

## **Chapter I.**

### **Introduction**



#### **1.1 State of Problem**

The imparity of the exchange rate and interest rate against those of the world, plus a lack of derivative expertise and underdeveloped derivative financial instruments are the major cause of Thailand's financial crisis. The Thai exchange rate system had to change from a relatively fixed to a float regime. After the floating of the Thai Baht, there is still a question of whether the imparity is absolutely eliminated. This is the focus of this study. This study will test efficiency in the FOREX market under the economic theories: Uncovered Interest Parity (UIP) and Forward Rate Unbiasness (FRU). By using the VAR methodology this study will be able to test the foreign exchange market under those two theories in the same model.

The inefficiency of the foreign exchange market was that it was not able to represent the real status of the country. In other words, it created an imparity in position between domestic and foreign countries. While at the same time there were limitations of the forward market, which came from the system itself that relatively small in size and from agents or businesses that did not have enough knowledge and skill. These factors led to a huge recession.

The crisis might not have caused such a deep recession if Thai businessmen knew how to utilize financial instruments or forwards. A forward is a tool to help businessmen or investors prevent risk. In the case of a foreign exchange market, risk comes from the fluctuation of the exchange rate. Even though it is not able to eliminate all loss, it may help to reduce some part of it. Businesses would be able to hedge their positions against risk from the imparity of the exchange rate.

This may reduce their loss from the currency fluctuation, and might reduce the number of bankrupt companies.

The way to stay away from loss is to have efficiency in the foreign exchange market. But in the case of Thailand, we possessed an inefficient foreign exchange market and thus we were finally faced with a severe crisis.

This study will test the efficiency of the foreign exchange market before and after switching exchange rate regime from relatively fixed under a basket of currencies to a floating. The floating exchange rate regime allows the market mechanism to determine an appropriate price for the foreign exchange. This means the exchange rate is now able to fluctuate driven by demand and supply. Businesses then realize that they need to change their past behavior, when the exchange rate was relatively fixed, to get more involved in the forward exchange rate market. The study will test the efficiency of the Thai Baht – US dollar foreign exchange market before and after changing the regime with US dollar during the period of June 1995 – June 1999.

## **1.2 Objective**

- To analyze the pattern of the foreign exchange market and the forward exchange rate market in Thailand before and after the floating exchange rate regime. To compare the pattern of the foreign exchange market before the Baht float with the pattern from the period after the floating exchange rate regime.
- To test efficiency in the FOREX market in Thailand based on the economic theories of UIP and FRU in the same model by using VAR methodology. This is different from the studies of

other economists that use only one theory, either FRU or UIP, to test efficiency of the market in their researches.

- To clarify whether the government strategies and policies after switching regimes is functional with the world economic situation. When the right parity of exchange rate, interest rate and forward rate is needed most in order to solve economic situation from its primary cause.

### **1.3 Scope of the study**

- This study focuses on the parity among the monthly exchange rate, interbank rate and forward premium. The study focuses on only forward premium. This is due to the fact that there is no future market in Thailand at this moment\*.
- Obtain monthly data from June 1995 to June 1999 and use this period of data to test the efficient market under FRU and UIP theories in the same model. The study uses this period in order to see the foreign exchange market's pattern before and after switching the regime. Therefore, I obtain data for periods that cover both the fixed and the floating regimes. The study cannot use daily data because daily data requires 60 lags for two-period test. This number of lags does not follow the theories of this study, and will not gain an efficient result.

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\* Thailand does not feature a futures exchange at the present time but it is a first priority as can be seen from the study on the development of a Thai futures market by the Securities and Exchange Commission (SEC) in 1994. This led to the creation of draft legislation on the development of a local futures market. However, as Thailand still does not have a futures market, this study only considers the forward market.

- Test the Thai foreign exchange market efficiency during the relatively fixed exchange rate under the basket of currencies and during floating exchange rate regime considering only US dollar. Because the greatest weight in the currency basket was US dollar and the fact that the United States is the most important international trading partner of Thailand with the highest trade volume, 80% of Thailand's international trade. This implies that the US dollar has much influence on the Thai economy and exchange rate during the period of the basket of currencies and floating exchange rate systems.
- Use the VAR methodology to test the efficiency of foreign exchange market. VAR is a technique that allows testing theories of FRU and UIP in multiple periods under the same model. In other words, by using the VAR methodology the test can be done for many periods by using the same model and data. In addition, the special character of VAR that makes it appropriate over other techniques to test in this study is that VAR does not require the researcher to state which variable is endogenous or which is exogenous. Generally, the researcher does not need to know exactly which variable has an influence on the other(s) in which direction. This is the one of the critical points in selecting the VAR methodology for this study because the relationship of the interest rate, exchange rate and forward rate is complex and has feedback effect. Therefore, it is hard to specify the direction of their relationship.

#### **1.4 Advantage of the study**

- To understand how the interest rate system, exchange rate system and forward rate system work, it is important to

understand their pattern because the economic situation is changing all the time. Only when the interest rate, exchange rate, and forward rate behaviors are well understood will it be possible to predict confidently the effect of changing major macroeconomic variables such as savings, investment, balance-of-payment and economic growth. Only with this understanding will the economy be able to gain in the way intended by the original the liberalization policies design.

- To increase the confidence of the businesses in the foreign exchange market in the case where the result of the test is an efficient FOREX market. An efficient market would give the private sector confidence that the Baht represents its true value and therefore reduces the chance of a financial crisis happening again. This will give them greater confidence in trading with both internal and external partners. The increase in confidence will not only affect domestic businesses, but also foreign investors and this may be critical to bring back economic growth.
- To point out the problems that still remain in the system in the case where the outcome of the test is an inefficient market so that the government authority will be able to implement appropriate policy to solve the initial cause of the problem. The outcome of the Efficient Market Hypothesis (EMH) is important in assessing public policy issues such as the desirability of efficient information systems and trading systems, the regulation of financial institutions and the competence of derivative users. This way the government authority will be able to cure or boost the economic system in a quick and efficient manner.

- To test whether the government's prior policies issued in order to solve the crisis were suitable or able to work to their objective. If it is appropriate for the situation, the government authority should continue them, but if it is not, the government authority should stop those policies and choose something, which gives more utility to the economic system.

## **1.5 Structure of thesis**

In this study, the first chapter is the introduction, which will explain why this study is important. This chapter states the objective, scope, and the advantage of the study. The second chapter is written about the background of the study, which includes background on the study and the summary of the structure of the representative variables in this study: interest rate, exchange rate and forward rate. The third chapter gives an explanation of EMH, FRU and UIP. This chapter also discusses in detail what had been done in former studies of both theories in order to test efficient of the market, including the market in Thailand. The fourth chapter presents the model and VAR methodology of the study. The fifth chapter presents the empirical study and results and the last chapter, chapter sixth, is the conclusion.

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