

The economic factors that effect changes of Thai's Baht and US dollar, Euro and Yen exchange rate

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Abstract

This research aims is to study the economic factors effecting change of the Thai's Bath and US dollar, Euro and Yen exchange rate. Various factors included in the study were inflation rate, interbank rate, current account, and Export value of Thai goods. Using the monthly data during the period of January 1, 2005 through December 31, 2014 and using the time series and descriptive approach for the main model factors effecting change in Thai's Baht and estimation of multiple regression with ordinary least square method in order to find out such impact as mentioned above. The result of the study were:

The economic factors that effect changes of Thai's Baht and Us dollar exchange rate found that the inflation rate had effected of changes in exchange rates of Thai's Baht against the US dollar in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the US dollar, up 0.1389 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the US dollar decreased by 0.1389 significantly affected changes at the 95 percent confidence level, but the three factors: interbank rate, the current account, and the export value from Thailand to USA were not significant. The economic factors that effect changes of Thai's Baht and EU exchange rate found that the inflation rate had affected of changes in exchange rates of Thai's Baht and the Euro in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the Euro, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the Euro decreased by 0.0831 Baht too. For the interbank rate had effected of changes in exchanges of Thai's Baht and the Euro in the opposite direction. If the inter-bank rate fell 1 percent, it would result in the exchange rate of Thai's Baht and the Euro increased by 0.0318 Baht and also in the opposite direction in a case of the other hand significantly affected changes at the 95 percent confidence level, and the current account, the export value from Thailand to the European Union were not significant. The economic factors that effect changes of Thai's Baht and Yen exchange rate found that one factor was the inflation rate had affected of changes in exchange rates of Thai's Baht against the Yen in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the Yen, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the Yen also decreased by 0.0831 Baht and found that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 21.459 and probability value = 0.000 by statistically significant at a confidence level of 99 percent. Meanwhile this equation was appropriate. Ineffable by changes in the interbank rate, inflation rate, the current account and the export value of goods Thailand to Japan had accounted for 92.01 percent and 7.99 percent was influenced by changes in other factors.

Keywords

The economic factors, effect changes of Thai's Baht, exchange rate

1. Introduction

Presently, the exchange rate between Thai Baht against other currencies are a total

of 48 local currencies up from 35 currencies from April 2008 onwards (Source: The Average Exchange rate of the Commercial

Banks in Bangkok Year 2003 - present: The Bank of Thailand, 2015) [1]. This study aims to study the influence of the critical factors to the exchange rate of Thai Baht currency against foreign currencies, including Thai Baht to three currency; the US Dollar, Thai Baht against the Euro and Thai Baht against the Yen. Three currencies are important and interesting due to the fact that they are the represent of the world's major currencies, namely the US dollar; a major currencies in North America, the Euro in Europe which are a group of EU member states, 17 countries that share the Euro as the currency of countries, including Austria, Belgium, Cyprus, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Malta, Netherlands, Portugal, Slovakia, Slovenia and. Spain (Source: Map of euro area 2015: European Central Bank, 2558)[2] and the Japanese Yen is also one of the major currencies in Asia. By the mean, considering the ratio of foreign exchange of the country's major worldwide due to transactions in foreign currencies related to two currencies, the sum of currency trading each currency is equal to 200%. The Bank for International Settlements: BIS and central banks around the world prepared a survey the foreign exchange every three years, so a recent survey of April 2014 showed that the ratio of currency trading at the international financial markets, ranking first in the US dollar. (87.0%) ranked the second in the euro (33.4%), the Yen (23.0%) rated the third of the total value worldwide , so this study was to study the influence of the factors critical to the rate. during the exchange, the Baht US Dollar, Thai Baht against euro and Thai Baht against the Yen in order to benefit for the financial sector, including those involved more aware of the important causes that affect exchange rates of Thai Baht against the US dollar, Thai Baht against the Euro and the Baht against the Yen.

