

CHAPTER I

INTRODUCTION

1.1 Background

Before the Asian financial crisis in 1997, half of the total capital flows from developed countries were drawn to many countries in Asia. The investment atmosphere of East Asia, in particular, was attractive due to its spectacular growth rate which manifested through high interest rates and lured foreign investors who were looking for high returns from investments. As a result, the East Asia's economies confronted with a huge inflow of foreign capital that in time translated into an unexpected upsurge in asset prices. It was evidenced that economies of Thailand, Malaysia, Indonesia, Philippines, Singapore, and South Korea experienced double-digits growth rate of GDP at the end of 1980s until early 1990s. Rapid growth without economic stability led capital reversal since 1995 and generated financial crisis in 1997. It was inevitable to confront downturn of economy among East Asian developing countries. The crisis had significant macroeconomic effects, including rapid devaluation in values of currencies, crash in stock markets, and slump in other asset prices of several East Asian nations. Many businesses collapsed and, as a consequence, millions of people fell below the poverty line. The powerful adverse shock also sharply reduced the oil price, generated to the Russian financial crisis in 1998, caused Long-Term Capital Management¹ in the United

¹ Long-Term Capital Management (LTCM) was a very large hedge fund that nearly collapsed in late 1998. Its investment strategies were based on a fairly regular range of volatility in foreign currencies

States to collapse, after losing US\$ 4.6 billion within 4 months. Many emerging economies in Latin America also fell into contagion crisis in the late 1990s, such as Argentina crisis in 1999.

Figure 1: Comparing exchange rate among East Asian nations

Source: Bank of Thailand

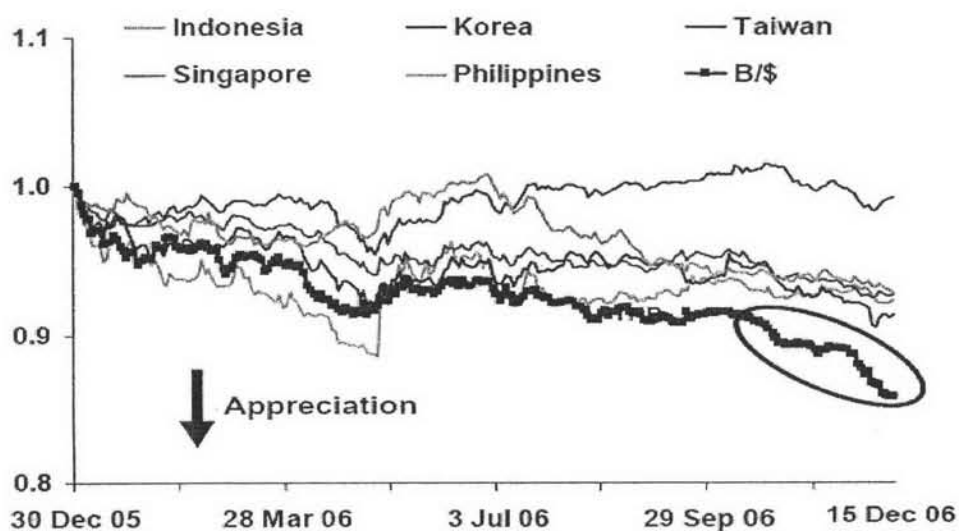


Table 1: Percentage change of exchange rate between December 2005-2006

Currencies (2006)	THB	TWD	CNY	MYR	PHP	SGD	IDR	KRW	YEN	EUR	GBP
Percentage change from Dec 2005	16.6	0.8	3.1	6.4	7.8	7.8	8.3	9.5	-0.1	10.5	13.6

Source: Bank of Thailand

and bonds. When Russia declared it was devaluing its currency and basically defaulting on its bonds, it moved beyond the regular range that LTCM had counted on.

