Chapter 6

Conclusion and Limitation

In this thesis, we have tested the NATREX model that how it can explain the behavior of real exchange rate in Thailand. The period is quarterly data from 1980:1 to 1997.4. Macroeconomic balance was used to explain movement of equilibrium real exchange rate. Since the assumption about open small economy, the variables are involved only terms of trade, productivity, thrift, foreign real long terms interest rate. These variables are related to non-tradable relative price and real exchange rate in long-run, the appropriate econometric method, therefore, is co-integration and error correction model. The Johansen and Jurious's method was used to calculate the results.

The results showed that the relationship of relative price of non-tradable to all of the fundamental variables existed. We have test long run relationship by using co-integration as follow, when shock from productivity in non-tradable sectors increase will produce the non-tradable relative price will appreciate. The thrift has negative relationship with the non-tradable relative price. An increase in the terms of trade led to a depreciate in non-tradable relative price. And when the long terms of real interest in rest of the world increase, the non-tradable relative price decrease.

The real exchange rate in long run will depreciate when the variables such as thrift, terms of trade and real long terms interest rate of foreign increase but it show positive relationship with the productivity. The sign of each variables are

similar in both models, which are non-tradable relative price and real exchange rate model.

From the co-integration equation , the actual non-tradable relative price is overvalued from the equilibrium non-tradable relative price about 56.8 % before currency crisis. Real exchange rate showed that they have misalignment about 23.5 % in quarter 2 of 1997. The adjustment coefficient indicated that the haft life of adjustment of non-tradable relative price and real exchange rate are about 1.2 , 1 quarters respectively.[1]

6.1 Policy implication

The currency crisis in Thailand manifested the policy makers and investors to be aware of the misalignment of real exchange rate; actual real exchange rate depart from the equilibrium real exchange rate. From the results of co-integration, it indicated that real exchange rate in Thailand has been misalignment since 1986. By the trend of misalignment began in 1986 and peak in mid-year in 1997. If the monetary authorities looked close up to the movement of real exchange rate as the leading indicator, Thailand would be able to avoid or limit the currencies crises. Williamson[2] write the matter of misalignment in preface of the text of world bank.

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[1]The haft-lifts the time it take for a discrepancy between the actual and equilibrium exchange rate to be reduced by haft. It is computed as (ln2) / α.

[2]John Williamson, "Foreword," in Exchange Rate Misalignment: Concept and Measurement for Developing Countries, ed. Lawrence E Hinkle and Peter J. Montiel (New York : Oxford University Press, 1999), p. xi.

" Some people may believe that crises are an inevitable feature of the capitalist system. ...But some of us believe that crises can be avoided or at least limited by good economic management, and that having a reasonable idea of where the equilibrium exchange rate lies is an essential requirement for good macro management."

NATREX can explain Thai economy good enough when we consider results from this thesis, but there are still many methods to confirm the long run relationship of real exchange rate model.

6.2 Limitation

The equilibrium real exchange rate is important for Thailand to cross check the misalignment of the actual real exchange rate departed from the equilibrium value. In this thesis, we use NATREX model to test the case of Thailand. There are many problem in estimating the model.

1. The productivity (GDPDLABOR) and thrift (RSGDP88) in quarterly data proxies from others variables such as monthly real export, real government expenditure, and current account, private investment index. The actual quarterly data in these variables may be suggest better results.

2. Longer data series may better capture long run behavior in each variable.

6.3 Suggestion

There are many suggestion to produced the equilibrium real exchange rate in case of Thailand.

1. We can try the other approaches that is reviewed in chapter 2 in case of Thai economy.

2. In these thesis real exchange rate is bilateral. The future empirical work may be produced the effective real exchange rate in case NATREX model.

3. The econometric method that use to test long run relationship is Johansen and Juselius approach, anathor approach that can be tested is Engle Granger approach, general to specified approach.

4. Although empirical work about PPP in other countries will be produce very much, but in Thailand need to tests in many aspect such as examine structure change in co-integration in PPP, pool data in case of Asian.