Impacts of Capital Account Liberalization on Economic Growth: Case Study of Thailand and Malaysia

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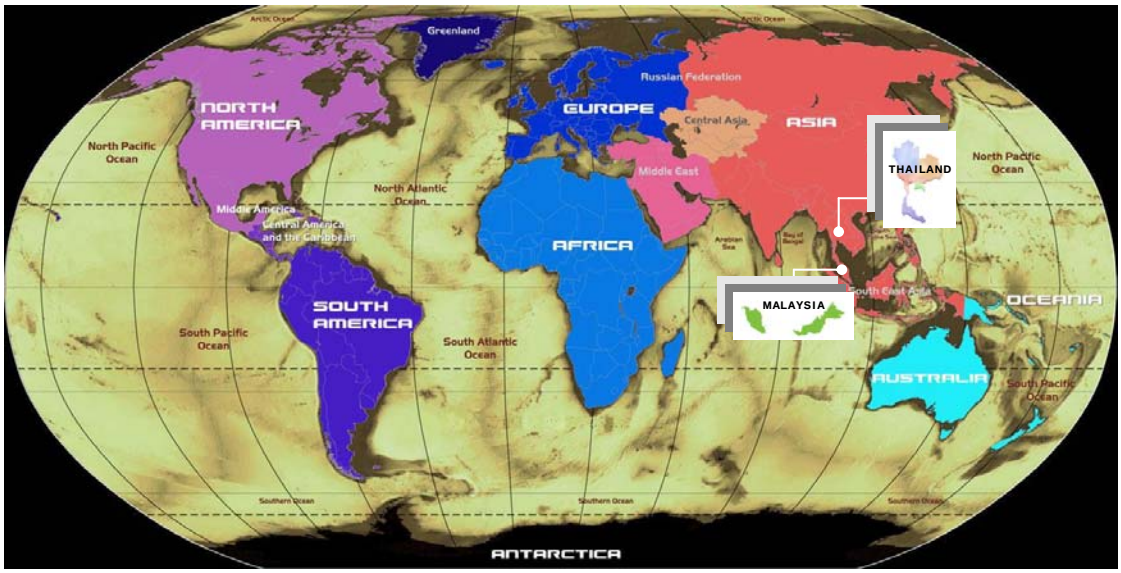

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List of abbreviations

FIDF: Financial Institutions Development Fund
GDP: Gross Domestic Product
GNP: Gross National Product
RM: Malaysian Ringgit

Abstract

This research scrutinized capital account liberalization policy in Thailand and Malaysia beginning from the first year of their liberalization programs. The research also examined the effects of such policy programs on Thai and Malaysian economic growth over the year 1975 to 2005 that is divided into three periods: before (1975-1996), during (1997-1998) and after (1999-2005) the Asian financial crisis.

There are preconditions under which capital account liberalization can be successful, including consistent macroeconomic policy, robust financial sector, prudential regulation and supervision, and absence of implicit government guarantees that liberalizing countries need to put them in place over the period of the liberalization. The study found that Malaysia seemed to be able to better fulfill these preconditions relative to Thailand.

Thailand and Malaysia have been liberalizing their capital account in 1985 and 1978 respectively with an attempt, in both countries, to shift their economies from agriculture to manufacture oriented in export sector and promote inward direct investment. Under pressures from international financial organizations, Thailand opened its capital account with supports from the IMF in terms of loans, while Malaysia liberalized the capital account without accepting such supports. Temporary uses of capital controls in Malaysia were considered to be more direct measures to deal with international capital flows than those in Thailand, and such measures seemed to successfully insulate Malaysian economy from the Asian financial crisis.

Capital account liberalization provided positive and negative impacts to the economies, unexceptionable for Thailand and Malaysia. In the positive side, the evidences show that capital account liberalization generated economic growth through the mechanism that the liberalization brought down the cost of capital, led to investment boom and thus spurred growth in the liberalizing countries. The liberalization also promoted growth through enhancing financial depth as seen from an increase in private credits relative to country's outputs. However, the economic expansion in both countries was deteriorated in the wake of the financial crisis that was at the time the capital controls were imposed. In the negative side, capital account liberalization disturbed macroeconomic environment including large current account deficit and sharp expansion of domestic credits that they reversed in the wake of the crisis.

Thailand had higher degree of capital account liberalization than Malaysia, and the impacts of the liberalization on Thai economy were greater, as seen from more reduction of the cost of capital, increasing trend of investment, consecutive increase in financial depth, current account deficit and continuous expansion of domestic credits in Thailand than those happened in Malaysia.

24,365 words

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1. Introduction

1.1 Background

Capital account liberalization is a decision by a country's government to move from a closed capital account regime, where capital may not move freely in and out of the country, to an open capital account system in which capital can enter and leave at will (Henry, 2006). The policy regarding capital account liberalization of a country refers to different degrees of an allowance of capital to flow into (inward) and from (outward) the country through foreign direct, portfolio and other kinds of investment. Liberalizing the capital account can imply removing impediments to inflows of capital, or allowing domestic investors to invest more freely in foreign assets.

Capital account liberalization remains one of the most controversial macroeconomic policy options available to emerging market nations (Klein, 2003). The 1990s have witnessed a series of financial crises, which have disrupted both exchange rate arrangements and financial systems. These crises have often occurred in the wake of capital account liberalization, calling into question the advisability of relaxing controls on international capital flows. In addition, a striking characteristic of these crises is their proximate timing across counties, a feature commonly referred to as "contagion". Many have pointed to the capital account as a potentially important channel through which contagion occurs. For these reasons, an increasingly popular policy prescription is to limit capital account convertibility (Rodrick, 1998 and Bhagwati, 1998).

Capital account convertibility is likely to be sustainable only if supported by appropriate macroeconomic and financial policies. However, the potential benefits of an open account, as well as the costs of maintaining capital controls, will influence whether countries respond to the growing ineffectiveness of capital controls by moving toward more restrictive controls or more open capital accounts.

This research focuses on policies regarding capital account liberalization in Thailand and Malaysia. Policy programs and their impacts on economic growth in both countries are investigated. This research also provides the recommendations on policy framework that a country should do with respect to international capital flows.

1.2 Research purpose

The research aims to examine the policy implementation on capital account liberalization in Thailand and Malaysia, and to explore the impacts of capital account policy on economic growth in both countries. Furthermore, the research aims to provide the policy recommendation on liberalizing Thailand and Malaysia's capital account as well as in other countries. By comparing two countries it is possible to find conditions under which capital account liberalization is enhancing growth.

1.3 Problem analysis

The relaxation of capital controls was known for the beginning of financial crisis, especially the 1997 Asian financial crisis. The free flows of capital led to currency speculation that spread and hit Thailand, Malaysia, Philippines, Indonesia and Korea. By the end of 1997 the exchange rate disaster threatened to takedown many of regions' banks, stock markets and entire economies that spread from Asia to Russia, Latin America and the rest of the world. Unfortunately, the IMF policies imposed during that time worsened the situation (Stiglitz, 2002). Some countries followed the whole package of IMF policies, while others chose not to do so because they recognized that capital account convertibility is likely to be sustainable only if supported by proper macroeconomic and financial policies. The policy programs and the impacts of capital account liberalization in those countries, should be examined in order to compare their successes and failures in order to formulate appropriate capital account liberalization policy to stimulate sustainable economic growth and reduce the probability of the crisis to emerge.

1.3.1 Central research question

What were the impacts of capital account liberalization on economic growth?

1.3.2 Sub-questions

1) What are the expected impacts of capital account liberalization on economic growth?
2) What were the policy programs of capital account liberalization in Thailand and Malaysia?
3) What were the policy outcomes on economic growth in Thailand and Malaysia: before, during and after the crisis?
4) What should be the policy framework on international capital flows in general?

1.4 Scientific and policy relevance

This research is scientifically relevant. Capital account liberalization can produce both benefits and risks by the extent which depends on the appropriateness of macroeconomic policy and financial infrastructure in the country. Since capital account liberalization is one of the causes of financial crisis and can rapidly spread out as contagion, comparing the capital account liberalization policy programs in two countries – before, during and after the crisis – can provide an insight in how the countries responded to different kinds of capital flows under different situations. For example, how the countries responded to massive capital inflows in the aftermath of the liberalization before the crisis was taken place, how they reacted to large and sudden capital outflows during the crisis, and how the policy programs supported economic recovery package and growth after the crisis.

It is worth for liberalizing countries to have capital account liberalization policy programs that are most suitable for their macroeconomic environment. This research is also relevant to policy makers who are in charge of monitoring world economic and financial dynamism and formulating macroeconomic and financial policies to protect the country's economy from international capital movements, and to provide policy

framework regarding sound macroeconomic environment for the country to benefit from international capital flows, especially to enhance growth of economic output.

1.5 Theoretical framework

Capital account liberalization is one of policy implications of financial liberalization. Based on Mckinnon and Shaw, Williamson and Mahar (1998) characterized six dimensions of financial liberalization. There are:

- The elimination of credit controls.
- The deregulation of interest rates.
- Free entry into the banking sector or, more generally, the financial services industry.
- Bank autonomy.
- Private ownership of banks.
- Liberalization of international capital flows.

McKinnon and Shaw suggested that a financially repressed system is one in which the government determines who gets and gives credit and at what price. A government can exercise or reinforce such control by regulating which financial institutions will be permitted to do business and how they will be permitted to operate, by owning banks and other financial intermediaries, and by exercising control over international capital movements. Conversely, liberalization can be characterized as the process of giving the market the authority to determine who gets and grants credit and at what price. Full liberalization involves the government's also allowing entry into the financial-services industry to any company that can satisfy objectively specified criteria based on prudential considerations (concerning capital, skills and reputation), giving banks the autonomy to run their own affairs (such as staff policy, types of business in which the bank may engage, and branch policy), withdrawing from the ownership of financial institutions, and abandoning control over international capital movements.

This research focuses on the sixth element of financial liberalization policy program based on Mckinnon and Shaw.

1.6 Methods of inquiry

To answer the first sub-question (What are the expected impacts of capital account liberalization on economic growth?), relating academic literatures is reviewed.

According to the following two sub-questions (What were the policy programs of capital account liberalization in Thailand and Malaysia? And what were the policy outcomes on economic growth in both countries - before, during and after the crisis?), the data of policy programs regarding capital account liberalization have been obtained from staffs, literatures and websites of governmental organizations responsible for financial policy such as Ministry of Finance and Central Bank of both countries.

For the last sub-question (What should be the policy framework on international capital flows in general), previous theoretical and empirical insights are employed.

1.7 Case selection

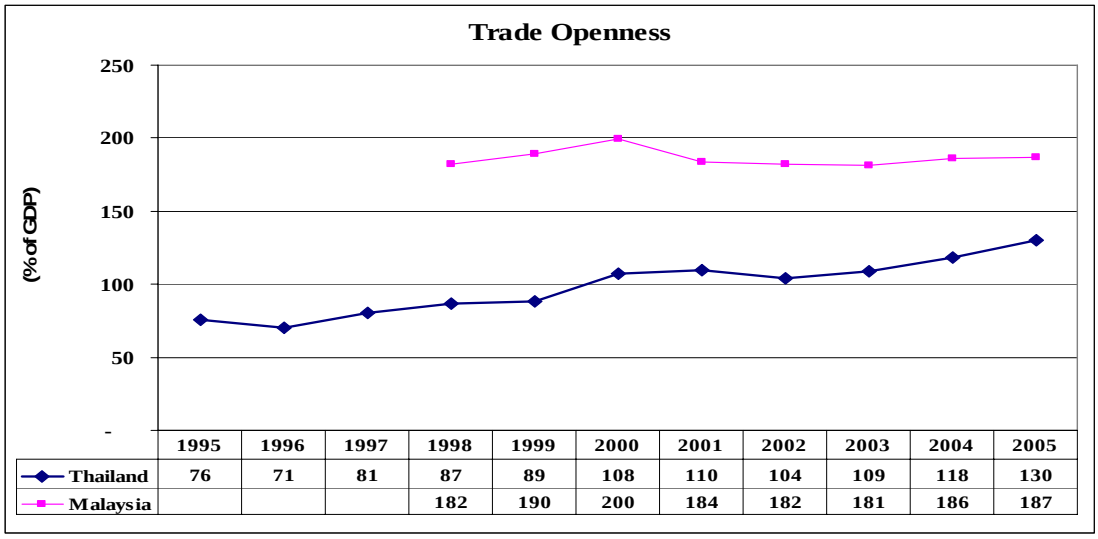
As claimed by many authors such as Joseph Stiglitz, the abolishment of capital control was an important cause of Asian financial crisis in the late 1990s. This research intends to compare the policy programs and outcomes of capital account liberalization in a couple of Asian emerging economies that had different degree of capital account liberalization. To be comparable, other factors should be similar. The study covers the period before (1975-1996), during (1997-1998) and after (1999-2005) the Asian financial crisis in order to compare the policies that were imposed in different situations such as large capital inflows in the aftermath of the liberalization and sudden capital outflows during a couple years of the 1997/98 Asian financial crisis, as well as their impacts on the economies in such situations.

Thailand and Malaysia had different degree of capital account liberalization, while they have similar characteristics of economic and financial sectors, as well as comparable institutional characteristics. Thailand implemented policy programs that moved toward more liberalized international capital flows than Malaysia[1], while Thai financial system and its economy were in trouble far more than Malaysia during the 1997/1998 financial crisis. Income per capita in Malaysia is somewhat higher with the average of $US2,847 in Malaysia and $US1,488 in Thailand during 1975-2005, but the degree of industrialization in Thailand and Malaysia is almost the same as seen from the ratio of industry value added to GDP that had an average rate of 41% in Thailand and 45% in Malaysia during 1990-2005. Although Malaysia had higher level of trade openness[2] (see Figure 1), during last decade the trend of trade volume in Malaysia has been stable at about twice the size of the economy whereas in Thailand it has been increasing from 76% of GDP in 1995 to 130% of GDP in 2005. The average rates of interest for savings account in both countries reached a very high level before and during the 1997/1998 financial crisis, and tended to decrease after the crisis (see Figure 2) due to their expansionary monetary policy (achieved by decreasing nominal interest rates) to stimulate growth in real sector and deter capital inflows from interest rate arbitrage that might cause local currency appreciation and then worsen exports.

[1] source: IMF

[2] Trade openness = (Exports+Imports)/GDP (Bank of Thailand, 2003)

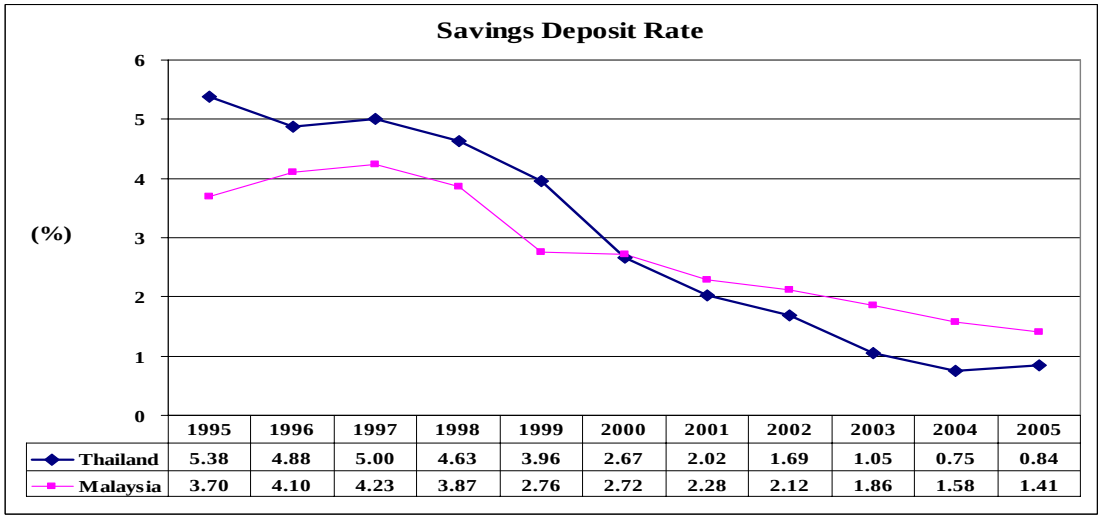
Figure 1: Trade openness



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	76	71	81	87	89	108	110	104	109	118	130
Malaysia				182	190	200	184	182	181	186	187

Source: Bank of Thailand and Prime Minister's Department of Malaysia

Figure 2: Savings Deposit Rate



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Thailand	5.38	4.88	5.00	4.63	3.96	2.67	2.02	1.69	1.05	0.75	0.84
Malaysia	3.70	4.10	4.23	3.87	2.76	2.72	2.28	2.12	1.86	1.58	1.41

Source: Bank of Thailand and Bank Negara Malaysia

Thailand and Malaysia are comparable in terms of characteristics of financial sector. Regarding central bank independence (McCauley, 2006), Bank of Thailand and Bank Negara Malaysia have similar degree of behavioral and balance sheet independence. Both countries have no evidence that political change leads to governor turnover. Some of the central banks' net profits shall be paid to the government. For legal independence, the Central Bank of Malaysia Act 1958 (Revised 1994) provides the Bank Negara Malaysia a somewhat higher level of independence from the government compared to the Bank of Thailand Act 2008 that gives general supervision of the Bank affairs to the finance minister.

In lights of regulations on the financial system, a set of financial policies during 1970s-1990s in Thailand and Malaysia is in concern. Thailand and Malaysia have eliminated credit controls since the 1980s and interest rate controls since the early 1990s. Entry barriers in the banking sector were reduced in 1990 in Thailand. For Malaysia, although there has been no new license for foreign banks since 1973, some foreign participations in joint ventures were permitted. If necessary especially during

crises, Thai and Malaysian governments can regulate the operations of financial institutions. In 1994, share of state-owned banks[3] in Thailand was estimated to be 7% of total assets and 8% in Malaysia. For the control on international capital flows, different degrees of regulations were imposed in the two countries. Malaysia firstly liberalized its capital account in 1978 but temporarily reimposed the controls on short-term capital inflows in 1994 and on capital outflows in 1998, whereas Thailand has continuously eliminated controls on capital flows since 1985 and only currency controls[4] were introduced in 1997 to cope with the financial crisis.

With respect to institutional characteristics, Thailand and Malaysia have comparable political system, government and culture. Politics in Thailand and Malaysia[5] are in a framework of a constitutional monarchy[6] whereby the Prime Minister is the head of government. A hereditary monarch is head of state of Thailand, and the federal head of state of Malaysia is the Yang di-Pertuan Agong, commonly referred to as the King of Malaysia. The Judiciary is independent of the executive and the legislature. Executive power is exercised by the government. Legislative power is vested in both the government and the two chambers of parliament - the Senate and the House of Representatives. Thailand consists of 76 provinces, and there are 13 states in Malaysia. Thailand had 29 prime minister turnovers during the past 70 years, whereas Malaysia had 5 during the past 50 years (Kirakul, 2006). Thailand and its neighbor, Malaysia, have cultural harmonization. Thai official religion is Buddhism and Islam is the second most, while the official religion of Malaysia is Islam and Buddhism is the second majority. Thailand and Malaysia are also economic partners. Trade volume between them was 15 billion US$ in 2006 that they became the highest-volume trading partners in ASEAN (Ministry of Commerce of Thailand, 2007).

In sum, Thailand and Malaysia have different degree of capital account liberalization, whereas they are comparable in many other aspects including the characteristics of economic and financial sectors, as well as institutional characteristics. This research thus focuses on investigating policy programs and their impacts on economic growth in Thailand and Malaysia comparatively.

1.8 Structure of the research

After this introductory part, the theoretical chapter is dealt with in order to obtain the expected impacts of capital account liberalization on economic growth. The following chapters focus on policy programs in Thailand and Malaysia, and policy outcomes on economic growth in both countries. Then, the research question is answered in the concluding chapter, followed by policy recommendations from this study in the final chapter.

