counter future speculative attacks, though it seems unlikely that it can be maintained indefinitely. Having a two-tier market complicates foreign trade transactions and dents Bangkok's hopes of becoming a regional financial center.

On July 2, 1997, Thailand's exchange rate system will be a managed float[3], whereby the value of the baht will be determined by market forces to

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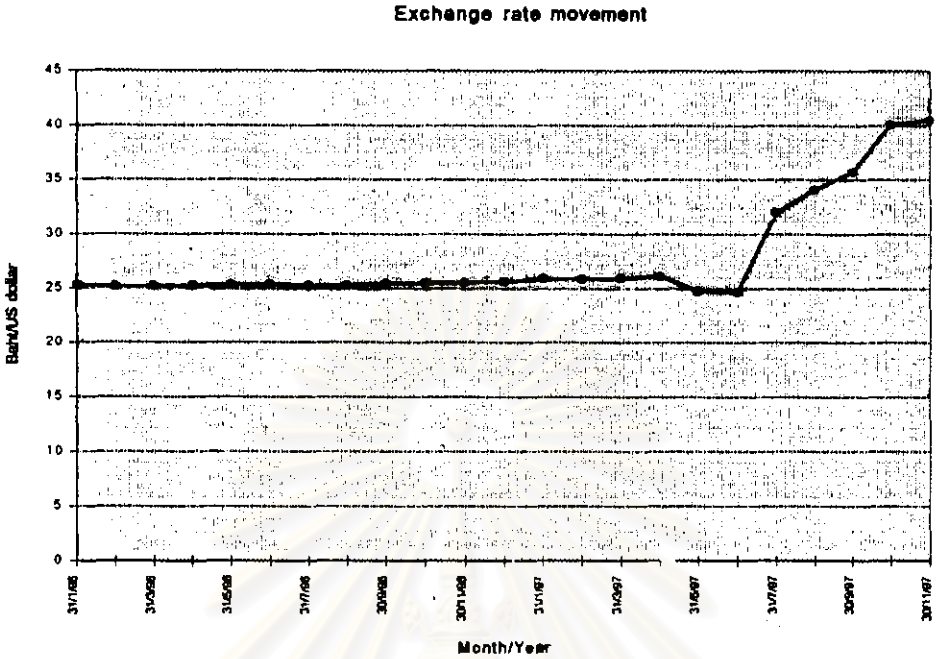
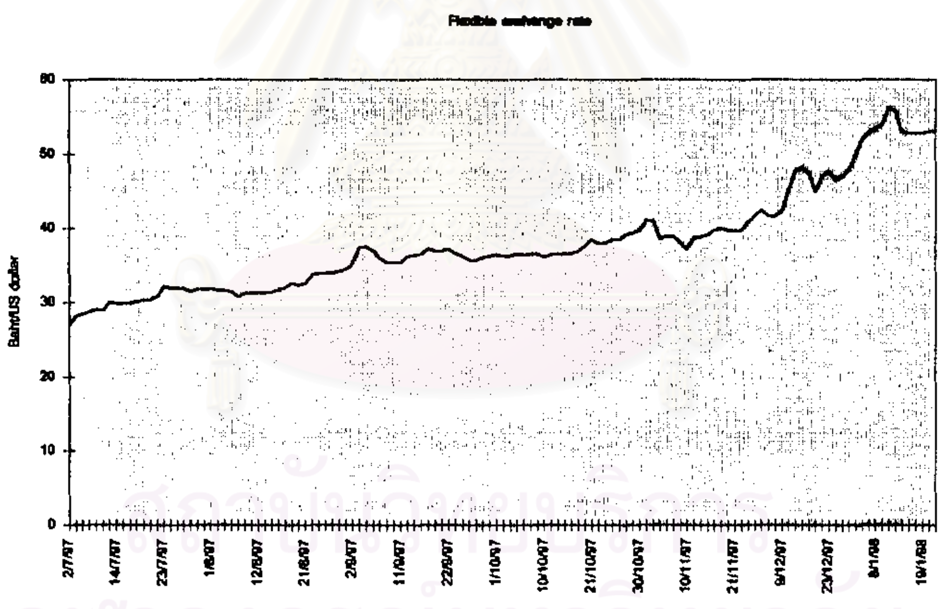
[3] Ibid. , p. 13.

