A Tale of Two Crises: 
Korea’s Experience with External Debt Management 
1979-80 and 1997-98 

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Introduction

Over the past four decades, Korea has suffered a number of small and large financial crises in the process of pursuing an outward-looking development strategy that relies on export promotion. The most serious was the 1997-98 financial crisis that brought the country to the brink of external debt default in 1997. Other crises in 1968-69, 1974-75, 1979-80, and 1991-92 were less damaging but nonetheless serious (Park 1986 and Cooper et al. 1994).

In many respects the causes of all these crises were similar: they included an investment boom in the run-up to the crises, a large and growing current account deficit as a proportion of GDP, and a real appreciation of the currency in effective terms. However, the 1997-98 financial melt-down was distinctive in that it was essentially a capital account crisis, which Korea and other emerging economies had not experienced before, although it was no doubt exacerbated by the current account deficit that grew before its eruption. All other crises originated and ended in the current account. This study has chosen the capital account crisis of 1997-98 and a current account crisis of 1979-80 for a comparative analysis.

Korea engineered a quick recovery from both the crises. As far as economic fundamentals were concerned, there was no reason to believe Korea was any more vulnerable to a crisis during the second half of the 1990s than it was two decades earlier. Nevertheless, the cost of resolving the second crisis was far greater than the first, and the progression of the two crises in terms of major macroeconomic variables also took different adjustment trajectories. Korea took a spending-out strategy in the first crisis, but such an option was no longer viable in the 1990s and it had to be bailed out by the IMF and other major creditor countries.

The purpose of this study is to analyze the causes and consequences of the two external debt crises of 1979-80 and 1997-98 from a comparative perspective with a view to understanding the dynamics of external debt crises in emerging economies. Sections II and III discuss the build up and resolution of the 1979-80 external debt crisis. This is followed in sections IV and V by an examination of macroeconomic
developments prior to and in the aftermath of the 1997-98 financial crisis. Section VI explores for the lessons of the two crises. Concluding remarks are in a final section.

. The 1979-80 Debt Crisis

As shown in Table1-1 and Figure 1, the Korean economy slowed in 1979 after the three years of double-digit growth. It managed to grow 6.8 percent while it was under growing inflationary pressure. Despite the weakening of the economy, the current account slid into a deeper imbalance as the deficit rose to 6.6 percent of GDP in 1979 from the 2 percent a year earlier. Although these macroeconomic developments hardly reached crisis proportions, they were ominous signs for the impending external debt crisis.

<Insert Table 1-1 here>

In 1980 the level of output contracted by 1.5 percent. The sharp economic downturn was more than a disappointing setback: it was alarming because the slump came with a rate of inflation measured by the consumer price index (CPI) that soared to 29 percent and the current account that dipped into a deficit equivalent to 8.3 percent of GDP. The deficit was hardly sustainable. The economy, having returned to a rapid growth path after overcoming the first oil crisis, was falling into stagflation with a large current account imbalance. As a result, total external debt as a proportion of GDP swelled by more than ten percentage points to 42.6 percent in 1980, reflecting the increase in foreign financing of the current account deficit and in holding a larger volume of foreign reserves (See Table 1-2).

<Insert Figure 1 here>

<Insert Table 1-2 here>
These adverse macroeconomic developments called for strong doses of stabilization measures that comprised tighter monetary and fiscal policy together with a currency devaluation, but Korean policymakers would not or could not accept such a traditional IMF supported prescription. Instead they opted for a growth-first policy for the next two years before turning to stabilization as the top priority of economic policy in 1983.

To the surprise of the IMF and the international financial community, this growing-out strategy did not sink the economy into deeper stagflation. On the contrary, the economy rebounded in 1981, growing 6.2 percent with a lower rate of inflation and a smaller current account deficit. Against all odds, the growth-first policy succeeded in resolving the current account crisis...

Seventeen years later, Korean policymakers found that a similar strategy was no longer tenable and would backfire if it was pushed through. What were then the internal and external developments that speeded up the recovery from the crisis with a small cost of resolution? How did a growth-first policy in the midst of accelerating inflation and current account hemorrhaging come about and why did it succeed? Will this strategy be viable to developing and emerging economies today? These are the questions this paper is trying to answer from the Korean experience of the 1979-80 debt management in the next two sections.

