Liberalization Process of Korean Capital Markets

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Abstract

This study is to analyze the liberalization process of capital markets in OECD countries, derive their experiences, and propose some policies for promoting financial globalization. For a small-sized open economy like Korea, capital liberalization is a prerequisite for economic liberalization. The expected effects of capital liberalization are: reduced cost for raising capital, increased investment profitability, increased efficiency in resource allocation, stimulation of economic growth, introduction of advanced financial techniques, improved function of domestic financial markets, and enhanced competitiveness of liberalized country, etc. However, it is necessary to implement the policies for minimizing the side-effects of capital liberalization such as instability in foreign exchange, stock and financial markets through inflow/outflow of short-term capital, increased volatility in foreign exchange rate, interest rate and prices, risen macroeconomic instability, imbalance of payments, disturbance in domestic industrial orders, restrictions against job increase and economic growth, and deterioration in income distribution structure. Also, institutional mechanisms for controlling inflow and outflow of speculative capital efficiently are necessary, including Tobin tax, quantity control of short-term capital transactions, variable deposit requirement, exchange control mechanism for differentiating capital inflow/outflow. The importance of these mechanisms is found in the experiences of Japan, Thailand, Taiwan, Indonesia, Malaysia, Mexico, etc.

JEL Classification: F02, F15, O14, O15, O32.

Key words: liberalization of capital market, financial liberalization, exchange liberalization, Tobin tax, exchange rate policy.

I. Introduction

Generally, capital liberalization means that government regulations against transactions like international borrowing and lending of capital, stock trading and capital investment are deregulated or abolished so that financial capital can move to the countries where high investment return is guaranteed on the basis of the principle of comparative advantage. Just as expanded trade liberalization integrates international commodity market further, capital liberalization provides integration of international financial market.

Capital liberalization can, therefore, enhance the role of market mechanism and increase efficiency in the distribution of financial capital. It has some positive features. First, capital liberalization allows domestic firms or individuals to finance capital in domestic market or overseas market at low interest rate, providing reduction in financial cost. Also, domestic investors can utilize more favorable investment opportunity through capital liberalization, increasing investment return.

Second, capital liberalization facilitates learning advanced financial techniques and gathering new information, increasing efficiency in financial mechanisms, and improving the function of domestic financial markets and international competitiveness.

Third, capital liberalization can increase dynamic efficiency between present consumption and future consumption, improving social welfare of a liberalized country.

Despite these advantages of capital liberalization, many countries hesitate to liberalize their capital markets due to the following reasons. The preconditions for successful capital liberalization must be met, i.e., a good operation of market pricing mechanism in commodity market and financial market, a sound financial structure, and a stable national economy are prerequisite

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for capital liberalization. If these preconditions are not met, capital liberalization may plunge a national economy into endless chaos because of its negative effects which are as follows :

First, balance of payments and exchange market are more likely to be disturbed by inflow and outflow of speculative capital. Since capital liberalization will allow foreign hot money to flow in and out frequently, stock market may show an unstable pricing, and investment may go unhealthy because of speculation.

Second, large foreign capitals, which can give large impact on domestic stock investment in a liberalized small open economy, are likely to disturb industrial order in the economy.

Third, due to the above side-effects, volatility in the exchange rate, interest rate, prices, balance of payments and economic growth will go up and down, making it impossible to implement economic stabilization policy .

Especially, an economy in transition from high economic growth period to a developed country may experience macroeconomic instability through capital liberalization. First of all, capital inflow/outflow causes instability in exchange rate. Experiences of the developed countries in the 1980s show that capital inflow/outflow brought about volatility in exchange rate, overshooting and long-term misalignment.

Theoretically, how inflow of foreign capital affects macroeconomic variables like exchange rate, interest rate, prices, current account balance of payments and GNP differs largely, depending on whether exchange rate system is floating or fixed. When foreign capital flows into a country under the fixed exchange rate system, its central bank intervenes foreign exchange market in order to keep its exchange rate at a given level. In short, central bank removes oversupply of foreign currencies by buying foreign currencies inflowed in exchange market. During this process, reserve base and money supply increase. In contrast, an influx of foreign capital in a country under the floating exchange rate system causes oversupply of foreign currencies in exchange market, bringing about overvaluation of the country's currency, i.e. decline of exchange rate.

In reality, few countries adopt the fixed exchange rate system or the floating exchange rate system in the pure sense of the term, and many countries use the two exchange rate systems in combination. In real word, therefore, an influx of foreign capital increases domestic money supply and drops exchange rate. In this case, central bank intervenes exchange market. Therefore, a part of foreign capital inflow is absorbed into increase of reserve base, and the remaining portion pressurizes overvaluation of a country's currency in exchange market. This generates a policy choice of which portion of national economic burden imposed by foreign capital inflow should be distributed to increase money supply and revaluation.

The experiences in the South American countries and Scandinavian ones show that capital influx increased their domestic money supply and raised stock price and real estate price, creating a bubble economy. This bubble economy increased consumer expenditure, causing economic overheating, price hikes and deterioration of balance of payments. Since these phenomena could not sustain long, economic bubble started to burst. Fearing sharp rise in exchange rate, caused by rapid deterioration of balance of payments, i.e. devaluation of their currencies, these countries introduced high interest rate policy to prevent it, accelerating economic slowdown. Because of this, value of collaterals taken by financial institutions got lowered below loan value, plunging the economies into financial crisis.

Similarly, as shown in the Mexican crisis in December 1994, sudden outflow of foreign capital has as large impact as excessive inflow of foreign capital. Unlike foreign loan or foreign direct investment, speculative hot money having a large greed for short-term investment return has a volatility of reversing from net inflow into net outflow within a short time period. As a result, local currency, stock price and real estate price experience sharp drop and economic uncertainty increases, causing inefficient use of resources. Sharp decline in asset price will increase non-performing loans of financial institutions, and accelerate the resulting consumption shrinkage and economic slowdown. If, therefore, financial institutions are not regulated well, chain reaction of financial bankruptcy may be brought about.

Korea's capital liberalization started by exchange crisis has become a shield protecting Korea against national bankruptcy in the short run, and it has been propelled as a core task for achieving general development of Korean financial market in the long run. Fortunately, taking the foreign exchange crisis in 1997 as an opportunity of turnaround, Korea has accelerated its integration with international financial market by building market economy and implementing extensive capital liberalization, and succeeded in achieving restructuring and liberalization in various sectors of Korean economy.