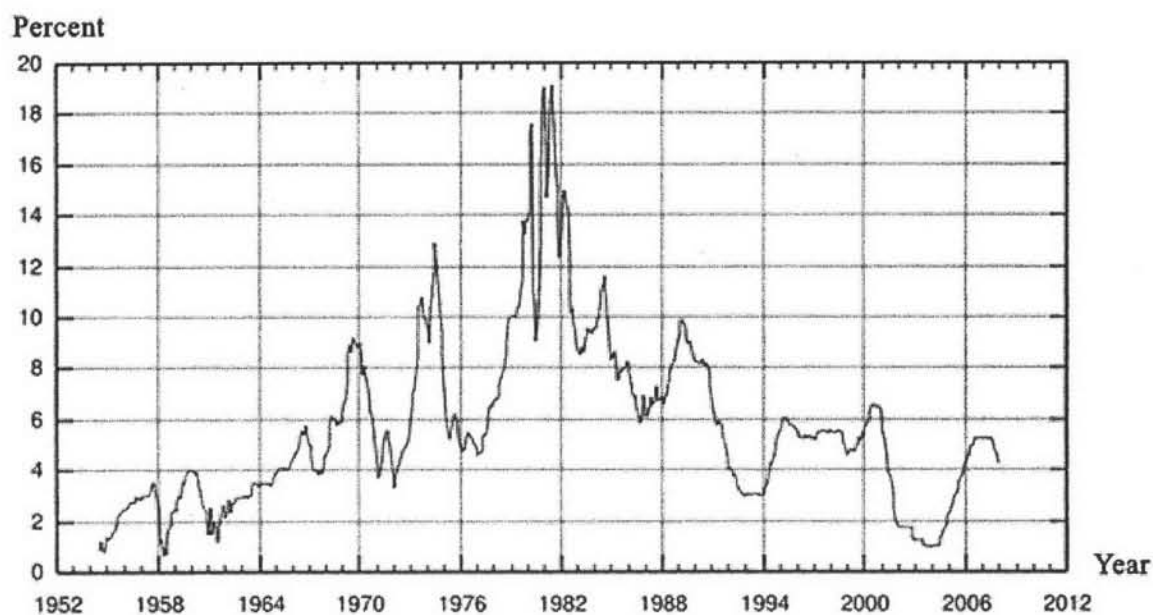
After aforementioned crisis in 1997, economic nightmare turned around again since 2001 and much more severe in 2006. Liquidity flood moved away from expected decreasing returns in US market according that the depreciation in dollar and subprime mortgage crisis to penetrate emerging economy markets in Asia. Between the beginnings of the year until the mid-December 2006, the Thai Baht rose by 16.6 percent against the dollar while other nations' currency appreciated less than 10 percent (see table 1), when problem in the US subprime housing mortgage lending² started to play out. The collapse of the subprime market affected Asian regional stock markets and weakened currencies as western investors sold assets to offset losses at home country.

The subprime lending started to be a crucial issue in the United States and triggered a global financial crisis since 2006. This situation occurred when US interest rate went down, during mid-2003 and mid-2004, approximately 1% (see table 2), combining with mortgage companies, including savings and loan associations and commercial banks, needed to raise performance for attracting investors as well as homeowners who needed to increase property values by refinancing their homes. American residence prices skyrocketed by 124% from 1997 to 2004. Unfortunately, in 2006, housing prices started to drop continuously in many states of the United States, refinancing became more arduous. Defaults and foreclosure activities occurred increasingly as well as adjusted mortgage interest rates seemed to be higher. Many homeowners were unwilling to sell their homes at low prices, sales volume of new home drop significantly 26.4 percent in 2007. The excess supply of home inventory with

² Subprime lending is risky for both lenders and borrowers due to the combination of high interest rates, poor credit history, and adverse financial situations usually associated with subprime applicants. It encompasses a variety of credit instruments, including subprime mortgages, subprime car loans, and subprime credit cards, among others. With loan incentives and long-term trends of rising housing prices encouraged subprime borrowers to assume mortgage trap.

downtrend of housing prices generated default risk and foreclosure to homeowners or subprime borrowers³.

Figure 2: Federal Funds Rate



Source: Federal Reserve Bank of New York

Owing to financial revolutions in many types of securitization, mortgage companies can repackage mortgage claims into variety of complex investment vehicles. In order to manage their risks, mortgage originators (e.g., banks or mortgage lenders) may also create separate legal entities, called special-purpose entities (SPE), to assume the risk of default and issue the new kinds of securities, such as asset-backed securities (ABS), mortgage-backed securities (MBS) or, even, collateralized mortgage obligations (CMO). It can become an advantage for mortgage companies when repackaged securities