-1. Causes of the 1979-80 Crisis

After successfully promoting exports of labor-intensive manufactures for more than a decade Korea shifted gear to a secondary import substitution cum export push of capital intensive heavy and chemical industries in the early 1970s as a new development strategy to move up the ladder of comparative advantage. This strategy required large investment with long gestation periods in many of these capital-intensive industries, which had to be financed in large part by external borrowing. At
the beginning, doubts were raised as to whether Korea had developed the borrowing capacity and more importantly access to international capital markets to secure foreign financing needed to launch such an ambitious strategy. The new strategy had to be put on the backburner, however. It ran aground not because of external financing difficulties, but because of the first oil crisis in 1972.

Having managed to overcome the first oil crisis, Korean policymakers once again began stepping up the implementation of the heavy and chemical industry plan in the middle of the 1970s. In retrospect, this renewed fervor in advancing the heavy and chemical industry plan sow the seeds of the 1979-80 external debt crisis. In order to encourage investment in heavy and chemical industries the Korean government offered tax incentives, low cost bank credit, and other subsidies mostly to large firms belong to Korea’s industrial groups or chaebols.

The implementation of the plan succeeded in allocating large amounts of domestic and foreign resources to heavy and chemical sectors, but at a huge cost of setting off an investment boom. Investment in these two industrial sectors grew so fast that the ratio of gross investment to GDP jumped to 33.1 and 36 percent in 1978 and 1979 respectively from 28.7 percent a year earlier (See Figure 2). Light manufacturing industries, which had accounted for a lion’s share of exports, saw a relative decline in investment.

<Insert Figure 2 here>

Unavoidably the investment boom resulted in overheating the economy with large increases in real wages during the 1976-78 period that averaged more than 18 percent per annum. On top of the demand expansion, the shift of mostly skilled labor to heavy and chemical industries added to the increase in wage demands throughout the manufacturing sector. To make matters worse, together with wage increases a steep hike in agricultural prices caused by a poor harvest in 1978 aggravated further the growing inflationary pressure.
While prices and wages were rising rapidly, the Korean government was determined to maintain a dollar peg exchange rate regime, thereby letting the real exchange rate appreciate in effective terms. The currency appreciation together with sluggish investment in light manufacturing industries where Korea's competitiveness was slipping cut into export earnings. Exports in dollar terms fell by one percent in 1979 before registering a modest gain in the following year.

While Korea was plagued by these domestic economic woes, it had to endure a series of adverse external developments. A country that depended 100 percent on imported oil was hit by the second oil crisis in 1979. The price of mineral fuel soared by 38 percent and 40 percent in 1979 and 1980 respectively. Overall the terms of trade turned against Korea by 15 percent in 1980 as compared to the 1978 level. The deterioration of the terms of trade was then combined with the loss of export competitiveness to produce a large increase in the current account deficit in 1979. It came to a head at 8.3 of GDP in 1980 (See Table 1-2).

Korea's suffering was not to be confined to its economy. While the economy was beset by severe stagflation and an external debt problem, Korea was thrown into political turmoil triggered by the assassination of President Park in 1979. A transition government was installed, but was too weak and unable to control the bureaucracy to organize an effective policy response to the crisis that took a turn for the worse. A military government succeeded the caretaker administration in May 1980, but the new regime was hardly in a position to mount a strong stabilization program while struggling to consolidate its power.

The high oil price, slowdown in export earnings and accelerating inflation were then exacerbated by the political uncertainties, clouding further the future prospects of the Korean economy. Not surprisingly, businesses, both small and large, began adjusting to the poor and deteriorating economic and political outlook by cutting their
investment, thereby bursting the investment boom: fixed investment, which had begun to slow in 1979, fell by almost 11 percent in 1980 and again by 3 percent the following year. Investment would not recover until 1983. This downward shift in the investment demand with a poor harvest sank the economy into a deep recession in 1980 when the level of output contracted 1.5 percent.

Under these circumstances, it was expected that the current account deficit would shrink, but it did not. Although the economic prospects including an early recovery were rather pessimistic in 1980, household consumers had confidence in Korea’s potential for growth and industrialization. Apparently they considered the fall in output was a transitory phenomenon; they drew on their savings to maintain their consumption spending. As a result, the share of saving in GDP dropped more than that of investment, augmenting the current account deficit on the saving investment side (See Figure 2).

. Management of and Recovery from the 1979-80 Crises

-1. Spending Out of the Crisis

As noted in the preceding section, the caretaker government could not garner the support of either the political or business community that was needed to formulate and implement an effective stabilization program. The best in terms of policy changes the transition government could deliver was to devalue the won vis-à-vis the US dollar by 27 percent early in 1980. Thereafter, Korea moved to a managed float tied to a basket of major international currencies. This new system was then managed to weaken the won continuously until 1987 when it rose in value against the US dollar.