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[3] BIS estimate

[4] Currency control is a measure whereby a country tries to regulate the value of money (currency) within its borders. From simple to complex policy changes, it can be characterized as a government initiated measure to control currency fluctuations through interest rates, bonds, laws, money printing, for instance. Whenever a country does not have strong enough currency control, hyper-inflation or depression can result (Wikipedia).

[5] Source: The World Factbook and Wikipedia

[6] Constitutional monarchy is a system of government in which a monarch is guided by a constitution whereby his/her rights, duties, and responsibilities are spelled out in written law or by custom (The World Factbook).

2. Theoretical overviews of capital account liberalization

2.1 Description of capital account liberalization

The capital account, officially known as capital and financial account, in a country's balance of payments covers a variety of financial flows, mainly foreign direct investment (FDI), portfolio investment (including investment in equity and debt securities), and loans, which have in common the acquisition of assets in one country by residents of another. Capital outflows include residents' purchases of foreign assets and repayment of foreign loans, whereas capital inflows associate with non-residents' investments in home-country, and property and loans to home-country residents. It is possible, in principle, to control these flows by placing restrictions on those flows going through official channels in order to shield the country from risks associated with fluctuations in international capital flows. Capital account liberalization refers to easing such restrictions that allows capital to flow more freely in or out of a country (Prasad, 2003; Eichengreen, 1999; and IFS, 2006).

In more details, the capital account in a country's balance of payments is categorized into four sources of capital; (1) Direct investment (2) Portfolio investment (3) Financial derivatives, and (4) Other investment. Direct investment includes equity capital, reinvested earnings, and financial derivatives associated with various intercompany transactions between affiliated enterprises. Excluded are flows of direct investment capital into the country for exceptional financing, such as debt-for-equity swaps. Portfolio investment includes transactions with nonresidents in financial securities of any maturity other than those included in direct investment, exceptional financing, and reserve assets[7]. As components of portfolio investment, equity securities include shares, stocks, and similar documents that usually denote ownership of equity, and debt securities cover bonds, debentures, notes and money market or negotiable debt instruments. Financial derivatives that cover financial instruments linked to other specific financial instruments or commodities, and through which specific financial risks (such as interest rate risk, foreign exchange risk, equity and commodity price risks, credit risk, etc.) can, in their own right, be traded in financial markets. Other investment that shows on the capital account includes all financial transactions not covered in direct investment, portfolio investment, financial derivatives, or reserve assets. Major categories are transactions in currency and deposits, loans (mainly bank borrowing), and trade credits. Capital inflows are the sum of the transactions of capital mentioned above that flow into a country, and capital outflows are those of capital that flow out of a country.

[7] Reserve assets consists of external assets readily available to and controlled by monetary authorities primarily for direct financing of payments imbalances and for indirect regulating of the magnitude of such imbalances through exchange market intervention. Reserve assets comprise monetary gold, special drawing rights, reserve position in the IMF, foreign exchange assets (consisting of currency and deposits and securities), and other claims (IFS, 2006).

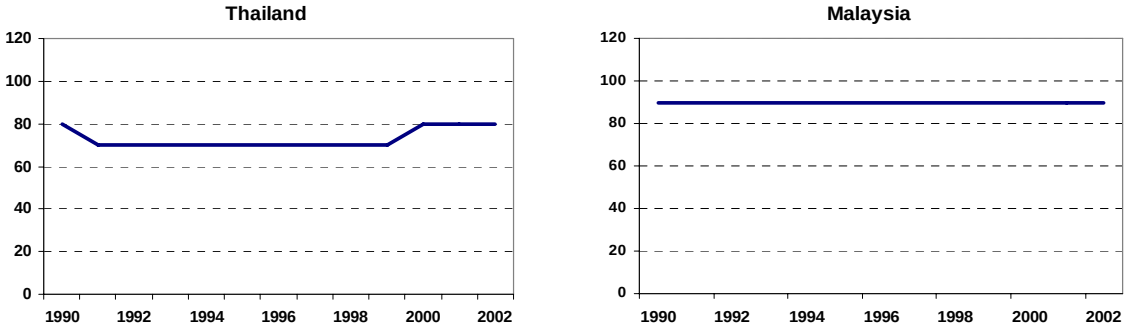
2.2 Measurements of capital account liberalization

A starting point for investigating the policy programs and the consequences of capital account liberalization is a review of different measures of capital account liberalization that have been employed to gauge whether a country allows the free flow of capital across its borders. In practice, there are a few indicators of capital account restrictions available across a wide cross-section of countries (Edison, Klein, Ricci and Sloek, 2002).

2.2.1 Rules-Based Measures

a) *IMF measure:* Every issue of the International Monetary Fund's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER) published between 1967 and 1996 includes a summary table in which a single row directly addresses the presence of capital controls; line E.2, labeled "Restrictions on payments for capital transactions." The information in this row has been the basis for generating an indicator of the existence of rules or restrictions that inhibit cross-border capital flows. The capital account openness index based on AREAER is shown in Figure 3 with the samples of Thailand and Malaysia. The index shows in percentage terms how many of the types of capital account transactions are subject to restrictions; a lower value indicates greater capital account openness. The figure shows that Thailand had higher degree of capital account openness than Malaysia all over the period 1990-2002.

Figure 3: Capital Account Openness Index based on AREAER



Sources: IMF, *Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER);* Miniane (2004); and IEO estimates.

b) Share measure: This measure uses the information from line E.2 of AREAER to construct an indicator, "Share", reflecting the proportion of years in which countries had liberalized capital accounts. For example, if the AREAER judged capital account liberalization for five years out of a 10-year period, then the openness measure Share would be 0.5. A potential problem with this approach is that a value of Share equal to 0.5 is consistent with a situation where a country had open capital markets for the first five years of a decade, for the last five years of a decade, for every other year of a decade, or for many other on-again, off-again patterns. In practice, from Klein and Olivei (2000) there are very few instances of on-again, off-again capital account controls, at least for the 10-year period between 1986 and 1995. Thus, over such period, a country with a value of Share equal to 0.1 had an open capital account in 1995 only, a country with a value of Share equal to 0.2 had an open capital account in 1994 and 1995, and so on.

c) Intensity measure: This measure is to score separately the intensity of controls for capital account receipts and capital account payments. For each of these two categories the scoring method is as follows: a score of 0 indicates payments are forbidden, 0.5 indicates that there are quantitative or other regulatory restrictions, 1 indicates that transactions are subject to heavy taxes, 1.5 indicates that there are less severe taxes, and 2 indicates that transactions are free of restrictions or taxes. The sum of the values for the two categories is an indicator of overall capital account openness that ranges between 0 and 4, meaning that a higher score reflects a higher degree of capital account openness.

2.2.2 Qualitative Measures

This alternative measure is to construct the indicators of capital account liberalization from the values of actual economic performance rather than published regulations. There are three different sets of indicators to be considered: national savings rates paired with national investment rates, interest rate differentials, and international capital flows. Neither a comparison of national savings rates with national investment rates nor interest rate differentials has been used in studying the effects of capital account liberalization on long-run economic growth. There have been some recent efforts to use actual capital flows to estimate the effects of capital account restrictiveness on growth (Edison, Klein, Ricci and Sloek, 2002).

a) National savings rates paired with national investment rates: The degree of capital mobility can be measured by the behavior of savings and investment explaining that the degree of correlation between the two series was a good indicator of impediments to capital movements (Feldstein and Horioka, 1980). In any particular year, savings matches investment in a country with stringent capital account restrictions while there need not be a link between savings and investment in a country with free capital mobility. Nevertheless, there is a criticism from Obstfeld (1986), for instance, arguing that the savings and investment rates of a country may be highly correlated, even if that country has no restrictions on international capital flows.

b) Interest rate differentials: Another set of quantitative measures of capital mobility includes onshore-offshore interest rate differentials and deviations from covered interest rate parity[8]. The differentials of short-term interest rates are low when a particular country has high degree of capital mobility. However, data availability restricts this method to a limited number of countries.

c) International capital flows: Many researchers gauge the extent of capital mobility through the use of actual capital inflows and outflows, either as a percentage of GDP (Kraay, 1998). Higher level of the sum of inward and outward capital movements reflects higher degree of capital account liberalization.

[8] Covered interest rate parity is an arbitrage condition which says that the returns from borrowing in one currency, exchanging that currency for another currency and investing in interest-bearing instruments of the second currency, while simultaneously purchasing futures contracts to convert the currency back at the end of the investment period, should be equal to the returns from purchasing and holding similar interest-bearing instruments of the first currency. If the returns are different, investors could theoretically arbitrage and make risk-free returns.

2.3 Theoretical predictions and evidences of the impacts of capital account liberalization on economic growth

In the neo-classical theory, capital inflows contribute to growth primarily by supplementing domestic saving, while in the endogenous growth theory the sources of growth attributed to capital flows comprise the spillovers associated with foreign capital in the form of technology, skills, and introduction of new products as well as the positive externalities in terms of higher efficiency of domestic financial markets and resultant improved resource allocation and efficient financial intermediation by domestic financial institutions. Since the spillovers and externalities associated with different forms of foreign capital could vary, a pecking order approach to the composition of capital flows is often advocated which could help in prioritizing capital inflows based on perceived growth enhancing role of each form of capital (Jadhav, 2003).

In the late 1980s and early 1990s a number of developing countries liberalized their capital accounts for the first time and a number of studies found a significant positive effect of capital account liberalization on economic growth. Henry (2003) found that free flows of capital enhances growth through the reduction of the cost of capital and thus the increase in investment, while Klein and Olivei (2000) and Bailliu (2000) suggest that capital account liberalization enhances growth through the channel of financial development or financial depth. Empirical studies of Quinn (1997) and Edward (2001) found a significant increase in the growth rate of income per capita as a result of capital account liberalization in approximately 60 countries over the period 1960-1989. It was also found by Bekaert, Harvey and Lundblad (2001) that during 1981 and 1997 stock market liberalization in 30 emerging markets significantly contributes to growth in income per capita with largest effects shortly after liberalization. More recently, the study of Mendoza, Quadrini and Rios-Rull (2007) provides the result that middle-income countries benefit significantly from capital account openness while growth among poorer countries may not be promoted by capital account liberalization. Besides, the response of growth to open capital accounts depends upon the level of income or the quality of government. The findings of Klein (2007) added that the positive effect of capital account openness on long-run economic growth is consistent with a situation where growth in a capital-scarce country with good institutions is spurred by access to world capital markets, while this effect is not present either if a country is relatively capital abundant or if it lacks the institutions or regulations required for capital inflows to be directed to their most productive uses. Contrarily, Grilli and Milesi-Ferretti (1995), Rodrik (1998) and Kraay (1998) found no significant impact of capital account liberalization on growth in 60-100 countries over the period 1971-1997.

Theoretically, capital account liberalization provides both benefits and risks to the economy. The impacts of capital account liberalization on economic growth can be illustrated as follows.

1) Capital account liberalization enhances economic growth through an efficient allocation of resources.

Capital account liberalization can improve economic growth through an efficient allocation of resources explained by the mechanism of a reduction in the cost of capital, an increase in the investment, and a rise in the growth rate of output per worker during the aftermath of the liberalization. Liberalizing the capital account would permit financial resources to flow from capital-abundant countries, where expected returns were low, to capital-scarce countries, where expected returns were high. The flow of resources into the liberalizing countries would reduce their cost of capital, increase investment, and raise output (Fischer, 1998 and Summers, 2000) that is so called "Allocative Efficiency[9]" (Henry, 2006). Since the cost of capital falls, investment should also increase, as profit maximizing firms drive down the marginal product of capital to its new lower cost. Motivated in part by the prospective gains from incorporating Allocative Effciency arguments into their economic policies, dozens of developing-country governments have implemented some forms of capital account liberalization over the past 20 years (Henry, 2006).

Henry (2003) explored the linkages of capital account liberalization, costs of capital, investment and economic growth in 18 countries[10], over the period of 10 years: 5 years before liberalizing their capital accounts and 5 years after their liberalization. Figure 4 shows that the cost of capital falls when countries liberalize the capital account[11]. The figure plots the average aggregate dividend yield across the 18 liberalizing countries in event time (year [0] is the year of liberalization). The average dividend yield falls by roughly 240 basis points from an average level of 5% in the 5 years prior to liberalization to an average of 2.6% in the five years following liberalization. The liberalization leads to a sharp increase in investment as reflected by the growth rate of the capital stock. Figure 5 shows that investment booms when countries liberalize the capital account. The growth rate of the capital stock rises by 1.1 percentage points in the aftermath of liberalization from an average of 5.4% per year in the pre-liberalization period to an average of 6.5% in the post-liberalization period. To date, foreign direct investment (FDI) has played an important role in the country's successful economic development than what portfolio investment does (Kaplan and Rodrick, 2001). Finally, the increase in investment should generate an increase in the growth rate of output per worker. Figure 6 confirms that the growth rate of output per worker increases when countries liberalize the capital account. The figure shows that the growth rate of output per worker rises by 2.3 percentage points from an average of 1.4% per year in the pre-liberalization period (5 years before liberalization) to an average of 3.7% per year in the post-liberalization period (5 years after liberalization). The increase in aggregate outputs per worker eventually results in more prosperity to the whole economy.

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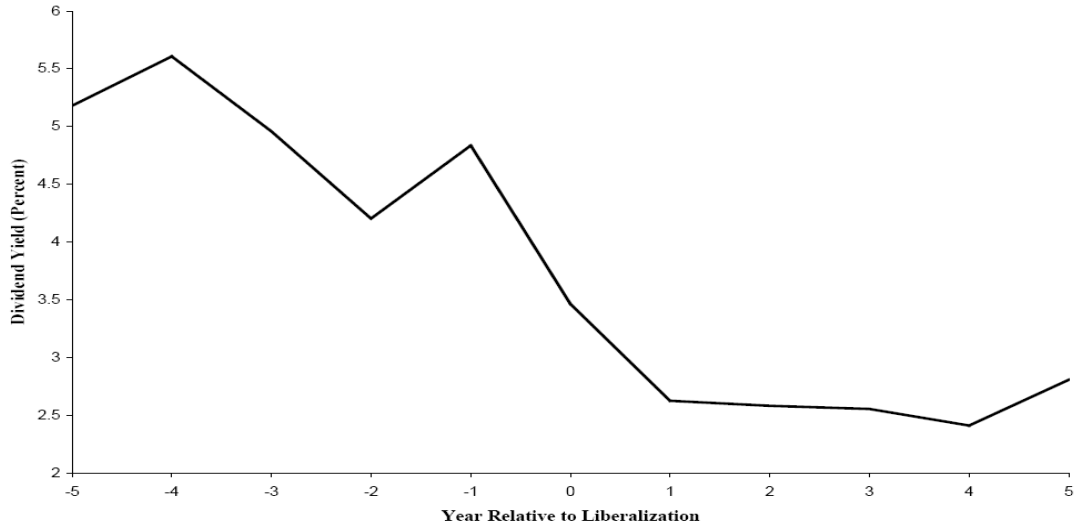
[9] 'Allocative Efficiency' draws heavily on the predictions of the standard neoclassical growth model introduced by Solow (1956). In the neoclassical model, liberalizing the capital account facilitates a more efficient international allocation of resources and produces all kinds of beneficial effects (Henry, 2006).

[10] Argentina, Brazil, Chile, Colombia, India, Indonesia, Jordan, Korea, Malaysia, Mexico, Nigeria, Pakistan, Philippines, Taiwan, Thailand, Turkey, Venezuela and Zimbabwe

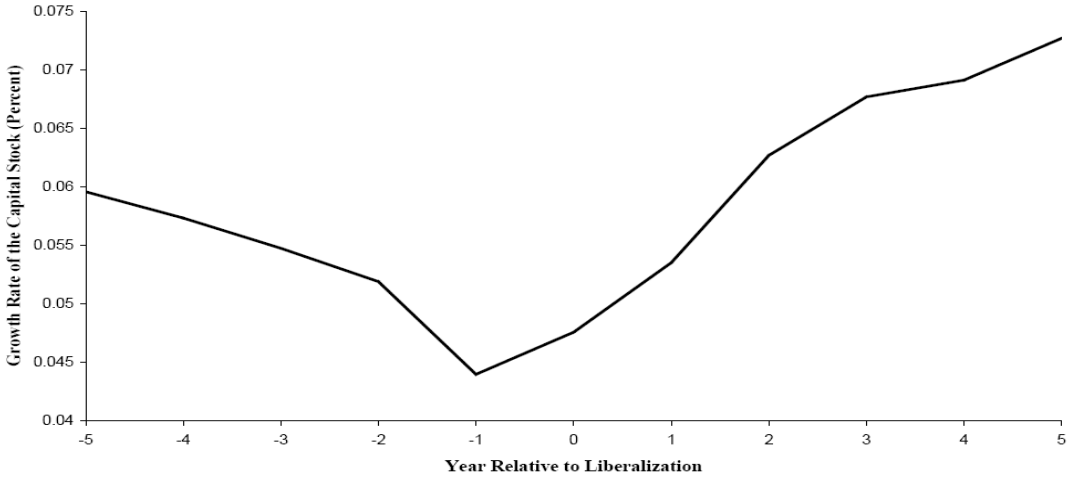
[11] Henry (2003) gives a remark that liberalizations do not occur in isolation. Stock market liberalizations are usually accompanied by other economic reforms that may increase the expected future growth rate of output and dividends.

Figure 4: Cost of capital falls in the aftermath of liberalization



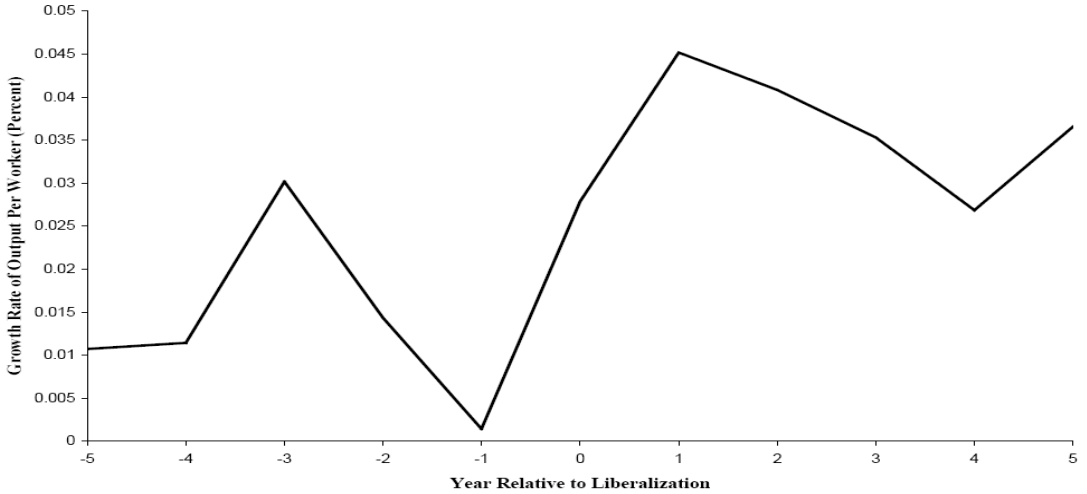
Source: Henry (2003)

Figure 5: Investment booms in the aftermath of liberalization



Source: Henry (2003)

Figure 6: Growth rate of output per worker increases in the aftermath of liberalization



Source: Henry (2003)

2) Capital account liberalization spurs growth by promoting financial depth.

Free capital movements contribute, both domestically and internationally, to the efficiency of the financial system and the development of financial markets by strengthening competition and allowing technology and skill transfers. In view of the considerable economies of scale that exist in the provision of many financial services, free capital movements can permit a more efficient international division of labor, by allowing individual countries to import rather than produce certain financial services (Ishii and Habermeier, 2002).