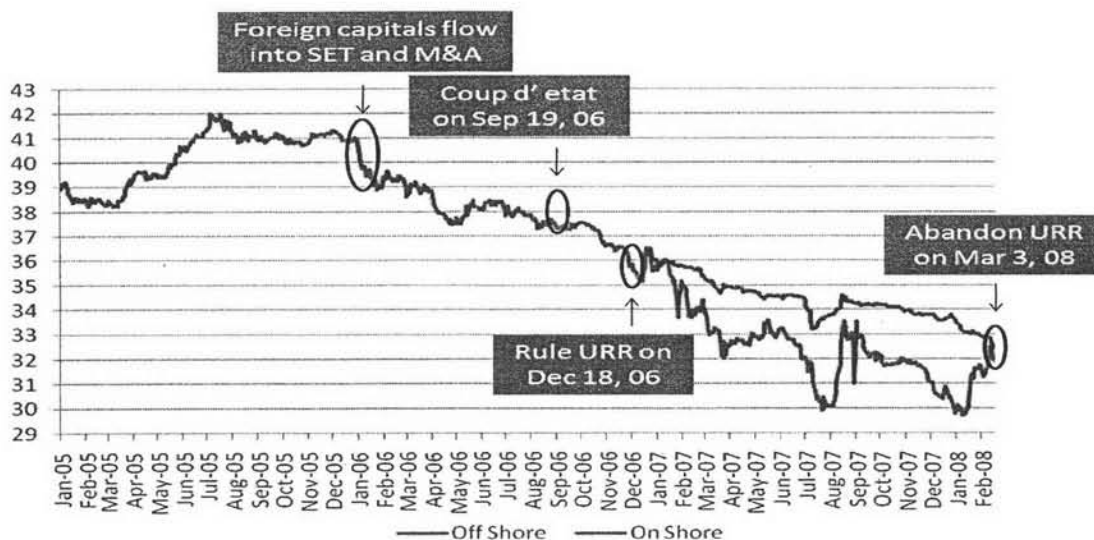
³ Subprime borrowers is classified as persons who are not able to qualify for paying back interest and capital because of relatively low income or deficient credit history than prime borrowers.

were sold or distributed to the third-party investors, subprime lenders could lift their risk to the third-party holders as well as raise liquidity for a new investment. The ABS, MBS and CMO's investors can take over the claim right to cash flows related to the mortgage payments instead. On the other hand, subprime lenders can also blend ABS, MBS and CMO and turn them to be collateralized debt obligations (CDO) that is a repackaging of existing debt. In exchange for purchasing the ABS, MBS and CMO, the third-party investors receive a claim, including risk, on the mortgage assets, which become collateral in the event of default.

Securitization itself could not generate upcoming disaster to US financial market but the conflicts of interest of well-known rating agencies—Standard & Poors, Moody's and Fitch—which acted both security issuer and credit evaluator were allowed freely to make judgment on quality of mortgages, subprime mortgages which their values were seen as junk bond can be repackaged to be sound investment-grade rating securities. The mortgage lenders and the third-party investors were the first to be affected from the downturn of the US economy, while borrowers were not able to make payments. Major security holders around the world reported losses about US\$ 170 billion in February 2008 due to the patterns of financial engineering, lots of SPEs passed claim rights, including risk to the third-party investors via ABS, MBS, CMO and CDO. The third-party investors who were holding ABS, MBS, CMO or even CDO faced substantial losses, when the underlying mortgage asset values declined. Hedge funds and international financial institutions who occupied securitization packages started to pull the fund back from stock market in many countries around the world, especially in East Asia. The dispersion effects of credit risk and the ambiguous impacts on financial engineering caused to reduce lending activities. The disaster combining with a credit crunch in the United States led many foreign investors to abandon investment in US market and pushed huge surge liquidity into East Asian countries until Ben S. Bernanke, Chairman of the Board of Governors of the Federal Reserve, had to introduce many new complexities of financial tools, such as Temporary Auction Facility (TAF) in December 2007, Term Securities Lending Facilities in March 2008, for coping with Hamberger Crisis. In order to prevent expected great recession in the 21 century, FED also decided to break his rule of being a

role model of capitalism by intervening in the financial market, such as transferring US\$ 30,000 million to J.P. Morgan in order to taking over Bear Stearns on March 14, 2008.

