ABSTRACT

Thesis Title : The Determinants of Exchange Rate and theirs Causal Relationships

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The objectives of this thesis are to study the economic determinants to analyze which one could impact on exchange rate including studying the possible causal relationship among them. OLS is performed on the regression specification to compute the economic determinants. Next, the two methods of causal test namely Akaike Final Prediction Error (FPE) and Granger test are employed in this study. Data used in this study for running OLS are the annual of the Baht relative to the US dollar, money supply, interest rate, consumer price index and stock price index, respectively. The sample period is from 1980 to 1998. While the data for testing causality are the monthly data of the Baht relative to the US dollar, money supply and stock price index in the period of January 1989 to December 1998.

According to the monetary approach combining with demand for money and supply of money, the outcome from OLS can imply that money supply, stock price index, consumer price index and exchange rate in term of lag are statistically

significant to exchange rate. Then we used these variables--stock price index and money supply to calculate the result of the causality test. First, we used the Augmented Dickey-Fuller procedure to examine stationary of each variable in level, first difference and second difference forms. As evaluated by the MacKinnon's ADF critical value, exchange rate and money supply are stationary in first difference forms while stock price index is stationary in the second difference. Similarly, the optimum lag of them is one.

The causality results from FPE and Granger are quite different, as to exchange rate and stock price index in FPE, we found feedback relationship between exchange rate and stock price index. It meant changes in exchange rate were led by changes in the stock price index. On the other hand, changes in the stock price index were preceded by changes in the exchange rate. But no statistically significant causal relationship can be observed in exchange rate and stock price index when using the Granger's causality test.

In addition, the results of exchange rate and money supply showed the FPE outcome that there is unidirectional causality from exchange rate to money supply. It meant changes in money supply were led by changes in exchange rate. But in Granger's causality test we found unidirectional causality from money supply to exchange rate.