Figure 1 : The movement of the spot rate on fixed and flexible exchange rate regime





Source : Reuter

reflect economic fundamentals. The Exchange Equalization Fund will no longer set a mid-rate in the moming. Instead the Bank of Thailand will announce a so-called "reference rate" which is calculated simply by averaging the closing rate at which the baht traded at the 15 Thai commercial banks on the previous day. It is hoped that a floating exchange rate will encourage more capital inflow as the risk of devaluation has recedes and the baht will more closely reflect real economic fundamentals. This in turn should ease liquidity conditions and allow interest rate cuts, encouraging more domestic economic activities and making the task of reviving the ailing financial sector.

While market forces are now the main determinant of the currency's level, the Bank of Thailand continues to monitor its movements closely and to intervene in the market when necessary to stabilize the rate within an undisclosed band. The Bank of Thailand has sought technical advice from the International Monetary Fund (IMF) on when and how to intervene. The Bank of Thailand will periodically in foreign exchange markets to achieve policy objectives and guard against excessive fluctuations.

To support the new foreign exchange regime, a cautious monetary policy stance will continue to be followed. In due course, the Bank will allow market forces to adjust interest rates downward in the context of a stable of strengthening baht. In the longer run, the managed float system will enable the authorities to implement monetary policy consistent with domestic policy objectives and support capital inflows.

Thailand has changed its exchange rate system from the basket of currencies to the managed float system. The following are very important factors that will predictably affect Thailand's economic situations in the near future.

1) Thai international trade : Thail export and import

The effect will depend on the structure of expenditure and revenue of each industry. The effect will be positive if that industry's revenue is in US dollar, and if its cost of production is in baht one such sample is an agriculture industry. On contrary, the effect will be negative if the revenue of that industry is in baht whereas its cost of production is in US dollar. Take an electric industry for example. This, type of industry relies heavily on imported raw material.

2) Thailand's international debt.

The depreciation of baht will directly create some negative effects on the industry that depends on some capitals from abroad especially the industry which doesn't hedge its position from the exchange rate volatility.

Table 2 : Debt outstanding (US dollar, million)

End of Period	1994	1995	9/96	4/97
Public sector	15,714	16,402	16,726	16,950
Long-term	15,534	16,317	16,665	n.a.
Short-term	180	85	61	n.a.
Private sector	39,287	51,730	60,386	66,394
BIBFs	18,111	27,503	30,409	35,230
Non-Bank	21,176	24,227	29,977	31,164
Long-term	13,733	16,913	21,739	22,250
Short-term	7,443	7,314	8,238	8,914
Total	55,001	68,132	77,112	83,344

Source : Bank of Thailand

3) Domestic liquidity and interest rate.

There will more dependency on foreign credits as fundamental factors of Thai economy. According to the change in foreign credit on Thai economic situation, the value of baht will vary. If Asian currency crisis is recovered, it will induce some capital inflow and will create domestic liquidity. Morever, domestic interest rate can decrease in the future.

4) Domestic inflation.

After the switch in exchange rate system, prices of raw material surge too. The increase of the cost of production will lead to the rise in commodity price in the mark^t. The effect on all consumers' expenditure is inevitable.

Many Thai companies with foreign loan exposure will be adversely impacted by the change in the exchange rate regime and the liquidity crunch. To help ease the tight liquidity situation, the government is needs to borrow from foreign governments or international agencies to help companies facing heavy foreign exchange losses after the baht is floated and to replenish official reserves which have declined due to the defense of the baht.

According to the exchange rate in new system, the domestic exchange rate fluctuates considerably, due to the effects of economic factors as the following :

1) The interest rate differentiation.