'Financial depth', so called 'financial development' or 'financial deepening', can be measured by liquid liabilities and credits going to the private sector (Klein and Olivei, 2000). The liquid liabilities indicator represents the ratio of liquid liabilities to GDP, where liquid liabilities consist of currency held outside the banking system plus demand and interest-bearing liabilities of banks and non-bank financial intermediaries. This ratio reflects the overall size of the financial intermediary sector. Another indicator of financial development equals the ratio of claims by financial intermediaries to the private sector to GDP that is more preferable in the empirical literatures because it can isolate credit issued to the private sector from that issued to governments, government agencies, and public enterprises. An increase in each indicator reflects greater financial deepening that is not an end in itself. Greater financial depth may contribute to the economic growth of a country by promoting its overall development (Klein and Olivei, 2000). The development of a country's financial sector has a significant impact on the level and the rate of growth of its per capita income in the long run (Bagehot 1873 and Schumpeter 1912). Additionally, countries with higher levels of financial development tended to have higher economic growth rates than those with lower levels of financial development (Rousseau and Wachtel, 2005).

The empirical study of Klein and Olivei (2005) found that countries with open capital accounts over some or all of the period 1986 to 1995 enjoyed a significantly greater increase in financial depth than countries with continuing capital account restrictions. Their quantitative estimates indicate an important effect of capital account liberalization on economic growth through the channel of financial deepening. The significance of the link between capital account convertibility and financial deepness is driven largely by the industrialized OECD-member countries. This group of highly developed countries has experienced a significant degree of capital account liberalization over the last thirty years, while only a smaller fraction of developing countries liberalized their capital accounts. But the failure to find a significant effect of capital account liberalization on financial deepness among countries that are not members of the OECD may not be due to the paucity of experience with opening up capital markets among developing countries. Evidence drawn from the set of Latin American countries, a set that includes many cases of capital account liberalization, also largely fails to find a significant effect of capital account liberalization on financial deepness and economic growth. An important interpretation of this finding is that countries require a constellation of economic, legal, and social institutions, institutions present in industrial countries but less common among developing countries, in order to have capital account liberalization translate to greater financial deepness and economic growth.

3) Under inappropriate sequencing of the liberalization policy, capital account liberalization may harm a country's macroeconomic stability, and thus deteriorate economic sustainability.

Capital account liberalization also entails risks that may arise if capital account liberalization is not appropriately sequenced and coordinated with complementary policies and reforms (Ishii and Habermeier, 2002). Free flows of capital can harm the country's macroeconomic stability in the way that they invite speculative hot money flows and increase the likelihood of financial crises with no apparent positive effects on investment and output (Bhagwhati, 1998; Rodrik, 1998; Stiglitz, 2002). The empirical study of Gerry Helleiner (1997) and Ishii (2002) confirms that a complete opening-up of the capital account carries very significant risks for macroeconomic stability in developing countries. Large capital inflows may fuel and contribute to a widening current account deficit and often a sharp expansion of domestic bank credits. When expectations cannot be met, the inflows are reversed, more than offsetting changes in private and government savings. For example, net private capital flows in Thailand swung from a net inflow of 5% of GDP in 1996 to net outflows of 8% of GDP in 1997 and 17% of GDP in 1998. These large fluctuations in capital flows can drastically weaken economic and financial sectors. During such period, GDP growth rate and income per capita substantially fell.

A related factor contributing to macroeconomic risk is that asset price misalignments and volatility may increase following capital account liberalization. Asset price volatility undermines the solvency of banks and their customers through, for example, the impact of unexpected exchange rate depreciation on the balance sheet of banks and nonbank borrowers. This in turn could raise uncertainty and stimulate capital flow reversals. In such circumstances, weaknesses in the banking system and real sector borrowers can limit the authorities' willingness to use interest rates to defend the exchange rate, or more generally constrain the policy mix. This can further exacerbate asset price misalignments, increase the probability of speculative attacks, and provoke a crisis. There is evidence that asset price volatility and misalignments have increased in both emerging markets and industrial countries in recent year, while the linkages between banking sector weaknesses and balance of payments problems appear to have tightened during the 1990s, as illustrated by the Asian crisis (Ishii and Habermeier, 2002).

2.4 Preconditions under which capital account liberalization can be successful

A fundamental issue in undertaking capital account liberalization is how to reap the benefits from capital market access while coping safely with the risks associated with international capital flows (Ishii and Habermeier, 2002). Attention has been focused on the growing frequency of financial crises and the possible role that capital account liberalization might play in contributing to such phenomena. In a world of growing financial globalization and more open capital accounts, events in other countries may have an impact on a country's economic and financial stability. Nevertheless, country experiences (see Table 1) indicate that the ability to avoid financial crisis in the context of more open capital accounts often depends upon the ability of financial and non-financial institutions as well as the government to manage risks in general. At the

same time, legal, institutional, and prudential arrangements must be adequate to deal with complex risks associated with increasingly diverse types of capital flows.

Table 1: Countries experiencing successful capital account liberalization

Austria created a stable macroeconomic environment and ensured that the financial sector was sound and well supervised before embarking on full capital account liberalization. It took a cautious and gradual approach to capital account liberalization, freeing long-term flows before short-term flows, and taking account of differences in the capacity of banks, corporations, and households to manage the risks involved. This combination of policies allowed Austria to avoid both external and financial system crises, as well as enjoying positive economic growth all over the past 3 decades.
Hungary liberalized its capital account following the 1995 crisis. Macroeconomic policies were returned to a sustainable footing, and financial sector reforms were implemented forcefully – most notably bank privatization and strengthened prudential regulation and supervision. Foreign bank participation was encouraged at an early stage. During 1996-1998, many capital controls were lifted, with foreign direct investment (FDI) liberalized early and other long-term flows liberalized before short-term flows. This approach helped to limit the effects on Hungary of the 1998 Russian crisis.
South Africa put in place a sound domestic financial infrastructure before liberalizing virtually all restrictions on nonresidents' capital flows in 1995. Controls on residents were lifted more gradually, owing in part to the Reserve Bank's weak foreign exchange reserve position. A number of controls remained in place at the time of the emerging markets crises of 1997-1998. Despite contagion from those crises, South Africa suffered no financial crisis, owing largely to the soundness of macroeconomic policies, a well-capitalized banking system, and low corporate debt.
The United Kingdom removed all of its remaining exchange restrictions and capital controls in 1979. Owing to London's historical role as a financial center, banks and other financial institutions were exposed to strong market discipline, which was reinforced by the adoption and continuous upgrading of prudential policies. These factors contributed to the resilience of the UK banking system during the exchange rate mechanism crisis of 1992.

Source: IMF Occasional Paper No. 211 (2002)

While country experiences are diverse, developing countries may be well advised in taking a pragmatic approach to capital account regulation and liberalization in order to avoid counterproductive effects on exchange rates, the current account balance and the domestic financial system. A few countries have been quite successful in managing capital flows by opting for gradual and limited financial integration into the global financial markets. Success has depended on flexibility in combining macroeconomic policy tools with direct or indirect controls to reduce volatility by deterring interest-rate arbitrage, limiting destabilizing speculation and avoiding bubbles in asset prices and exchange rates. On the other hand, a large number of developing countries, particularly the poorer ones, continue to depend on financing from the multilateral financial institutions.

Proper sequencing and coordination of capital account liberalization with other reforms reduces the likelihood of macroeconomic and financial system instability,

which has affected a number of countries that recently have liberalized or were in the process of liberalizing their capital account. Although there is no simple rule for the sequencing and coordination of capital account liberalization with other policies, the following preconditions would provide liberalizing countries a framework of successful capital account liberalization.

2.4.1 *A background of sound and sustainable macroeconomic policies is necessary before a country lifts controls on international capital flows and also during its implementation of the liberalization program.* Sound and sustainable macroeconomic policies are associated with the capability of the government to formulate consistent policies including exchange rate, interest rate, monetary and fiscal policies, and effectively implement them in dealing with the dynamism of economic situations (Ishii and Habermeier, 2002). Given the situation of economic overheat and large capital inflows, the government may introduce the high-interest rate policy combined with capital control measures to manage the composition of capital toward long-term flows, and tightening monetary and fiscal policies. In this case, more flexible exchange rate regime may be desirable in order to relieve monetary stress in stabilizing national currency. When the situation diverges, the government is required to alter macroeconomic policies to more appropriate stance.

2.4.2 *Financial sector reforms should be put in place to support and reinforce macroeconomic stability.* It would be essential for the governments of liberalizing countries to adopt a strategy of restructuring their financial sectors with the aim of reducing the burden of bad debts on the economy, reactivating a fundamental engine of growth (Trivellato, 2002). Financial sector reforms can be achieved through the development of money and capital markets. In money market, the authorities should foster competition among financial institutions to increase their efficiency, and thus enhance more profitability. Effective risk management system in financial institutions, combined with the establishment of asset management agencies, are critical to reduce non-performing loans in the financial sector. At the same time, capital market should be strengthened in order to efficiently transform savings into productive investment, and thus reducing reliance on bank intermediation. Well-functioning money and capital markets can enhance the robustness of the financial system, and help support the effectiveness of monetary arrangements. For example, monetary authorities are likely to fail in boosting economic expansion by reducing interest rates while non-performing loans are high because loan approval by financial intermediaries would be proceeded with more strict manner, leading to relatively less investment and slow expansion of the economy. Payments and settlements systems[12] also need to be improved to ensure the conformity to international standard. Moreover, improving public debt management practices can help manage the risks from short-term capital flows (Ishii and Habermeier, 2002).

2.4.3 *Improving prudential regulation and supervision should be implemented to* safeguard the financial system and *complement the financial reforms aimed at*

[12] A payment and settlement system can be described as a system which consists of a particular group of institutions and a set of instruments and procedures, designed to ensure the circulation of money and speed up interbank and other settlements resulting from the various economic transactions either within a country or between countries.

enhancing competitive efficiency and market development. Generally, prudential regulation provides the benefit of efficient allocation of savings and investments by seeking to strengthen and preserve the effective functioning of the financial system (Haihong, 1999). Particular attention should be paid to prudential regulation and supervision of liquidity and market risk[13] associated with short-term foreign borrowings, the adoption of international best practices such as capital adequacy and accounting standards in financial institutions, and the transparency and disclosure of timely and reliable information associated with the financial sector in order to increase market confidence, particularly of foreign investors.

2.4.4 *The liberalization of capital flows by instruments or sectors should be sequenced to take into account the concomitant risks. In particular, liberalizing long-term flows, especially flows from foreign direct investment (FDI), should be ahead of liberalizing short-term flows.* In light of economic slowdown, a liberalization of inward FDI would be desirable in that direct investment can spur growth to the economy. FDI usually involves flows that are relatively long term and not subject to rapid reversals associated with changes in investor sentiment, while short-term capital inflows can be quickly reversed when a country is hit with an adverse macroeconomic shock, such as sharp decrease in interest rate or even political uncertainty. Some developing countries also use capital controls to steer the composition of inflows toward more stable forms, such as FDI. Some countries have also used selective capital controls to try to induce a shift from shorter- to longer-term inflows by imposing an implicit tax on capital inflows reversed within less than a year.

2.4.5 *The existence of implicit government guarantees is not desirable when a country liberalizes its capital account.* This includes implicit guarantee of currency value in the form of adopting the fixed exchange rate regime and implicit guarantee of bank entry and exit that leads to an oligopolistic structure in the financial system. Both kinds of the guarantees can thus lead to moral hazard[14] by market participants including investors and financial institutions. Under fixed exchange rate regime, nominal values of assets in domestic and foreign currencies are considered unchanged and hence investors do not take the exchange risk into account. Once the government cannot keep its currency fixed (e.g. due to the drying-up foreign reserves resulting from massive capital outflows during financial crises), a substantial fall in domestic asset values in terms of foreign currency would be a result. In addition, the implicit government guarantee on bank entry and exit also leads to the moral hazard behavior. In the country that allows neither new entries nor weak financial institutions to fail, financial institutions are prone to invest in risky projects, enjoy large profits and leave serious losses to the government. Both cases of implicit government guarantees deteriorate the stability of economic and financial systems that are fundamental in liberalizing economies.

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[13] 'Liquidity risk' arises from the inability to accommodate decreases in liabilities, or to fund an increase in assets at a reasonable cost, or liquidate assets at a reasonable price in a timely fashion. Inadequate liquidity affects profitability and, in extreme case, can lead to insolvency. 'Market risk' refers to risk of losses in on- or off-balance sheet position arising from movements in market prices that change the market value of an asset or a commitment.

[14] Moral hazard is the prospect that a party insulated from risk may behave differently from the way it would behave if it were fully exposed to the risk. Moral hazard arises because an individual or institution does not bear the full consequences of its actions, and therefore has a tendency to act less carefully than it otherwise would, leaving another party to bear some responsibility for the consequences of those actions.

2.5 Temporary uses of capital controls

In the circumstances that a country, even with cautious capital account liberalization measures, cannot efficiently manage large capital inflows that frequently took place in the era of economic booms, or effectively deal with sudden capital outflows as happened during the Asian financial crisis in the late 1990s, the temporary uses of capital controls may be an answer. The timing of capital controls and the types of controls that are applied might have something to do with the success of controls. This is in line with what Krugman (1998) argues that faced with a global financial crisis the Asian countries should insulate themselves from instability abroad and reflate their economies behind the shelter of controls.

The empirical research of Buckley (1999) suggests that inflow controls are more effective than outflow controls. Controls on capital outflows are best used as a temporary counter-crisis measure. Outflow controls lose their effectiveness more quickly and completely over time than do inflow controls. The incentive to avoid outflow controls is much stronger than for inflow controls and much easier: under-invoicing or over-invoicing is easy to effect and extremely difficult to police. Nonetheless, the effectiveness of inflow controls also declines over time as markets exploit the potential to channel restricted flows through exempted channels. For this reason, enduring inflow controls need to be particularly comprehensive in coverage and rigorously enforced.

Inflow controls by their nature are up-front and transparent. Foreign investors know of them upon investing. The risk of outflow controls being unilaterally imposed part way through an investment's life may well be a significant disincentive to investment and this is a potential cost of such controls. The critical thing with all controls is that they need to be administered and enforced cleanly and transparently, which may be a challenge for some countries.

2.5.1 How to manage massive capital inflows?

The Asian financial crisis is claimed by Stiglitz (2002) that it was drawn from the abolishment of capital controls, and is characterized by Buckley (1999) as a capital account crisis. The origin of the crisis was large inflows of private capital and of a largely short-term nature, followed by a sudden and massive reversal of capital flows. The magnitude of the swing in capital movements from massive inflows to sudden reversals accounted for about 11% of combined GDP of crisis-hit Asian economies (Thailand, Malaysia, Indonesia, the Philippines and Korea). Open capital accounts and being the recipient of large capital flows make a country more likely to enter a recession and that capital controls reduce this likelihood. Given the aforementioned nature of the crisis, emerging economies must better manage massive capital inflows, especially predominantly short-term flows because there is strong evidence that the ratio of short-term debt to foreign currency reserves is a powerful predictor of financial crises, and that higher short-term debt levels are associated with more severe crises (Buckley, 1999). Three policy frameworks on managing massive capital inflows are presented as follows. It is emphasized that these policy measures should be taken as a package, since they are correlated and supporting each other.

1) Steering the composition of capital inflows toward longer term
When an emerging economy experiences continued massive capital inflows that threaten effective domestic monetary management, the authorities may install the capability of implementing unremunerated reserve requirements (URR) and minimum holding periods (MHP) on capital inflows. Both URR and MHP can be varied, depending on the magnitude of such capital inflows and the general condition of the economy. The imposition of an URR and MHP on capital inflows can change the composition of capital inflows toward a longer maturity but may not necessarily affect the volume of total capital inflows. This in itself is already a big improvement towards reducing the vulnerability of an economy to a currency crisis, because short-term capital is much more volatile than long-term capital. The restrictions on short-term foreign borrowing are also helpful to eliminate the exposure to foreign exchange risk. The measure can alternatively be implemented by an allowance of foreign borrowing with central bank approval.

The effectiveness of the controls in slowing down short-term capital inflows can be eroded over time as markets exploit the potential loopholes in the system (ESCAP, 2001). For example, there are instruments, such as derivatives, which foreign investors can use to convert capital from long-term into short-term, although such instruments are very limited in the underdeveloped financial markets in emerging economies. The problem of circumvention can be reduced by adopting a comprehensive set of controls at the outset and by constantly monitoring capital flows.

2) Adopting a flexible exchange rate regime
Emerging Asian economies with open capital accounts can adopt a managed float exchange rate policy, which would be consistent with sustainable international competitiveness and would also allow sufficient exchange rate flexibility while avoiding a serious exchange rate misalignment caused by persistent capital movements. An exchange rate compatible with competitiveness can be based on an appropriately trade-weighted currency basket rather than a single currency in order to avoid wide fluctuations in international competitiveness caused by a single currency-dominant basket. The degree of flexibility should be increased in order to accommodate external shocks from massive, persistent capital inflows. Such an exchange rate regime would be consistent with facilitating FDI, trade and economic growth, as well as with accommodating pressures from swings in capital flows (ESCAP, 2001). It should be emphasized that an appropriate exchange rate regime has to be considered with the imposition of sound macroeconomic policy to solve problems of emerging and transitional economies.

3) Imposing contractionary monetary and fiscal policies
To prevent economic overheating from a wave of massive inward capital flows, the imposition of tightening monetary and fiscal policies is desirable. In light of monetary policy, the measure includes the sterilization through open market sales of domestic securities, such as central bank bonds, in order to absorb liquidity or reduce money circulation in the economy. Synchronously, tightening fiscal policy can be achieved by reducing government spending that is more publicly desirable than raising tax rates. However, from the IMF view, tight fiscal policy was the only means to prevent overheating and avoid a real appreciation regardless of the cause of the inflows. Whereas sterilization, the most common policy tool, was generally negative because it

would be very costly and difficult to sustain. Therefore, contractionary fiscal policy should be implemented at first place, prior to the cautious imposition of tightening monetary policy.

2.5.2 How to deal with sudden capital outflows?

The sudden and massive withdrawal of foreign capital led to the "twin crises", currency and banking crises, which mutually reinforced each other to deepen and broaden the financial crisis and hence economic slowdown. Capital outflow controls may well be required to provide a fence behind which emerging-market nations can build strong macroeconomic conditions and financial systems, and sophisticated prudential regulators.

Capital markets impose different disciplines upon advanced countries, on the one hand, and emerging-market nations, on the other. For example, the US government can stimulate its economy through deficit spending without prompting a retreat of international investors for these investors trust the US Federal Reserve to keep a tight rein on the money supply and thus on inflation. In contrary, the same deficit spending approach by an emerging-market nation would prompt a hasty withdrawal of capital for fear of inflation and currency depreciation. Capital controls may well be necessary to build up a fence behind which an emerging-market government can reflate its economy after a crisis (ESCAP, 2001).

The followings are three policy frameworks aiming to deal with sudden outward capital flows. Again, all these policy measures should be taken together.

1) Introducing restrictive measures on capital outflows
The restrictive measures on capital outflows include the restrictions on outward FDI, the restrictions on the repatriation by non-residents, the ban on the provision of domestic credits to non-residents, and the limits of local currency exports. Thailand and Malaysia are examples of countries that used these kinds of the restrictive measures. Thailand restricted outward FDI by forbidding banks and other financial intermediaries to invest overseas. From an attempt to restrict portfolio capital outflows, the Malaysian authorities imposed the holding period of the repatriation of Malaysian securities sale by non-residents. After September 1st, 1998, non-resident sellers of Malaysian securities were required to hold on to their Ringgit proceeds for at least 12 months before repatriation was to be allowed. Such measure was introduced together with the ban on the provision of domestic credits to non-residents correspondent banks and stock brokers. In addition, Malaysian-residents were forbidden to export more than 10,000 ringgit during any travel abroad, while non-residents were forbidden to export more than 1,000 ringgit upon leaving Malaysia.