However, Korea must be neither contented with the current stage nor stop its efforts for capital liberalization. For example, even though OECD countries have different reservation ratio, which is the ratio of the excluded obligations to all obligations of OECD Code of Liberalization of Capital Movement and of Current Invisible Operations. The reservation ratio of existing OECD countries is about 10% on average, but that of Korea still stands at 27%. Korea's reservation ratio is highest among existing OECD countries and new entrants. Czech and Hungary have reached almost full liberalization through the recent unprecedented liberalization policies.

Capital market liberalization provides many advantages. It should be always noted that if capital market liberalization is expanded when infrastructure like arranged financial supervision system and domestic financial market development is not achieved, new crisis in foreign exchange and finance may explode. In fact, liberalizing capital market and capital transactions is indispensable for Korean economy to enter into the universe of developed economies. Capital liberalization provides such advantages as reduced cost for raising capital, increased investment profitability, increased efficiency in resource allocation, stimulation of economic growth, introduction of advanced financial techniques, and improved function of domestic financial market, and enhanced competitiveness of a liberalized country, etc. In contrast, capital liberalization provides the following side-effects: instability in foreign exchange, stock, and financial markets through inflow/outflow of short-term capital, increased volatility in exchange rate, interest rate and prices, risen macroeconomic instability, imbalance of payments, disturbance in domestic industrial order, restrictions against domestic policies of job increase and economic growth, and deterioration in income distribution structure.

Past capital market liberalization implemented in some developing countries produced fruitful results, but others did not get good results. Asian countries like Japan, Thailand and Malaysia achieved successful liberalization of capital market, but South American countries like Chile and Argentina experienced many troubles because of liberalization of capital market (Calvo, Leidirman and Reinhart, 1993; Kahn and Reinhart, 1994).

Under the background described above, this study will analyze the process of capital liberalization in OECD countries, derive their experiences, and propose some policies for driving world capital liberalization, i.e. financial globalization. The rest of the paper is organized as follows. Section Ⅱ analyzes capital liberalization process in OECD countries (excluding Korea) with respect to its process of capital liberalization and control over short-term capital flow. Section Ⅲ analyzes Korea's capital liberalization before and after the foreign exchange crisis in 1997. Finally, this study puts forward conclusive remarks in Section Ⅳ.

II. Capital Liberalization in OECD Countries

This section highlights the process of capital liberalization in OECD countries, and their control over movement of short-term capital.

1. Process of capital liberalization

OECD started with twenty member countries in 1961, and affiliated four countries, i.e. Japan, Finland, Australia and New Zealand between late 1960s and early 1970s. These OECD countries have expanded capital liberalization for a relatively long period. No country implemented capital liberalization until the 1980s, because of two oil shocks (1973 and 1979), hyperinflation, high unemployment, and imbalance of payments. Even many OECD countries invoked derogation according to the safeguard clause specified in the Code of Liberalization of Capital Movement and of Current Invisible Operations, for various reasons. UK, USA, Denmark, France, Italy, and Sweden invoked derogation to prevent capital outflow. In contrast, Germany, Switzerland, Austria, Japan, and Australia issued derogation to restrict capital inflow.

In the 1980s, France, Scandinavian countries and Spain imposed a unilateral foreign currency control. However, UK declared whole abolition of control over foreign currencies in 1979, changing everything. This was driven mainly by the fact that EU countries agreed on adopting the common goal of completing capital liberalization till 1990. From this time on, extension of the Code's obligations started to be discussed seriously. In 1992, OECD countries adopted the revised Code of which gist was the abolition of government restrictions against cross-border financial services and short-term capital flow.

This provided a momentum for many OECD countries, excluding Greece and Iceland, to lift discriminative regulations against capital flow. The only restriction kept by a part of OECD countries in the mid-1990s was regarding foreign direct investment in transportation industry and foreigner's acquisition of real estate in the capital transaction sector, and insurance, underwriting securities and imposition of conditions on the establishment of branch and office in the financial service sector.

OECD countries propelled capital liberalization at different speeds and in different patterns. Some preferred gradual liberalization, and others adopted fast liberalization.

Japan, France and Scandinavian countries were typical players that adopted gradual approach. Especially, Japan took gradual measures for capital liberalization moving at a snail's speed for 16 years since it entered to the OECD in 1964. In contrast, Canada and Germany liberalized their capital markets in 1951 and 1958, respectively. Because of the Big Bang in 1979, UK abolished all restrictions on capital transactions within 6 months. This led Australia and New Zealand to liberalize ordinary transactions and capital transactions all at once in the early 1980s. Turkey took the same road in 1989.

This wave had a remarkable effect on the countries that had adopted gradual approach since the mid-1980s, shortening the period for liberalizing their capital markets. Started to liberalize their capital markets from 1986 to 1987, Scandinavian countries completed capital market liberalization in 5 years. Adopted a typical gradual approach, France started capital liberalization in 1985 and continued to push liberalization drive for 5 years. Imposed a relatively strict control upon foreign exchange, Italy abolished restrictions against capital transactions only in 2 years after it adopted the EU Directive on capital movement in 1988.

Generally, those countries adopting gradual approach start liberalization with less volatile capital transactions. In other words, liberalization in foreign direct investment precedes foreign stock investment, and liberalization in ordinary financial transactions follows liberalization in trade credit. Also, stock trading is liberalized prior to bond transactions, and liberalization in the trading of long-term bonds is followed by that in the trading of short-term money market bonds.

However, this traditional strategy of gradual capital market liberalization was no longer a problem to the countries, including UK, which liberalized their capital markets through big bang. In the 1980s when capital liberalization was accelerated, the strategy was not applied well to the countries adopting gradual approach. This was partly because type-based classification of capital transactions got considerably insignificant due to the development of financial market and techniques like development of derivatives.

Accordingly, Turkey liberalized foreign direct investment and stock investment and trading at the same time. Sweden liberalized short-term treasury bond market and long-term national bond market simultaneously. Italy and Ireland liberalized stock trading and bond trading simultaneously. France and Norway limited local currency based loan to non-residents to the last stage, as Korea does, in order to prevent the potential speculation of hedge funds. Generally, resident's overseas deposit was excluded from the Code's obligations to the last, in order to prevent tax evasion.

2. Control over short-term capital flow

Generally, a government controls inflow/outflow of foreign capital to i) provide stable management for balance of payments and macroeconomy, ii) protect domestic infant industry, and iii) provide sound regulation and supervision[1].

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[1]In spite of the justifiability of capital control, when international capital markets are competitive, the distortion caused by capital control suppressing international capital flow gives deadweight loss to the country controlling capital (Tornell, A. and A. Velasco, 1992).