If domestic interest rate is significantly higher than foreign interest rate, it will induce a huge capital inflow, thereby making possible domestic currency appreciation. On the other hand, there are some cases whereby domestic interest rate is higher than foreign interest rate but there are few capital inflows, because of the higher domestic inflation. If domestic inflation is significantly higher than the foreign inflation, it will create some capital flight and domestic currency will continueously depreciate. It can be said that inflation makes real value of baht depreciation.

2) Term of trade, trade balance and balance of payment.
Term of trade is the proportion of export price devided by import price. If the export price is higher than the import price, term of trade will get better and domestic currency will eventually appreciate.

3) The efficiency of production and the consumers' taste.
Although Thailand can export more and can lead to the appreciation of domestic currency, the Thais still also consume more imported goods. The increase in domestic income due to the increase in export will affect the depreciation of domestic currency, not the appreciation of domestic currency.

4) Psychology and Credibility.
Nowadays psychology and credibility become more important factors that directly determine the value of the exchange rate. Since they will effect the capital inflow-outflow of some investors. Factors that will effect credibility of investors are government policy, economic situation, and rumers,among money.

5) Unanticipated events.

Unanticipated events that affect the volatility of exchange rate are, for example, political revolution, and strike. All these events will cause the depreciation of domestic exchange rate.

In conclusion, the Ministry of Finance and the Bank of Thailand strongly believe that the managed float system will benefit Thailand's overall economic development. The new system will provide sufficient flexibility to accommodate developments in Thailand's economy and respond to the financial situation formed in 1994.

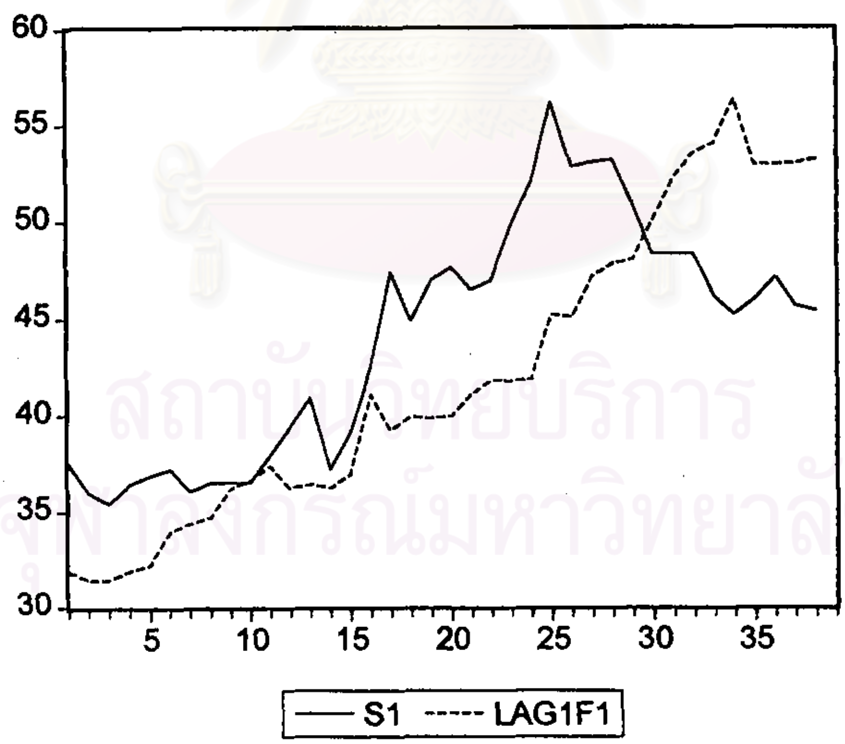
Data sources and Description

This model was applied to Thailand's flexible exchange rates regime during July 2, 1997 -February 18, 1998.

The estimation of the model's parameter is carried out by employing the daily data (five days per week) . Both spot and forward exchange rates are Thai baht per US dollar exchange rates, the forward exchange rates used one - month forward rate as proxies instead. Domestic and foreign interest rates are Thailand interbank middle rates and US Federal Funds effective middle rates which used one -month interbank middle rates of the both countries as proxies instead. From the equation (10), the data were collected from January 1994 to November 1997 on a monthly basis. Spot exchange rate is Thai Baht/US dollars. The domestic and foreign prices are the consumer price indices in Thailand and United States, respectively. All data were obtained from Reuters and are shown in the appendix. This equation was estimated by using the ordinary least square (OLS) method, cointegration method, the autocorrelation functions and the partial autocorrelation functions in Eviews version 2.0.

