

## **Chapter 3: Research Methodology**

### **3.1 Introduction**

The study makes an extensive use of secondary sources of data to explore adequately the areas in which its interest essentially lies. A theoretical framework, that is, the Mundell-Fleming Model is used in the analysis. Several concepts such as capital controls, exchange controls, and fixed exchange rate system are explained in the following section. The behavior of selected economic indicators such as the balance of payments and the economic growth are also analyzed in the study.

### **3.2 Theoretical framework**

The Mundell-Fleming (MF) Model is well-known economics model that is particularly useful in analyzing the effectiveness of monetary and fiscal policies in an open economy setting. It is thus being used in this study to analyze the impact of the recent expansionary fiscal and monetary policies in Malaysia.

MF Model (Martson, 1985; Hallwood, Sachs and Larrain, 1993) is named after Robert Mundell and J. Marcus Fleming. The MF Model incorporated the assumption of perfect capital mobility into international economic analysis. The capital mobility parameter (measuring the responsiveness of capital flows to changes in the domestic interest rate relative to foreign rates) was assumed to be very large. Slight pressures on domestic interest rates will generate massive capital flows that will induce the exchange rates to adjust. It is through the role of capital movements that, the capital account in the balance of payments becomes a predominant factor in explaining the exchange rate changes. Thus, they have shown the importance of capital mobility in the conduct of stabilization policies and had a fundamental influence on international monetary economics.

However, where capital controls exist with fixed exchange rate, the assumption of capital mobility where interest rates in the home country must equal to interest rates in the world economy should be dropped. The analysis of this study is thus limited to the current economy setting of capital controls and fixed exchange rate in Malaysia.

### 3.3 Definition of concepts

**Capital controls** limit the movements of capital across national borders. They exist when domestic interest rates need no longer equal to foreign interest rates, nor can households convert domestic assets into foreign assets freely without significant administrative barriers. (Sachs and Larrain, 1993).

**Exchange controls** are measures that aim at controlling and monitoring the settlement of payments and receipts in foreign currency. In Malaysia, all payments to non-residents in foreign currency are permitted through authorized dealers in foreign exchange, which comprised of all commercial banks in the country. (BNM, 1996).

A **fixed exchange rate system** is adopted when a country fixes its exchange rate in terms of another currency, say, the US dollar, and thereby fixes its exchange rate relative to every other currency. Under such an arrangement, the country would keep the exchange rate fixed and the monetary authority is to achieve this goal by buying and selling its currency (usually against the US dollar) in the foreign exchange market. (Melvin, 1992).

**Financial liberalization** means investors have a choice as to when they may 'come and go'; banks are permitted to engage in a wide range of financial services, and face no restrictions on branching. (Jomo, 1998; BNM, 1996).

**Short-term capital flows** refer to capital movements with maturity of less than a year while **long-term capital flows** refer to those with maturity of more than a year. (BNM, 1994).

**Foreign direct investment** refers to investments made to acquire a significant interest in a foreign enterprise with the purpose of having direct involvement in its management. (BNM, 1994).

A **Balance of payments** records a country's trade in goods, services, and financial assets with the rest of the world. (Melvin, 1992).

**Current account** is defined as including the value of trade in merchandise, services, and unilateral transfers. Merchandise refers to trade in tangible commodities. Services refer to trade in services of factors of production: land, labor, and capital. (Melvin, 1992).

### 3.4 Sources of data

Data for the research is obtained from secondary sources, namely the publications of various articles in economics and international finance journals, textbooks on economics and international finance topics, articles, statistics and discussion papers from various relevant agencies like Bank Negara Malaysia (BNM), IMF, World Bank and Unctad. Other data is also obtained from newspapers and Internet.

### 3.5 Data analysis

This is an explanatory research which is carried out through gathering of the relevant literature studies and some empirical economic data, particularly the capital flows and items in the balance of payments, and to establish whether the capital control measures is an appropriate policy in Malaysia.

An analysis is carried out using the theoretical economics framework, namely, the Mundell-Fleming Model, to analyze the likely impact and the appropriateness of the expansionary fiscal and monetary policies that are adopted in the country under the current economy setting of fixed exchange rate and capital controls. An effort is also made to explain the recent economic indicators such as the balance of payments and the economic growth to explore the conceivable happenings ahead. As far as possible, a large part of the efforts is concentrated in fact findings to support the research analysis.

### **3.6 Limitations of the study**

The study relies heavily on the availability of secondary data. The period from the initiation of the capital controls to to-date is too short to make a comprehensive evaluation of the recent policy measures. Besides that, the current economic data may not reflect the effect of the recent policy measures as yet but of past policy measures. It may therefore appear too soon to gauge the real impact of capital and exchange control measures and the associated expansionary fiscal and monetary policies.

The use of the basic Mundell-Fleming model in analyzing the effectiveness of expansionary fiscal and monetary policies is fundamental but, is however incomplete in the real economy sense. This is because the basic Mundell-Fleming model is highly simplified. This makes it easier to develop the main point of argument but it however, also means that the analysis is incomplete. There are indeed many other economic variables such as exchange rate expectations and inflation that also affect the real economy. Nonetheless, despite these limitations, the analysis is suggestive and does help to explain the recent economic events.

It should also be pointed out that the studies of international finance and economics are enormous, complex and dynamic. Detailed analysis and

discussion is not possible due to the constraints in time as well as length allowed for this research.