Government tends to lift the regulations of capital inflow/outflow in recession period, and enhance it in boom period[1]. Notwithstanding, control over capital inflow/outflow provides only temporary effects[2]. Chile is the typical case of control over capital inflow/outflow. In fact, Chilean control over capital inflow/outflow was designed to prevent liberalization of capital market from damaging macroeconomic stability, improve efficiency of monetary policy, and impose sound regulations upon financial institutions. The lesson from the Chilean model is that government's deep understanding of capital market and well-organized financial system are prerequisites for capital liberalization.

In the 1970s, some of OECD countries already started to realize that control of foreign exchange is limited. Germany and Switzerland failed to use control of foreign exchange to prevent rapid capital flow from abroad, and allowed strength of their currencies, succeeding in mitigating inflow of foreign capital. USA imposed control of foreign exchange between 1967 and 1973, but the country abandoned it.

In early 1980s, all OECD countries found that control of foreign exchange took enormous economic and administrative cost and could prevent only some small shocks in its effectiveness. This fact was confirmed again and again whenever currency crisis broke out in the 1980s and early 1990s. Despite very strict control of foreign exchange, France surrendered to external speculative pressure, and it was forced to devaluate the franc by over 25% only for 18 months between 1981 and 1983. Full liberalization of capital market, which was introduced by Australia and New Zealand in early 1980s, started from the fact that control of foreign exchange could not prevent large capital flight which occurred shortly before.

When European currency crisis exploded in early 1990s, Ireland, Spain and Portugal introduced temporary regulations for control of foreign exchange, but they abolished them in four months. This was because OECD countries had already consented broadly that free financial market could lead to economic stability.

G7 summit talks held in June 1995 discussed that flow of speculative short-term capital should not be allowed. At that time, international capital showed a sharp return to developed countries due to the secession of UK and Italy from ERM in 1992, Mexican peso crash in 1994, and earthquake in Kobe in Japan. Based on the proposal presented by Canada, which hosted G7 summit talks in June 1995, formal introduction of exchange transaction tax called the Tobin tax, was discussed. Existing OECD countries, which have enforced to control of foreign exchange for about forty years after the World War II, reached the following conclusions.

1. When market participants have strong motive to avoid regulation of exchange transaction, control of foreign exchange is not almost effective. The more unstable currency value is, the stronger this motive of avoidance is.
2. Loophole should be reduced to the utmost so that regulation of exchange transaction can continue to be effective. To reduce this loophole, government intervention in firms' normal exchange transactions and legal risk-hedging activities is inevitable.
3. If regulation of exchange transaction lasts long, market will develop the tools for avoiding such regulation, increasing loopholes in the long run.

Meanwhile, the necessity for limited control over capital flow was more spotlighted by East Asian financial crisis in 1997. Malaysian Prime Minister Mahathir Mohamad imposed a strict national regulation upon exchange transactions which showed any sign of speculation, excluding exchange transactions for goods trading like commodity purchase. Of course, this regulation was a temporary emergency action. East Asian financial crises ware a severe cost for financial globalization. The lessons from them highlighted the necessity for developing a self-cooperation mechanism to cope with capital flow showing a high volatility in capital movement.

[1] Cardoso, E. and I. Goldfajn, 1997.
[2] Simone, F. and P. Sorsa,1999.

UN proposed to establish a new international organization called WFO (World Finance Organization) for supervising short-term speculative capital movement[1]. For example, discussion of civilian financial institutions' bail-in to induce debtors and creditors to act carefully in order to establish and run an international hedge-fund watchdog and prevent financial crisis, movement for including fund providers in the countries from which capital outflows into the targets of sound management supervision, and projects for building a new financial architecture which is regarded as most inclusive response to such interest.

However, Feldstein (1999) provides the following advices. He argues that emerging markets should not expect that international organizations like IMF would be able to play an epoch-making role of preventing financial crisis or that a new international financial order would drive world economy to less dangerous dimension. He says that developing countries have no choice but to do self-revival actions of which essence is to acquire enough liquidity. Since, however, it is impossible to gain a large liquidity by paying unreasonably high cost, liquidity must be obtained within the scope of reasonable cost. The ways for gaining sufficient liquidity reasonably are to avoid excessive short-term foreign debts, increase exchange reserve, and seek for credit facility allowing borrowing[2].

This study proposes the following countermeasures for preventing the negative effects of capital liberalization, which are caused by short-term speculative capital flow. It is necessary to control flow of short-term speculative capital. To this end, short-term speculative capital flow must be regulated under international cooperation. Or, we may consider taxation over short-term speculative capital transactions or gains at the domestic level[3], quantity control by imposing the limits to foreigners' domestic stock investment, restrictions over domestic banks' loan to overseas residents, and inhibition of domestic banks' short-term borrowings from abroad.

On the other hand, introducing Tobin tax as a way for taxation over short-term speculative capital transactions may be considered. Along with this, we may consider a kind of Keynes tax (argued by Crotty and Epstein, 1996), which imposes tax on the sale of financial asset held shorter than target holding period (for example, within one or two years). Tobin tax and Keynes tax can become tools for limiting flow of short-term speculative capital effectively through mutual supplementary effects.

France and Germany have recently discussed again the introduction of Tobin tax for regulating short-term speculative capital transactions or gains[4]. The countries argue that taxation on short-term speculative capital suppresses fluctuations in foreign exchange market and infection of currency crisis. The two countries show that Tobin tax can reduce exchange volatility in daily capital transactions, lengthen remaining period of capital inflow, and prevent a sharp rise and decline in capital flow.

It should be noted, however, that if international capital transaction is inelastic, low elasticity may reduce the effects of regulation over short-term capital flow so that Tobin tax may fail. Also, when expected return from short-term speculative capital investment exists, i.e. local currency is expected to be overvalued, the effects of Tobin tax decreases. Therefore, Tobin tax can function well only if it is imposed effectively across the world.

On the other hand, quantity control by imposing the limits to foreigners' domestic stock investment has been used by many countries. Quantity control will be an effective tool for restricting speculative short-term capital transactions. The argument that quantity control over short-term speculative capital flow may reduce the introduction of long-term capital or foreign direct investment and thereby limits domestic financing seems to be less persuasive, as shown by the experi-

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[1] Sachs confirmed that Thailand, Malaysia, Indonesia, Philippines and Korea recorded net capital flow USD 93 billion in 1996, and net capital outflow USD 12.1 billion in 1997, showing sharp change of USD 105 billion in capital flow for one year. Since total GDP of the five countries were estimated to be USD 935 billion, large capital accounting for 11% of their total GDP moved fast (Radelet, Steven and Sachs, Jeffrey, 1998).

[2] Feldstein, Martin, 1999.

[3] For example, Chile's taxation over inflow of short-term foreign capital in early 1990s, and Malaysia's taxation over outflow of foreign capital are belonged to tax-based capital control.

[4] Of course, there is another argument that Tobin tax cannot suppress large speculation, reduces transaction volume and increasing transaction cost, failing to reduce volatility in capital market (Davidson, 2000).

ences of China and India (Stiglitz and Andrew, 1981). However, in spite of its rigid regulation over short-term capital flow, China has induced a large amount of foreign direct investment.

If foreigners finance domestic currency from domestic banks in order to invest in domestic market, imposition of high interest rate or tax, or obligatory deposit of a part of borrowings at no-interest bearing account may be considered in order to set the limits to the loans to the foreign borrowers (Crotty and Epstein, 1996). Or, if a domestic bank gets short-term borrowings from abroad, it is possible to reduce incentives for short-term borrowing through variable deposit requirement.

The above regulation of short-term speculative capital flow has many restrictions and problems in reality. As described above, for example, Tobin tax can come into effect only if all countries introduce it. From this, a conclusion can be drawn that flow of short-term speculative capital cannot be controlled effectively until all countries introduce Tobin tax.

I. Capital Liberalization in Korea

This section will review and evaluate the process of Korea's capital liberalization before and after the financial crisis in 1997.

1. Capital liberalization before the financial crisis

Capital liberalization in Korean economy started for the purpose of using foreign capital to make up for shortage of capital necessary for sustaining high growth continued since 1960 when Korean government launched economic development plan. In the 1970s, expanded scale of economy put forward the necessity of capital liberalization internally, and externally, sharp rise in trade volume, increased international capital transactions and developed countries' strong pressure on liberalization highlighted necessity of capital liberalization (Lim, 2000).

Consequently, Korean government announced the 'Long-term Plan for Globalization of Capital Market' for capital liberalization in January 1981. Based on this long-term plan, capital liberalization in Korea experienced revisions and supplementations over several times. As 'Timetable for Promoting Capital Liberalization' in 1988 and 'Plan for Promoting the Liberalization of Korean Stock Market' in 1991 were announced (Table 1), capital liberalization in Korea became framed into a well-figured cast. As Foreign Currency Control Act was amended in September 1992, basic preparations for exchange liberalization were finished. According to the three-phase financial liberalization and market liberalization plan, the so-called 'Blue Print' in June 1993, Korean government has implemented exchange liberalization step by step.

Korean capital market was supposed to be gradually liberalized for the past five years since 1989. According to the 'Proposals for Reforming Foreign Exchange System' announced in December 1988, domestic companies' fund raising from abroad, foreign direct investors' investment in domestic stocks, and natives' holding and use of foreign capital would be liberalized by a large margin, through Phase 1 in 1995, Phase 2 between 1996 and 1997, and Phase 3 from 1998 to 1999.

Notwithstanding, Korea had many difficulties in attracting foreign investment and foreign capital since Korean government had imposed a strict regulation upon capital transactions through the Foreign Capital Inducement Act and Foreign Currency Control Act. To get through these difficulties, Korean government announced the 1st exchange liberalization and the 2nd exchange liberalization, in 1999 and 2000 respectively, and 'mid-and-long-term development course of exchange market' in 2002.

When Korea saw foreign exchange crisis exploded in 1997, IMF signed the first LOI (Letter of Intent) with Korean government on December 3, 1997. When Korea joined the OECD in 1996, gradual liberalization of Korean capital market was accepted. In the process of overcoming the financial crisis broken out in December 1997, Korean capital market showed fast and full-fledged liberalization. Korean foreign currency system was reformed over two phases and a new foreign currency exchange act was established, putting a period to the past foreign currency control era. Foreigners have extended their reach further into Korean financial market. Some of Korean financial institutions have been taken over by foreigners, and several banks in Korea have CEO or director from foreign countries.

Table 1

Korea's measures of capital liberalization (1985-1996)

Year	Highlights
1985	Permitted Korean firms' overseas stocks (upper limit: 15% of market cap., upper limit of individual equity: 3%)
1987	Permitted the investment in stocks and bonds for obtaining high technologies or solving export troubles
1988	Permitted securities firms to invest in foreign stock markets (insurers and investment trust companies) (upper limit: USD 30 million for securities firms / USD 10,000 for insurers and investment trust companies) Permitted emigration expense up to USD 200,000, and emigration investment up to USD 300,000
1989	Permitted foreign exchange banks to get borrowings from offshore financial markets: issuance of foreign currency denominated bonds Increased the stock investment equity of foreign securities firms to 40%
1990	The companies with license of international securities business were allowed to invest in foreign countries up to USD 50 million. Abolished the foreign currency loan of the Bank of Korea
1991	Permitted the issuance of foreign currency denominated bonds for importing production facilities and equipment Allowed domestic institutional investors to invest in foreign national and public bonds with high credit rating Deregulated the regulations over foreign branches' local financing
1992	Liberalized domestic stock market: individual investment limit 3%, total limit of a foreigner's investment 10% Permitted additionally the overseas issuance of CP and Negotiable CD (in the past: bond, CB, BW and DR) Increased the investment limit of overseas portfolio of securities firms, investment trust companies and insurers to USD 50 million Provided full deregulation of foreign subsidiaries' local financing (expanded investment grade scope)
1994	Increased the limit of foreigners' total investment to 12% of market cap. Abolished the limit of foreign invested companies' local financing Deregulated institutional investors' investment in foreign stocks Allowed domestic residents to invest in foreign stocks (within the limit of KRW 1 trillion) and top-tier national and public bonds
1993	Investment and loan companies, pension fund and companies with overseas transaction over USD 1 trillion were allowed to invest in foreign countries Companies with transaction over USD 1 trillion were allowed to hold foreign exchanges Increased the limit of overseas investment Applied declaration system to the issuance of foreign currency denominated stocks Permitted overseas branches of domestic banks to provide domestic residents with loan related with futures transaction
1995	Increased the limit of foreigners' total investment to 12% of market cap. Permitted overseas CB issuance (within 15% of market cap.) Abolished the overseas investment limit of investment and loan companies and pension funds Lifted the regulations over overseas deposit: institutional investors (USD 1 trillion), domestic firms (USD 1 million), individuals (USD 30,000)
1996	Permitted non-residents to transact cross-currency derivatives Increased the limit of investment in the stocks of listed companies and state-owned companies to 20% and 15%, respectively Increased the limit of individual investment to 5% Listed Korea Bond Fund on the London Stock Exchange Permitted non-residents to invest in BW Abolished the limit of investment of individuals and firms in foreign stocks Abolished the limit of institutional investors' foreign currency loan to non-residents Permitted institutional investors and foreign exchange banks to provide Korean currency loan to non-residents (within the scope of KRW 100 million)