2) Restricting domestic currency holdings by non-residents
In the absence of the crisis, several emerging economies allow greater holdings of their domestic currencies by non-residents, because allowing substantial holdings of an economy's domestic currency by non-residents can lead to the development of domestic currency-denominated offshore markets. However, this development can limit the effectiveness of domestic monetary policy since such markets can be used as an unregulated platform for currency speculation. In the wake of the crisis, holdings of national currencies by non-residents should be restricted. In a situation that

substantial holdings of domestic currency by non-residents have accumulated, such holdings and their use can be minimized if threatened with a speculative attack (freezing the use of domestic currencies by non-residents). Limiting the holdings of local currency by non-residents will help maintain monetary policy autonomy and reduce the opportunities for speculative attack on an economy's currency (ESCAP, 2001).

3) Imposing expansionary fiscal policy and economic sector reforms

To boost the economy in the epoch of sudden outward capital flows, the imposition of expansionary fiscal policy is required. The measures include raising public expenditure and cutting tax rates in order to stimulate domestic demand and investment, and thus greater economic expansion. At the same time, the reform programs of financial and corporate sector restructuring need to be introduced at an early stage in order to maintain financial stability and robust corporate sector. For example an attempt should be taken to reduce non-performing loans in the financial system, increase the real sector competitiveness and encourage risk management to all market participants.

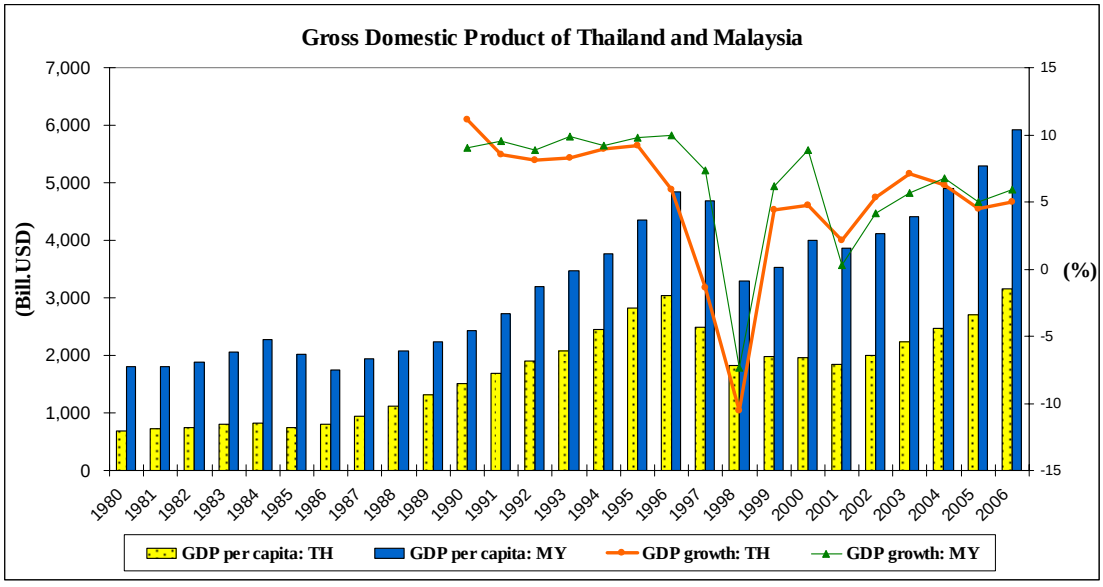
In the next chapter, policy programs of capital account liberalization in Thailand and Malaysia will be examined.

3. Policy programs of capital account liberalization in Thailand and Malaysia

This chapter will begin with the explanation of policy programs concerning capital account liberalization in Thailand and Malaysia, followed by the analysis of the policy programs in both countries. Before moving on to the policy programs in the selected countries, it is worth to describe briefly their economic outlook and the overview of financial policies in regulating their financial systems over the period 1970s-1990s.

Thailand and Malaysia had similar level of economic and financial development. Confirming the World Bank's phrase of "Asian Miracle", Thailand and Malaysia had high economic growth from the early to the mid 1990s. Figure 7 shows GDP growth rate of Thailand and Malaysia during the period 1990-2006 and their GDP per capita during 1980-2006. Thailand had an average GDP growth rate of 8.17% and Malaysia 9.24% before the growth substantially dropped to the lowest point of -10.51% in Thailand and -7% in Malaysia in the wake of the Asian financial crisis in the late 1990s. After the recovery, Thai and Malaysian economies continued to grow and reached the rate of 5% in Thailand and 5.9% in Malaysia at the end of 2006. The income per capita in Malaysia was somewhat higher (average of $US1,488 in Thailand and $US2,847 in Malaysia during 1975-2005), but the degree of industrialization was almost the same (average of industry value added to GDP ratio was 41% in Thailand and 45% in Malaysia during 1990-2005).

Figure 7: GDP growth rate and GDP per capita of Thailand and Malaysia



Source: International Financial Statistics (IFS), IMF

Over the year 1995-2005, Malaysia had higher level of trade openness[15] than Thailand. However, during last decade the trend of trade volume in Malaysia has been stable at about twice the size of the economy, whereas in Thailand has been increasing from 76% of GDP in 1995 to 130% of GDP a decade after that.

[15] Trade openness = (Exports+Imports)/GDP (Bank of Thailand, 2003)

The average rates of interest for savings account in both countries reached a very high level before and during the Asian crisis, and tended to decrease after the crisis due to their expansionary monetary policy (achieved by decreasing nominal interest rates) to stimulate growth in real sector and deter capital inflows from interest rate arbitrage that might cause local currency appreciation and then worsen exports.

In lights of the financial regulations, the following financial policies were introduced. Thailand and Malaysia have eliminated credit controls in the mid 1980s and interest rate controls in the early 1990s. Entry barriers in the banking sector were reduced in 1990 in Thailand. For Malaysia, although there has been no new license for foreign banks since 1973, some foreign participations in joint ventures were permitted. If necessary especially during crises, Thai and Malaysian governments can regulate the operations of financial institutions. In 1994, share of state-owned banks[16] in Thailand was estimated to be 7% of total assets and 8% in Malaysia. For the liberalization of the capital account, Thailand and Malaysia have different degree of controls on international capital flows. Thailand has implemented the policy programs that moved toward more liberalization than Malaysia. The details of the policy programs in both countries are explained next.

3.1 Policy programs in Thailand

Thailand started the programs of capital account liberalization in 1985 in an attempt of democratic neo-liberal Thai government to shift the economy from agriculture to manufacture oriented in export sector in order to promote international trade and investment. The attempt was pushed by international financial organizations, the IMF in particular. Capital account liberalization in Thailand was supported by SALs (Structural Adjustment Loans[17]) received from the IMF and after that Thailand followed the economic policy under "Washington Consensus[18]" especially aiming at liberalizing capital inflows of foreign direct investment at the beginning stage. The government embarked on a set of policies to further open its capital account in the late 1980s and early 1990s. In 1985, Thailand imposed liberal treatments of foreign direct and portfolio investments, whereas the exchange controls still applied to the repatriation of interest, dividends and principal of portfolio investment. Foreign borrowing by Thai residents was allowed but subject to registration at the Bank of Thailand.

Major milestones in the liberalization process between 1985 and 1996 were as follows:

- *Foreign Direct Investment:* In 1991, in addition to amendments in the Investment Promotion Act to promote more foreign investment, the government authorized 100% foreign ownership of firms that export all their output. Also, direct investment by Thai residents overseas was gradually liberalized in 1991 and 1994.
- *Portfolio Investment:* With regard to tax treatment, during 1986 the authorities reduced tax impediments to portfolio inflows, in particular for purchasing Thai mutual

[16] BIS estimate

[17] Large loans made by the IMF or the World Bank to developing countries which may carry strict financial and budgetary obligations or required reforms intended to open recipient countries to private investment and increase the recipient's competitiveness in the global economy. Reforms are usually orientated towards liberalization, privatization and reduction in government expenditure.

[18] "Washington Consensus" is often seen as synonymous with "neo-liberalism" and "globalization".

funds. This was followed in 1991 and 1992 by improvements in the tax treatment of dividends, royalty payments, capital gains, and interest payments on foreign corporate bonds. In 1990, three mutual funds were created to attract foreign investment, and in 1991 repatriation of investment funds, interest and loan repayments by foreign investors were fully liberalized.

- *Foreign Exchange System:* Thailand adopted a dollar-pegged exchange rate regime from 1984 until July 1997. The most important change was the establishment in 1993 of the Bangkok International Banking Facility (BIBF), an offshore financial market, which provided loans in foreign currencies to Thai residents and non-residents, enjoyed tax and regulatory advantages, and aimed at fostering the development of Bangkok as a regional financial center. The restrictions of purchases of foreign exchange by residents and transfers of Baht overseas were also gradually eliminated.
- *Other liberalization measures* adopted during the 1985–96 period included subjecting non-resident Baht accounts at domestic commercial banks to lower reserve requirements.

In the early 1990s, Thailand introduced programs of deregulation and financial liberalization, phased in further liberalization of capital flows, deregulation of financial institution operations, and allowed partial entry of foreign competitors into the domestic financial system. In May 1990 Thailand formally accepted the obligations of Article VIII of the IMF Articles of Agreement. Thereafter, it accelerated the pace of liberalization of currency and capital transactions and substantially lifted the restrictions against foreign direct investment (FDI) in order to boost export-oriented economic growth. From the 1980s to the mid-90, it actively liberalized other forms of capital account transactions than FDI in order to expand capital inflows as well as to promote the domestic financial market. At the same time, it moderated the controls on capital outflows in order to avoid the overheating of the domestic financial market resulting from the large capital inflows. With this respect, in 1990, commercial banks were allowed to lend limited amount of foreign currencies to nonresidents, and to approve the repatriation of proceeds from sales of securities by foreign investors. In 1994, the limits on Thai residents investing abroad to companies that had at least a 25% Thai equity participation was increased. The purchase of capital and money market securities abroad, foreign direct investments exceeding $10 million and purchase of real estate remained subject to BOT approval.

A great jump in the process of opening up the capital account was the approval by the Thai government for the establishment of the Bangkok International Banking Facilities (BIBF)[19] (Haihong, 1999), an offshore financial center, in March 1993 to facilitate the growth of international banking business in Thailand. Since then, foreign capital mainly has flowed in through the BIBF, and bank lending and borrowing, with preferential tax treatment, was available to both residents and non-residents. BIBF was originally intended to stimulate offshore financial transactions, with the aim to develop Bangkok as a regional financial center. By 1994, capital account transactions were highly liberalized and Thailand had a favorable regime for foreign investment.

[19] The main operations of BIBF on the liability side are deposits or borrowing in foreign exchange from abroad, mainly through foreign inter-bank transactions and inter- office borrowings. On the asset side, their main activities are lending in foreign currency to Thai residents (out-in) and non-residents (out-out). BIBF institutions also engage in other standard off-shore banking activities such as loan syndication and foreign exchange transactions in third country currencies, and are also authorized to undertake investment banking activities.

Only some areas were restricted, including that foreign investors were still subject to some restrictions on foreign ownership, in particular with regard to companies listed on the Stock Exchange of Thailand (SET), and to severe restrictions on real estate. Thai investment overseas, in particular by banks and other financial intermediaries, was another area being restricted.

Due to the liberalization of currency and capital transactions as well as due to a large spreads between foreign and domestic interest rates under the dollar-pegged exchange rate regime, short-term capital inflows was accelerated and the outstanding loans by foreign banks to residents grew. The result was a bubble economy, centered in the real estate market. The structural vulnerability of Thai financial sector, along with BIBF mechanism, accelerated the development of two kinds of mismatches, one between liabilities denominated in foreign currencies and assets denominated in Thai baht, the other between short-term liabilities and long-term assets. In July 1997, a crisis was triggered by the floating of the Thai baht. Thailand's experience would also suggest that the crisis was caused by a mismatch in the policy area, between policies to liberalize the capital account and the exchange rate regime, as well as a too hasty liberalization of the capital account, given its vulnerable domestic financial system.

Thailand's promotion of capital inflows combined with other key measures, which included high interest rates and domestic stock market reforms, and rapid economic growth contributed to very substantial net capital inflow in the range of 9-13% of GDP between 1989-1995 (Haihong, 1999). Together with Malaysia, Thailand is one of the countries that received the largest capital inflows in the East Asia region, indeed in the world, relative to GDP. Between 1988–96, according to data from the Bank of Thailand, Thailand received a staggering cumulative amount of US$ 100.3 billion, about 55% of 1996 GDP, or 9.4% of GDP on average (Alba, Hernandez and Klingebiel, 1999). Net capital inflows to non-banks accelerated from approximately $0.8 billion per month in 1991 to $1.6 billion per month at the end of 1995. Prior to the emergence of the crisis, commercial bank debt including BIBF's loans rose from $21 billion to $42 billion from the end of 1991 to 1996, while non-bank private debt increased from $21 billion to $32 billion. It was thus inevitable under such circumstances of rapid capital inflow, ample liquidity and insufficient profitable investment projects to support such a large influx of capital that much investment moved into the stock and property markets. The relative risk and term structure of interest rates in favour of short-term loans led to a significant shortening of the average maturity of Thailand's external debt. In particular, the share of short-term debt rose from 26% in 1989 to 50% by the end of 1995. Due to the restrictions on short-term foreign borrowing in 1995 and 1996 including a 7 percent reserve requirement on foreign borrowing by finance companies, commercial banks and BIBF banks, the share of short-term debt fell to 42% in 1996 and 37% in 1997. This was still relatively high when compared to the emerging market countries' average of 25%.

In response to the rapid credit growth, the monetary authorities launched a number of policy measures, aiming at slowing down credit expansion to a level consistent with the objective of stable economic growth. Examples of the measures included the requirement for BIBFs to submit their credit plans to the authorities, and raising their minimum disbursement from US$0.5 million to US$2.0 million in order to reduce the inflows of BIBF credits (Hataiseree,).

The high growth of the Thai economy over the several pre-crisis years was largely financed by external funds, as reflected by the prolonged current account deficits, of 4.9 to 8.3% of GDP during 1990-1996. In 1996, however, growth and investment levels deteriorated in the face of an appreciating real exchange rate and capital inflow and exports declined sharply. The persistence of a large current account deficit, high interest rates, increasing inflation and the appearance of serious weaknesses in the financial system left the country vulnerable to external shocks and shifts in the market sentiment, triggering a series of exchange rate attacks, banking crises and eventually capital flight the following year (Haihong, 1999).

In the mid of October 1997, Thai authorities announced a financial sector restructuring package including the creation of a Financial Sector Restructuring Authority (FRA) to assess the rehabilitation plans of failed financial institutions (finance companies) and dispose of their assets, an Asset Management Corporation (AMC) to manage and sell the bad assets, as well as the amendment of Bankruptcy Law to facilitate the process of liquidation, tighter loan classification and provisioning rules, and a relaxation of the limit on foreign ownership of financial institutions from 25% to 100% for up to 10 years. The Thai authorities have also been gradually improving the banks' regulatory framework as well as accounting and disclosure rules, but the framework remains less stringent than other emerging markets (Adams, Mathieson, Schinasi and Chadha, 1998). Although the restructuring package and other financial reforms were implemented, it might be less than adequate to provide satisfied results. Consequently, the attempt of restructuring the financial sector scarcely reassured investors, the markets remained unsettled, and GDP continued falling.

As one of the worst affected countries from the late 1990s Asian financial crisis, Thailand was forced to call in the IMF and to embark on IMF-supported and IMF-designed programs to cope with the financial crisis. Thailand started the IMF program in August 1997. In return for financial assistance from the IMF (and other multilateral and bilateral donors), the country committed to float its exchange rate, raise interest rates, tighten fiscal policy (at least initially), open up its financial market to foreigners, close troubled banks and other financial institutions, and undertake a range of other structural reforms.

As an IMF member country, the followings are the policy measures advocated by the IMF during 1990-2002. The IMF advised fiscal tightening, but only occasionally or with apparently less intensity, as a reason that tighter monetary policy through sterilization would be very costly and increasingly difficult to sustain over time. The IMF supported greater exchange rate flexibility, but with varying degrees of intensity over time. In Thailand, the IMF stressed the need for greater exchange rate flexibility in the mid-1990s (1994-1996) when the composition of inflows became more short term, but not in the early 1990s especially in 1991-1992 when there was growing current account deficit and the appreciation of baht was unfavorable. Further trade liberalization and the elimination of restrictions on capital outflows were advised in 1992 and again in 1996 as a supporting policy to cope with the effects of large capital inflows. The measure in the latter year included that domestic pension funds were allowed to invest in foreign assets. In 1992, the IMF also advised a tightening of prudential regulations as a way of dealing with the large capital inflows. For example,

the IMF recommended the Thai authorities to have appropriate provisioning by commercial banks for the guarantee they provided for foreign borrowing. However, capital controls were recommended to impose temporarily in Thailand during 1995-1998, controls on inflows during 1995-1997 and controls on outflows during 1997-1998. When Thailand introduced capital controls on outflows in May–June 1997[20], the IMF argued that it was essential to use the capital controls as a breathing space in which to implement a comprehensive macroeconomic policy.

The chronology of the policy programs in liberalizing capital account in Thailand and supporting measures are as follows.

Table 2: Thailand's Capital Account Liberalization Policy Programs

Year	Policy Programs
1980s	- Capital account liberalization program was started in 1985. - The enactment of the Alien Business Law of 1972 and the Investment Promotion Act of 1977 were prepared to promote foreign investment. - Restrictions on inward long-term investment were eased in the 1980s: ➢ Industrialization policy switched from import substitution to export promotion and preferential treatments awarded to foreign investment. ➢ Preferential treatments for export oriented corporations were expanded in 1986. - As domestic financial markets reform first focused on capital markets, promotion of securities investment by foreigners was implemented from the second half of 1980s: ➢ Maximum withholding tax on dividends and distributed income was lowered in 1985. ➢ Tax on income from mutual funds was lowered in 1986. - Exchange controls still applied to the repatriation of interest, dividends and principal of portfolio investment. - Foreign borrowing by Thai residents was allowed but subject to registration at the Bank of Thailand.
1990s	- Controls on short-term flows and outward investment were eased in the 1990s. - By end 1994, Thailand had a very open and favorable regime for foreign investment: ➢ A 100% foreign owned corporation was allowed in export-related sector in 1991. ➢ Direct investment by Thai residents overseas was gradually liberalized in 1991 and 1994. ➢ In 1990, three mutual funds were created to attract portfolio investment from abroad. ➢ In 1991 repatriation of investment funds, interest and loan repayments by foreign investors were fully liberalized. ➢ Taxes on dividend, interest, and capital gains were reduced in 1992. ➢ Bangkok International Banking Facility (BIBF) was established in

[20] Most of the capital control measures and exchange restrictions introduced were relaxed in January 1998.