Figure 2 shows the movement of the spot and the one-month forward exchange rates in normal form. It demonstrates that, both rates have the same trend.

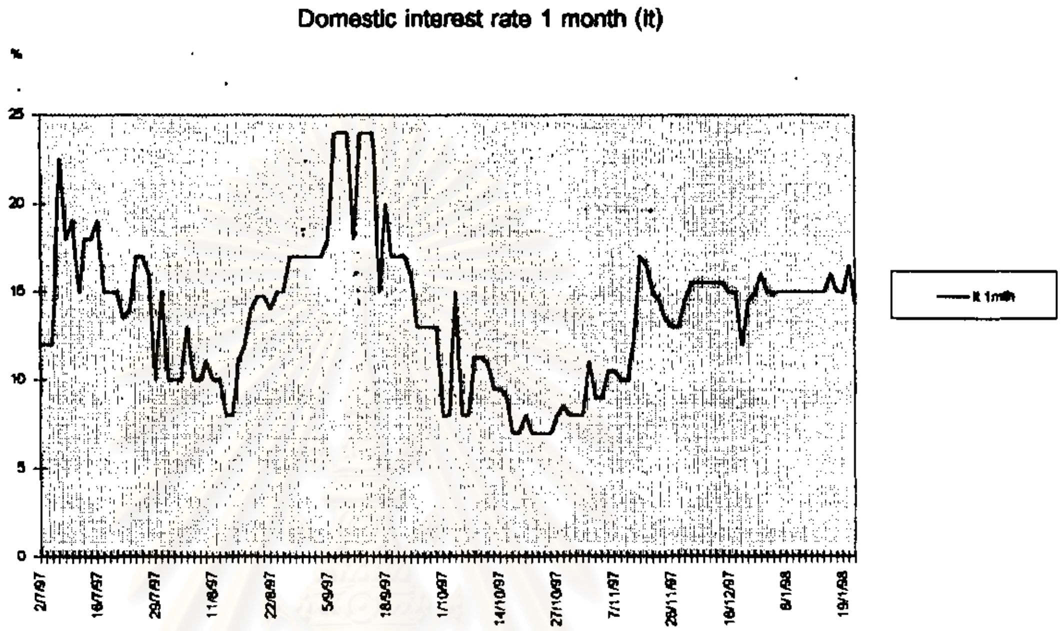
Figure 2 : The movement of the spot and the 1-month forward exchange rates