2. The objectives of the study

To study the economic factors that effect change of Thai Baht and US dollar, Euro and Yen exchange rate.

3. Review Literature

Purchasing Power Parity (PPP) is a theory of exchange rate determination and a way to compare the average costs of goods and services between countries. The theory assumes that the actions of importers and exporters, motivated by cross country price differences, induces changes in the spot exchange rate. In another vein, PPP suggests that transactions on a country's current account, affect the value of the exchange rate on the foreign exchange market. This contrast with the interest rate parity theory which assumes that the actions of investors, whose transactions are recorded on the capital account, induce changes in the exchange rate. PPP theory is based on an extension and variation of the "law of one price" as applied to the aggregate economy.

Relative Purchasing Power Parity (Relative PPP)

Relative purchasing power parity relates the change in two countries' expected inflation rates to the change in their exchange rates. Inflation reduces the real purchasing power of a nation's currency. If a country has an annual inflation rate of 10%, that country's currency will be able to purchase 10% less real goods at the end of one year. Relative purchasing power parity examines the relative changes in price levels between two countries and maintains that exchange rates will change to compensate for inflation differentials.

The Fisher Effect

The economic theory proposed by economist Irving Fisher, that describes the relationship between inflation and both real and nominal interest rates. The Fisher effect states that the real interest rate equals the nominal interest rate minus the expected inflation rate. Therefore, real interest rates fall as inflation increases, unless nominal rates increase at the same rate as inflation.

Interest Rate Parity theory (IRP)

This theory assumes that if two currencies have different interest rates, this difference will lead to a discount or premium for the exchange rate in order to avoid **arbitrage** opportunities. A simple example may be a situation, where interest

rates in the United Kingdom are, say, 2%, while interest rates in Japan are, say, 1%. The sterling will need to depreciate 1% against the Japanese Yen so that arbitrage opportunities can be avoided. The future exchange rate of British Pound/Yen is reflected in the forward exchange rate known today. The forward exchange rate of the pound is at a discount, as it purchases lesser amount of Japanese Yen in the forward rate than it does in the spot rate. The forward exchange rate of the yen, on the other hand, is at a premium. However, interest rate parity has not shown much proof that it is working recently. Currencies of countries, where interest rates are high, in many cases increase in value, because central banks are determined to cool an overheating economy by raising interest rates, therefore, this influence on currencies is not related to arbitrage.

From the above review literature, PPP theory suggests the transactions on a country's current account affect the value of the exchange rate on the foreign exchange market. The Relative PPP mentions when inflation increases the real purchasing power of a nation's currency will reduce. The exchange rate will change to compensate for inflation difference. For the Fisher Effect theory also describe if two currencies have different interest rates. The difference will lead to a discount or premium for the exchange rate in order to avoid arbitrage opportunities. Therefore, the current account, the inflation rate and interest rate or interbank rate are the factors which affect to the exchange rate.

Current Account [3]

The balance of the current account tells us if a country has a deficit or a surplus. If there is a deficit, does that mean the economy is weak? Does a surplus automatically mean that the economy is strong? Not necessarily. But to understand the significance of this part of the Balance of Payment (BOP), we should start by looking at the components of the current account: goods, services, income and current transfers. Theoretically, the balance should be zero, but in the real world this is improbable, so if the current account has a surplus or a deficit, this tells us something about the government and state of the

economy in question, both on its own and in comparison to other world markets. A surplus is indicative of an economy that is a net creditor to the rest of the world. It shows how much a country is saving as opposed to investing. What this means is that the country is providing an abundance of resources to other economies, and is owed money in return. By providing these resources abroad, a country with a Current Account Balancing (CAB) surplus gives other economies the chance to increase their productivity while running a deficit. This is referred to as financing a deficit. A deficit reflects government and an economy that is a net debtor to the rest of the world. It is investing more than it is saving and is using resources from other economies to meet its domestic consumption and investment requirements. For example, let us say an economy decides that it needs to invest for the future (to receive investment income in the long run), so instead of saving, it sends the money abroad into an investment project. This would be marked as a debit in the financial account of the balance of payments at that period of time, but when future returns are made, they would be entered as investment income (a credit) in the current account under the income section. A current account deficit is usually accompanied by depletion in foreign-exchange assets because those reserves would be used for investment abroad. The deficit could also signify increased foreign investment in the local market, in which case the local economy is liable to pay the foreign economy investment income in the future.

