#### CHAPTER 1



#### INTRODUCTION

## 1.1 Statement of the Problems and Benefits of the Study

Financial markets have grown more volatile since the introduction of floating exchange rates in the early 1970s. Capital and foreign exchange controls were reduced or eliminated in a number of countries during the 1980s. The foreign exchange market become the largest, and one of the fastest-growing, markets in the world. The longer trading hours, 24 hours electronic transactions, and international computer and communications networks are tightly link the major foreign exchange markets.

Financial markets and financial services are becoming more consolidated and more globally integrated. As businesses expand into new markets around the world, there is greater demand for financing to follow them. The rapid growth of international financial transactions reflects the growth in cross-border capital flows. Fluctuations in financial variables, such as exchange and interest rates, and the lowering of trade barriers that increased international competition, have been forced companies worldwide to face with their financial risk. Companies must have policies and procedures for understanding and controlling these risks. The most efficient and best organized firms will prevail. Also, countries with the most efficient (but not necessarily the least regulation) will become the world's major international financial centers.

In this era Thai's financial and capital market is closer to the world's financial and capital market since the deregulation of the Thai foreign exchange market (accepted IMF 8) on May 24, 1990 <sup>1</sup> and the adaptation of the managed

<sup>&</sup>lt;sup>1</sup> Tashmai Rikshasuta. "Legal effects from the acceptance of Article VIII on the business transactions with member and non-member countries of the international monetary fund (IMF)". Department of Law, Graduate School, Chulalongkorn University, 1992.

float exchange rate system on July 2, 1997. The managed float exchange rate system lead Thai businesses to face with their financial risk. After July 2, 1997, the baht depreciated substantially, with the exchange rate quoted among commercial banks averaging 36.86 baht per US dollar during the second half of the year. At the end of December, the exchange rate was B47.25 per US dollar or a 45.4 percent depreciation from 30 June 1997.<sup>2</sup> (Figure 1.1)

Exchange rate changes are a major source of uncertainty for international businesses. In a world of global investment and trade, the magnitude of fluctuations in currency values can determine the company's gain or loss. Clearly, the foreign exchange market in Thailand plays a significant role. The question of the financial market efficiency in Thailand has not yet been resolved and continues to attract attention since the existence of inefficiency implies opportunities for unexploited profits in capital markets. Therefore, the testing for the market efficiency hypothesis is necessary for the benefits of all participants in the financial market.

Professional market participants will want to monitor the difference between the current forward rate and the future spot exchange rate. Because this quantity represents both the forward rate's forecasting error and the opportunity gain (or loss) from open foreign exchange positions, it will be an important magnitude for both international investors and borrowers to track. Besides, the understanding of the market efficiency is also an important basic concept in business financial strategy management and the study's result will give some idea to policy makers for further policy implication benefits.

Economic Research Department, Bank of Thailand. *Thailand Economic Performance in* 1997 and Outlook for 1998 (Special Supplement). 1998, p.46.

<sup>&</sup>lt;sup>3</sup> Richard M. Levich. Forward rates as the optimal future spot rate forecast.. Woodhead-Faulkner limited, 1989.

## 1.2 Objectives of the Study

- 1.To test the market efficiency hypothesis (MEH) that whether the current forward exchange rate is an unbiased predictor of the future spot exchange rate (UBFH).
- 2. To test the rational expectation hypothesis (REH) that whether the market participants use all available information rationally (expected return to speculators is zero).
- 3.To test the no risk premium hypothesis that whether the agents are risk neutral (the risk premium is zero)

In the early managed floating exchange rate regime of Thailand.

## 1.3 Scope of the Study

This study will analyze the exchange rate of Thai baht against U.S. dollars. The secondary data sets will consist of daily observations of the spot and one-month forward rate for the period July 2,1997 through February 23, 1998 (169 observations) obtained from the Data Stream.

### 1.4 Research Methodology

To fulfill the study's objectives, this thesis will apply the Econometric View Version 2.0 to utilize the econometric methods of time series analysis as follow;

#### 1. Unit root testing

The unit root test is used to test whether the variables spot exchange rate  $S_{t+1}$ , forward exchange rate  $F_t$  and expected spot exchange rate  $E_t S_{t+1}$  is stationary or not by looking at the Augmented Dickey Fuller (ADF) statistic value.

### 2. Cointegration analysis

This thesis will apply the Cointegration analysis developed by Engel and Granger(1987) ⁴ which is compose of two steps:

- 2.1 Estimate the regression model by ordinary least square (OLS)
- 2.2 Test whether the residual term from the regression has a stationary process by using Augmented Dickey Fuller Test (ADF).

#### 3. Error Correction Mechanism

Generalizations of the error correction methods discussed in Engle and Granger (1987) will be used. This method is used to formulate long run relationships, by adjusting the short run mechanism with error correction terms.

# 4.Correlogram and Q - statistic Test

The correlogram and Q-statistic test for serial correlation on the residual will be used.

## 1.5 Organization of the Study

There are six chapters in this thesis as follows; the first chapter has provided an introduction to the study and consisted of statement of problems and benefits of the study, objectives, scope, and organization of the study. The second chapter includes; related literature, review of the theoretical framework for foreign exchange markets efficiency, and both local and international surveys. The third chapter presents the idea of foreign exchange market in Thailand. The forth chapter discusses methodology and data sets. The fifth chapter describes the empirical results. Finally, in the last chapter the conclusion, policy implication and recommend possible further studies are presented.

<sup>&</sup>lt;sup>4</sup> Robert F Engle, and C.W.J. Granger, "Co-integration and Error Correction:

