CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

The focus of this chapter is to provide some background information, through the various literatures currently available, to this research paper. It starts with section 2.2 on some background information on the East Asian crisis, focusing on the causes. Section 2.3 discusses the global capital flows and its consequences. An introduction to capital controls and its effectiveness are presented in the following section 2.4. Section 2.5 discusses exit strategies, including general considerations for adopting exchange rate regimes is discussed. Finally, a summary is presented in section 2.6.

2.2 CAUSES OF THE EAST ASIAN CRISIS

In this subsection, the discussion centers on the causes of the East Asian Crisis focusing on issues such as Liquidity Problems, Moral Hazards, Herd Behavior and Weaknesses within the East Asian economies.

2.2.1 Liquidity Problems

In general, lenders would come forward to extent the credit lines under favorable and stable economic conditions. Since the tendency to over lend by domestic banks to domestic producers increases, regardless of the their track records and project viability, some loans were extended to non-viable projects and 'bad' borrowers. Moreover, as long as lenders know that the country's foreign exchange reserves, in which they have invested, are well in excess of short-term debts they would be assured that their investments and assets are well protected from any potential liquidity crisis or 'runs' by other lenders.
However, in a financial crisis each individual creditor would decide not to lend, assuming, on the grounds that no other investors would do the same rational thing.

Others (Radelet and Sachs (1998 & 1999) argued that affected countries were caught by the sudden shift in capital flows, which was unanticipated and caused a liquidity crisis when investors refused to rollover their credit lines to the affected countries. Instead, they would try to withdraw their funds and investments from the crisis hit nation in order to salvage whatever value is left. Due to this liquidity problem, domestic banks that have over lend to 'bad' domestic borrowers would see their balance sheets deteriorate and non-performing loans (NPLs) increase. This was the case in Korea and Thailand where the local banks could not obtain sufficient dollars to repay their short-term borrowings when creditors refused to extent their credit line (ito, 1999). In addition, the debtor is also forced to default. This forces the debtors to auction or liquidate their assets in order to repay the loan and thus, scrapping the economic project with heavy loses.

An important aspect of the increased in capital inflows into East Asia is the rise in credit boom and with that, financial fragility. Berg (1999) found that a large number of banks in the East Asian region were lending heavily collateralized by high price property and thus, any slowdown in the economy would only bring higher interest rates and decline in asset prices. This could lead to a potential growth of non-performing loans (NPL) and bankruptcies. The large size of corporate and bank external loans relative to GDP would only magnify the problem even further. Moreover, with domestic banks poorly capitalized, the financial system would be pressured to correct this with immediate effect. Any
delays would only send the wrong signals to investors who would then may refused to roll over their credits.

Cooper (1999) analysis on Thailand exemplifies the above scenario. According to him, the Thai banks had borrowed quite heavily from international capital markets, about US$69 billion by June 1997. Almost US$49 billion out of this total were under one year maturity, sometimes under 30 days in maturity. This was in stark contrast to Thailand international reserves of US$31 billion with a substantial sum already committed to the forward market. Signs of weaknesses were already apparent within the Thai economy by the end of 1996 and early 1997. Investors decided not to extend their loans and a drop in net capital flows only led to downward pressure on the exchange rate, which was strongly peg to the US dollar. Under pressure to defend the peg, Thailand exhausted its international reserves by June 1997 and floated its currency, which marked the beginning of the contagion effects of the East Asian crisis. A complete description of a liquidity scenario is presented in Diamond and Dybig (1983) bank run model.

2.2.2 Moral Hazards

A second hypothesis to the crisis is the presence of moral hazards, which had invited heavy capital inflows into the region. Goldstein (1998) and Krugman (1998) observed that there exist some implicit guarantee of deposits and financial institutions by the governments of the region. Capital inflows, which were not put into productive used, had became easily available to any debtor who had to pay higher interest rates to the creditors. Over investments were resulted from a strong belief that investors would be bailed out by the government if their investment went sour. Some investor went on to belief that deposits that pay higher interest rates were attractive, especially when the
economy was growing fast and the exchange rate seemed less volatile. This is exacerbated by the fact that some creditors felt secure that they would be repaid for lending to projects that were controlled by companies close or owned by the government (Radelet and Sachs, 1998).

Barth et al. (1998) and Mishkin (1998) viewed previous International Monetary Fund (IMF) packages may also in fact create moral hazard problems, which could have deepened the seriousness of the crisis. With past international assistance to countries under stress becoming more predictable, it is possible that certain parties, lenders and borrowers, would form some expectations of financial assistances that would bail them out of the problem. Governments can also form similar expectation, as defaulting is unthinkable. As a result, debtors would be encouraged to engaged in risky investments due to implicit guarantee of a financial bailout. This was case with the IMF handling of Mexico in 1995, which could suggest to investors of the potential bail out scheme available to the affected country.

