CHAPTER 5

METHODOLOGY

5.1 INTRODUCTION

The analysis begins with an overview of the economies of Malaysia and Singapore using graphical and tabular analysis of broad indices. This is followed by the formulation of a simultaneous equations model.

5.2 DATA AND SOURCES

All analyses in this research paper will mainly use secondary data from the Central Bank Annual Report and Economic Report of the two countries. Besides that, International Monetary Fund (IMF) publications and any text books or journals which are applicable and reliable will also be referred to. A period of 22-years from 1975 to 1996 will comprise the sample size for the analysis. The economic variables chosen in this comparative analyses will be the ones for which values are obtainable from both countries for the same time frame.

5.3 SOFTWARE

Eviews.

5.4 SIMULTANEOUS EQUATION MODELS

The proposed simultaneous equation models are as follows :-

\[ \text{BOPs} = \text{CUB} + \text{CAB} \]
\[ \text{CAB} = \text{LC} + \text{SC} \]
\[ \text{CSUMTION} = f(\text{M3, IVESTMEN}) \]
\[ \text{CUB} = \text{TB} + \text{SB} \]
\[ \text{DEPOSITS} = f(\text{CPI}) \]
\[ \text{EXPORTS} = f(\text{REER, TFP}) \]
\[ \text{GNP} = \text{CSUMTION} + \text{IVESTMEN} + \text{EXPORTS} - \text{IMPORTS} \]
\[ \text{IMPORTS} = f(\text{GNP}) \]
IVESTMEN = \( f(M3) \)

\[
\begin{align*}
LR &= \ f(\text{DEPOSITS, LOANS}) \\
\text{LOANS} &= \ f(M3) \\
\text{SC} &= \ f(\text{R, RW, KLSE or SES}) \\
\text{TB} &= \ \text{EXPORTS} - \text{IMPORTS} \\
U &= \ f(\text{CPI, GNP})
\end{align*}
\]

Abbreviations :-

- BOPs = Balance of payments
- CSUMTION = Total consumption (private + government)
- CPI = Consumer price index
- CAB = Capital account balance
- CUB = Current account balance
- DEPOSITS = Banking system deposits
- EXPORTS = Exports of goods
- GNP = Gross national product
- GNS = Gross national savings (as % of GDP)
- IMPORTS = Imports of goods
- IVESTMEN = Gross capital formation (private + government)
- LOANS = Banking system loans
- LR = Liquidity ratio
- M3 = Broad money supply
- R = Interest rate (monthly data refer to the daily average overnight interbank lending rates of ten banks)
- RW = World interest rates
- REER = Real effective exchange rates
- SB = Services balance
- SC = Short term capital
- KLSE / SES = Annual turnover of Malaysia's or Singapore's stock market
- TB = Trade balance
- TFP = Total factor productivity
- U = Unemployment rate

An important caveat applies here which is, that the study does not attempt to correct for cross-country differences in industrial structure. A major constraint of the study is the availability of economic data on Malaysia and Singapore from 1975 to 1996.