At the same time, Korean government held policy discussions over several times in order to fix basic framework for financial restructuring and encouraged its implementation till May 1998 when the Financial Supervisory Commission (FSC) launched and started to function[1]. The basic blueprint of financial restructuring was drawn under the request or approval of the IMF, which covers National Assembly's early passing of 13 financial reform acts, closure of bad-performing financial institutions and stakeholders' bearing of resulting loss, reduction of the scope of payment guarantee in the deposit insurance system, establishment of standards for supervising soundness, government's financial support on the precondition of self-survival efforts, and improvement in the transparency of accounting principles.

It should be noted that Korea's financial crisis was not generated by national fiscal failure or external speculators, but by the shortage in foreign currency liquidity, which was caused by the fact that foreign financial institutions' refused to provide refinancing for existing loans and demanded payment of whole debts in the situation where Korea had a lot of accumulated short-term debts. In other words, Korea's financial crisis in 1997 came from a sharp rise in Korea's short-term foreign debts in the mid-1990s. However, Korea had already liberalized financial institutions' debt-financing transactions before its accession to the OECD in 1996.

As a matter of fact, there are voices of reflection on Korea's capital liberalization. Those who reflect on the past course argue that Korea's capital liberalization would not be able to reach the present stage unless a financial crisis broke out in 1997, and think that Korea's capital liberalization was not voluntary but forced under external pressure (from IMF, USA, etc.). Even though the majority of Korea's capital liberalization was implemented under the external pressure[2], it achieved a remarkable development. Even if Korea's capital liberalization has not succeeded in producing expected results, it is significant in that it has transformed Korea's capital flow, which had been government-led and closed, into a more transparent and smooths one.

As discussed above, Korea's capital liberalization before the financial crisis in 1997, went slow and its scope was selective, in comparison with developed countries like UK and some Asian countries like China and Singapore. Before the financial crisis, the direction and width of Korea's capital liberalization was adjusted through talks with major developed countries like USA according to changes in current account rather than actual plan.

2. Capital liberalization after the financial crisis

As described above, Korean government permitted foreigners' investment in domestic listed stocks for the first time in January 1992. Since then, Korean government increased gradually the limit of foreigners' stock investment, experienced the financial crisis in 1997, and permitted all kinds of investment in stocks in 1998, excluding the restrictions against foreigners' investment in state-run companies. In other words, the limit of foreign investors' investment in domestic stocks, stock index futures and options, and beneficiary certificates was abolished, and foreign investors were allowed to invest in privately-held stocks and acquire securities in primary market.

In case of bond market, foreigners' direct investment in the CBs of small-and-medium companies was permitted in 1994, and then, the limit of foreigners' investment in all listed bonds was completely abolished in late 1997 when the financial crisis reached its peak. With IMF bailout on December 5, 1997, Korean government and IMF reached the following agreements across various fields like macroeconomic goals, monetary policy, and foreign exchange rate policy and fiscal policy (Table 2).

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[1] Primary Points of Agreements on the IMF Loans to Be Provided (Information of Korean Banks, May 1998) provides a good summary of this story.

[2] As new economy-related ministers took offices, US pressure on the liberalization of Korean capital market, which has been latent behind US drive towards the opening of Korean market of agricultural and industrial goods, has become full-fledged. Especially, six or five investment banks, including BearSterns belonged to top 10 investment companies in USA, dispatched their representatives to Korea, giving stronger pressure on the liberalization of Korean capital market.

Table 2

Korea's capital liberalization under IMF program (December 1997 – December 1998)

Sector	Milestones	
Direct investment	May 1998	Liberalized business categories for foreigners' investment: full liberalization of 7 business categories including building leasing business, partial liberalization of futures trading business, and expanded liberalization of investment cooperatives and CATV business
	May 1998	Liberalized business categories for foreigners' investment: full liberalization of 11 business categories including commodity exchange business and investment company
Stock investment	Dec 1997	Increased the limit of foreigner's investment in stocks: 26%→50%→55% per issue, and 50%→55% per head Permitted stock acquisition for friendly M&A in the OTC market and stock market without limit Increased the limit of foreign banks' acquisition of the stocks of domestic banks Expanded liberalization of bond market: liberalized non-guaranteed/ guaranteed corporate bonds of large companies (10%→30%); expanded limit of investment in the non-guaranteed CBs of large companies (30%→50%); and abolished the limit of investment in the non-guaranteed corporate bonds and CBs of small-and-medium companies Abolished the limit of investment in corporate bonds Approved foreigners' investment in national and public bonds
	Feb 1998	Liberalized domestic short-term financial instruments completely
	May 1998	Abolished the per-issue limit of foreigners' investment in stocks Approved all kinds of M&A
	July 1998	Permitted investment in non-listed stocks and bonds
Other investment	Dec 1997	Lessen the regulations over private-sector companies' foreign borrowing Deregulated long-term cash loan with maturity over three years temporarily (Approved borrowing when one-year maturity was passed since July 1998)

1. With regard to foreign exchange rate system, Korean government and IMF agreed to 'keep elastic exchange rate policy and limit governmental market intervention to mitigation of sudden fluctuations'. Under the agreement with IMF, just as small open economies or developing countries did, Korean government abolished the exchange rate system pegged to the currencies of major countries (especially USA), and adopted the floating exchange rate system which it had avoided.[1]

2. With regard to trade liberalization, Korean government and IMF agreed to 'set up a timetable for propelling gradually abolition of trade subsidy, abolition of import approval, abolition of import diversification policy and improvement of transparency in the procedure of import certification within the scope of WTO's concession plan'.

3. With regard to capital liberalization, Korean government and IMF agreed to advance the existing capital liberalization plan through staged actions programs. Especially, under the negative system, both parties agreed to:

- increase the limit of foreigners' investment in domestic stocks to 50% till the end of 1997 and 55% till the end of 1998;

[1] Since the financial crisis in 1997, transition to floating exchange rate system recovered function of exchange rate. It is very difficult, however, for a developing country of small-scale liberalized economy to maintain pure floating exchange rate system, because such a country will not be able to easily endure attacks from short-term speculative capital like hedge fund and infection of financial crisis. When exchange rate shows extreme volatility, government's proper intervention will be inevitable. However, how to make it possible to succeed in causing government's proper intervention is a really difficult problem. Therefore, a tool for companies to raise their ability of managing exchange risk and solve such a risk must be provided through market. To this end, an infrastructure for exchange market must be built.