In addition, Yeyati (1999) argued that the removal of government's guarantees in the recipient countries does not eliminate the moral hazard problem since there exist deposit guarantees in the lender countries. Moral hazard, according to the researcher, arise from the combination of limited liability banks that maximize the value of the option implicit in the deposit contract by investing in high yield and high risk projects and the presence of an explicit or implicit deposit insurance that allows banks to engage in further risk taking without being penalized by investors via higher deposit rates, worsening the situation. Albeit the underlying problems had originated from the merging market economies, moral hazard aggravates the effect of a financial crisis by increasing the volume of capital inflows to these economies beyond what would
be justified on grounds of differences in economic fundamentals and expected returns to investment. Thus, a no bailout policy in the lending country may not be sufficient to prevent these excessive capital inflows and since the governments in the lender countries are slow to penalize these investors, the onus to rectify this falls rightly on the recipient countries.

2.2.3 Herd Behavior

The third hypothesis is similar in idea to the bank run theory. In this case, investors behave like a single herd, moving when others are and fleeing when in danger. The logic can be found in stock and financial markets. When the other investors are investing, it is more likely that share and asset prices would appreciate. So it makes sense to invest under normal circumstances. When other investors are withdrawing, due to a fall in share prices or white noise, it is logical to go along and withdraw from the market because prices are bound to go down. As Radelet and Sachs (1999) noted, the vulnerabilities within the East Asian economies were not sufficient to trigger the recent crisis. Only when investors began to panic and start withdrawing their funds, in a herd, from the region did these vulnerabilities emerged and worsened the situation. Scharfstein and Stein (1990), and Banerjee (1992) presented a more theoretical model of herd behavior.

2.2.4 Weaknesses In the East Asian Economies

A final hypothesis with regards to the causes of the recent financial and currency crisis in East Asia is related to the structural weaknesses embedded within the affected economies, which were identified by several researchers such as Berg (1999), Corbett and Vines (1999), Dornbush (1999), Roubini (1998), Radelet and Sachs (1998 & 1999), Wyplosz (1999) and Rao (1998). In general, these weaknesses were related to the exchange rate policies, the
management of large capital flows and the challenges these flows posed to macroeconomic policy and the financial sector, and the sequencing of the capital account liberalization, which had took place before the domestic financial system was strengthened and proper prudential practices and laws were in placed. In short, it was a case of premature financial sector and capital account liberalization.

With respect to the exchange rate, the official exchange rate policy of several East Asian countries was one of pegging to the US dollar while others pegged their currencies to a basket of currencies. However, the effective weight of the US dollar was so high that these currencies could be seen as implicitly pegged to the US dollar (Monetary Authority of Singapore, 2000 and Ito, Eiji and Yuri, 1998) and as a result, the Malaysian Ringgit, Thai bath and the Philippine peso were overvalued (Chinn, 1998). Between 1991 and 1995, the dollar was on a downward trend relative to the yen. As a result, East Asian countries currencies had depreciated in real terms and this led to a boom in economic growth and exports. Nonetheless, this trend reversed itself in 1995 when the dollar started to appreciate rather rapidly. This caused the East Asian currencies to suffer from loss of competitiveness and trade deficits, which made current account deficits unsustainable.

The large influx of capital into the region was sterilized by the authorities using a combination of monetary policy and tight fiscal policy aimed at avoiding a large appreciation in their currencies against the US dollar. The central banks were forced to sterilize a large part of these inflows during 1994-1996. However, this led to higher domestic interest rates, which in turn attracted more capital to the region and pressured the nominal exchange rate to appreciate.
Financial liberalization had also directly led to the buildup of large capital inflows, since much of the domestic credit expansion in the region was financed by foreign money. This led to a rapid development and expansion of the financial sector, buildup of foreign liabilities that were largely short-term in nature, and strained the government’s capabilities to manage the economy. As a consequence, other weaknesses emerged as a result of government direct and indirect interference and insider relationship, which produced misallocation of resources and wastages. Prudential regulations and laws were not in place to check these abuses, which only made matter worse (Shirazi, 1998).

2.3 INTERNATIONAL CAPITAL FLOWS

In this subsection, the discussion centers, first, on the global capital flows followed by the consequences of such movements.

2.3.1 Global Capital Flows

The nature and pattern of global capital flows have changed significantly over the last 20 years. According to Bank Negara Malaysia Annual Report for 1994, the trend in the late seventies and early eighties were dominated by long-term official flows, including commercial bank lendings. These borrowings were mostly directed to less developed countries such as those in Latin America and Asia, which included substantial private bank lending using largely ‘petrodollars’. For example, between 1980-84, total capital flows worldwide stood at about US$ 37.8 billion, of which about US$35.1 billion went to less developed countries.

The debt crisis in the 1980s saw a significant reversal trend of global capital flows (BNM, 1995). The beginning of the Debt Crisis of the 1980s saw several Latin American countries that were unable to meet their financial obligations.
For instance, in August of 1982 Mexico's Finance Minister Jesus Silva Herzog had informed the international financial community that Mexico was unable to meet its financial obligations. Moreover, in 1982 and 1983, Latin American countries suffered significant dry up of international capital (Edwards, 1998a,b). Furthermore, this period saw enormous capital flights from Latin America, amounting up to US$11 billion a year between 1984-88 as the region suffered from debt service responsibility, sharp reduction in capital inflows and domestic problems (BNM, 1995).