The term of trade [4]

Numerous factors determine exchange rates, and all are related to the trading relationship between two countries. Beside of inflation rate, interest rate, current account, public debt, political stability and economic performance, term of trade still is a one factor to determine exchange rate too. A ratio comparing export prices to import prices, the terms of trade is related to current accounts and the balance of payments. If the price of a country's exports rises by a greater rate than that of its imports, its terms of trade have favorably improved. Increasing terms of trade

shows greater demand for the country's exports. This, in turn, results in rising revenues from exports, which provides increased demand for the country's currency (and an increase in the currency's value). If the price of exports rises by a smaller rate than that of its imports, the currency's value will decrease in relation to its trading partners.

The related researches of this study were as following:-

Narong Chunrapetch (2006) [5]. studied the economic factors that influence the exchange rate. Managed using quarterly data Since the third quarter 1997 to second quarter 2005 only in case of exchange rate movements between the US dollar against the baht. The study found that the current account relationship in the opposite direction of the exchange rate consistent with the hypothesis. For the variable price comparison (PPP) international reserves and changes in the exchange rate in the previous period does not affect the exchange rate.

Nipaporn Chotepreuksawan (2011) [6]. Conducted research the factors affecting exchange rates. Thai Baht per the US dollar, Thai Baht per the Euro and Thai Baht and the Yuan. The study found that inflation rate as a factor that affected the exchange rate of Thai Baht against the US dollar, Thai Baht per the Euro and Thai Baht against the Yuan in the same direction, which was a natural assumption given by statistically significance the 95% significance level. The interbank rate was a factor affecting the exchange rate of Thai Baht against the Euro in the opposite direction, but did not affect the exchange rate of Thai Baht against the US dollar, Thai Baht and the Yuan. The current account of exports Thailand - United States worth of exports Thailand - The European Union and the value of exports Thailand - China were factors that did not affect the exchange rate of Thai Baht per US dollar, Thai Baht per the Euro and Thai Baht and the Yuan.

Nongnuch Intrawisade (2000) [7]. studied the effectiveness of the model determined exchange rate. The second objective was to study the economic fundamentals that determine the exchange rate and to compare

the performance of models that predict changes in exchange rates, second theory is that financial models (Monetary Approach) model and the selection of the assets (Portfolio Balance Approach) study using the technique of estimation methods were used. minimal and the Root Mean Square Error (RMSE) to compare the performance of forecasting models exchange. A monthly From July 2540 to December 2543 by the exchange of Thailand against the currencies of the country's industry leading five countries including France, Germany, Japan, UK and USA. The study found that Economic fundamentals, the exchange rate was statistically significant, including the amount of the bond and interest rates while inflation and national income. Not affect the exchange rate was statistically significant also found that the exchange rate in the previous period. Have a dramatic effect on the exchange rate and evaluate the performance of the model. The model showed that the two types of financial models and model selection could predict exchange rate well but the result did not different.

Suda Pitawan and Phoaphan - Kunlayanamitr (2009) [8]. studied the relationship between the exchange rate between Thai Baht against the US dollar, the percentage change of the current account, the percentage change in foreign reserves, the interbank rate, the inflation rate and the Stock Exchange of Thailand Index. Using monthly data From 1 January 2000 until 30 November 2009 by running the Multiple Regression. The result found that the percentage change of the current account and the Stock Exchange of Thailand Index affecting the exchange rate of Thai Baht against the US dollar in the opposite direction, as the hypothesis. For the percentage change foreign reserves, the interbank rate. and inflation rate did not affect the exchange rate of Thai Baht against the US dollar by significant statistical confidence level of 95 percent.