- permit foreign banks to buy stocks of a domestic bank, which exceed 4% of the total number of its stocks issued and outstanding, under approval from financial watchdog, if it is helpful to improve the efficiency and soundness of Korean banking system;
- approve foreigners' purchase of domestic short-term financial instruments without limit;
- reduce the restrictions against foreign direct investment in domestic stocks through procedure simplification; and
- abolish the limit to private companies' foreign borrowings[1].

After Korean government and IMF agreed as above, the following four measures for foreign investment liberalization were taken: i) liberalization of domestic listed bonds, ii) liberalization of foreign investment in domestic corporate paper, trade bill and commercial note, iii) liberalization of investment in domestic CD, RP and cover bill, and iv) liberalization of investment in domestic stocks of listed and registered companies.

Before the financial crisis in 1997, foreign companies could not merger or acquire domestic companies. Under this situation, foreign direct investment was naturally limited extremely. However, since the financial crisis, Korean government reorganized systems to encourage foreign direct investment, and lifted all regulations over foreign companies' merger and acquisition of domestic companies (Lim, 2001). It should be noted that as foreign direct investment is a long-term capital without imposing burden of foreign debt payment and leads to job creation and technology transfer, a majority of developing countries like China is in a cutthroat competition over attraction of foreign direct investment (Lim, 2003).

Then, Korean government allowed domestic companies to acquire trade credit, get mid-and-long-term foreign currency borrowings with expiry over one year, and issue overseas securities without limit, and liberalized all foreign exchange transactions related with foreigners' investment in domestic non-listed stocks and bonds. As a result, foreign exchange and capital transactions were liberalized completely, excluding private companies' short-term borrowing and individuals' capital transactions, both of which were scheduled to be liberalized in late 2000.

As described above, exchange transactions were liberalized to allow the private sector to execute freely overseas economic activities so that Korean economy can improve efficiency. This provided a momentum for qualitative and quantitative development of Korea's foreign exchange market. It also provided Korean retail investors with an opportunity to reduce the involved risks of capital investment and improve investment efficiency through their diversified overseas investment.

Korea's 'Exchange Transaction Act' enforced from April 1999 expanded further the liberalization width of capital transactions. Concretely, Korean companies' current payment including local companies' expense related to R&D activities and service charges was liberalized. Korean companies were allowed to get short-term foreign currency borrowings with maturity less than one-year. Korean companies and financial institutions were permitted to invest in overseas real estates and establish overseas branches. The principle of real demand regarding the transactions of forward exchange and derivatives was abolished. Non-residents were allowed to issue securities in Korea, etc. Non-banks were permitted to carry foreign exchange business related to their business activities. Cambist registration system was introduced. In this way, Korean financial institutes carrying foreign exchange were increased[2]. This was followed by supplementary policies described below.

1. Korean government introduced newly such systems as foreign exchange network, establishment and operation of international finance center and early exchange warning system, in order to build a system for monitoring a sudden inflow/outflow of foreign exchange.

2. To prevent Korean companies' blind short-term borrowings, the government decided to inhibit domestic companies with lower financial soundness from lending short-term foreign loans

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[1] Information of Korean Banks, 1997.
[2] International Finance Division, 1999.

and issuing short-term overseas securities, prohibit large companies to provide payment guarantee for their subsidiaries including provision of security for foreign borrowings, and prevent main company and its subsidiaries from providing guarantee for local financing.

3. To minimize excessive speculative capital transactions, Korean government has restricted the limit of non-residents' Korean currency borrowing, limited the issuance of short-term Korean currency denominated securities, made it obligatory to settle difference at the expiry of forward exchange contracts, prohibited Korean currency borrowing using irregular use of derivatives, and tried to periodically review internal control over the derivative transactions.

4. Korean government did not abolish the notification of remittance, take-in and take-out of large amount of foreign currency to National Tax Service or Korea Customs Service, connected foreign exchange network and monitoring network of National Tax Service and Korea Customs Service, and systemized monitoring of illegal foreign currency take-out. In this way, the government tries to block illegal take-out of foreign currency or property flight.

5. Korean government ruled that the safeguard may be invoked when it seems to be impossible to use other measures to stabilize domestic economy. The government can require the liberalized capital transactions to be approved in the case of a macroeconomic emergency, and stipulate variable deposit requirement on excessive influx of foreign capital.

3. Evaluation of Korea's capital liberalization

Korea's capital liberalization must be promoted to achieve the basic policy goal of economic liberalization. In a small open economy like Korea in which foreign trade accounts for a high portion of economy, economic liberalization cannot be achieved without capital liberalization.

The internal significance of Korea's capital liberalization is as follows. In the past, obtaining an approval for induction of foreign capital was a preferential treatment. In Korea, a high portion of resource allocation was decided by ruling political forces because the government could impose a strict control upon allocation of financial resources. As long as the government controls capital flow, actual economic liberalization cannot be realized. Financial liberalization is absolutely necessary for reducing control of political forces over economy. Capital liberalization is indispensable for real financial liberalization.

The external significance of capital liberalization is as follows. Just as Korea trades goods and services primarily with developed countries, Korea transacts capital necessarily with developed countries through capital liberalization. However, many of these developed countries have achieved a considerable level of liberalization in trade and capital flow. Being close to Korea in terms of both economy and geography, Japan has recently implemented actual capital liberalization. Therefore, capital liberalization allows Korean economy and developed economies to integrate their capital markets as well as their markets of goods and services. The integration of Korean market and developed markets through these international transactions expands the scope of Korean's economic activity and, at the same time, reduces factors causing economic instability. Therefore, sticking to liberalization of the regulation items in balance of capital account should not be followed in doing sequential liberalization. On the contrary, sequential liberalization must be approached in terms of structural aspects, which include abilities to establish macroeconomic policies for imposing proper control upon the instability of macroeconomic conditions under capital liberalization and improvement of the function of financial supervision[1].

As is known, despite Korean government's opposition, Korea's capital liberalization was accepted through lump-sum negotiation with IMF for bailout when a financial crisis exploded in 1997. The financial crisis in Korea had the following positive effects on capital liberalization.

