Chapter 5 Conclusion

In this paper, we empirically investigate the long run relationship between various macroeconomic variables and the trade balance by using Malaysian quarterly data from 1973 to 1998.

5.1 Limitations

Though the results are potentially useful, it is worth mentioning some of the limitations of our findings. Firstly, some data are not available in quarterly basic for the case of Malaysia. For example, the quarterly data on current account (CA) and gross domestic product (GDP) are only available in recent years. In the case of GDP, interpolation method is employed. However, this may not reflect the true pattern of the actual quarterly GDP. The same method is not used for the case of CA as it represents trade balance, which is the subject matter of this research. As such, any error in the estimation of its quarterly pattern may lead to misleading results. Therefore, CA is discarded in the initial stage.

Next, cointegration analysis has the following limitations (Perman, 1991):

1) Under certain circumstances, some of its test procedures including the ADF tests have very low power.

2) Static ordinary least square cointegration regression may have substantial bias in small sample[10].
3) The role of cointegration in model evaluation is inherently limited. Its contribution lies in the long run information provided. The short run dynamic structure of the model can not be evaluated without the use of other techniques.
4) Structural breaks in the time series being investigated can cause difficulties in inference.

Subsequently, we shall look back at the identification of the variables and the empirical results. On the theoretical ground, nominal exchange rates, real exchange rates and terms of trade (which resemble exchange rate policy), money supply and interest rates (which represent monetary policy), fiscal balance (which resemble fiscal policy) and income are identified as the important determinants of trade balance.

5.2 Findings and policy implications

However, the empirical results strongly suggest that all these variables except interest rates are found to be not cointegrated with trade balance. Thus, there are no long run equilibrium relationships between all these macroeconomic variables (except interest rates) when they are paired with the trade balance for Malaysia throughout the estimation period.

[10] However, the estimates of the long run equilibrium parameters are consistent and highly efficient when the variables are cointegrated.

The major policy implications of this study are as follows. Firstly, exchange rate policy and fiscal policy may not influence the Malaysian trade balance effectively as the macroeconomic variables which resemble these policies are found to be not cointegrated with the trade balance. Secondly, money supply and income are also found to be ineffective in influencing the trade balance with the same rationale.

Finally, Malaysian government shall use interest rate policy to rectify the trade imbalances. This is because interest rate is the only macroeconomic variable found to have long run relationship with the trade balance[11].

As compared to the study by Chua (1987) on the determinants of Malaysian current account from 1961 to 1985, exchange rates are also found to be insignificant in influencing the current account. However, TOT and FB are verified as important determinants of Malaysian current account.

For the case of the United States, Bahmani-Oskooee and Pourheydarian (1992) suggests fiscal policy as the only viable policy option to rectify the United States trade imbalances. They suggest that other variables such as TOT, REX, NEX, M2, R and Y are not cointegrated with the United States trade balance.

[11] Although cointegration reflects only the existence of long run relationship and may not have a causal interpretation, we could use theory to determine what causes what (Rao, 1994).

For the case of India, Nachance and Ranade (1998) suggest that NEX and REX are important determinants of the trade balance of India.

All in all, there is no consensus on which policy that can effectively rectifying the trade imbalance in these three countries. Similar studies may be carried out on more countries[12], especially for the developing countries to identify the viable policy measures to tackle the trade deficit problem.

5.3 Conclusion

In short, the major findings in this research is that interest rate is the only variable found to be cointegrated with the trade balance. Hence, there is long run equilibrium relationship between the interest rate and trade balance. Malaysian government shall use interest rate policy to rectify the problem of trade imbalance.

[12] Nachance and Ranade (1998) used different approaches as compared to Bahmani-Oskooee and Pourheydarian (1992) as well as this paper.