4. The methodology of the study

The methodology of this study consists of: -

4.1 Data Collection

Using the secondary data (Time

Series Data) from January 1, 2005 to December 31, 2014 which was collected from the related documentaries including the statistic data from the government offices such as Bank of Thailand, Bank for International Settlements, Department of Export Promotion etc.

4.2 The variables of the study

4.2.1 Independent Variables were

- 4.2.1.1 Interbank rate
- 4.2.1.2 Inflation rate
- 4.2.1.3 Current account
- 4.2.1.4 Export value of Thai goods to

- USA
- European Union
- Japan

4.2.2 Dependent Variable was the foreign exchange rate of

- Thai Baht against the US dollar
- Thai Baht against the Euro
- Thai Baht against the Yen

4.3 Data Analysis

4.3.1 Descriptive Method

The statistic for analysis was using the mean and the percentage.

4.3.2 Quantitative Method

The statistic for analysis the important factors that influence the exchange rate of Thai Baht against the US dollar, Thai Baht against the Euro, Thai Baht against the Yen was Multiple Regression Analysis by Ordinary Least Square Method. The models consist of three equations which were

- Exchange rate of Thai Baht against the US dollar equation

$$USD = a + b_1 IBR + b_2 INF + b_3 CA + b_4 XUS \dots (a)$$

- Exchange rate of Thai Baht against the Euro equation

$$EUR = a + b_1 IBR + b_2 INF + b_3 CA + b_4 XEU \dots (b)$$

- Exchange rate of Thai Baht against the Yen equation

$$YEN = a + b_1 IBR + b_2 INF + b_3 CA + b_4 XJP \dots (c)$$

The symbol used to represent as.

USD = Exchange rate of Thai Baht against the US dollar (Thai Baht)

EUR = Exchange rate of Thai Baht against the Euro (Thai Baht)

YEN = Exchange rate of Thai Baht against the Yen (Thai Baht)

IBR = Interbank Rate (%)

INF = Inflation Rate (%)

CA = Current Account (1,000 million Baht)

XUS = Export value of goods from Thailand - United States (Export to USA.) (1,000 million Baht)

XEU = Export value of goods from Thailand - The European Union (1,000 million Baht)

XJP = Export value of goods from Thailand - Japan (1,000 million Baht)

a = constant

b_i = coefficients of independent variables, i = 1, 2, 3, 4.

5 Results of the study

Primary testing the relationship of the three models had the Autocorrelation in each independent variables, so it need to eliminate the Autocorrelation problem away by using ARIMA (1,0,0) and ARIMA (2,0,0) until the Autocorrelation were disappeared and the models were fit. The modified models were showed the results as the following; -

- Analysis of exchange rates of Thai Baht against the US dollar

$USD = 34.8531 - 0.0998IBR + 0.1389INF - 0.0002CA - 0.0005XUS \dots (1)$ <p style="text-align: center;">(0.7208) (-0.4602) (1.9945)* (-0.5383) (-0.0524)</p>
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F-statistic = 3.521 Prob. = 0.002

Adjusted R-squared = 0.9871

Durbin-Watson = 1.8283

Note: The values in parentheses were the t- statistic.

* A statistically significant at the 95 percent confidence level

** A statistically significant at the 99 percent confidence level

From Equation 1, the Durbin-Watson was 1.8283 and it was in a range of 1:50 to 2:50, it mean that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 3.521 and probability value = 0.002 by statistically significant at a confidence level of 99 percent mean this equation was appropriate. Ineffable by changes in the

interbank rate (IBR), inflation rate (INF), the current account (CA) and the export value of goods Thailand - United States. (XUS) had accounted for 98.71 percent and 1.29 percent was influenced by changes in other factors. When testing the statistical significance of the independent variables found that one factor was the inflation rate (INF) had effected of changes in exchange rates of Thai Baht against the US dollar in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai Baht against the US dollar, up 0.1389 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai Baht against the US dollar decreased by 0.1389 Baht too.