1. Since the financial crisis in 1997, in spite of foreign creditor banks' continued debt recovery, Korean economy solved the shortage problem of foreign currency liquidity and accumulated a large foreign currency reserve because foreign investors rushed to buy Korean stocks, along with surplus in current account. Other investment accounts (comprising loans) recorded deficit USD 8.4 billion between December 1997 and July 2000. On the contrary, current account and di-

[1] On April 1, 1998, the Financial Supervisory Commission was launched officially as an integrated financial watchdog integrating supervision functions of each financial institution.

rect investment account showed profit USD 74 billion and USD 7 billion, respectively, and net inflow of stock investment fund reached USD 20.3 billion.

2. As foreigners speeded up their money input for buying Korean stocks shortly after the financial crisis, foreign currency liquidity recorded a large increase. This provided a momentum for Korean government to shift fast from high interest rate policy implemented after the financial crisis to financial deregulation / low interest rate policy, achieving stabilization of interest rate and speedy economic recovery.

3. Inflow of foreign investment fund was very important for KOSPI index to jump up since the mid-1998. Domestic institutional investors had no bullets, but foreign investors bought Korean stocks and led bullish stock rally.

However, Korea's capital liberalization led by IMF brought about the following serious negative effects. Concretely speaking, Korean government attempted to induce capital inflow by using high interest rate exceeding 30%, according to the semi-forced advice of IMF. In the process, Korean government had only adapted to the change of foreign exchange rate under the floating exchange rate system in the beginning, and to the change of interest rate later. Unlike the South American economies, however, the adaptation to the channel of interest rate was not effective in Korea where capital movement was not sensitive to change of interest rate. Because the primary use of interest rate in order to overcome the financial crisis did not improve psychological instability of economic agents and accelerated economic slump. Therefore, Korean companies went bankrupt that would not otherwise fail. This brought about a vicious circle of increase in non-performing loan of financial institutions and acceleration of financial disintermediation in Korea. At that time, foreign capital inflow seeking for high interest rate was ignorable and capital flight could not be imagined.

As described above, Korea's capital liberalization led Korean economy to depend on international financial order. Korea stock market followed closely tracks of overseas stock markets (Coefficient of correlation between KOSPI index and Dow Jones Index reached 0.85 in August 2002). This forced Korean government to operate Korean economy by following the interests of foreign institutional investors, which were financial capitals of developed countries.

As a result, the management of Korean business gave top priority to short-term revenue maximization and stock price management, and Korean government was forced to focus on stabilizing prices and boosting capital market, rather than job increase and welfare improvement. Moreover, it made it inevitable for Korean government to privatize state-run corporations[1] and implement the policies for improving transparency of companies in order to provide more investment opportunities for foreign finance capital and facilitate its investment activities.

In a sense, revising company goals (short-term revenue maximization and stock price management) and government policy orientation (stabilizing price stabilization and boosting capital market) is helpful for national economy. As the past experiences in many countries show, however, company goals and government policies, both of which reflect the interests of large shareholders from domestic and foreign financial capitals, provide little help for improving long-term business competitiveness and stimulating economic growth, raise instability in domestic financial sector, and tend to be prone to plunge national economy into a chaos. Therefore, these policies give profits to domestic and foreign financial capitals and losses to workers without stocks or most of minority stockholders. Also, widened gap between poor and rich, which has been recently found in many countries, is resulted from this new economic order. The same is true of Korea. Economic volatility in the real sector as well as the financial sector has become increasingly higher, and income gap between poor and rich has been widened.

To suppress these negative effects of capital liberalization and utilize foreign capital effectively to promote job increase and economic growth, the following paradigm shift is necessary.

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[1] Korean government announced the 'Direction of Promotion of the Sale of Bank Stocks Owned by the Government in 2002' on January 25, 2002, in order to settle market-led financial system and minimize people's burden by recovering public fund early. Based on this, the government presented a framework for privatization of financial institutions, within which sale of bank stocks owned by the government would be promoted on a full scale for the purpose of completing the disposal in three or four years, and started to privatize financial institutions.

1. The increased liquidity and speculative activity of financial capital is not helpful for long-term economic growth and macroeconomic stability.

2. Unlike economic theories addressing efficiency of market functions, market valuation or stock price change in stock market in which human beings' impulsive economic psychology or speculative activity dominates is not an indicator showing efficiency of national economy or presenting a good direction of capital investment.

3. The ex post coincidence between the interests of stockholders (financial capitalists) and a country's goals of job increase and economic growth is never true empirically as well as theoretically.

4. Even if business management transparency is enhanced and stock prices increase for the interests of foreign financial capitalist, giving benefits to a small number of large stockholders, the interests of such stockholders must not precede economic growth and stability.

5. Conflict over policy goals should be borne to some degree, as long as benefits from capital liberalization are not abandoned. However, it is necessary to have flexible policy combination that changes priority of policy goals depending on economic situation. It is necessary to make efforts for minimizing conflicts over policy goals by utilizing various policy drives like temporary capital control, e.g., variable deposit requirement which forces a part of foreign currency borrowings or a part of foreign investment fund to be deposited at central bank when influx of short-term capital hikes.

IV. Conclusion

The main purpose of this study is to suggest some policy recommendations for financial globalization based on the experiences of OECD countries' capital liberalization process.

In the long run, capital liberalization will make a large contribution to lowering domestic interest rate and extending growth potential of national economy. When a small open economy joins the group of developed countries, spread in domestic and overseas interest rates will disappear, reducing the side-effects of capital liberalization (instability in foreign exchange and stock markets, increased volatility in foreign exchange rate, interest rate and prices, deepened macroeconomic instability, disturbance in industrial order, and restricted domestic policies for job increase and economic growth, all of which are caused by short-term speculative capital inflow/outflow). Therefore, it will be possible to maximize the benefits of capital liberalization (reduced financing cost, improved investment profitability, increased efficiency in resource allocation, boosted economic growth, introduction of advanced financial techniques, improved constitution and competitiveness of domestic financial industry, etc.).

However, from the short-term perspective, the three macroeconomic variables – domestic currency, interest rate and foreign exchange rate – are strongly correlated due to capital liberalization. Stabilization of these macroeconomic variables is a prerequisite for successful capital liberalization. Restructuring financial industry and emergence of new financial instruments, both of which come from financial globalization, affect monetary and credit policy. They also affect the transmission path of financial policy and selection of new central monetary indicators. Consequently, it is good to shift from direct control over money supply to indirect control over it by selecting interest rate and foreign exchange rate as intermediate policy targets.