The trend in the 1990s saw global capital flows returning to Latin America and Asia. According to Lopez-Mejia (1999), the net capital flows to developing countries increased remarkably. For example, in 1996 net capital flows stood at US$190 billion, almost four times larger than they were in 1990. Moreover, the five largest recipients accounted for 50 percent of the total capital inflows, namely China, Brazil, Mexico, Thailand and Indonesia. This was supported by Eichengreen and Mussa (1998b) who stated that net capital inflows to developing countries had tripled, from roughly US$50 billion a year in 1987-89 to more than US$150 billion in 1995-97.

Among others, the increased integration between financial markets and economies around the globe has brought with it huge amount of capital inflows from potential investors who are eager to make large and quick profits. In East Asia, these inflows were also encouraged by the fact that fiscal policy was not profligated, monetary policy was not inflationary and the region had enjoyed for sometime high saving and investment ratios (Monero et al., 1998). These were among the main factors that have attracted foreign investors to the region. Other related features, as noticed by Glick (1998), also include the higher expected returns on investment in Asia and currency realignment in the major
industrial countries such as Japan and America in the mid 1980s. For example, between 1985 to 1995, domestic favorable factors such as economic reforms and encouraging investment climate in the Asian region had actually attracted foreign capital in the region.

This upward trend had continued for sometime in the 1990s up until the recent East Asian crisis, which saw a sharp reversal of private capital flows to the region and in general, other less developing countries. In the last half of 1997, a total of about US$109 billion worth of capital flows left East Asia from an inflow of US$97 billion to an outflow of US$12 billion, equivalent to about 10 percent of the pre-crisis GDP of five major countries in the region (South Korea, Thailand, Malaysia, Indonesia and Philippines) (Radelet and Sachs, 1999). This marked the start of the crisis and saw rapid deterioration in the financial markets, contagion effect and major devaluations of the regional currencies.

Recently, the recovery of the East Asia region has seen an upsurge of capital inflows to the region. The International Institute of Finance (2000) in its press release forecasted that net capital flows to emerging economies was expected to rise to US$190 billion, compared to a range of US$150 billion in both 1998 and 1999. The report also said that investors, apparently, have begun to put the recent East Asian crisis to rest. Foreign direct investment (FDI) was expected to continue to rise from a record US$140 billion in 1999 and US$120 billion in 1998. The portfolio equity investment was also expected to rise, in 2000, by US$34 billion from US$17 billion in 1999. With respect to Malaysia, for the first seven weeks of this year some RM7 billion or US$1.8 billion worth of foreign portfolio funds have been invested into the local stock market (Hasni, 2000).
2.3.2 Consequences of Global Capital Flows

In general, capital flows have played a vital role in the economic growth of less developing countries such as Malaysia. These flows were responsible for bridging the gap between domestic savings and investment, and also provided the necessary impetus for economic development and growth. This trend is being pursued by investors from capital rich nation in their quest to exploit new opportunities and untapped resources. Based on Bank Negara Malaysia Annual Report for 1994, it was found that foreign capital (including foreign direct investment and external borrowing) has been a partial substitute for Malaysian savings and had an important role in the economic growth process, by making up for the shortfall in savings. Moreover, it was estimated that a one percent increase in real gross national savings would lead to a 0.634 percent increase in real gross domestic product.

This significant role was also echoed by Eichengreen and Mussa (1998b) who acknowledged that capital mobility creates valuable opportunities for portfolio diversification, risk sharing and intertemporal trade. Likewise, by holding claims on foreign countries, households and businesses could protect themselves against the disruptions of economic disturbances that might affect the home country. Via foreign direct investment (FDI), businesses could invest overseas to operate plants and shield their productions from cost and productivity shocks in the home country. Moreover, capital mobility can encourage domestic savings as the recipient governments try to deliver economic growth using more domestic resources.

Ito (1999) and Jomo et al. (1997) noted that FDI is often preferred form of investment for most host countries since it carries two major positive effects on the economy. First, it adds to the domestic savings to become fund for
investment and second, it often comes with technological spillovers. Ito (1999) for example, argued that the weighted average of growth rates of the ASEAN economies tend to increase when the level of FDI from Japan in the preceding year was high. A higher growth in Japan and the U.S. helped the economic growth of these countries. Furthermore, the growth rate increases if the yen appreciates from a preceding year, a sign that the ASEAN region has become more attractive to Japanese investors to expand their production.

Nonetheless, these critical capital flows do carry sufficient risks especially those associated with short-term capital flows or ‘hot money’. Indeed, the recent financial and currency crisis in East Asia testifies to the preceding fact. Based on Ito (1999) findings, Thailand received the most capital inflows in the ratio of GDP between 1993 and 1996 or about 10 percent of GDP between 1993 and 1996. In general, the region saw considerable portfolio inflows and other type of investment other than FDI. Moreover, since the bulk of these flows were ‘hot money’, it practically signal an impending crisis was about to happen. In the case of Mexico, for instance, it has been argued that a sudden reversal of these ‘hot money’ was blamed for the sharp depreciation of the Mexican peso by almost 50 percent.