- Analysis of exchange rates of Thai Baht against the Euro

$$\text{EUR} = 49.3159 - 1.3159\text{IBR} + 0.3101\text{INF} - 0.0054\text{CA} - 0.0098\text{XEU} \dots(2)$$

(20.4872)** (-2.4829)* (2.4618)* (-1.8112) (-0.7143)

F-statistic= 334.264 Prob.= 0.000
Adjusted R-squared = 0.9448
Durbin-Watson = 1.9244

Note: The values in parentheses were the t-statistic.

* A statistically significant at the 95 percent confidence level

** A statistically significant at the 99 percent confidence level

From Equation 2, the Durbin-Watson was 1.9244 and it was in a range of 1:50 to 2:50, it mean that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 334.264 and probability value = 0.000 by statistically significant at a confidence level of 99 percent mean this equation was appropriate. Ineffable by changes in the interbank rate (IBR), inflation rate (INF), the current account (CA) and the export value of goods Thailand – European Union. (XEU) had accounted for 94.48 percent and 5.52 percent was influenced by changes in other factors. When testing the statistical

significance of the independent variables found that two factors were the inflation rate (INF) had affected of changes in exchange rates of Thai Baht against the Euro in the same direction and the interbank rate (IBR) had effected of changes in exchanges of Thai Baht against the Euro in the opposite direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai Baht against the Euro, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai Baht against the Euro decreased by 0.0831 Baht too. For the interbank rate, if the interbank rate fell 1 percent, it would result in the exchange rate of Thai Baht against the Euro increased by 0.0318 Baht and also in the opposite direction in a case of the other hand.

- Analysis of exchange rates of Thai Baht against the Yen

$$\text{YEN} = 5.2321 - 0.0318\text{IBR} + 0.0831\text{INF} - 0.0003\text{CA} - 0.0037\text{XJP} \dots (3)$$

(30.7303)** (-0.5221) (2.0898)* (-0.7427) (-1.4207)

F-statistic= 21.459 Prob.= 0.000
Adjusted R-squared = 0.9201
Durbin-Watson = 1.8955

Note: The values in parentheses were the t-statistic.

* A statistically significant at the 95 percent confidence level

** A statistically significant at the 99 percent confidence level

From Equation 3, the Durbin-Watson was 1.8955 and it was in a range of 1:50 to 2:50, it mean that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 21.459 and probability value = 0.000 by statistically significant at a confidence level of 99 percent mean this equation was appropriate. Ineffable by changes in the interbank rate (IBR), inflation rate (INF), the current account (CA) and the export value of goods Thailand - Japan. (XJP) had accounted for 92.01 percent and 7.99 percent was influenced by changes in other factors. When testing the statistical significance of the

independent variables found that one factor was the inflation rate (INF) had affected of changes in exchange rates of Thai Baht against the Yen in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai Baht against the Yen, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai Baht against the Yen also decreased by 0.0831 Baht.

6 Conclusion

This research aims is to study the economic factors effecting change of the Thai's Bath and US dollar, Euro and Yen exchange rate. Various factors included in the study were inflation rate, inter-bank interest rate, current account, and Export value of Thai goods. Using the monthly data during the period of January 1, 2005 through December 31, 2014, which was collected from the related documentaries including the statistic data from the government offices such as Bank of Thailand, Bank for International Settlements, Department of Export Promotion. The statistic for analysis was using the mean and the percentage. The statistic for analysis the quantitative method the important The economic factors that effect changes of Thai's Baht and Us dollar, Euro and Yen exchange rate. The models consist of three equations were:

- Exchange rate of Thai's Baht against the US dollar equation

$$\text{USD} = a + b_1\text{IBR} + b_2\text{INF} + b_3\text{CA} + b_4\text{XUS} \dots (a)$$