	1993 to facilitate international investment. ➢ In 1994, the limits on Thai residents investing abroad to companies that had at least a 25% Thai equity participation was increased, whereas the purchase of capital and money market securities abroad, foreign direct investments exceeding US$10 million and purchase of real estate remained subject to central bank approval. - Foreign investors were restricted on foreign ownership, with regard to companies listed on the Stock Exchange of Thailand (SET), and to severe restrictions on real estate. - Thai investment overseas, in particular by financial intermediaries and banks, was restricted. - In 1995, a 7 percent reserve requirement was introduced on nonresident baht accounts with a maturity of less than one year and on finance companies' short-term foreign borrowing. - In 1996, the 7 percent requirement was extended to short-term baht borrowing by nonresidents and short-term foreign borrowing by commercial and BIBF banks. - In response to a large amount of capital inflow and its impact on growing domestic demand and inflation, the Thai government maintained high interest rate policy in 1995[21]. - Currency controls were introduced in May and June of 1997 to deter currency speculators. - The Bank of Thailand changed from a dollar-pegged exchange rate regime to a managed-float system in July 1997. - Limits on foreign ownership of domestic financial institutions were relaxed in October 1997. - To strengthen prudential regulations, a 6% reserve requirement was imposed on commercial banks' nonresident foreign exchange deposits in 1998. - To strengthen the management of foreign exchange: ➢ The period for which foreign exchange earners can deposit their foreign currency in their foreign exchange account was limited to 3 months in 1997 (extended to 6 month in 2003). ➢ In 1998, export proceeds to be surrendered within 7 days (previously, 15 days) of receipt. - To reduce the fluctuation of local currency: ➢ Baht direct lending to nonresidents was restricted in 1997, and prohibited as the end of 2000 (some exceptions including baht direct lending to entities in neighboring countries under BOT approval permitted in 2001). ➢ In 1998, Thai baht credit facilities provided by each financial institution to nonresident made subject to an outstanding limit of 50 million baht per counterparty (its enforcement strengthened in 2000).

[21] Instead of curbing economic overheating, high domestic interest rates made it even much cheaper for Thai business to borrow foreign loans at lower costs than they could domestically. The Bank of Thailand's effort to slow down an overheated economy by raising interest rates in 1995 caused foreign borrowing to grow even more rapidly. By the end of 1996, foreign borrowing had grown to $31.2 billion. These were mainly short-term loans and most were not hedged against currency fluctuations (Doner and Ramsay, 1999).

	- A financial sector restructuring package was introduced in October 1997: ➢ Financial Sector Restructuring Authority (FRA) was established to assess the rehabilitation plans of failed financial institutions (finance companies) and dispose of their assets. ➢ Asset Management Corporation (AMC) was set up to manage and sell the bad assets, as well as the amendment of Bankruptcy Law to facilitate the process of liquidation, tighter loan classification and provisioning rules, and a relaxation of the limit on foreign ownership of financial institutions from 25% to 100% for up to 10 years. ➢ The Thai authorities have also been gradually improving the banks' regulatory framework, and accounting and disclosure rules. - At the end of January 1998, Thai authorities relaxed most of the control measures introduced in 1997.
2000s	- Further liberalizations: ➢ In 2002, Thai residents were allowed to purchase immovable foreign assets for residential purposes (previously, BOT approval was required). ➢ Issuance of Thai baht denominated bonds by international financial institutions was allowed in 2004. - To reduce the fluctuation of local currency: ➢ Nonresidents maintain domestic or foreign-exchange accounts for settlement purposes only (2003). ➢ Ceilings imposed on the amount that nonresidents deposit with domestic banks and any excess over the limit of total outstanding amount at the end of the day must be surrendered to the BOT at a penalty rate (2003). ➢ Interest was not allowed to be paid on nonresident accounts, except for fixed accounts with maturities of at least 6 months (2003). ➢ Foreign investors were required to deposit 30% of investment in foreign currency in 2006 (terminated on March 3rd, 2008).

Source: Williamson and Mahar (1998), Haihong (1999), Johnston (1997), IMF (2005)

3.2 Policy programs in Malaysia

In Malaysia, capital account was liberalized in 1978 aimed at promoting foreign direct investment particularly in manufacturing export sector. Over the 1970s, Malaysian economic policy followed the footsteps of the original four Asian Tigers[22] and aimed at transition from reliance on mining and agriculture to manufacture. Under pressure from international financial organizations, the Malaysian government liberalized the capital account to allow more FDI into the industrial sector without accepting any support from such organizations. Much of the inflow of foreign capital into Malaysia in the 1970s and 1980s came from Japan, Singapore, Hong Kong and Taiwan, and was directed into specialized export processing ventures. As a result, heavy industries flourished and Malaysian exports became the country's primary growth engine.

The growth of Malaysia's outputs was obstructed by the banking crisis in Malaysia in 1985 and 1986. A strong exchange rate, and influx of foreign investment was a major

22 Four Asian Tigers or East Asian Tigers refers to the economies of Taiwan, Singapore, Hong Kong, and South Korea.

shift in domestic investments towards real estate and speculation in equities in the early 1980s (Sheng, 1989). Combined with fast credit growth, and large fiscal deficits in the early 1980s, they stimulated inflation and price bubbles in real estate and stock markets. During this period, banks' exposure to the real estate sector grew considerably. The countercyclical policies that followed led to a recession in 1985-1986 and subsequently the bubble burst. By 1986, real estate prices had declined by 60-70% relative to 1983. As collateral-based bank lending in Malaysia, the collapse of stock and real estate price bubbles contributed to banking problems, leading to bank runs and financial institution failures (Soledad and Peria, 2002). Bank Negara Malaysia introduced a series of policy measures designed to address the macroeconomic impact of the recession on the banking system in 1985 and 1986. These included an extensive reform of the Bank's export credit refinancing scheme to promote exports, the creation of a l-billion-ringgit New Investments Fund to shift bank lending out of real estate to the productive (tradeables) sectors of agriculture, manufacturing, and tourism, and the reduction of liquidity reserve ratios of the commercial banks to lower their effective cost of funds. The Bank Negara Malaysia also introduced a more flexible interest rate regime by freeing deposit rates, and encouraged the establishment of a secondary mortgage market to securitize long-term housing loans. The exchange rate was allowed to move more freely with some intervention to stabilize sporadic speculative bouts. The Central Bank also put into place in 1985/86 a number of regulatory changes designed to strengthen the structure of the banking system and its own regulator powers to prevent and control damage arising from the recession (Sheng, 1989). As a result, banking performance was improved as seen from a substantial decline in non-performing loans from 30% of total loans in the banking system in 1988 to 25% in 1989, 20% in 1990 and 15% in 1991.

In September 1986, the government adopted a program of supporting further capital account liberalization by further deregulating inward foreign direct investment, followed by the deregulation of portfolio investment for the purpose of capital market development. In 1990, Malaysia established the Labuan offshore financial center functioning as Thailand’s BIBF that was established three years later. Capital inflows to Malaysia were characterized by equity portfolio investment since the government had made fostering the domestic stock market its top priority.

In response to a surge of speculative inflows in late 1993 betting on an appreciation of the ringgit, controls on short-term and portfolio inflows temporarily reimposed in 1994. In January 1994, Malaysian residents were prohibited from selling short-term monetary instruments to non-residents, banks were restricted in outright forward and swap transactions they could engage in with foreigners, and they were also subjected to a ceiling on their external liabilities not related to trade or investment. The restrictions were abolished in August the same year. As a result, capital inflows declined in 1994 and then increase by smaller amount after the controls were lifted. The ringgit depreciated in 1994 (after appreciated in 1992) and then slightly appreciated after the controls were lifted. These restrictions also resulted in a sharp reduction in short-term liabilities that helped Malaysia enter the Asian financial crisis in 1997 with relatively strong fundamentals and a much smaller share of short-term external debt in total (Kaplan and Rodrick, 2001).

Facing with the 1997/98 financial crisis, Malaysia took a different path from other crisis countries. Instead of going to the IMF, in 1998 the Malaysian authorities imposed controls on capital-account transactions, fixed the exchange rate at RM3.80 per US$, cut interest rates, and embarked on a policy of reflation[23]. As a counter-measure of capital inflow restrictions, the government introduced controls on capital outflows in August 1998, including a restriction on access to domestic capitals by non-residents (lending to non-residents) to prevent foreign reserves from drying up as a result of currency defense. In September 1998, Malaysian residents were forbidden to export more than RM10,000 during any travels abroad, while non-residents were forbidden to export more than RM1000 upon leaving Malaysia. After September 1, 1998, non-resident sellers of Malaysian securities were required to hold on to their ringgit proceeds for at least 12 months before repatriation was to be allowed. Additionally, the authorities imposed a ban on the provision of domestic credit to non-resident correspondent banks and stock-broking companies. Like the currencies of other crisis-hit economies, the ringgit fluctuated wildly until mid-1998, weeks before the ringgit was fixed at RM3.8 against the US dollar (a rate that represented a 10% appreciation relative to the level at which the ringgit had been trading immediately before the controls) on September 2nd, 1998. The fixed exchange rate decision was opposed to the measure that the IMF suggested crisis-hit economies to float their currencies.

The followings are the rationale of the policies imposed on capital restriction in September 1998 and the removal of the controls afterward. In response to the crisis and the reversal of capital flows out of the region, Malaysian authorities firstly implemented an orthodox adjustment policy. Interest rates were raised to stem the decline of the ringgit, and in December 1997 a drastic cut (18%) in government spending was announced. This policy package was similar to IMF programs implemented elsewhere, and was pushed through by Deputy Prime Minister Anwar Ibrahim. Anwar also made clear that he was committed to exchange-rate flexibility and that capital controls would not be implemented. Meanwhile Prime Minister Mahathir was blowing off steam against financial market speculators, and sending very different signals. The Malaysian economy failed to respond to the orthodox policies. Consumption and investment demand plunged as a result of capital outflows, high interest rates, and a pessimistic outlook. This gave the opponents of Anwar's policies the upper hand, and at the end of June, 1998, Mahathir appointed Daim Zainuddin, a former finance minister, as minister in charge of tasks relating to economic development. Daim was told to formulate an alternative to Anwar's policies. Daim and Mahathir were intent on reflating the economy through cuts in interest rates and credit expansion, but there was little effective change in monetary policy. The attempt to reduce domestic interest rates was obstructed by growing speculation against the ringgit in offshore markets. Offshore institutions (mainly in Singapore) borrowed ringgit at premium rates (double or triple the prevailing interest rates in Malaysia) to purchase dollars and bet in favor of the ringgit's collapse. As a result, the economy's decline continued.

On February 15th, 1999, the Central Bank of Malaysia changed the regulations on capital restrictions. The one-year holding period for the repatriation of portfolio investment was replaced by an exit levy in which principal and profits were allowed

[23] Reflation refers to the act of stimulating the economy or increasing a country’s output.

to be repatriated by paying an exit tax that the amount of which was determined by the duration of the investment. For all capital having entered Malaysia before February 15th, 1999, 30% exit tax has to be paid on the capital repatriated within the first 7 months after entering Malaysia, 20% if repatriated between 7 and 9 months after entry, 10% if repatriated between 9 and 12 months of entering, and no levy if repatriated after one year of entry. For funds entering Malaysia after February 15th, 1999, capital was free to enter and leave without taxation, however, profits were taxed at the rate of 30% if repatriated within one year of entry and 10% if repatriated after one year of entry.

Nonetheless, the government was concerned about the impact of the controls on future capital inflows, particularly on foreign direct investment (FDI) on which the Malaysian economy is highly dependent. The authorities therefore took pains to ensure that the controls would not affect FDI or current account transactions. Repatriation of profits and dividends from (documented) FDI activities were freely allowed. Foreign currency transactions for current-account purposes (including the provision of up to 6 months of trade credit for foreigners buying Malaysian goods) were also not restricted.

The objective of the capital restriction was also to end speculation against the ringgit. Most of that speculation was coming from short-selling of the ringgit in offshore (mainly Singaporean markets). These markets were offering high interest rates to attract ringgit deposits. To shut down offshore trading, the government mandated that all sale of ringgit assets had to go through authorized domestic intermediaries, effectively making offshore trading illegal. All ringgit assets held abroad had to be repatriated to boost capital inflows. Worried that these measures would lead to more outflows of capital and further depreciation of the currency, the Malaysian government also banned for a period of one year all repatriation of investment held by foreigners. Simultaneously, in an attempt to revive aggregate demand, Malaysia lowered the 3-month Bank Negara Intervention Rate[24] from 9.5% to 8% on September 16th, 1998. On February 15th, 1999, the Central Bank of Malaysia changed the regulations on capital restrictions, shifting from an outright ban to an exit levy and replacing the levy on capital with a profits levy on future inflows. The controls are described more fully in Table 4.

Along with the capital account liberalization policy, the Malaysian authorities also introduced several supporting policies and measures in reforming the financial and corporate sectors, strengthening regulation and supervision of financial markets, implementing corporate governance reforms, and protecting the economy from foreign exchange exposure. For example, foreign borrowing was restricted in order to protect the corporate and banking sectors from external risks. Malaysia's short-term debt thus stood well below its foreign exchange reserves, which made it less prone to a run by foreign creditors and the exposure to foreign exchange risk. However, as a country with a very high level of indebtedness overall, Malaysia was quite vulnerable to turnarounds in general market sentiment that would be reflected in an increase in interest rates or reduction in credit availability. In October 1997, Malaysian

[24] From February 1998, BNM announced the 3-month Intervention Rate as its policy rate to the public, and from September 1998, the 3-month Intervention Rate was directly linked to the Base Lending Rate (BLR) of the banking institutions, expediting the transmission from the operational target to the market.

authorities required banks to submit individual credit growth plans in an attempt to restrict overall credit growth to 25% in 1997 and 15% in 1998, aiming to lower the degree of leverage of the economy and thus reduce the vulnerability of the financial system from foreign capital. Until the first quarter of 1998, the policy of the Malaysian authorities had been to inject liquidity into the interbank market in order to keep interest rates low. In order to counter the expected property price deflation, the government announced in May 1998 that foreign investors are allowed to buy all types of residential and commercial property without restriction if the cost of the property is a minimum $65,000 and financing is obtained overseas. Like in Thailand, an asset management company, Danaharta, was established in May 1998 to manage and liquidate bad assets of the financial system that was enhanced by the relaxation of foreign ownership rules to allow foreign investors to invest in the liquidated assets. The supervisory and regulatory framework was regarded by market participants to be improved with a series of measures designed to bring it to international best practices. For example, the shortening of the classification of non-performing loans from 6 months to 3 months, the adoption of capital adequacy standard, and the provision to publish such bad loans and financial institutions' capital adequacy. In addition, the government budget of 3 billion ringgit (US$789.5 million) was spent on infrastructure development in the early 2000s.

The chronology of the policy programs in liberalizing capital account in Malaysia and its supporting measures are as follows.

Table 3: Malaysia's Capital Account Liberalization Policy Programs

Year	Policy Programs
1970s	- Capital account was liberalized in 1978, aiming to promote foreign direct investment into industrial sector.
1980s	- Dealing with the banking crisis, Bank Negara Malaysia introduced a financial restructuring program in 1985 and 1986: (1) A reform of the Bank's export credit refinancing scheme to promote exports (2) A setting up a l-billion-ringgit New Investments Fund to shift bank lending out of real estate to the productive (tradeables) sectors (3) A reduction of liquidity reserve ratios of the commercial banks to lower their effective cost of funds (4) An adoption of a more flexible exchange rate regime with some interventions (5) An adoption of a more flexible interest rate regime by freeing deposit rates (6) The establishment of a secondary mortgage market to securitize long-term housing loans (7) Regulatory changes to strengthen the structure of the banking system and central bank regulator powers. - Inward foreign direct investment was deregulated further in September 1986, followed by the deregulation of portfolio investment.
1990s	- Labuan offshore financial center was established in 1990 to facilitate international financial transactions. - Controls on short-term and portfolio inflows were temporarily reimposed in January 1994:

	(1) Malaysian residents were prohibited from selling short-term monetary instruments to non-residents. (2) Banks were restricted in outright forward and swap transactions they could engage in with foreigners. (3) Banks were subjected to a ceiling on their external liabilities not related to trade or investment. - In August 1994, the authorities eliminated most of the inflow controls. - The government introduced controls on capital outflows in August 1998, including a restriction on access to domestic capitals by non-residents (lending to non-residents) to prevent foreign reserves from drying up. - Capital and exchange controls were imposed on September 1-2, 1998: (1) Malaysia fixed the exchange rate at RM 3.80 per $US (2) Prior approval was required for nonresidents to be able to buy or sell ringgit forward. (3) All sale of ringgit assets was required to be transacted through approved domestic intermediaries. (4) Nonresidents were required to obtain BNM approval to convert ringgit held in external accounts into foreign currency, except for the purchase of ringgit assets in Malaysia or for the purposes of conversion and repatriation of sale proceeds of investment made by foreign direct investors. (5) Settlements of imports and exports became required to be settled in foreign currency. However, free exchange was maintained for all current account transactions in addition to supply of trade credit to non-resident exporters of Malaysian goods. (6) Credits to External Accounts were limited to sale of foreign currency, ringgit instruments, securities or other assets in Malaysia; salaries, wages, rentals commissions, interest, profits, or dividends. (7) Debits to External Accounts were restricted to settlement for purchase of ringgit assets and placement of deposits; payment of administrative and statutory expenses in Malaysia; payment of goods and services for use in Malaysia; and granting of loans and advances to staff in Malaysia. (8) Domestic nationals exported not more than RM10,000 during any travels abroad. Foreign nationals exported not more than RM1,000 upon leaving Malaysia. (9) Imposition of a one-year holding periods for the repatriation of Malaysian securities proceeded by non-resident sellers (after September 1, 1998). (10) Ban on the provision of domestic credit to non-resident correspondent banks and stock brokers. - On February 15th, 1999, the one-year holding period for the repatriation of portfolio investment was replaced by an exit levy in which principal and profits were allowed to be repatriated by paying an exit tax (the amount of which was determined by the duration of the investment). (1) For capital having entered Malaysia before February 15th, 1999: *a)* 30% if repatriated within the first 7 months after entering Malaysia, *b)* 20% if repatriated between 7 and 9 months after entry, *c)* 10% if repatriated between 9 and 12 months of entering, and

	d) no levy if repatriated after one year of entry. (2) For funds entering Malaysia after February 15th, 1999: *a)* capital was free to enter and leave without taxation, *b)* profits were taxed at the rate of 30% if repatriated within one year of entry and 10% if repatriated after one year of entry. - As supporting policies and measures: (1) Foreign borrowing was restricted in order to protect the corporate and banking sectors from foreign exchange risk. (2) In October 1997, banks were needed to submit individual credit growth plans to Malaysian authorities in an attempt to restrict overall credit growth. (3) To counter the expected property price deflation, the government announced in May 1998 that foreign investors are allowed to buy all types of residential and commercial property without restriction if the cost of the property is a minimum $65,000 and financing is obtained overseas. (4) Until the first quarter of 1998, the policy of the Malaysian authorities had been to inject liquidity into the interbank market in order to keep interest rates low. (5) An asset management company, Danaharta, was established in May 1998 to manage and liquidate bad assets of the financial system. The liquidation was accelerated by the relaxation of foreign ownership rules introduced in the same year. (6) The 3-month Bank Negara Intervention Rate was reduced from 9.5% to 8% on September 16th, 1998 to stimulate aggregate demand. (7) The supervisory and regulatory framework is regarded by market participants to be improved with a series of measures designed to bring it to international best practices.
2000s	- The exit levy imposed in 1999 was entirely abolished in 2001. - As a supporting measure, the government budget of 3 billion ringgit (US$789.5 million) was spent on infrastructure development in the early 2000s.

Source: Williamson and Mahar (1998), Kaplan and Rodrick (2001), IMF (2005)

3.3 Analysis of policy programs in Thailand and Malaysia

The successes and failures of capital account policy programs in Thailand and Malaysia will be analyzed based on the preconditions that have been described in section 2.3 of this research. Recalling the preconditions, before the liberalization of capital account to be put in place, a country should have sound and sustainable macroeconomic policies aiming particularly to ensure the consistency of exchange rate policy with other macroeconomic policies, financial sector reforms in order to support macroeconomic stability, strengthened prudential regulation and supervision pointing to help manage risks in liberalization, well sequencing by liberalizing long-term capital flows ahead of short-term flows, and the absence implicit government guarantee aiming to discourage moral hazard behaviors of investors and financial institutions.