The textbook policy prescription for an economy suffering from a growing current account deficit and inflationary pressure would require a stabilization program that includes squeeze on the supply of money, a reduction in government expenditure
and currency devaluation. However, when the economy was slipping into what appeared to be a long recession that could multiply the unemployed to endanger social stability, and when the political future was unpredictable after 27 years of dictatorial rule, it would have been difficult for any government – civilian or military – to have the will to lean on stabilization policies. The caretaker government had been preoccupied with arresting the downturn of the economy, so was the military government that came to power in May 1980.

The new government was deeply committed to stabilizing the economy as a top priority of its economic policy along with financial reform and corporate or chaebol restructuring. It believed that inflation was at the root of the deterioration in income distribution, labor unrest, and the weakening of Korea’s export competitiveness. According to Haggard and Collins (1994), to the new political leaders inflation was more than an economic problem; it was the cause of deeper social malaise (P 9.79).

However, the new leaders were severely constrained in implementing extensive stabilization measures both economically and politically. On top of the deep recession in 1980, which was in part caused by a 20 percent decline in output in the agriculture, fishery, and mining sectors as a whole, the new regime had to resolve a crisis in the informal credit market that rocked the financial system when global trades sowed in 1982. Politically, the new government, not very popular and unable to consolidate its power, was not about to alienate any segments of the population by imposing an unpopular stabilization program.

The policymakers knew quite well that the growth-first strategy would succeed if only a large deficit on the current account resulting from the strategy could be financed externally. It was uncertain whether the international community would accommodate Korea’s demand for large scale borrowing at a time when Korea’s external debt was the fourth largest in the world. Nevertheless, it chose to reflate the economy. It was a gamble, but a calculated one.

Although the level of foreign debt was large, Korea’s debt service remained within a sustainable range. More important was the belief held by some of the
policymakers that though the current account deficit was large, it was a transitory problem and as such did not reflect on any fundamental weaknesses of the economy. Much of the decline in output was also attributable to the poor harvest. To the extent that the problem at hand was transient, it was argued that real adjustment was not warranted. If all-out efforts were made, the planners of the new regime concluded that the chances of securing additional external financing needed to finance the current account deficit were not pessimistic. In the end, the spending out strategy was chosen, and it worked. In many respects, Korea was lucky.

In managing macroeconomic policy, the new government therefore would not break out of the growth-first policy until 1983 when it began restraining the growth of domestic demand. The rates of growth of both M2 and M3 rose to 44.5 and 34.3 percent in 1979 and 80 respectively and remained above the 30 percent level for the next two years. The stance of fiscal policy measured by the unified budget deficit as a percentage of GDP was clearly expansionary until 1982. Interest rates in real term also declined in both 1980 and 1981 (See Table 1-3)

-2. Recovery and Shift to Stabilization

Despite the looseness in monetary and fiscal policy, the bleeding of the economy did not last very long. Inflation began subsiding in 1981 when the economy grew 6.2 percent and receded to 7.2 percent in 1982. Thereafter inflation remained below 3 percent on average per annum until 1985. By 1982, the current account deficit shrank to 3.3 percent of GDP and continued to decline thereafter. The economy recovered fully to resume its rapid growth only a year after it went into a tailspin. As in many other crises in other parts of the world, the pattern of recovery followed the V type of adjustment (See Figure 1). Against all odds, the growth first policy succeeded in resolving the debt crisis. What were then the factors responsible for the dramatic turnaround of the economy?

Haggard and Collins (1994) emphasize three interrelated developments. One
was the improvement in the external environment. Prices of oil and raw materials on which Korea was heavily dependent fell relative to prices of other goods and services, improving Korea’s terms of trade. In fact, the deceleration of inflation was mainly the result of the slowdown of the prices of oil and raw materials. The interest rates in global financial markets declined and the yen began its long period of appreciation against the US dollar. The second was the decline in real wages in both 1980 and 81 due in part to an increase in the flexibility of the labor market. The third development was depreciation of the real exchange rate, which improved Korea’s export competitiveness.

There is little doubt that these developments contributed to a dramatic decline in inflation, resurgence of growth, and improvement in the current account after the setback in 1980. However, there were other important factors that helped pull the Korean economy out of the debt crisis. One factor was the closed capital account. The tight control over capital account transactions allowed flexibility as well as effectiveness of monetary policy in a fixed exchange rate regime.