Other notable costs of massive capital flows, especially those associated with short-term capital flows, are related to macroeconomic consequences. Garcia and Valpassos (1998) in their study on Brazil’s experience with short-term capital inflows illustrated several major consequences. For example, Brazil’s external accounts have been gradually deteriorating since the stabilization plan was introduced in the 1994. From a situation of no current account deficit before 1994, this account has become extremely negative after the plan. In a span of three year, 1995-1997, the current account deficit had added up to
more than US$70 billion with a potential upward trend. Moreover, the sizable accumulation of foreign reserves, which were sterilized in order to avoid a large increase in money supply and an appreciation in the nominal exchange rate, posed to be another macroeconomic problem to the Brazilian government. As these foreign reserves were invested at international rates, this massive sterilization led to higher net interest rate expenditures.

Calvo and Reinhart (1999) concluded that many countries, which had experience with short-term capital flows, have suffered an abrupt capital account reversal and needed a severe adjustment in the current account. Up until the recent East Asian crisis, Latin America was the region most prone to large capital flows reversal with examples such as Mexico and the Argentinean’s crisis in the early 1980s that led to a 20 percent capital account reversal, among the largest ever recorded.

Short-term capital flows do affect the financial system of the recipient nation. Indeed, as Roubini (1998) and Lopez-Mejia (1999) found capital inflows are usually accompanied by an increase in asset prices, which made financial sector vulnerable as households’ debts and consumption rose as appreciated assets were used as collateral. Poorly managed banks might finance consumption boom and credit expansion in the property and construction sectors. With poor prudential measures and regulations, resources would be misallocated and weak domestic financial institutions in distress would emerge.

Moreover, these large capital inflows tend to drive up the prices of domestic assets. In a flexible exchange rate environment, an appreciation of the domestic currency raises the relative prices of domestic goods. In contrast, in a fixed exchange rate regime, the increased in demand for domestic assets could
lead the monetary authorities to purchase foreign exchange and thus, increasing the money supply and eventually the prices of domestic goods. Either way, the rise in prices of domestic assets and goods relative to the world prevailing prices would lead to a real appreciation, which would definitely lead to a loss in competitiveness of domestic exported goods in the world market (Eichengreen et al., 1999a).

2.4 CAPITAL CONTROLS
This subsection provides an overview of literature on the various motives and considerations for imposing capital controls and their effectiveness. Table 1 provides a snapshot details on the purposes of capital controls.

2.4.1 Motives for Capital and Exchange Controls
According to Mathieson and Rojas-Suarez (1993), there are four broad major considerations and rationales for imposing capital controls. First, to help manage balance of payment crises or unstable exchange rates generated by excessively volatile short run capital inflows. They allow a space of relief to the governments in order to correct the shortcomings of the domestic economic fundamentals (Saxena and Wong, 1999) such as the one experienced by Malaysia. Examples of countries, which had imposed capital controls based on this motivation, include Brazil (1993), Chile (1991-98), Colombia (1993-98), Malaysia (1994) and Thailand (1995-97) (Ariyoshi et al., 2000).

Second, to ensure domestic savings are used for domestic investment purposes and limit foreign ownership over domestic factors of production. The rational is that developing countries have limited scarce resources and domestic savings. Moreover, developing countries are prone to political turbulence, which motivate residents to invest a large portion of their savings in foreign
denominated assets, as they are perceived to generate significant yield. Johnston and Tamirisa (1998) linked capital controls to the insufficient level of development of the domestic financial markets and institutions. Controls are used, according to them, to protect infant industries and less developed financial markets. Thus, capital controls are strongly believed to be able to stop such scenario from taking place by limiting access to foreign assets and via an interest equalization tax. This argument lies closely to the ‘theory of second best’ in which a tax or quantitative restriction can improve economic welfare of the affected society by correcting pre-existing distortions that cannot be corrected otherwise (Neely, 1999).

The third motivation is to maintain the national authority’s ability to tax domestic financial activities, income and wealth. Neely (1999) highlighted that the first widespread used of capital controls in World War 1 as a method to finance the war. This resulted in restrictions on the capital outflows and raised domestic revenues. By keeping capital in domestic circulation, it facilitated the taxation of wealth and interest income. Moreover, it permitted a higher inflation rate, which generated more revenue. If a country faces problems in financing the fiscal and balance of payments deficits, capital controls may reduce both domestic debt-servicing costs and preserving the domestic inflation base by keeping domestic interest rates low. Moreover, Giovannini and De Melo (1993) provided empirical evidences on the effects of financial repression or controls on government finances. The result showed that certain nation had enjoyed an artificial low cost of domestic funding and the revenue from this financial repression can be quite substantial, to some extent equivalent in magnitude of seigniorage. Countries with higher inflation rates and therefore, higher rates of currency depreciation tend to raise more revenues from financial repression.
Finally, to prevent disruptive capital flows from upsetting any stabilization and structural program, especially in capital account liberalization and sequencing process. There is a valid argument that less developing countries should have some controls on capital flows while they build up their financial system and deepen it, upgrade their supervision framework and strengthen their monetary and fiscal institutions (Eichengreen, 1998a). The nature of destabilizing capital flows depend closely to the credibility of the stabilization and structural programs implemented by the government and on the extent of the differences of the speeds of adjustment in goods, factors and financial markets (Saxena and Wong, 1999). If the program lacks credibility, the potential for currency substitution and capital flight increase, which could trigger balance of payment crisis, devaluation and inflation. Nevertheless, if the plan itself is credible, the high interest rates associated with a stabilization program, due to continuous sterilization activities by the central bank, may cause temporary large capital inflows, which could lead to an appreciation of the domestic currency. This could in fact deter trade reforms aimed at lowering barriers to imported goods or offset existing trade reforms on the prices of domestic traded goods (Tamirisa, 1998).