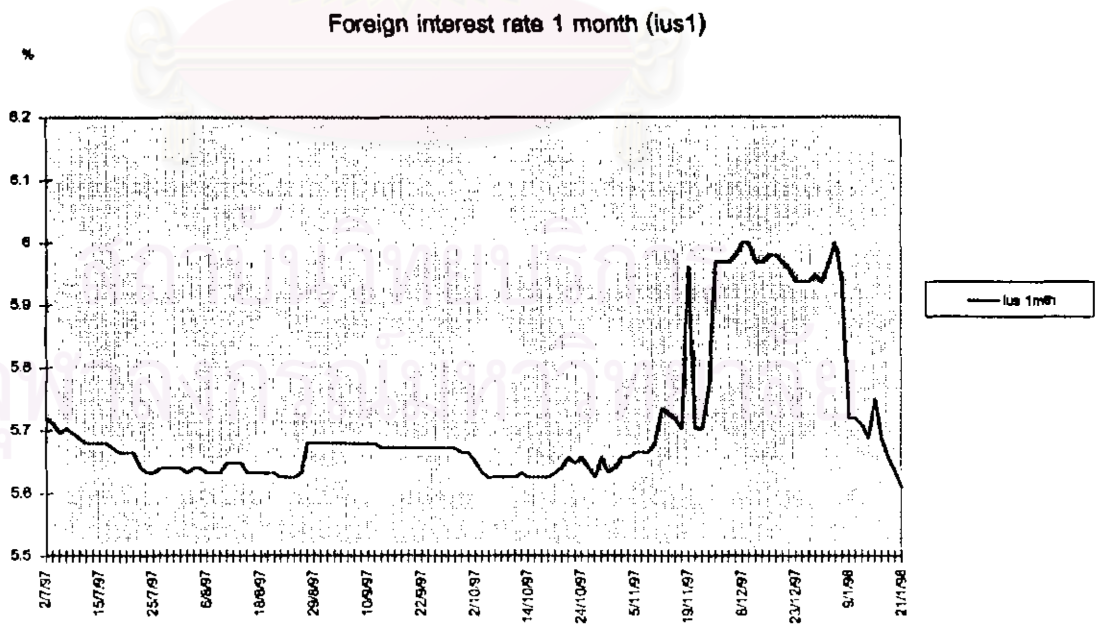


Source : Reuter

Then, figure 3 demonstrates that the movements of one-month domestic and one-month foreign interest rate .

Figure 3 : The movements of the 1-month domestic and foreign interest rate

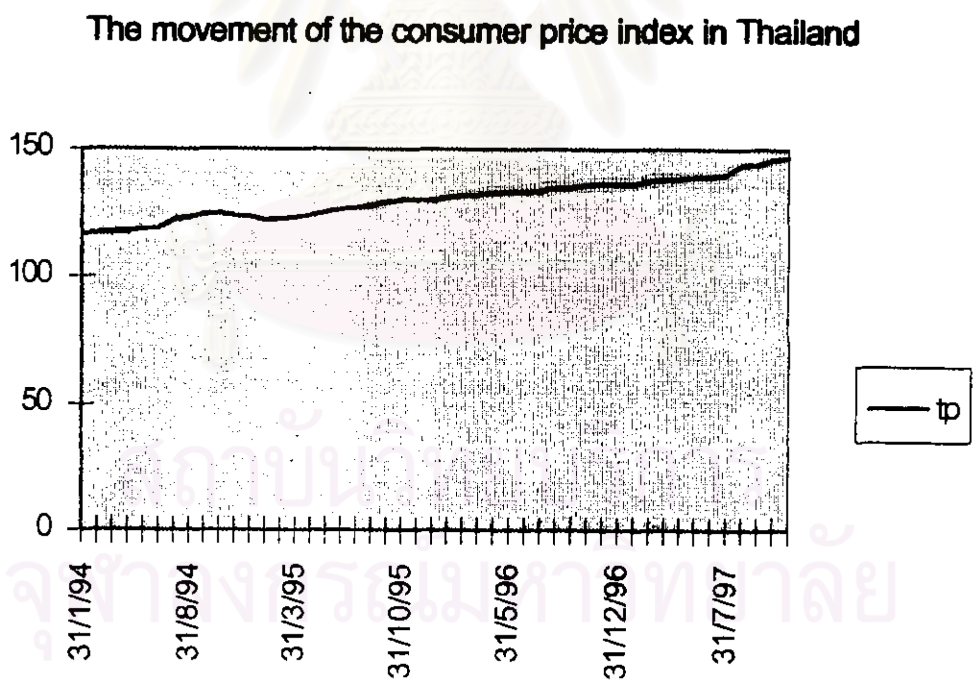




Source : Reuter

The data in equation (10) were collected from January 1994 to November 1997 on a monthly basis. The spot exchange rates are Thai baht per US dollar, the domestic and foreign price levels represented by the consumer price indices of Thai and United States based on the 1990 price. The equation(10) was estimated by using cointegration method to test the long-run relationship between the spot exchange rate and the price level in logarithm form. Furthermore, this equation uses autocorrelation functions and partial autocorrelation functions to examine patterns of the deviation from purchasing power parities.

Figure 4 : The movement of the consumer price indices in Thailand and United States



The movement of the consumer price index in United States