- Exchange rate of Thai's Baht against the Euro equation

$$\text{EUR} = a + b_1\text{IBR} + b_2\text{INF} + b_3\text{CA} + b_4\text{XEU} \dots (b)$$

- Exchange rate of Thai's Baht against the Yen equation

$$\text{YEN} = a + b_1\text{IBR} + b_2\text{INF} + b_3\text{CA} + b_4\text{XJP} \dots (c)$$

The result of study found that: The economic factors that effect changes of Thai's Baht and Us dollar exchange rate found that the inflation rate had effected of changes in exchange rates of Thai's Baht against the US dollar in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's

Baht against the US dollar, up 0.1389 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the US dollar decreased by 0.1389 significantly affected changes at the 95 percent confidence level, but the three factors: interbank rate, the current account, and the export value from Thailand to USA were not significant. The economic factors that effect changes of Thai's Baht and EUR exchange rate found that the inflation rate had affected of changes in exchange rates of Thai's Baht and the Euro in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the Euro, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the Euro decreased by 0.0831 Baht too. For the interbank rate had effected of changes in exchanges of Thai's Baht and the Euro in the opposite direction. If the inter-bank rate fell 1 percent, it would result in the exchange rate of Thai's Baht and the Euro increased by 0.0318 Baht and also in the opposite direction in a case of the other hand significantly affected changes at the 95 percent confidence level, and the current account, the export value from Thailand to the European Union were not significant. The economic factors that effect changes of Thai's Baht and Yen exchange rate found that one factor was the inflation rate had affected of changes in exchange rates of Thai's Baht against the Yen in the same direction. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the Yen, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the Yen also decreased by 0.0831 Baht. and found that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 21.459 and probability value = 0.000 by statistically significant at a confidence level of 99 percent. Meanwhile this equation was appropriate. Ineffable by changes in the interbank rate , inflation rate, the current account and the export value of goods Thailand to Japan had accounted for 92.01 percent and 7.99 percent was influenced by changes in other factors.

7 Discussion

The inflation rate was the important factor affecting the exchange rate of Thai's Baht against the US dollar exchange rate, Thai's Baht against the Euro exchange rate and Thai's Baht against the Yen exchange rate by statistical significance in the same direction. This study result was consistent with the research of Nipaporn Chotepreuksawan (2011) :111d related to the Relative Purchasing Power Parity theory: RPP). Moreover, the interbank rate was also a factor affecting only the exchange rate of Thai's Baht against the Euro by statistical significance in the opposite direction that was consistent with the research of Nipaporn Chotepreuksawan (2011) and consistent with the theory of interest rate parity (The Interest Rate Parity: IRP) but the inter-bank rate did not affect the exchange rates of Thai 's Baht against the US dollar exchange rate and Thai's Baht against the Yen exchange rate by statistical significance. This may be due to the government interfering in the domestic interest rates by using the interest rate policy. During 2003 to 2007, the inflationary pressures were rather high due to the high oil prices or the problem of Subprime in 2007 to 2009, which was consistent with the findings of the research Nongnuch Intrawisade (2000). The current account was the independent variables that were not affecting the exchange rate of Thai's Baht against the US dollar exchange rate, Thai's Baht against the Euro exchange rate and Thai's Baht against the Yen exchange rate by statistical significance. This may be due to government interference with Monetary Policy to stimulate activity of the current account balance. The results of this study were consistent with results of Narong Chumapetch (2006), Suda Pitawan and Phoaphan Kunlayanamitr (2009). For the export value of goods from Thailand to USA, the export value of goods from Thailand to the European Union and the export value of goods from Thailand to Japan was the other independent variable did not affect the exchange rate of Thai 's Baht against the US dollar exchange rate, Thai's Baht against the Euro exchange rate and Thai's Baht against the Yen exchange rate by

statistical significance. This is consistent with findings Nipaporn Chotepreuksawan (2011) may have caused the government to intervene. Due to the fact that the export value was not under the assumption that the market trade was a perfect competitive market, so a comparison with the price of trade with foreign countries were not change much, or export and import of Thailand reflected to the exchange rate were rather low and imperfect.