2.4.2 Effectiveness of Capital and Exchange Controls

To measure the effectiveness of a capital controls regime is not an easy task as researchers are often confined within certain limits due to poor data collection or under developed economic models. Moreover, just how effective is capital controls depends closely on the determination of the ruling government's efforts to enforce the regime. As Dooley (1995) humbly acknowledged:

"Empirical work on the effectiveness of capital controls has suffered from the lack of a widely accepted definition of what constitutes an effective control"
program. At one end of the spectrum, evidence of effectiveness has been defined as the ability to detect over extended time periods different average behavior of selected economic variables for countries with and without capital control programs. At the other extreme, effectiveness has been defined as the ability to maintain an inconsistent macroeconomic policy regime forever” (p. 29).

Regardless of this, the following literature review will try to highlight evidences of capital and exchange controls effectiveness. It covers three major areas of capital controls effectiveness, which are actively researched. They include studies in interest differentials between domestic and foreign interest rates, controls on both capital inflows and outflows.

In general, governments do succeed in creating a small wedge between domestic and international yield on similar short-term financial instruments for some extended time periods (Dooley, 1995). Supporting this view is the work by Gross (1988) who reported the spread between commercial and financial spot rates in a dual exchange rate systems in Europe. The researcher found that the Belgium government was able to maintain a sizeable differential for about a year before the private sector found ways to avoid the controls. Similarly, Edwards (1998b) used time series analysis to investigate the way in which capital controls have affected interest rate differentials and thus, the ability to perform independent monetary policy in Chile. He found that in the post restriction period, interest rate differentials had increased slightly. Although the increase has been rather small, the upward trend is quite clear and supports the view that the imposition of capital controls in Chile had increased the government short-term control over domestic interest rates.
In addition, Gross (1987) argued that capital controls could be effective in controlling short-run fluctuations in domestic interest rates, but they should not be used to offset any permanent shock and to keep the domestic interest rates below international levels in the long run. Using data from Italy and France, he concluded that significant interest rates differentials between domestic and offshore have only appeared during period of turbulences in the European Monetary System (EMS). However, when there is no major realignment of the intra-EMS parities, the interest rate differentials tend to disappear. In short, if one was to found that the on-shore interest rate differ from the offshore markets, the capital controls are effective (Edwards, 1998b).

Another concept of measuring the effectiveness of capital and exchange controls looks at the controls on capital inflows. Cordella (1998) presented an example in which foreign lenders find it profitable to invest in an emerging market, if and only if, the recipient government imposes controls or taxes on short-term capital inflows. If the supply of credits to the emerging economies depends strongly on financial stability, capital controls could make these markets less vulnerable to financial crises and increase the supply of capital. Taxes on short-term capital inflows can avoid bank runs and increase the volume of foreign investments. Theoretically, this shows that controls on capital inflows are effective in attracting new capital.

Experiences with temporary capital controls, which affected short-term capital inflows, have showed positive results such as in Thailand and Malaysia. For example, in both nations these measures were effective in reducing the level of short-term capital flows and affected the maturity of these inflows while at the same time curtailed large sterilization programs (Ariyoshi, et al. 2000 and Cheong, 2000). Specifically, Malaysia had experienced a widening of domestic
and foreign interest rate differentials fueled by a surge in short-term capital flows. The Malaysian authorities responded by imposing control over short-term capital inflows in January of 1994 with six major restrictions. The prohibition on domestic resident from selling domestic short-term money market instruments to non-residents was associated with a sharp reduction in foreign capital inflows (Aziz, 1994; and Reinhart and Smith, 1997).

Yet, Edwards (1999b) argued that capital controls on short-term capital inflows have often been exaggerated, especially in Chile. Albeit Chile's measures did managed to increase the maturity of its foreign debts, more than 40 percent of its debt to banks in 1996 had residual maturity of less than one year. In addition, controls had no effect on Chile's real exchange rate and only a minute affect on the local interest rate. Above all, the controls came with a cost as small and medium size firms in Chile found it difficult to cope with increased cost of capital.