The single most important factor was Korea’s ability to finance externally its growing current account deficit that appeared untenable in 1980. Despite a looming current account crisis and an unfavorable economic outlook together with the political turmoil that led to a government, which was more authoritarian than the Park regime, Korea did not experience any capital flight by domestic residents or withdrawals of foreign loans and investments. In fact, the international financial community stood ready to finance Korea’s growing current account deficit.

The state-owned Korea Development Bank and other state controlled commercial banks when armed with government guarantees were not denied access to international financial markets. It is true that the share of short-term loans in total external debt rose and the cost of borrowing went up, but Korea, unlike during the 1997-98 financial crisis period, was not subject to any external borrowing constraint.

By 1983, stability returned with a resurgence in growth. Inflation receded to 3.5 percent while the economy registered double-digit growth of almost 11 percent. The
deficit on the current account declined to below 2 percent of GDP. Domestic demand was robust on top of strong export earnings. It was therefore clear that continuation of loose monetary and fiscal policy was no longer needed, as it would pose danger of rekindling inflation when the economy was not fully rid of inflationary expectations. Furthermore, total external debt remained at over 47 percent of GDP and was heavily laden with short term loans. Korea was hardly out of the woods. If the debt burden were to be reduced, the current account had to generate surpluses. To sustain stability and retire foreign debts, it was time to reverse the stance of monetary and fiscal policy, and the shift to stabilization was made in 1983 and sustained until 1988.

Ⅳ. The 1997-98 Capital Account Crisis

Ⅳ-1. Investment Boom Fueled by Foreign borrowing

Korea rebounded strongly from a slowdown in growth in 1992 and 1993. It did not experience the kind of double-digit growth that it had during the period of 1986-89, but the economic growth from 1994 to the beginning of 1997 was almost 8 percent on average per annum. It peaked in 1995 at nearly 9 percent (See Table 2-1).

Like the earlier periods of high economic growth, the economy was in part being fueled by exports but mostly by high investment, which was equivalent to 39 percent of GDP in 1996. In many respects, this high investment was a positive development as the economy was coming out of a slowdown during the 1992-93 period, but it also resulted in a deterioration of the current account in 1996. The deficit was a little over 4 percent of GDP and hardly unmanageable; it turned into one of the major causes of the financial crisis of 1997-98.

Much of the expansion in investment could only be possible by taking on enormous amounts of debt in economy with small and illiquid capital markets. It was not clear to Korean policymakers why Korean firms embarked upon such a debt
financed investment spree. There were two major developments that might explain the surge in corporate investment. One was the strengthening of the yen, which lifted the outlook of the economy as it boosted Korea’s export competitiveness.

The three-year period from the second half of 1992 to the first half to 1995 was witness to the super yen. Until the spring of 1995, when the yen hit the level of 79.5 to the dollar, there seemed to be no end to the yen’s rise. The appreciation of the yen brought about a sharp increase in the export earnings of Korea, which, in turn, encouraged a great deal of capital investment in 1994-96. Korea benefited the most of all East Asian countries from the high yen because it was then directly competing with Japan in many industries where Japan had been a predominant exporter.

The other was financial liberalization and market opening, which increased the availability of low-cost foreign credit. It led to a surge in foreign capital inflows. During the three-year period from 1994-96 total capital inflows rose to 47 percent of GDP from less than 30 percent during the preceding three-year period. A large fraction of the capital inflows, which consisted mostly of short-term borrowings by domestic financial institutions, was then channeled to financing of long term investment of Korea’s industrial groups or chaebol, which dominated manufacturing including electronics, automobiles, iron and steel, ship-building, and petrochemicals.

Many studies document that these two developments set off an investment boom (Park 1998 and 2002). Investment jumped to 38.9 percent of GDP in 1996 from about 35 percent three years earlier and wound up in a large increase in the current account deficit, which reached almost 5 percent of GDP (See Table 2-1). They also made more visible and serious as well currency and term mismatches in the balance sheets of financial institutions that rendered many banks and other financial institutions highly vulnerable to a crisis.

Korea’s industrial groups were not only expanding their domestic investment, but also moving into foreign countries as foreign direct investors. In 1994, Korea’s total foreign investment rose to $2.3 billion from less than $ 1.3 billion a year earlier. Over the next two years, it grew 33 and 36 percent respectively, and much of this
investment went to Southeast Asia and Europe, no doubt financed in large part by foreign credits.