The followings will be emphasized on the successes and failures of capital account liberalization policy programs that have been carried out in Thailand and Malaysia.

The evidence of Thailand shows that one of the factors causing the economic crisis was the rapid elimination of external capital controls, especially over capital inflows, without first fulfilling the preconditions. Thailand had inconsistent macroeconomic policies, inadequate financial sector reforms, lack of prudential supervision and regulation and implicit government guarantees, while the timing of liberalizing long- ahead of short-term flows was proper.

(1) In Thailand there was a failure in coping with the inconsistent macroeconomic policies, including high interest rate policy, monetary policy and exchange rate policy. Firstly, in response to a large amount of capital inflow in the aftermath of the liberalization from 1985 to 1997 and its impact on growing domestic demand and inflation, the Thai government chose to maintain a high interest rate policy hoping to increase more savings that would lead to a decline in domestic demand and inflation. Instead of decelerating economic overheating, high domestic interest rates made it even much cheaper for Thai business to borrow foreign loans at lower costs than they could domestically. The Bank of Thailand's effort to slow down an overheated economy by raising interest rates in 1995 caused foreign borrowing to grow even more rapidly. By the end of 1996, foreign borrowing had grown to US$31.2 billion. These were mainly short-term loans and most were not hedged against currency fluctuations. Secondly, with regard to the effectiveness of monetary policy, Thailand's opening up of the capital account also had important implications for the mechanism through which the effects of monetary policy are transmitted to the real economy. One example is the deterioration of the effectiveness of monetary policy conducted through the credit channel. The establishment of BIBFs in 1993 enhanced access to overseas financing which helped bring down the cost of funds. As a result, bank credits including BIBFs grew at a rapid rate, averaging 23%, in the period 1993-1996 (Haihong, 1999). In response to the rapid credit growth, the monetary authorities launched a number of policy measures, aiming at slowing down credit expansion to a level consistent with the objective of stable economic growth. However, the private sector had greater direct access to foreign financing, enabling them to bypass any domestic financial intermediary, thus deteriorating the effectiveness of monetary policy conducted through the credit channel. Thirdly, Thailand maintained a rigid exchange rate system by pegging the baht to a basket of currencies with the US dollar weighted at 90% of the total for many years until the crisis broke out in 1997. This policy posed problems for monetary policy autonomy in defending the currency particularly when capital inflows reversed and the country's foreign reserves were drying up.

(2) Thailand had fragile financial system and the implementation of a series of financial sector reforms seemed to be inadequate to help strengthen the economy. The Thai financial system was somewhat over-banked relative to other modes of financing and the total output of the economy. This bank-dominated financial system contributed to the excessive growth of credit. Increased foreign capital inflows under an open capital account enlarged this excessive lending. Additionally, collateral-based lending by banks and large re-lending to real estate sector by corporations in Thailand made the excessive lending very vulnerable to assets deflation. With an open capital account, large amounts of foreign capital flowed into the real estate sector. Domestic banks played the role of intermediation. The boom of massive capital inflows stimulated further expansion of lending in the Thai financial system. As overall

economic activities began to slow down in 1996, the stock and property market prices came under severe pressure. Since these assets had also been used as collateral for loans, the health of the lending institutions became a concern for the investors, including foreign investors who could withdraw their money instantly. Although the Thai authorities have put in place a financial sector restructuring package in October 1997 aiming to get rid of non-performing assets of weak financial institutions and improve regulatory and supervisory standards, the attempts were not fruitful enough to help the economy from further slowdown in a timely period. For example, the evidence of capital market development was rarely as seen from slow expansion of capital stock from 23% of GDP in 1975 to 27% of GDP in 1985, and more stable at 41% of GDP during 1991-1996, even if there was a high growth of capital stock during 5 years after the liberalization from 26% of GDP in 1986 to 40% of GDP in 1990. In addition, non-performing loans in Thai banking system remained high. Although the establishment of the asset management company helped reduce the NPLs from the peak of 45% of total loans during the 1997/98 crisis to 18% at the end of 2000, they remained at the high level compared to 10% in Malaysia and 8% in South Korea at the end of 2000[25].

(3) Thailand had problems with prudential supervision and regulation. The regulation to manage risks associated with short-term inflows, short-term foreign borrowings in particular, was minimal (short-term foreign borrowings was allowed with the registration at the Bank of Thailand) that caused the mismatch between short-term foreign liabilities and long-term domestic assets taken place in the aftermath of the liberalization particularly during the 1997/98 crisis. Besides, the Thai financial system before the crisis lacked the transparency and disclosure of timely and reliable information. For instance, the figures for non-performing loans were first released only in June 1997. The failure of the Bangkok Bank of Commerce was also an example of inadequate supervision and regulation of the authorities. Lax supervision and regulation, and the lack of transparency in the Thai financial system played a crucial role in the misallocation of economic resources, especially the misuse of large amounts of capital inflows which were supposed to be a benefit to the country's economy from opening up the capital account. However, the Thai authorities took efforts in applying international best practices to financial institutions in Thailand including the adoption of standard capital adequacy (Basel standard) and accounting system (International Accounting Standards: IASs).

(4) The Thai authorities took into account the risks associated with short-term capital flows and liberalized inward long-term flows since the beginning of the liberalization program, before the controls on short-term flows of investment were eased in the early 1990s. The promotion of FDI helped boost the economy as seen from the rapid increase of GDP per capita after the liberalization until it was obstructed by the Asian financial crisis in 1997.

(5) In addition, there was the existence of implicit government guarantees and thus moral hazard. Those guarantees existed in various areas. First, the pegged exchange rate regime before 1997 provided an implicit guarantee of currency value. In other words, short-term assets in Thai baht had fixed nominal values, so that in practice,

[25] Sources: Bank of Thailand, Bank Negara Malaysia and Japan Institute of International Monetary Affairs

there was effectively an implicit guarantee of the value of those assets in foreign currency. Hence the exchange risk premium remained low and investors kept up their confidence in Thailand's financial situation. However, this guarantee was ended when there was a massive capital outflow in 1997 and the Bank of Thailand decided to float Thai baht. Second, even if bank entry barriers were eased in 1990, implicit government guarantees existed for Thai commercial banks and other financial institutions. It meant that both getting into and out of the system (to let a financial institution fail) were still difficult in Thailand. Although the establishment of the BIBF allowed partial entry into the domestic financial system, the core banking business has long remained in the hands of local institutions. As a matter of fact, the combination of economic and political influences ensured that Thai-owned commercial banks would not be allowed to fail. Additionally, the banking system in Thailand continued to have an oligopolistic structure that was reflected in large spreads between the deposit and lending rates of 5.5% over the period 1985-1996 (Johnston, 1997), compared to an average of 1.5% spreads in Malaysia over the same period. With this safety net, Thailand's bankers and financial institutions were encouraged to finance risky projects in the expectation that they would enjoy the profits while the government would cover serious losses, which made many banks vulnerable to asset deflation. In 1994 and 1995, when the Bangkok Bank of Commerce got into trouble and a run on the bank began, the Bank of Thailand provided a liquidity support with nearly $7 billion through the Bank's Financial Institutions Development Fund (FIDF). Such safeguards became extremely difficult and had to be abandoned in 1997 when the Bank of Thailand was confronted with the tasks of supporting troubled banks and defending the value of baht from foreign speculators. The continuing instability of the financial system led the authorities to announce a financial sector restructuring package by mid-October 1997, but the markets remained unsettled.

In case of Malaysia, the policy programs of capital account liberalization were implemented in more appropriate manner without participating in the IMF program. Compared to the preconditions, the relatively appropriate manner of Malaysian capital account liberalization program is illustrated as follows.

(1) Consistent macroeconomic policy in Malaysia helped sustain the economy. Malaysian capital account policy programs took a role in enhancing the economy and at the time of the crisis they can also protect the country from economic slowdown. Macroeconomic policy relating to capital account liberalization can be categorized into three phases. The first phase was leaded by 'deregulation policies' from 1970s to the mid 1990s, aiming to promote FDI flowing into Malaysia, supported by the establishment of Labuan offshore financial center in 1990. Concerning risks associated with short-term capital inflows, the restriction on foreign borrowing led to the reduction of foreign debt to GNP ratio from 84.4% in 1986 to 51.6% in 1989, and the authorities also temporarily reimposed controls on short-term and portfolio inflows in 1994. The second phase occurred during the period of large capital outflows starting from 1996 to the end of the decade as a result of massive portfolio investment since the mid 1980s, coincided with the currency crisis from the devaluation of Thai baht and the financial crisis in the region. This second phase was induced by a 'capital control regime', including controls on outward capital flows and the switch to the fixed exchange rate regime. The restriction on foreign borrowing turned up to be fruitful in protecting Malaysian financial and non-financial enterprises

from increasing foreign debt burden as a result of a sharp depreciation of the ringgit during the crisis years in 1997 and 1998, before it was pegged between the late of 1998 and July 2005 to avoid the fluctuation of the currency. Besides, low interest rate policy in September 1998 helped revive domestic demand and boost economic expansion. Although there has been much criticism of the reintroduction of capital controls, Malaysia successfully overcame the crisis without IMF support, defended its currency, which was pegged to the US dollar, against speculative capital movement, and finally achieved economic recovery. Malaysia's GDP growth rate turned to be positive since 1999 after having a one-year negative rate at -7.4% in 1998. Its income per capita also became an increasing trend after dramatic decline in the crisis year. The third phase was leaded by 'economic development policy' starting from the year 2000. In order to re-benefit from capital account liberalization, most of controls were abolished and the ringgit was float to be in line with the allowance of capital movements. Furthermore, infrastructure development program was in place to support the growth of the economy.

(2) Effective financial sector reforms were implemented in Malaysia, as an attempt to recover from the Malaysian banking crisis, without support from the IMF. Although Malaysia (and Thailand) did not fulfill the preconditions before the liberalization, Malaysia can to some extents fulfill them during the liberalization program. After Malaysia faced with the banking crisis in 1985, it took efforts to restructure its banking system. The government achieved in debt restructuring in its financial reform package by reducing non-performing loans in Malaysian banking system from 30% of total loans in 1988 to 4% in 1997 before it rose to 14% in the 1998 crisis year. After the crisis, Danaharta, an asset management company set up in 1998, disposed approximately 80% of loan purchased giving rise to the reduction of NPLs to 6% in 2005. To strengthen financial sector profitability, the government mandated bank mergers to 10 anchor banks instead of closing weak financial institutions. In capital market, Malaysian government had made fostering capital market development its top priority. As a result the capital stock in Malaysia grew substantially from 22% of GDP in 1987 to 43% of GDP in 1997 before it declined since the Asian financial crisis.

(3) Malaysia had relatively improved prudential regulation and supervision. In light of the disclosure of financial information, Bank Negara Malaysia provided financial and economic statistics to the public that many of the information were dated back to 1980s period of time. For example, the figures for non-performing loans were first released in 1988, whereas in Thailand they were first released in a decade later. In the mid 1990s, the Malaysian authorities put effective regulation on short-term capital inflows that helped reduce the likelihood of sudden outflows or capital flight during the crisis years. In addition, the supervisory and regulatory framework, stimulated by market participants, was improved with a series of measures designed to bring it to international best practices.

(4) Malaysian government, similarly to Thai authorities, implemented the liberalization program toward long-term direct investment at the beginning stage, followed by the deregulation of short-term flows. In view of short-term flows, there was also an evidence of temporary controls on short-term capital and portfolio investment in an attempt to sustain macroeconomic environment from large capital inflows.

(5) Implicit government guarantee is hardly seen in Malaysia. Malaysia adopted a flexible exchange rate regime before the liberalization program was introduced. Only to deal with the financial crisis, the authorities pegged the ringgit to the US dollar in September 1998 and unpegged it on July 21st, 2005. In light of an implicit guarantee on bank entry and exit, although there has been no new license for foreign banks since 1973, some foreign participations in joint ventures were permitted. The banking crisis in 1985 and 1986 propelled a number of weak commercial banks and finance companies into insolvency and financial distress. The Malaysian authorities consequently introduced a rescue package, including the merger of banking institutions, to restore stability in the banking sector. Moreover, the Malaysian banking sector was less oligopolistic compared to the banking sector in Thailand, reflected by small spreads between the deposit and lending rates of 1.5% on average over the period 1985-1996, compared to 5.5% in Thailand during the same period of time.

4. Policy outcomes on economic growth in Thailand and Malaysia: Before, during and after the crisis

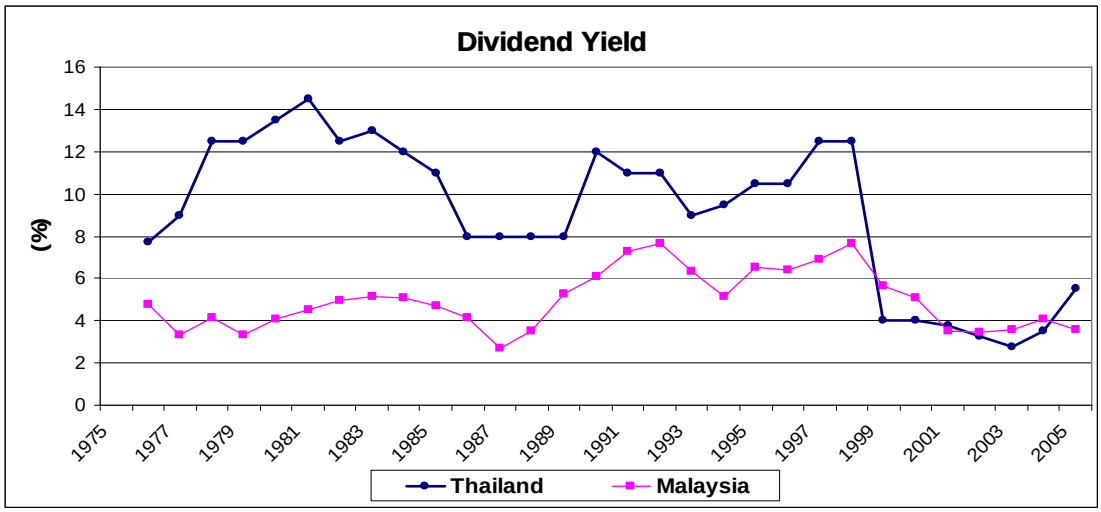
In this chapter, the attempt is to investigate the outcomes from implementing capital account liberalization policy programs by Thai and Malaysian authorities on economic growth in Thailand and Malaysia. According to the theoretical predictions and evidences of the impacts of capital account liberalization on economic growth presented in section 2.2 of this paper, liberalizing the capital account can have the impacts on growth through three channels. First, capital account liberalization can promote economic growth through an efficient allocation of resources explained by the mechanism of a reduction in the cost of capital caused by the free flow of capital from capital-abundant countries to capital-scarce countries, an increase in the investment due to relatively lower cost of investment, and thus a rise in the growth rate of output per worker during the aftermath of the liberalization. Second, the liberalization can also enhance growth by promoting financial depth in the country. Free capital movements contribute, both domestically and internationally, to the efficiency of the financial system and the development of financial markets by strengthening competition and allowing technology and skill transfers. The financial depth factor can be measured by looking at the overall size of the financial intermediary sector, and alternatively at credits issued to the private sector as the proportion of GDP. Third, as the other side of the coin, capital account liberalization can provide negative impacts to the economy. Under inappropriate sequencing of the liberalization policy, opening the capital account may harm a country's macroeconomic stability by disturbing current account and domestic bank credits for instance that may eventually deteriorate its economic sustainability.

The followings are to explore how Thai and Malaysian economies are affected by their capital account liberalization policy programs, recalling that the period before the crisis refers to the year 1975-1996, during the crisis refers to 1997-1998, and after the crisis refers to 1999-2005, while the 1985/86 Malaysian banking crisis is sporadically the issue.

4.1 Positive impacts of capital account liberalization on economic growth

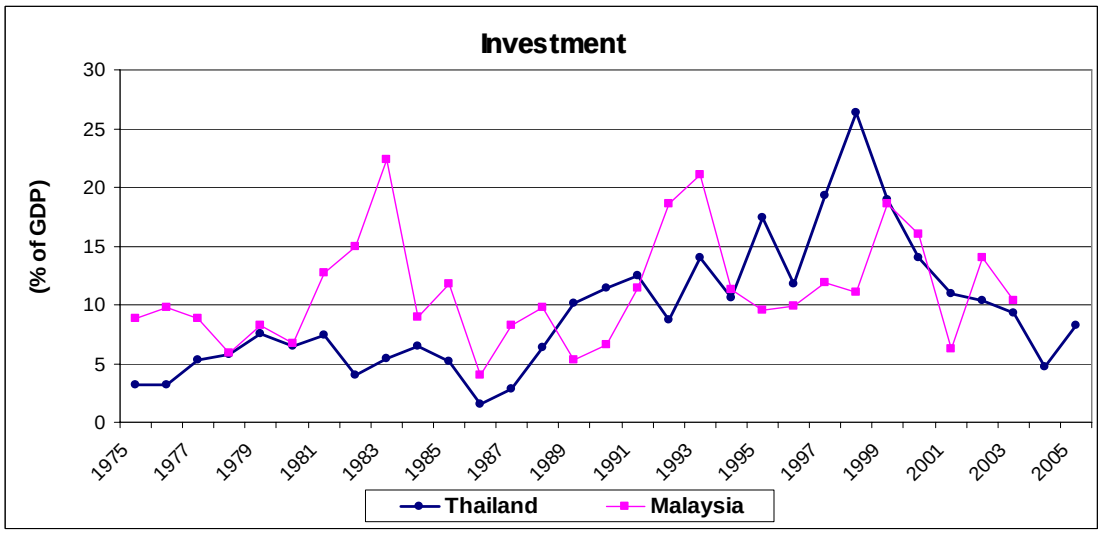
Following the theoretical predictions and evidences mentioned above, the positive impacts of capital account liberalization on economic growth in Thailand and Malaysia can be assessed by exploring the effects of the resource allocation on the cost of capital, investment and thus the country's output per worker. Figure 8 shows the cost of capital in Thailand and Malaysia that is derived from dividend yield in capital market. Figure 9 shows the investment level that is derived from the sum of inward and outward direct, portfolio and other investment of the countries as a percentage of GDP. And due to data scarcity of numbers of employed people, the output per worker will be represented by GDP per capita that is displayed in Figure 10.