Finally, the effectiveness of capital controls on outflows could be seen by looking at the economic effects, especially during a financial crisis. Edwards (1999b) highlighted two types of capital controls on outflows. The first version is called the 'preventive' capital controls. Here, a government imposes the controls when a country suffers a severe balance of payment deficits, but has not encountered a devaluation scenario. These controls include taxes on fund remitted abroad, dual exchange rates and an outright prohibition on fund transfers. The idea is to slow down the loss of international reserves, fend off speculative attacks and allow the authorities more time to undertake corrective measures on the economy. An example of this type of controls can be found in Korea, prior to the recent East Asian crisis.
In terms of effectiveness, Cuddington (1986) argued that based on his study on capital flight from developing countries, these controls had failed in preventing any capital outflows. Moreover, Kaminsky and Reinhart (1996) also found that in most episodes of balance of payment crises, the authorities have unsuccessfully tightened preventive capital controls in order to avoid a currency collapse.

The second version, in the meantime, is called 'temporary' controls on capital outflows. Here, the idea is to shield a country that has already experience a major financial and currency crisis. Current example includes Malaysia (1998-current), Spain (1992) and Thailand (1997-98) (Ariyoshi et al., 2000). Krugman (1998) argued that once these controls are in place, the affected nation can lower its interest rates, stop the loss of international reserves, and concentrate on corrective macroeconomic policies such as financial and structural reforms under the time frame awarded by these controls. Once the economy has recovered, it can dismantled these controls and allow for unhindered capital flows to take place. Eichengreen (1998a) rationalized that controls on capital outflow were necessary to prevent capital flight and preserve governments' freedom to pursue counter cyclical fiscal policies.

In the examples above, all three nations reimposed controls on capital outflows in the light of significant downward pressure on their exchange rates and financial stability due to speculative pressures such as in Spain during the EMS turmoil of the early 1990s, and Thailand and Malaysia during the recent East Asian Crisis (Ariyoshi et al., 2000). Based on their experiences, the result is quite mixed. In Malaysia, these controls were effective in closing down the offshore Ringgit market and stopped speculative activities on the Ringgit. Moreover, these controls, along with other policies, have played a crucial role in
ensuring stability of financial markets, which in turn facilitated restructuring in the banking sector and accelerated pro-growth policies (BNM, 1999d). In addition, Edison and Reinhart (1999) who had assessed the imposition of capital controls on outflows in several countries, including Malaysia, found that these controls were effective in Malaysia and did align closely with the prior objectives of these controls namely greater interest rate and exchange rate stability and more policy autonomy. Hasni (1999) highlighted the impact and effectiveness of the Malaysian capital controls on outflows. The regime had made possible the fixing of exchange rate, which rendered stability to the foreign exchange market. The broad financial stability, which has been gained due to the exchange rate stability, has been extremely conducive and stimulative to economic recovery.

However, in Thailand, the controls that had been imposed prior to floating of the Thai bath, developed leaks and speculative pressures returned. These forms of controls included a two-tier currency market with a single goal of segmenting the offshore and onshore currency market, suspension of all transactions between residents and non-residents as these dealings could easily led to a buildup of the Thai bath position in the offshore market and the prohibition of repatriation of proceeds due from sales of assets. Thus, after two months from the first date of its imposition, the Thai bath was floated and the controls failed. Most of the controls were abolished or modified such as the prohibition of banks noncommercial transactions with nonresidents was replaced with limits and the two-tier market was integrated (Ariyoshi, et al., 2000).

Thus, the effectiveness of the capital controls cannot depend solely on the later but a combination of other macroeconomic and prudential policies to close down any loophole in the system, which are vital in ensuring that these controls
would work in the first place. A strong government commitment, as shown by the Malaysian government, towards ensuring the success of the regime would be an added advantage to the system. Moreover, financial and structural reforms must be carried out in order to avoid or minimize the damage caused by a financial and currency crisis.

2.5 EXIT STRATEGIES AND EXCHANGE RATE REGIMES

In this subsection, the literature review would cover issues related to exit strategies, embracing themes such as the preconditions for an exit, and general considerations regarding the choice for an exchange rate regime for developing countries, including Malaysia. The discussion on exit strategies, however, concerns only exits from a fixed currency regime, such as a peg, to a more flexible exchange rate system.

2.5.1 Exit Strategies

The evidences of countries moving away or abandoning fixed exchange rates in developing countries during financial and currency crisis strongly indicate that the economic losses were substantial, consisting of a major devaluation in the local currency, macroeconomic consequences and financial turmoil, as the respective governments had lost their credibility with respect to governing their economies. Thus, it is quite desirable for nations with a fixed currency regime to maintain their status quo and only exit when there is tranquility within the world economy.

To exit, interested nations must address the followings requirements, as mentioned by Eichengreen et al. (1999b) and IMF (1997). First, the transitional exit arrangement to a new parity or a more flexible regime needs to allow the rate of depreciation to vary in order to accommodate any speculative pressure.
This view is supported by Caramazza and Aziz (1998) who argued that a more flexible regime can respond to large capital inflows and thus, allow the government to influence market expectations. In particular, the policymakers can make market agents more cautious of the possibility of currency devaluations, following an appreciation. This could deter any potential speculative attack onto the economy.