Figure 3: historical onshore and offshore exchange rate



Source : Bank of Thailand

When capital inflows to Thailand accelerated again in November 2006 from subprime crisis on the western side, the Bank of Thailand panicked and decided to rule unremunerated reserve requirement on inward moneys flow on December 18. The Bank of Thailand's policy—unremunerated reserve requirement or 30 percent capital control—generated a two-tier baht market as offshore and onshore. On December 19, overall stock prices fell down by almost 20 percent within a day (figure 3) and it was the first time that the Stock Exchange introduced circuit breaker, at the same time thousands of order were queued to sell Baht, the Baht value expected to decline more than 40 baht per dollar, the controls were hastily removed from stock market. Thailand did have to allow Baht to rise further, but it had already gained against all other Asian currencies last year. The rising of Baht made the monetary authority anxiously concerns about export's comparative advantages that have been the main engine for driving aggregate income.

Restrictions on the short-term capital inflows, if they are implemented in a well-thought-out and transparent direction, it can offer a viable compromise, curbing capital inflows and excessive money growth, while taking pressure off the currency. Other Asian countries were also looking for the ways to discourage foreign capital inflows, for instance, South Korea raised reserve requirements on foreign currency debt in December 2006. China has kept its restrictions on portfolio capital inflows, helping it to hold down its exchange rate.

According to fragile regulatory economic structure, massive surge of capital inflows can reduce the absorptive capacity of a country's banking systems, generating inappropriate lending decisions and building up financial system fragility subsequently that might be able to generate recession for recipient countries, such as pushing up credit growth, appreciating the recipient country's exchange rate, causing inflation and affecting other macroeconomic factors in a way incompatible with domestic policy objectives.

Even though, many criticisms have focused on the adverse effects of capital flows; contradictorily, benefits of capital inflows are more valuable that can be generating smooth consumption, augmenting scarce domestic savings, promoting investment, transferring technology and managerial skills.

It is unavoidable for Thailand to avoid disasters from flow of money. Growing of Thai economy still depends on foreign funds according that gross national savings in many year are not enough to push forward the investments of the country (see table 3), so foreign capital investment are welcomed for generating Thai economic growth.

Table 2: Thailand Gross Domestic Investment and Gross National Savings

(Unit: Billions of Baht)

Periods	Gross Domestic Investment	Gross National Savings
1980	193.06	146.80
1981	225.64	159.72
1982	223.16	188.82
1983	276.07	202.80
1984	291.22	222.52
1985	298.41	244.50
1986	293.24	276.90
1987	362.35	357.48
1988	508.35	499.53
1989	651.18	633.01
1990	902.98	721.08
1991	1073.88	869.09
1992	1131.35	956.19
1993	1266.40	1094.25
1994	1460.94	1290.56
1995	1762.16	1492.10
1996	1928.16	1580.22
1997	1593.16	1564.14
1998	945.97	1470.08
1999	950.61	1397.66
2000	1124.16	1548.04
2001	1237.09	1502.53
2002	1297.33	1564.38
2003	1477.48	1691.75
2004	1738.59	1852.57
2005	2228.36	1978.30
2006	2235.03	2335.67

Source : National Economic and Social Development Board (NESDB)

This study is conducted to point out the impacts of capital flows toward the Thai economy and interactions of key determinant factors from visiting of massive capital mobility.

1.2 Objectives

1. To investigate the response of covered interest parity differentials, THB/USD spot exchange rate, level of capital restrictions and relative returns on stock market between Thailand and the United States to the rising short-term capital flows.
2. To examine the response of short-term capital flows to interest parity differentials, THB/USD spot exchange rate, levels of restriction on capital control in Thailand and relative returns on Thai and US stock market.
3. To explore the role of forward rate whether it leads to inflows of short-term capital to Thailand.

1.3 Scope of study

This study focuses on the movement of short-term capital flow in the form of net private capital flows in the Bank of Thailand's capital and financial accounts. The empirical estimations use monthly data from January 1999 to December 2007. The implications of short-term capital flow for Thai economy are investigated with the Vector Autoregression Model. Impulse response is pursued to achieve the objectives.

1.4 Structure of the study

This study will be divided into 5 chapters. The first chapter is the introduction, significance of the problem, objectives and scope of the study. The second chapter addresses the literature and empirical evidences relating to this study. The third chapter is all about methodology that consists of theoretical or conceptual framework, model specification, capital control index construction and measurement and data. The forth

chapter is analytical part and empirical results. The last chapter is conclusion, limitation of this study and suggestion.