8 The recommendation

The results of this study reflected the opinion and ideas of the government staff who are involved in control and manage the various economic factors that effect changes of Thai's Baht and US dollar, Euro and Yen exchange rate should set lip policy to choose the suitable techniques to be stable and had appropriate value were:

The factors that effect changes of Thai's Baht and Us dollar exchange rate were:

1. The policy on the inflation rate to know that the inflation rate had effected of changes in exchange rates in the same direction and significantly affected changes at the 95 percent confidence level. If the inflation rate increased 1 percent, it would affect the exchange rate of Thai's Baht against the US dollar, up 0.1389 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the US dollar decreased by 0.1389 significantly affected changes at the 95 percent confidence level,
2. The policy on the three factors :to know that inter-bank interest rate, the current account, and the export value from Thailand to USA were not significant.

The factors that effect changes of Thai's Baht and EUR exchange rate were:

1. The policy on the inflation rate: to know that the inflation rate had affected of changes in exchange rates of Thai's Baht and the Euro in the same direction. If the inflation rate increased 1percent, it would affect the exchange rate of Thai's Baht against the Euro, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the

European Union decreased by 0.0831 Baht too.

2. The policy on the inter-bank rate: to know that the inter-bank rate had effected of changes in exchanges of Thai's Baht and the Euro in the opposite direction. If the inter-bank rate fell 1 percent, it would result in the exchange rate of Thai's Baht and the Euro increased by 0.0318 Baht and also in the opposite direction in a case of the other hand significantly affected changes at the 95percent confidence level.

3. The policy on the current account, the export value from Thailand to Euro: to know that the current account, the export value from Thailand to Euro were not significant.

The factors that effect changes of Thai's Baht and Yen exchange rate were:

1. The policy on the inflation rate: to know that the inflation rate had affected of changes in exchange rates of Thai's Baht against the Yen in the same direction. If the inflation rate increased 1percent, it would affect the exchange rate of Thai's Baht against the Yen, up 0.0831 Baht. In the other hand, if the inflation rate fell 1 percent, it would result in the exchange rate of Thai's Baht against the Yen also decreased by 0.0831 Baht.

2. To know that there was no the Autocorrelation within the independent variables. Moreover, this equation had the F-statistic = 21.459 and probability value = 0.000 by statistically significant at a confidence level of 99 percent. Meanwhile this equation was appropriate. Ineffable by changes in the interbank rate, inflation rate, the current account and the export value of goods Thailand to Japan had accounted for 92.0 I percent and 7. 99 percent was influenced by changes in other factors., it would result in the exchange rate of 'Thai's Baht against the Yen also decreased by 0.0831 Baht. The role model for the government staff who are involved in control and manage the various economic factors that effect changes of Thai 's Baht and US dollar, Euro and Yen exchange rate should study more various economic factors than in this research such as: exports, imports, service receipts, service payments, international monetary flows, private investment index, Set index, consumer price index, debt and deposit ratio, 3 months lixl:d deposit interest rate and, interbank rate and international reserves. Some

factors can using the daily data such as: inter-bank rate, 3 months fixed deposit interest rate, the previous; day's SET index and exchange rate of Thai's Baht and Us dollar, Euro and Yen exchange rate.

• Further research suggestions

For the initial data to do the foreign exchange rate research and the further researches. The researcher suggests the research topics as follows.

1. There should be a matter of time delay in the trial as well. Some factors may not affect the foreign exchange rates during the same instant. It should take the delay time (Time Lag) to consider for data analysis.

3. There should be a study the important factors affecting the exchange rate of Thai's Baht against other currencies more attractive than Thai's Baht against the US dollar exchange rate, Thai's Baht against the Euro exchange rate and Thai's Baht against the Yen exchange rate.

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