Second, governments need also to ensure that fiscal reforms are in place so as to achieve a smooth transition to a regime of greater exchange rate flexibility. Fiscal reforms must be able to deliver smaller deficits in the future, thus reducing any potential pressure on the current account in the future (Alesina and Perotti, 1996). Moreover, fiscal reforms that can broaden the tax base and make expenditure less rigidly indexed to the inflation rate are also often required for fiscal policy purposes in order to complement the monetary policies and respond to shocks related to the new regime (IMF, 1997). In Malaysia, the role of devising budgetary policy falls squarely on the Ministry of Finance, hence an indication of separation of duty and responsibility from the rest of the government organizations and branches.

In addition, financial sector must reform and strengthened in order to accommodate the new exchange rate regime in the near future. In this respect, the government is responsible in preparing this sector for the risks associated with a flexible exchange rate arrangement. Moreover, better regulations and prudential practices must be inculcated into the system in order to avoid any unwarranted problem that may cause disruption later on (Knight, 1998). In Malaysia for example, the central bank has put forward a master plan for the financial sector in light of a possible exit from the current fixed exchange rate regime and the possibility of financial liberalization in the near future (Ali, 2000).
2.5.2 Exchange Rate Regime: Issues and Considerations

The economic literature has identified several important issues related to the choice of an exchange rate regime including the structure of the economy, its capability of withstanding external shocks, and the macroeconomic situation and institutions that influence the nature of the exchange regime (See Table 2). Stockman (1999) identified two major arguments, which encompass the preceding issues. The first generation of literature, the 'traditional', on the choice of an exchange rate regime focus was based on the theory of optimum currency area by Mundell (1961). It focused on the characteristics of an economy, whether a country would be well off, in terms in its ability to maintain external and internal balance, with a fixed or flexible exchange rate. According to general consensus, the exchange rate should be adjusted when shocks originate from abroad or in the domestic goods market, but should be fixed if shocks originate from the domestic money market (Aghevli, Khan and Montiel, 1991; IMF, 1997; Rana, 1998; Edwards, 1999a; Frankel, 1999; and Stockman, 1999 and Mussa et al., 2000).

The second generation of literature concentrated on the themes like credibility as opposed to flexibility, which included issues such as the possibility of an exchange rate anchor, fiscal and monetary discipline, government commitments and domestic politics. Here, it is quite difficult to reach a broad conclusion as various factors do influence the choice of an exchange rate regime (IMF, 1997; Rana, 1998; Frankel, 1999; Stockman 1999 and Mussa et al., 2000) For example, it may be more costly, politically, to adjust a pegged exchange rate because the former involves explicit government decisions while in a flexible exchange environment, it relies on the market forces to determine the equilibrium exchange rate. Another problem is due inflation expectations.
So long as the fixed exchange rate is credible and can be maintained, inflation expectations will be subdued. The risk, however, is when the fixed regime becomes unsustainable due to the authorities unwillingness to maintain it, which could lead to a currency crisis.

Finally, Crockett and Nsouli (1977) and Aghevli, Khan and Montiel (1991) discussed extensively on the general considerations regarding the choice of exchange rate regimes for developing countries. They covered themes like the criterion of optimality, where a standard welfare criterion should be specified and applied when considering the choice of a regime, and the type of shocks to which an economy would likely face. Furthermore, they also looked at the question of openness in which they concluded that the more open an economy to world markets, the stronger the case for a fixed exchange rate. Capital mobility and the degree of wage rigidity were also discussed in their literature.