Figure 8: Cost of capital in Thailand and Malaysia



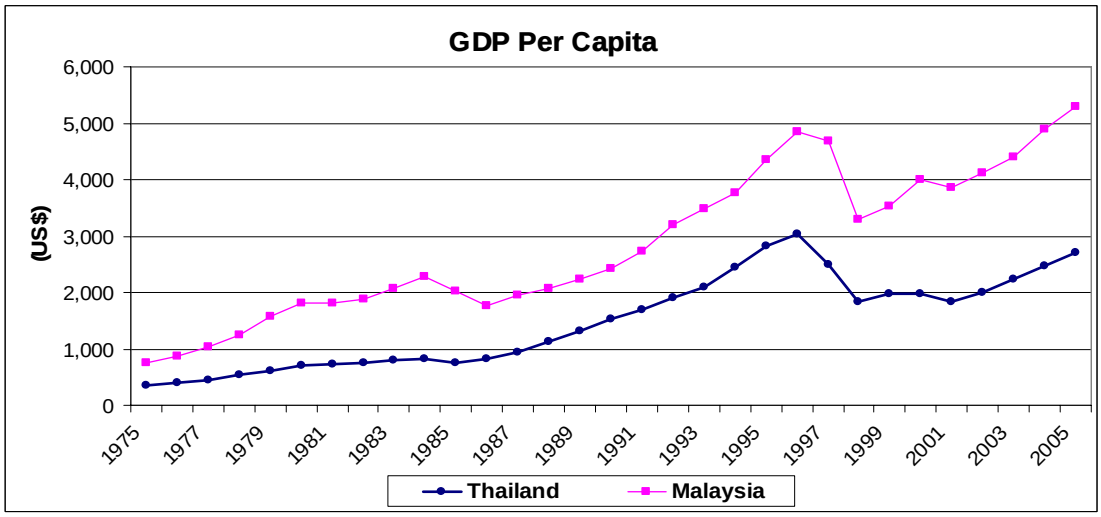
Source: International Financial Statistics (IFS), IMF

Figure 9: Investment of Thailand and Malaysia



Source: International Financial Statistics (IFS), IMF

Figure 10: Output per capita of Thailand and Malaysia



Source: International Financial Statistics (IFS), IMF

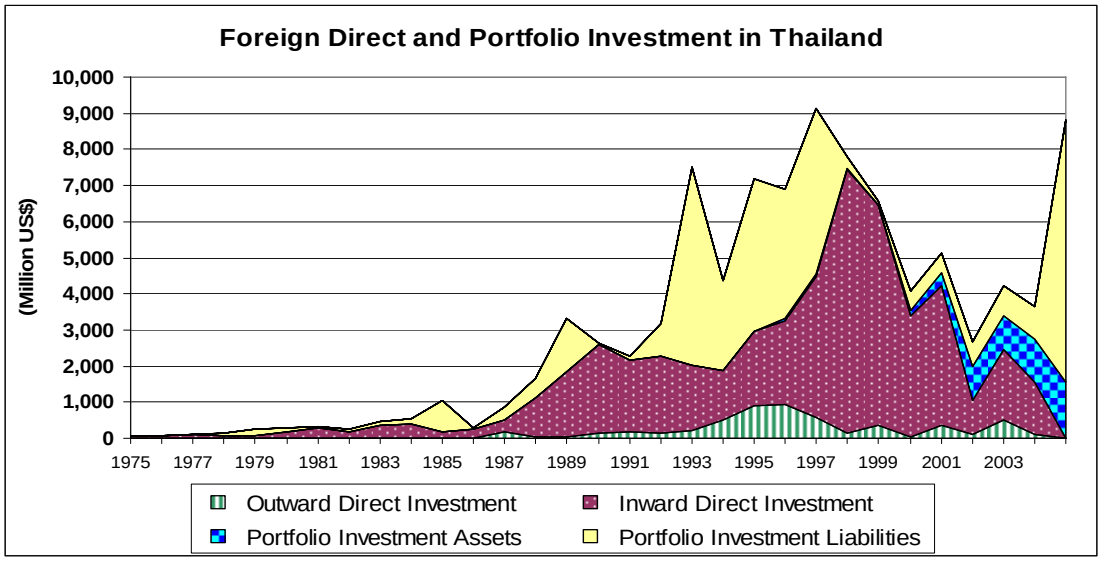
Form Figure 8, the cost of capital in Thailand declined immediately after the Thai authorities liberalized the capital account by lifting the restrictions on inward long-term investment in the mid 1980s. The cost of capital reduced from 11% in 1985 to 8% over the year 1986-1989. Although the rates increased to 12% in 1990, 9% in 1993 and hit the highest rate at 12.5% in the 1997/1998 crisis years, they remained lower than the average rate during five years before the onset of the liberalization programs (13% during 1979-1984). The cost of capital sharply declined after the crisis as a result of macroeconomic policy aiming at economic recovery. The sharp reduction of the cost of capital also took place at the time that the Thai authorities abolished in January 1998 most of capital controls imposed during the 1997 financial crisis. In Malaysia, the cost of capital during the liberal years in 1980s was lower than in 1990s that the Malaysian authorities imposed controls on capital inflows in 1994 and capital outflows in 1998 (average of 4.29% during 1978-1989, compared to 6.56% during 1990-1999). From the year 1999, the cost of capital continued to decline due to the economic recovery policy package that was at the same time as the Malaysian authorities eased most of the controls imposed during the crisis years.

Principally, the reduction of the cost of capital leads to an increase in investment. From Figure 9, total investment in Thailand and Malaysia increased rapidly after the liberalization and the reduction of cost of capital. Investment in Thailand rose from 5.2% of GDP in 1985, the first year of the liberalization, to 11.8% of GDP in 1996, one year before the 1997/98 financial crisis, with an average of 9.4% of GDP over the pre-crisis period. Investment in Thailand continued to rise during the crisis years to the highest level of 19.3% and 26.3% of GDP in 1996 and 1997 respectively that was due to the substantial decline in GDP in those couple crisis years. After the crisis, investment declined dramatically to 4.7% of GDP in 2004 before it started to rise to 8.3% of GDP in 2005 with an average of 9.4% of GDP over the post-crisis years of 1999-2005. Figure 11 shows that inward direct investment to Thailand grew more rapidly than direct investment abroad by Thai residents as a result of that the restrictions on inward long-term investment were eased in the mid 1980s. At that time, industrialization policy switched from import substitution to export promotion and preferential treatments awarded to foreign investment particularly for export oriented corporations.

In Malaysia, investment increased from 5.9% of GDP in 1978, the first year of the liberalization, to its peak of 22.4% of GDP in 1983 before it considerably declined to 4% during the 1985/86 banking crisis. After the Malaysian banking crisis, investment's trend increased to 21% of GDP in 1993 before it fell to an average of 10.8% of GDP 5 years afterward due to the temporary imposition of controls on capital inflows in 1994 and on capital outflows in 1998. After the 1997/98 Asian financial crisis, investment in Malaysia turned to increase to 18.6% of GDP in 1999 and tended to fall afterward to 10.4% of GDP in 2003 as a result of a very high growth of GDP from an attempt of the government in boosting Malaysian economy. Figure 12 shows that foreign direct investment in Malaysia slightly increased after the first year of the liberalization. Such inward direct investment declined due to the Malaysian banking crisis and then increased dramatically until the year before the country was hit by the Asian financial crisis in 1998. The increase was slightly impeded by the controls on inward short-term foreign direct and portfolio investment that were temporarily reimposed in 1994 to deal with massive capital flows into Malaysia, whereas the increase was stimulated by the relaxation of capital outflow

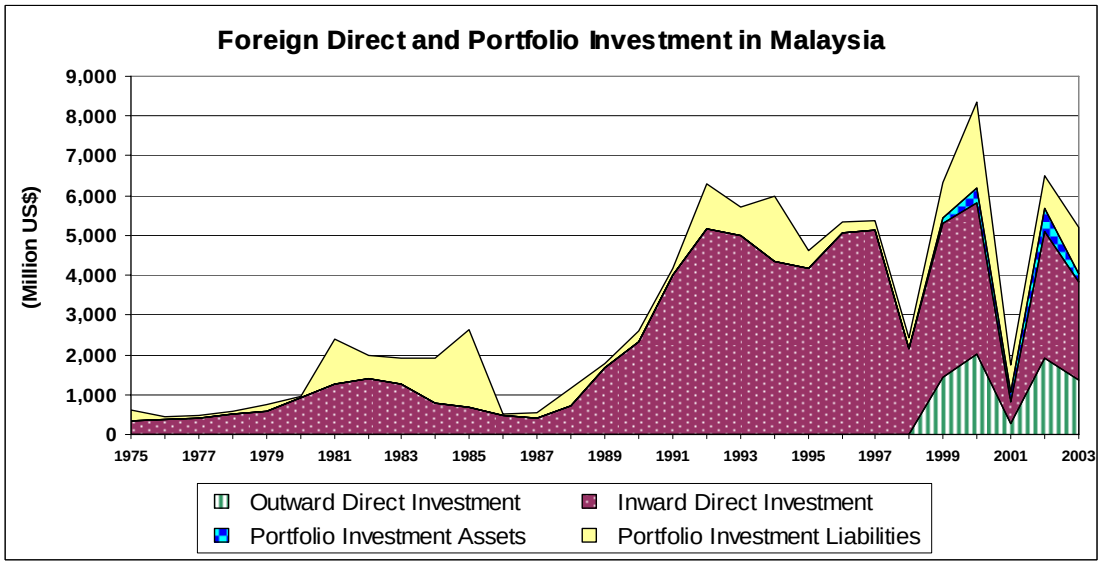
controls after the Malaysian economy had recovered that caused outward direct investment to grow afterward.

Figure 11: Foreign direct and portfolio investment in Thailand



Source: International Financial Statistics (IFS), IMF

Figure 12: Foreign direct and portfolio investment in Malaysia



Source: International Financial Statistics (IFS), IMF

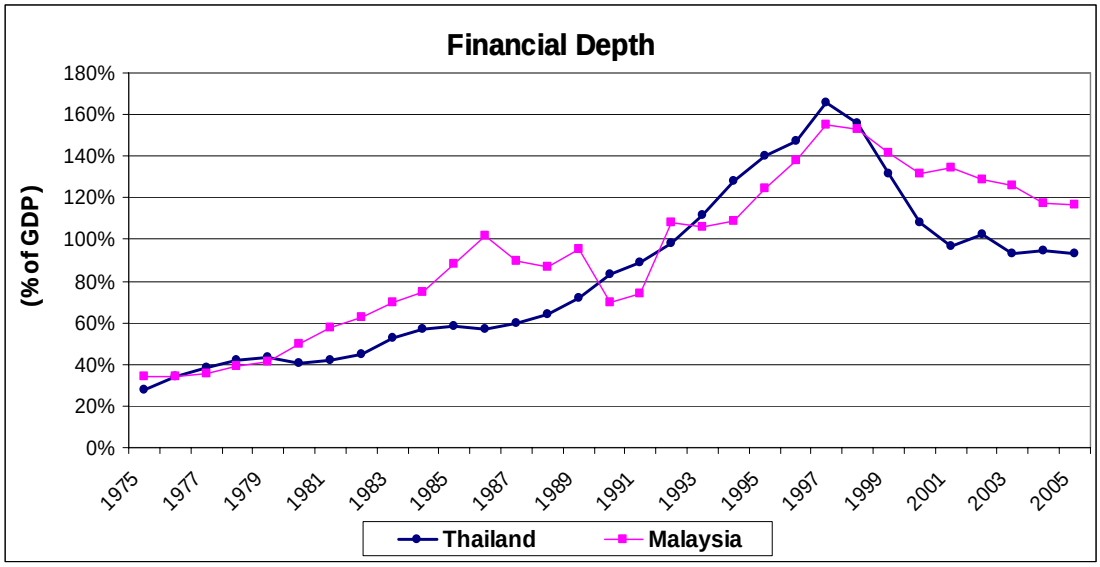
Some similar findings from Thailand and Malaysia at this point are that the investment increased immediately after the liberalization was taken place, and the increasing trend of investment was impeded at the time that the capital controls were imposed to cope with sudden outflows during the financial crisis.

With respect to output per capita as a result of efficient resource allocation from the liberalization, the theoretical and empirical arguments suggest that due to the reduction of the cost of capital in the aftermath of the liberalization, the increase in investment can enhance a country's output to grow. The findings of Thailand and Malaysia confirm the validity of the arguments. From Figure 10, output per capita in Thailand and Malaysia grew sharply in the aftermath of the liberalization until it was

obstructed by the 1985 banking crisis in Malaysia and the 1997/1998 financial crisis in both countries. Over ten years after the liberalization, Thailand enjoyed an average growth rate of GDP per capita at 14.2%, compared to 7.9% over a decade before liberalizing the capital account. Similarly to Malaysia, the average growth rate of GDP per capita was 13.5% over five post-liberalization years, compared to 9.3% over three pre-liberalization years. However, the average growth rate of GDP per capital in Thailand was slightly more than the rate in Malaysia that might be due to the higher degree of capital account openness in Thailand than in Malaysia.

Another factor determined the positive impact of the capital account liberalization on economic growth is financial depth. The endogenous growth theory suggests that the sources of growth attributed to capital flows comprise the spillovers associated with foreign capital in the form of technology, skills, and introduction of new products as well as more efficient domestic financial markets. The financial depth factor can be explained by the claims by financial intermediaries to the private sector relative to the country's output. In case of Thailand and Malaysia that the banking sector dominates the financial system with the market-share of 80-90% of total domestic credits, the financial depth factor is thus represented by claims on the private sector by banking institutions relative to GDP.

Figure 13: Financial depth of Thai and Malaysian financial sector



Source: International Financial Statistics (IFS), IMF

Figure 13 shows the level of financial depth in Thailand and Malaysia. The higher degree of financial depth can be seen from the higher extent of which money or capital was allocated by private sector financial institutions to private sector enterprises as a percentage of GDP. In case of Thailand and Malaysia, the proportion of private credit to GDP increased rapidly after they introduced the liberalization policy programs from 58% in 1985 to 166% in 1997 in Thailand, and from 39% in 1978 to 101% in 1986 in Malaysia. Without crucial imposition of capital controls in Thailand, Thai financial depth (the ratio of private credit to GDP) continuously increased from the beginning of the liberalization until it entered into the Asian financial crisis in 1997. Contrarily, Malaysian financial depth was deteriorated by the banking crisis in 1985, the temporary imposition of inflow controls in 1994, and the Asian financial crisis in 1998 one year later than that Thailand entered the crisis, and

that both countries imposed capital outflow controls to insulate their economies. Prior to the year 1978, Malaysia and Thailand had similar level of financial depth. Once Malaysia opened its capital account, private financial intermediaries in Malaysia were able to allocate more capital relative to GDP to private enterprises, compared to those in Thailand. Since Malaysia had trouble with its banking system in the 1985 banking crisis, financial intermediaries in Malaysia were less effective in allocating capital to the private sector as seen from the deterioration of the financial depth over 5 years after the banking crisis. In the year 1990 and 1991, Malaysian financial depth apparently declined that was due to the decline of private credits and especially the rapid growth of GDP in those years. As Malaysia had an experience in coping with the prior banking crisis, combined with the right track of capital account and exchange rate policy, and effective economic and financial restructuring programs, Malaysian financial depth turned to increase and be higher than financial depth in Thailand in the aftermath of the 1997/98 crisis. In other words, the role of the financial sector in Malaysia became more crucial after 1998 in allocating private credit to the economy, compared to the Thai financial sector. The trend was declining after the crisis in both countries that was due to the rise of GDP resulting from their economic recovery policy package. Furthermore, higher financial depth in Malaysia in 1999 afterward reflects that the positive impact of capital account liberalization on economic growth though enhancing financial depth needs to be accompanied with sound fundamental financial infrastructure including prudential regulatory and supervisory framework and robust financial institutions that Malaysia put these issues effectively in its restructuring package in the wake the 1997/1998 crisis, while Thai restructuring programs were to some degrees less effective to deal with the economic problem. This might be a reason why Malaysia can recover faster from the economic slowdown and financial fragility in the aftermath of the 1997/1998 financial crisis.

4.2 Negative impacts of capital account liberalization on economic growth

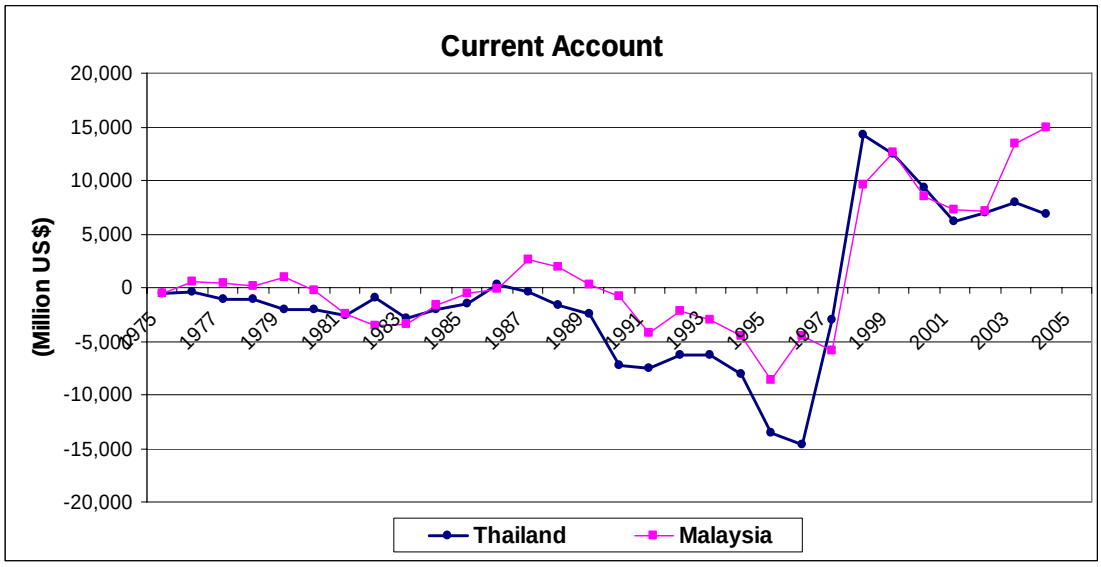
Capital account liberalization also entails risks to the economy if the liberalization is not appropriately sequenced and coordinated with macroeconomic policy and reforms. Free flows of capital can harm the country's macroeconomic stability that is likely to deteriorate the economic sustainability. Massive capital inflows, in terms of FDI and imports of capital goods, can fuel large current account[26] deficit and sharp expansion of domestic bank credit that they hastily reversed in the wake of the crises. In addition, portfolio investment from abroad may stimulate speculative hot money flows that provide the major risk to a country to enter the financial crisis and the economic slowdown from massive and sudden reversal of foreign capital flows.

From Figure 14, after one year of capital account liberalization, Thailand and Malaysia had current account deficit as a result of their policies stimulating inward direct and portfolio investment. The deficit was larger in Thailand due to the higher degree of capital account openness and the high-interest rate policy that invited more capital inflows over time. In Thailand, the current account reduced from the surplus of US$247 million in 1986 to the largest deficit of US$-14,692 million in 1996. The deficit hastily declined during the crisis years due to massive capital outflows. A

[26] Current account = (Exports - Imports) + Net factor income from abroad + Net unilateral transfers from abroad
Large current account deficit reflects that the country depends largely on imported goods and investment from abroad, and consequently the domestic currency is likely to depreciate.

series of capital outflow controls were imposed in Thailand in 1997, for example, the restrictions on Baht direct lending to non-residents, as well as the measures to stimulate more capital inflows, for example, the relaxation of the limits on foreign ownership of domestic financial institutions. The current account surplus, however, continued to increase in 1998, but then declined afterward. In Malaysia, the current account reduced from the surplus of US$941 million in 1979 to the deficit of US$-3,482 million in 1983. It turned to be surplus after the banking crisis and then the surplus reduced until a year before the financial crisis. The imposition of capital outflow controls in 1998 slowed the surplus in 1999 and the trend declined afterward before it rose in 2004 and 2005 due to very high export volume.