As current transactions and capital transactions become increasingly liberalized, foreign exchange rate as an intermediate policy target has become more important. In a small open economy with a high dependence on import, changes in foreign exchange rate have a significant effect on its domestic prices. Since capital liberalization tightens the ties between interest rate and foreign exchange rate, it is difficult to manage both rates independently. Managing domestic interest rate independently of overseas interest rate increases the volatility of foreign exchange rate, and any slight difference in these two rates causes fast flows of a large capital, making it difficult to set money supply or interest rate as a target of monetary policy.

Generally, foreign exchange rate under capital liberalization is determined by price competitiveness, and volume of current and capital transactions. Especially, in the short run, capital transactions have more direct effects on exchange rate. As capital liberalization goes wider, mid-and-short-term foreign exchange rate is more directly influenced by capital inflow/outflow.

Hence, the author would like to put an emphasis on improving exchange control system for regulating short-term speculative capital inflow/outflow. It is necessary to manage capital inflow/outflow properly in preparation for the case where foreign capital transforms itself into short-term speculative capital. Also, foreign capitals taking various forms should be differentiated. Inflow of short-term speculative capital should be suppressed. On the contrary, influx of long-term capital should be encouraged. Exchange control system should be improved so that capital outflow as well as capital inflow can be liberalized vigorously.

Differentiation of capital inflow

In the beginning where all inflows of foreign capital cannot be liberalized, it is inevitable to provide differentiated treatment for foreign capital in the forms of short-term speculative capital, stock investment and direct investment. Efficient control of the composition of foreign capital allows to reduce total capital inflow and to obtain more desirable foreign funds. The foreign capital related with purchase of capital goods for facility investment and technology development give a slight pressure on overvaluation and money increase, unlike other forms of foreign capital inflow, and on the contrary, provide the positive effects of improving production capacity and promoting technology development of domestic firms. Priority should be, therefore, given to the inflow of the previously mentioned long-term capital inflow, whereas portion of short-term capital inflow should be kept low.

The methods for differentiating various kinds of foreign capital include direct control through mandatory order, tax, subsidy, and open tender. Since direct control through mandatory order is prone to be involved in bureaucratic corruptions and political scandals, it is necessary for direct control to be implemented in the way that short-term foreign capital can be more affected, but long-term foreign capital can be protected from direct control.

It is also necessary to consider imposition of interest equalization tax amount to spread between domestic and foreign interest rates, or variable deposit requirement ruling that a constant ratio of foreign borrowings should be deposited. It will be desirable to introduce Tobin tax, which differentiates reserve requirements ratio according to maturity, i.e. imposes higher reserve requirements ratio against shorter maturity, and lengthen deposit period of foreign currency inflow.

Liberalization of capital outflow

We may liberalize capital outflow in the way that domestic surplus fund generated by excessive foreign capital inflow is exhausted by capital outflow. This can minimize the side-effects of short-term speculative capital inflow. Finally, liberalization of capital inflow/outflow must be propelled energetically so that foreign capitals flown can reflow into more productive sectors in foreign countries through overseas investment. Since, however, overseas investment should be driven in the long run in link with domestic industrial policies, there is no choice but to promote investment in foreign financial assets more vigorously in the short-term period.

Since international financial market marches fast toward capital globalization, a small open economy like Korea should liberalize investment in foreign stocks and provide firms with an opportunity to invest directly in foreign stocks through foreign exchange banks as well as indirectly in foreign stocks through investment and trust management companies. Exchange management should be shifted to negative list system. Whether domestic firms should flow foreign currencies obtained into their home country or deposit the currencies at banks abroad should be referred to their portfolio strategies.

Finally, the author would like to emphasize that stability of financial system is a prerequisite to manage the volatility of financial market, and international organizations like APEC should discuss cooperation in macroeconomic policy on the capital flow across East Asian countries.

References

1. Bank Of Korea, Primary Points of Agreements on the IMF Loans to Be Provided, Information of Korean Banks, May 1998.
2. Bank Of Korea, Characteristics of Recent International Capital Flow and How to Cope with It, Information of Korean Banks, June 2002.
3. Calvo Guillermo A., L. Leiderman and C. M. Reinhart, "Capital Inflows and Real Exchange Rate Appreciation", IMF Staff Papers, March 1993, Vol. 40, No. 1, pp. 108-151.
4. Cardoso E. and I. Goldfajn, "Capital Flows to Brazil: The Endogeneity of Capital Controls", IMF WP/97/115.
5. Davidson Paul, "The Role of Financial Markets; Efficiency vs Liquidity", presented at Ninth Annual Hyman Minsky Conference on Financial Structure, The Jerome Levy Economics Institute, 2000.
6. Feldstein, Martin, "Self-protection for Emerging Market Economies", NBER working paper 6907, 1999.
7. Information of Korean Bank, December 1997.
8. Kaminsky, Graciela L. and Carmen M. Reinhart, "The Twin Crises: The Cause of Banking and Balance-of-Payment Problems", American Economic Review, 1999, Vol. 89, No. 3, pp. 473-500.
9. Korea Ministry of Finance, Long-term Plan for Internationalization of Capital Market, January 1981.
10. Lim, Yang-Taek, "A Historical Perspective on the Korean Economic Development", Current Politics and Economics of Asia, New York : NOVA Science Publishers, Inc., 2000, Vol. 9, No. 3.
11. Lim, Yang-Taek, Korea in the 21st Century, New York : NOVA Science Publishers, Inc. 2000.
12. Lim, Yang-Taek, "The Role of Foreign Direct Investment for Koreas Economic Recovery and Future Directions in Foreign Investment Promotion Policy", Restructuring Asian Economics for the New Millennium, Research in Asian Economic Studies, New York : JAI Press Inc., 2001, Volume 9B, pp. 565-599.
13. Lim, Yang-Taek, A Study on the Import Restrictions of China since Chinese Accession to the WTO, a research paper of Korea International Trade Association, 2003.
14. Ministry of Finance, Long-term Plan for Internationalization of Capital Market, January 1981.
15. Radelet, Steven and Jeffrey Sachs, "The Onset of the East Asian Financial Crisis", Sachs's webpage, 1998.
16. Simone, F. and P. Sorsa, "A Review of Capital Account Restriction in Chile in the 1990s", IMF WP/99/52.
17. Stiglitz, Joseph E. and Andrew Weiss, "Credit Rationing in Markets with Imperfect Information", American Economic Review, 1981, Vol. 71, No. 3.
18. Tornell, A. and A. Velasco, "The Tragedy of Commons and Economic Growth: Why Does Capital Flow from Poor to Rich Countries?", Journal of Political Economy, 1992, Vol. 100.