# CHAPTER 1

## INTRODUCTION

The main purpose of this study is to investigate the Granger-causality relationship between Federal government budget deficits and interest rates in Malaysia since 1978. This paper aims to assess whether larger deficits do raise Treasury bill discount rates and vice versa. Besides that, a comparison is also made between the effects of deficits on short-term (three-month) rates and medium-term (one-year) rates.

Although budget deficits have often caused uneasiness among economists, policymakers and observers, it is not uncommon in many countries around the world. Budget deficits happen in the economies of developing and developed nations alike. Growing deficits generally invoke the fear of higher national debts and may jeopardize the growth of the economy in the long-term. This is understandable as it is widely believed that persistent deficits could cause inflationary pressures in the economy and also cause 'crowding out' in private expenditures.

However, there is a linkage between budget deficits and development of the economy. As in the case of Malaysia, large deficits were incurred as the many development programmes were implemented especially in the 1970s. On top of that, deficits is almost a necessity in times of recession as the government needed extra funds to boost the economy into recovery, just like in 1998 in the wake of the Asian financial crisis. Therefore, budget deficits could not be eliminated just for the sake of earning surpluses as the government had to consider the structural and economic growth of the nation and therein lies the dilemma of incurring budget deficits.

Budget deficits are theoretically believed to have an influence on various macroeconomic variables. The subject of large deficits raising interest rates in particular has been explored in many previous studies. Conventional economic theory has it that large deficits raise interest rates because increased spending would imply increased aggregate demand for money. This 'lowers the spending that can be financed at any given nominal interest rate and therefore drives up the interest rates' (Evans, 1985:69). This will subsequently cause 'crowding out'.

However, there are a growing number of studies that oppose the conventional paradigm. The alternative theory, which is widely known as the Ricardian Equivalence states that the people would anticipate deficits and increase private savings for future tax payments. This would stabilize the effects of the deficits on interest rates. Therefore, based on past studies, the results and conclusions arrived have not been unanimous.

On top of that, there is also the possibility of interest rates affecting budget deficits. Empirical evidence by Darrat (1986) could attest to this relationship as he found that budget deficits in Germany are sensitive to changes in interest rates. Nevertheless, this reverse relationship has often been neglected in many previous studies. According to Darrat (2002), as debt servicing is an important component of government expenditure, a rise in deficits may be caused by an increase in interest rates. Besides that, escalating interest rates may lead to reduced tax revenues due to worsening business activities.

Therefore, this could also be proof that rising interest rates has an effect on budget deficits.

Since the 1980s, budget deficits in Malaysia have been partly financed by the issuance of government bonds such as the Treasury bills and other government securities. Therefore, it is relevant and reasonable that the relationship between budget deficits and interest rates of Treasury bill rates in Malaysia be determined.

The results of previous investigations have varied with the development of new methodologies. Most of the earlier studies use the simple ordinary least squares (OLS) method to establish the significance of the correlation between deficits and interest rates. However, more recent studies have begun to apply cointegration analysis in their investigations to shed more light on this relationship.

The investigation in this paper applies the cointegration methodology and the Granger causality analysis on quarterly data from 1978 tc 2002 in order to analyze the subject on hand. It is loosely based on the studies by Vamvoukas (1997) and Darrat (2002). Besides using the budget deficits and interest rates data, several other variables that are theoretically related to the two are also included in the model, namely the inflation rate, Gross National Product (GNP), monetary (M1) growth, government expenditure on goods and services, government transfers and a proxy for economic openness.

Another motivation for this study is that most of the studies reviewed were conducted on developed economies and OECD nations. There have not been many studies conducted on developing countries, let alone Malaysia. Therefore, it is hoped that with the application of a different methodology on the Malaysian data, a more conclusive result could be obtained for a small open economy such as Malaysia.

Chapter 2 of this study will briefly review the history of fiscal and monetary management in Malaysia. Chapter 3 will review the literature of previous studies that are related to the subject of deficits and interest rates. Chapter 4 will elaborately discuss the methodologies used and the variable and model specifications. Chapter 5 will report and present the results of the investigations and Chapter 6 will summarize and conclude the findings of this study.