Figure 14: Current Account of Thailand and Malaysia

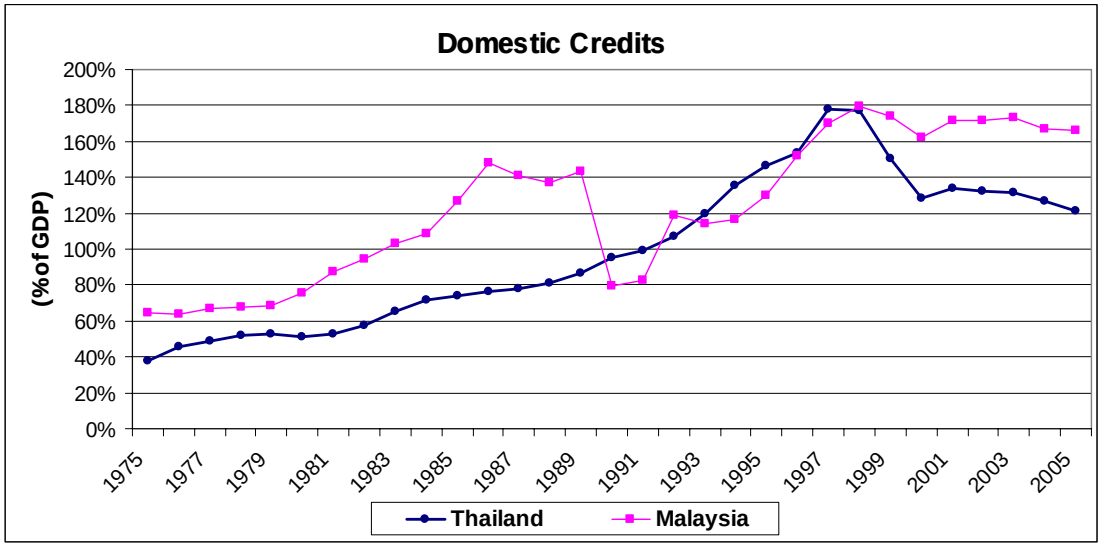


Source: International Financial Statistics (IFS), IMF

Capital account liberalization may also cause a sharp expansion of domestic credits. Figure 15 shows that domestic credits[27] relative to GDP grew after Thailand and Malaysia liberalized their capital account in 1985 and 1978 respectively. In fact, domestic credits in Malaysia generally stayed at higher level than those in Thailand regardless before or after the liberalization reflecting the higher level of indebtedness in Malaysia. During a decade after they started the liberalization programs, domestic credits to GDP ratio was at 95% on average in Thailand (1985-1994), and 102% on average in Malaysia (1978-1987). As a result of the 1985/86 Malaysian banking crisis, domestic credits in Malaysia stopped growing. They temporarily declined in 1990 and 1991 probably due to the establishment of Labuan offshore financial center in 1990 leading to a shift toward more foreign currency lending. After the elimination of temporary inflow controls in August 1994, Malaysian domestic credits grew, while the increasing trend was again obstructed by the Asian financial crisis in 1998. With respect to domestic credits in Thailand, they continuously rose over the period of the liberalization until the wake of the financial crisis in 1997 that made them decline from 178% of GDP in 1998 to 151% in 1999. After the crisis, the ratio of domestic credits to GDP stayed at 170% on average in Malaysia and 130% in Thailand.

[27] Public and private credits

Figure 15: Domestic credits in Thailand and Malaysia



Source: International Financial Statistics (IFS), IMF

The evidences can be summarized that Thailand had higher degree of capital account liberalization than Malaysia, and the effects of the liberalization on Thai economy were thus greater, as seen from more reduction of the cost of capital, increasing trend of investment, consecutive increase in financial depth, large current account deficit and continuous expansion of domestic credits in Thailand than those happened in Malaysia.

5. Conclusions

In this concluding chapter, the research questions will be answered, beginning with sub-questions, followed by the central question of the research. For policy recommendations, they will be presented in the next, final chapter.

5.1 Expected impacts of capital account liberalization on economic growth

Capital account liberalization can provide both benefits and risks to the economy. The theoretical predictions and evidences suggest that liberalizing the capital account can have positive impacts on growth through an efficient allocation of resources from capital-abundant countries to capital-scarce countries and from savings to investment that eventually promote the countries' outputs. This is taken place by that the liberalization allows capital to flows from capital-abundant countries, where expected returns are low, to capital-scarce countries, where expected returns are high. The flows of financial resources would reduce the cost of capital in the liberalizing countries and thus stimulates investment. An increase in investment eventually spurs growth in the liberalizing countries. The liberalization can also enhance growth by promoting financial depth in the liberalizing country. Free capital movements contribute, both domestically and internationally, to the efficiency of the financial system and the development of financial markets by strengthening competition and allowing technology and skill transfers. Nevertheless, capital account liberalization can have negative impacts on the economy. Under inappropriate sequencing of the liberalization policy, opening the capital account may harm the country's macroeconomic stability by disturbing their current account to be large deficit in the aftermath of the liberalization and it reversed in the wake of the crises, and by disturbing domestic credits to expand sharply in the aftermath of the liberalization and then fall rapidly in the wake of the crises.

Proper sequencing and coordination of capital account liberalization with other reforms reduces the likelihood of macroeconomic and financial system instability, which has affected a number of countries that recently have liberalized or were in the process of liberalizing their capital account. As key preconditions for successful capital account liberalization, a country should have sound and sustainable macroeconomic policies aiming particularly to ensure the consistency of exchange rate policy with other macroeconomic policies along the path of the liberalization. The country also needs to have financial sector reforms to support the macroeconomic and financial stability, and strengthened prudential regulation and supervision to ensure the robustness of the economic system. Liberalizing long-term flows should be ahead of short-term flows that would be put in place only when the liberalizing countries can effectively deal with associated risks arising from international capital flows. Furthermore, liberalizing countries should not have implicit government guarantees in order to discourage moral hazard behaviors of market players.

5.2 Capital account liberalization policy programs in Thailand and Malaysia

Thailand and Malaysia have been liberalizing their capital account in 1985 and 1978 respectively with an attempt, in both countries, to shift their economies from agriculture to manufacture oriented in export sector and promote inward direct investment. Under pressures from international financial organizations, Thailand

opened its capital account with supports from the IMF in terms of loans, while Malaysia liberalized the capital account without accepting such supports. Thailand implemented the policy programs that moved toward more liberalization than Malaysia. Thailand started the programs with the relaxations on inward long-term investment in the mid 1980s, followed by that the controls on short-term flows and outward investment were eased in the early 1990s. Although Malaysia relaxed most of controls in the late 1970s followed by further deregulation on inward foreign direct and portfolio investment in the mid 1980s, it temporarily reimposed the controls on short-term inflows in 1994 due to large capital inflows in the aftermath of the liberalization. In the wake of the Asian financial crisis in 1997-1998, Thailand put less capital controls than Malaysia to deal with massive and sudden capital outflows and economic slowdown. The Thai authorities, under the IMF assistance, introduced currency controls in the second quarter of 1997 to deter currency speculators, followed by floating Thai Baht in the third quarter, and outflow controls on baht direct lending to non-residents in the same year. Malaysia imposed a series of capital outflow and currency controls during the crisis years, including the requirements of the repatriation holding period, the ban on the provision of domestic credit to non-residents and the limits of Ringgit exports, for instance. Upon the exchange rate policy, Malaysia did different thing from Thailand by pegging Ringgit at 3.8 per US$ that helped increase the stability of its currency. After the crisis, both countries relaxed most of the controls that were imposed during the crisis years.

The evidence of Thailand shows that one of the factors causing the economic crisis was the rapid elimination of capital controls, especially over capital inflows, without fulfilling most of the preconditions that can be seen from the inconsistent macroeconomic policies, inadequate financial reforms, lack of prudential supervision and regulation, and the existence of implicit government guarantees. Only timely sequencing of long-term ahead of short-term capital flows was fulfilled. If most of the preconditions have been met along the path of opening the capital account, Thailand may be insulated from various risks of international capital flows and benefit more from the liberalization. In case of Malaysia, the policy programs of capital account liberalization were implemented in more appropriate manner without participating in the IMF program. Malaysia can fulfill all preconditions during the liberalization. The Malaysian government’s effective response was characterized by the timely capital account liberalization policy implication, combined with proper macroeconomic policies and supporting measures, effective financial sector reforms, improvement of prudential regulation and supervision, and absence of implicit government guarantee.

5.3 Outcomes of capital account liberalization policy programs on economic growth in Thailand and Malaysia: before, during and after the crisis

Findings from the investigation of the policy programs and the impacts of capital account liberalization in Thailand and Malaysia show that Thailand had higher degree of capital account openness than Malaysia, and the effects of the liberalization on Thai economy were thus greater, as seen from more reduction of the cost of capital, increasing trend of investment, consecutive increase in financial depth, larger current account deficit and continuous expansion of domestic credits in Thailand than those happened in Malaysia. As the evidences suggest that capital account liberalization can provide benefits and risks to the economy, Thailand and Malaysia also possessed both positive and negative impacts from their capital account liberalization policy

programs. Besides, Thailand was affected greater due to its higher degree of capital account openness than Malaysia. In the positive side, their economic expansion was enhanced by the decline in the cost of capital in the aftermath of the liberalization that stimulated investment to grow in both countries. Since the different degree of liberalization, the decline of the cost of capital was more apparent in Thailand than in Malaysia and Thai investment also had increasing trend that was because it was not considerably deterred by a variety of capital controls as occurred in Malaysia. Consequently, their output per capita increased rapidly after the first year following the onset of their liberalization policy programs, with a higher average rate in Thailand. It is noticed that investment in Thailand and Malaysia increased dramatically after 1-2 years after the liberalization was taken place, the increasing trend of investment was impeded at the time that the capital controls were imposed to cope with the financial crisis.

The growth of Thai and Malaysian economies were also enhanced by greater financial development in both countries in post-liberalization years. Financial depth improved rapidly after Thailand and Malaysia introduced the liberalization policy programs in 1985 and 1978 respectively. However, the financial depth was deteriorated by the banking crisis in 1985 in Malaysia, the temporary controls on capital flows into Malaysia in 1994 and the Asian financial crisis in 1997-1998 in both countries that were at the same time they imposed capital outflow controls to insulate the economies. Additionally, higher financial depth in Malaysia in 1999 afterward reflects that the positive impacts of capital account liberalization on economic growth though enhancing financial depth need to be accompanied with prudential regulatory and supervisory framework and robust financial institutions that Malaysia put these issues effectively in its restructuring package in the wake the 1997/1998 crisis, while Thai restructuring programs were to some degrees less effective to deal with the economic problem. This might be a reason why Malaysia can recover faster from the economic slowdown and financial fragility.

In the negative side, Thai and Malaysian economic stability was deteriorated by sharp increase in current account deficit and rapid expansion of domestic credits that they hastily reversed in the wake of the crises. After one year of capital account liberalization, Thailand and Malaysia had substantial current account deficit as a result of their policies stimulating inward direct and portfolio investment. The deficit was larger in Thailand partly due to its higher degree of capital account openness and the high-interest rate policy that invited more capital inflows over time. In the wake of the crisis, the current account in both countries dramatically increased as a result of large and sudden capital outflows before the imposition of capital controls was put in place. The controls, combined with other policy packages, helped recover the economies after the crisis. The liberalization policy programs also caused a sharp expansion of domestic credits until they extremely fell after the crisis years that entailed instability in the financial system. The expansion and the decline of domestic credits were greater in Thailand than those in Malaysia.

5.4 What were the impacts of capital account liberalization on economic growth?

At this point, the central research question can be answered that capital account liberalization enhanced growth by allowing an efficient resource allocation from capital-abundant countries to capital-scarce countries leading to the decline of the cost of capital in liberalizing countries, as well as the allocation of savings to investment that stimulated investment expansion and thus the growth of the countries' outputs. The liberalization can also promote growth by improving financial depth in liberalizing countries as seen from increasing private credits relative to GDP during the non-crisis liberalization years. Furthermore, capital account liberalization induced risks that harm the country's macroeconomic stability. Capital account liberalization can bring about large current account deficit and sharp domestic credit expansion in the wake of massive capital inflows, while they turned to be large current account surplus and rapid credit contraction when the capital suddenly reversed.

6. Policy recommendations

Regarding that capital account liberalization entails positive and negative impacts to the economy, policy makers should trade-off between benefits and risks from opening their capital account, and start the liberalization program only if they ensure that associated risks from international capital movement can be well managed. The liberalizing countries need to take attempts to fulfill the preconditions over the period of the liberalization, reminding that benefits from capital account liberalization are hardly seen without the concomitant of sound macroeconomic policy, solid financial sector, prudential regulatory and supervisory frameworks and the absence of implicit government guarantees. In the wake of the liberalization, flexible exchange rate regime seemed to be desirable, combined with contractionary fiscal and monetary policies to slow down the economic overheat. In the wake of financial crises, temporary capital controls can be put in place to insulate the economy from massive and sudden capital flows. The liberalizing countries should also impose expansionary fiscal policy as well as financial sector reforms to boost and strengthen the economy. When the troublesome periods pass and stability returns to the economic and financial systems, the countries can remove the controls and would again benefit from capital mobility. Final remark is that countries need to pursue capital account liberalization policy with a highly prudent manner that is considered to be most appropriate to their individual situations. Even if they may be pushed by world liberals toward a higher degree of capital account liberalization, they should delay the further openness program until they are confident that the preconditions can be properly fulfilled along the way of the liberalization. This aims to ensure that the liberalizing countries are likely to have gains more than pains from their capital account liberalization policy programs.

References:

Adams, Charles, Mathieson, Donald J., Schinasi, Garry, and Chadha, Bankim. 1998. "International Capital Markets Developments, Prospects, and Key Policy Issues". *World Economic and Financial Surveys, International Monetary Fund*.

Ahmad, Mohd Fairuz Hj, and Zainul, Mohd Izad. 2004. "Strengthening the Development of Domestic Debt Securities Market: The Malaysian Experience". *Paper presented at SEACEN-World Bank Seminar on Strengthening the Development of Domestic Debt Securities Market Colombo, Sri Lanka, 8 – 10 June 2004.*

Alba, Pedro, Hernandez, Leonardo, and Klingebiel, Daniela. 1999. "Financial Liberalization and the Capital Account: Thailand 1988–1997". *World Bank.*

Anderson, Jonathan. 2003. Capital Account Controls and Liberalization: Lessons for India and China. *UBS Investment Research*.

Bagehot, Walter, *Lombard Street*, 1873, Richard D. Irwin, Homewood, Illinois.

Buckley, Ross P. 1999. "The Role of Capital in Financial Crises". Bong Law Review 231.

Economic and Social Commission for Asia and the Pacific (ESCAP). 2001. "Export Competitiveness and Sustained Economic Recovery", Chapter II Policy Recommendations for Preventing Another Capital Account Crisis. *United Nations*, New York.

Edison, Hali J., and Reinhart, Carmen M. 2000. "Capital Controls during Financial Crises: The Case of Malaysia and Thailand". *International Finance Discussion Papers No. 662*. Federal Reserve.

Edison, Hali J., Klein, Michael W., Ricci, Luca, and Sloek, Torsten. 2002. "Capital Account Liberalization and Economic Performance: Survey and Synthesis". *NBER Working Paper No. 9100.*

Eichengreen, Barry, Mussa, Michael, Dell'Ariccia, Giovanni, Detragiache, Enrica, Milesi-Ferretti, Gian Maria, and Tweedie, Andrew. 1999. "Liberalizing Capital Movements: Some Analytical Issues". *Economic Issue no. 17, International Monetary Fund.*

Haihong**,** Gao. 2000. "Liberalising China's Capital Account: Lessons Drawn From Thailand's Experience". *World Bank.*

Hataiseree, Rungsun. 2001. "The Capital Account and the Exchange Rate in Monetary Policy Decision Making". The paper is part of a collection of research papers prepared for EMEAP Deputies Meeting in Beijing in March 2001.

Helleiner, G.K., Capital-Account Regimes and the Developing Countries, UNCTAD, International Monetary and Financial Issues for the 1990s, Vol. VIII, New York and Geneva 1997, pp. 1-26

Henry, Peter Blair. 2003. "Capital Account Liberalization, The Cost of Capital, and Economic Growth". *NBER Working Paper No. 9488.*

Henry, Peter Blair. 2006. Capital Account Liberalization: Theory, Evidence, and Speculation. *NBER Working Paper No. 12698.*

Ishii, Shogo, and Habermeier, Karl. 2002. Capital Account Liberalization and Financial Sector Stability. *International Monetary Fund Occasional Paper No. 211*, Washington, D.C.

Iwashita, Tadashi. 2001. "On Appropriate Sequencing of Capital Account Liberalization". Remarks at the conference "From Naples to Genoa: a New World of Finance and Development", Rome, May 31 – June 1, 2001.

Jadhav, Narendra. 2003. "Capital Account Liberalization: The Indian Experience". Paper Presented at "A Tale of Two Giants: India's and China's Experience with Reform and Growth", New Delhi, November, 2003.

Johnston**,** R. Barry, Darbar, Salim M., and Claudia Echeverria. 1997. "Sequencing Capital Account Liberalization: Lessons from the Experiences in Chile, Indonesia, Korea, and Thailand". *IMF Working Paper WP/97/157.*

Kaplan, Ethan, and Rodrik, Dani. 2001. "Did the Malaysian Capital Controls Work?". *Harvard University*.

King, Robert, and Ross Levine, "Finance and Growth: Schumpeter Might be Right," *Quarterly Journal of Economics*, vol. 108 (3), August 1993, pp. 717 – 737.

Klein, Michael, and Olivei, Giovanni. 2005. Capital Account Liberalization, Financial Depth, and Economic Growth. *NBER Working Paper No. 7384*.

Klein, Michael W. 2003. Capital Account Openness and the Varieties of Growth Experience. *NBER Working Paper No. 9500*.

Martin, Sue. 2006. "European Plantation Firms and Malaysia's New Economic Policy since 1970". *Paper for IEHA Congress 2006*, SESSION 94: Foreign Companies and Economic Nationalism in the Developing World after World War II.

McCauley, Robert Neil. 2006. Understanding monetary policy in Malaysia and Thailand: objectives, instruments and independence. *Bank for International Settlements (ed.), Monetary Policy in Asia: approaches and implementation*, pp. 172-198.

Mendoza, Enrique G., Quadrini, Vincenzo, and Rios-Rull, Josi-Victor. 2007. on The Welfare Implications of Financial Globalization without Financial Development. *NBER Working Paper No. 13412*.

Pootrakool, Kobsak, Chai-anant, Chayawadee, Dejtrakul, Suchada, and Punnarach, Bunnaree. 2003. Can We Count on Intra-regional Trade as a Source of Growth?. Bank of Thailand Discussion Paper.

Prasad, Eswar, Rogoff, Kenneth, Wei, Shang-Jin, and Kose M. Ayhan. 2003. "Liberalizing Capital Account Restrictions". *Article drawn on the analysis in IMF Occasional Paper 220, Effects of Financial Globalization on Developing Countries: Some Empirical Evidence, Washington.*

Rodrik, Dani. 1998. Who Needs Capital-Account Convertibility?. *Harvard University*.

Rousseau, Peter L., and Wachtel, Paul. 2005. Economic growth and financial depth: is the relationship extinct already?. Paper prepared for the UNU / WIDER conference on Financial Sector Development for Growth and Poverty Reduction, July 1-2, 2005, Helsinki.

Schumpeter, Joseph A., *The Theory of Economic Development*, 1912, Harvard University Press, Cambridge, MA.

Sheng, Andrew. 1989. "Bank Restructuring in Malaysia: 1985-1988". *Background paper for the 1989 World Development Report, World Bank.*

Soledad, Maria, and Peria, Martinez. 2002. "The impact of banking crises on money demand and price stability". *IMF Staff Paper (September1st, 2002).*

Stiglitz, J. 2002. Globalization and its Discontent. London/New York, Norton, chapter 4, "The East Asia Crisis: How IMF policies brought the world to the verge of a global meltdown", pp. 89-113.

Sundaram, Jomo Kwame. 2004. "Malaysia's Pathway through Financial Crisis". *Global Economic Governance Program, Working Paper 2004/08,* United Nations.

Takagi, Shinji, et. al. 2005. "The IMF's approach to capital account liberalization". *International Monetary Fund, Washington, D.C.*

Trivellato, Benedetta. 2002. "Corporate and Financial Sector Reform in the Wake of the Asian Crisis: Malaysia and Thailand". *European Journal of East Asian Studies*, Volume 1, Number 2, 2002, pp. 221-246 (26).

Williamson, John, and Mahar, Molly. 1998. A Survey of Financial Liberaization. *International Finance Section, Department of Economics, Princeton University.*

www.bnm.gov.my (Bank Negara Malaysia)

www.bot.or.th (Bank of Thailand)

The World Factbook.