2.6 SUMMARY

This chapter has provided the study of relevant literature that would act as the backbone of this research paper. It has captured the necessary background of the study and would be useful for future references. Furthermore, it has also highlighted the various arguments and views related to the recent East Asian crisis and how the crisis has affected most developing countries within this region. As a result of the crisis, East Asian nations such as Thailand, Indonesia, South Korea and Malaysia were forced to response as their economies were badly hit. The first three nations resorted to the IMF for financial assistance as their economies crumble and international reserves dried up. Malaysia, in contrast, had adopted the selective capital and exchange controls and pegged the Ringgit to the US dollar. The initial reaction from the international businesses community was pessimistic. Nevertheless, Malaysia has so far
succeeded in its approach and the domestic economy is on its recovery path. The discussion on exit strategies rests on the premise that Malaysia would decide to abandon its capital controls regime and the Ringgit peg once the authorities see it fit. Caution must be exercise as many less developing countries have only enjoyed temporary success only to succumb to volatile short-term capital flows later. The case of a premature capital account and financial sector liberalization seem to be repeating itself as the 1990s saw several nations had to endure severe economic and social losses. Therefore, the move towards an exit should be carry out in a careful and well-planned manner.
<table>
<thead>
<tr>
<th>Purpose of Capital Controls</th>
<th>Method</th>
<th>Direction</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generate Revenue/Finance War Effort</td>
<td>Controls on capital outflows permit a country to run higher inflation with a given fixed-exchange rate and also hold down domestic interest rates.</td>
<td>Outflows</td>
<td>World War II</td>
</tr>
<tr>
<td>Financial Repression/Credit Allocation</td>
<td>Governments that use the financial system to reward favored industries or to raise revenue, may use capital controls to prevent capital from going abroad to seek higher returns.</td>
<td>Outflows</td>
<td>Common in developing countries</td>
</tr>
<tr>
<td>Correct a Balance of Payment Deficits</td>
<td>Controls on outflows reduce demand for foreign assets without expansionary monetary policy or devaluation. This allows a higher rate of inflation than otherwise would be possible.</td>
<td>Outflows</td>
<td>U.S. Interest equalization tax, 1963-1974</td>
</tr>
<tr>
<td>Correct a Balance of Payments Surplus</td>
<td>Controls on inflows reduce foreign demand for domestic assets without contractionary monetary policy or devaluation. This allows a lower rate of inflation than would otherwise be possible.</td>
<td>Outflows</td>
<td>German Bardepot Scheme, 1972-1974</td>
</tr>
<tr>
<td>Prevent Potentially Volatile Inflows</td>
<td>Restricting inflows enhances macroeconomic stability by reducing the pool of capital that can leave a country during a crisis.</td>
<td>Inflows</td>
<td>Chile, 1991-1998, Malaysia, 1994</td>
</tr>
<tr>
<td>Prevent Financial Destabilization</td>
<td>Capital controls can restrict or change the composition of international capital flows that can exacerbate distorted incentives in the domestic financial system.</td>
<td>Inflows</td>
<td>Chile, 1991-1998</td>
</tr>
<tr>
<td>Purpose of Control</td>
<td>Method</td>
<td>Direction</td>
<td>Examples</td>
</tr>
<tr>
<td>-------------------</td>
<td>--------</td>
<td>-----------</td>
<td>----------</td>
</tr>
<tr>
<td>Prevent Real Appreciation</td>
<td>Restricting inflows prevents the necessity of monetary expansion and greater domestic inflation that would cause a real appreciation of the currency.</td>
<td>Inflows</td>
<td>Chile, 1991-1998</td>
</tr>
<tr>
<td>Restrict Foreign Ownership of Domestic Assets</td>
<td>Foreign ownership of certain domestic assets especially natural resources can generate resentment.</td>
<td>Inflows</td>
<td>Article 27 Of the Mexican Constitution</td>
</tr>
<tr>
<td>Preserve Savings for Domestic Use</td>
<td>The benefits of investing in the domestic economy may not fully accrue to savers so the economy, as a whole, can be made better off by restricting the outflow of capital.</td>
<td>Outflows</td>
<td></td>
</tr>
<tr>
<td>Protect Domestic Financial Firms</td>
<td>Controls that temporarily segregate domestic financial sectors from the rest of the world may permit domestic firms to attain economies of scale to compete in world markets.</td>
<td>Inflows &amp; Outflows</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Characteristics of Economy</th>
<th>Implications for the Desired Degree of Exchange Rate Flexibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Size of economy</td>
<td>The larger the economy, the stronger is the case for a flexible rate.</td>
</tr>
<tr>
<td>Openness</td>
<td>The more open the economy, the less attractive is a flexible exchange rate.</td>
</tr>
<tr>
<td>Diversified production/export</td>
<td>The more diversified the economy, the more structure feasible is a flexible exchange rate.</td>
</tr>
<tr>
<td>Geographic concentration of trade</td>
<td>The larger the proportion of an economy's trade with one large country, the greater is the incentive to peg to the currency of that country.</td>
</tr>
<tr>
<td>Divergence of domestic inflation from world inflation</td>
<td>The more divergent a country inflation rate from that of its main trading partners, the greater is the need for frequent exchange rate adjustments. (But for a country with extremely high inflation, a fixed exchange rate may provide greater policy discipline and credibility to a stabilization program).</td>
</tr>
<tr>
<td>Degree of economic/financial development</td>
<td>The greater the degree of economic and financial development, the more feasible is a flexible exchange rate regime.</td>
</tr>
<tr>
<td>Characteristics of Economy</td>
<td>Implications for the Desired Degree of Exchange Rate Flexibility</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td>Labor mobility</td>
<td>The greater the degree of labor mobility, when wages and prices are downwardly sticky, the less difficult (and costly) is the adjustment to external shocks with a fixed exchange rate.</td>
</tr>
<tr>
<td>Capital mobility</td>
<td>The higher the degree of capital mobility, the more difficult it is to sustain a pegged but adjustable exchange rate regime.</td>
</tr>
<tr>
<td>Foreign nominal shocks</td>
<td>The more prevalent the foreign nominal shocks, the more desirable is a flexible exchange rate.</td>
</tr>
<tr>
<td>Domestic nominal shocks</td>
<td>The more prevalent the domestic nominal shocks, the more attractive is a fixed exchange rate.</td>
</tr>
<tr>
<td>Real shocks</td>
<td>The greater an economy susceptibility to real shocks, whether foreign or domestic, the more advantageous is a flexible exchange rate.</td>
</tr>
<tr>
<td>Credibility of policymakers</td>
<td>The lower the anti-inflation credibility of policymakers, the greater is the attractiveness of a fixed exchange rate as a nominal anchor.</td>
</tr>
</tbody>
</table>