Foreign debts of domestic firms amounted to $35.6 billion at the end of 1996. This figure jumped to $43.2 billion a year later. Private foreign debts as defined by the Korean government did not include those liabilities of foreign subsidiaries and branches of Korean firms, unless their parent firms guaranteed the payments of these debts. The exact amount of these liabilities was not known, but it was estimated to have been over $51 billion at the end of June 1997.¹

IV-2. Bursting of the Investment Bubble

During the third quarter of 1995, however, the Japanese yen reversed itself and began to depreciate. At about the same time, the terms of trade moved against Korea’s favor and continued to deteriorate for the next two years. The terms of trade shock, which in part reflected the stagnation in demand for Korea’s major export products, worsened the current account and set in motion weakening of the economy (See Figures 3)

Despite these adverse developments, Korean policymakers were not prepared to make any substantial adjustment in the exchange rate as well as monetary and fiscal policy. The real effective exchange rate as a consequence appreciated for more than a year from the third quarter of 1995 and thereafter remained relatively stable until November of 1997, when the financial crisis broke out. The reluctance of the Korean policymakers to devalue the won during this period was not altogether clear. There was speculation, however, that the policymakers, who were then preoccupied with industrial restructuring, believed that a strong won would help facilitate the shifting of resources away from those such as light manufacturing where Korea was losing its competitiveness to more skill- and knowledge-intensive industries.

¹ Since a large amount of private foreign debts was due in the spring of 1998, foreign lenders knew that private firms would not be able to service their foreign debts and therefore could destabilize the financial markets once again.
Although the economy began to decelerate during the second half of 1996 (see Figure 3), the large industrial groups were unable or unwilling to adjust their production and investment. Their inventories were piling up, and so were their losses and debts. Realizing the financial difficulties the large industrial groups and other large firms were faced with commercial banks were becoming less willing and more selective in accommodating their credit needs. Denied sufficient credit at commercial banks, the industrial groups had to secure high-cost, short-term loans from merchant banks and any foreign financial institutions willing to lend to them.

Why were Korea’s industrial groups so inflexible and slow in adjusting their investment and output in response to the worsening of the internal and external environment? The answer lay in some of the salient characteristics of the Korean chaebol. One such characteristic was their predatory behavior of competing for market share more than for profit, a feature that was nurtured by an industrial policy geared to obtaining scale economies in major export industries at the early stage of development. Every major chaebol was pursuing business mostly in tried and proven industries, so profits were driven down, forcing them to carve out the largest market share possible and to diversify at the first opportunity into new industries, which promised high profits.

As a result, all of the largest chaebols went on to expand their investment in Korea’s major industries so as not to lose their relative positions in the economy with borrowed money before the 1997 crisis. Furthermore, the rigid and bureaucratic management system, where the decision-making was concentrated at the top, made it difficult for the chaebol to adjust their operations to changes in market conditions as rapidly as they should have. Because practically all of the chaebols are family owned, they were reluctant to rely on equity financing, as doing so could dilute their management control. This reluctance together with small and underdeveloped domestic capital markets ensured that the chaebols depended on short-term debt financing from both domestic and foreign sources and hence highly leveraged. Knowingly or unknowingly they were also taking large risks in mismatching their balance sheets in
terms of maturity and currency.

A survey conducted in 1997 shows that the average debt-equity ratio of the 30 largest chaebols was more than 380 percent in 1996, four times as high as that of Taiwan (Korea Institute of Economics and Technology 1997). As it turned out, the high leverage and the balance sheet mismatches of the corporate sector proved to be the Korean economy’s most damaging structural weaknesses. Since they were so dominant players, chaebols’ rapid debt accumulation meant that the economy as a whole became more susceptible to a slowdown in growth and a financial crisis.

The new government that came to power in early 1993 was committed to market deregulation and opening as part of its efforts to enhance efficiency of domestic industries. The WTO agreement did not leave much room for industrial policy, and financial liberalization took away what was left of the government’s control or coordination of investment of the large conglomerates and enterprises through the banking sector.

Unfortunately, however, the market deregulation and financial liberalization were not accompanied by any reform of corporate governance or the financial regulatory system. Small stockholders never had much of a voice in the management of the chaebols. The government was no longer willing to intervene in investment planning and decisions of the chaebol. The chaebols were left free to do whatever they believed was in their best interests.


The investment boom supported by foreign credit could last only so long. Once the investment bubble burst as a result of the slowdown in export growth and a terms of trade deterioration, the number of corporate bankruptcies began to soar, and so did the volume of non-performing loans at financial institutions, as the government could not rescue many debt ridden corporations. Over a six-month period from December 1996 to June 1997, non-performing loans as a proportion of total loans
almost doubled (See Park 1998). The first major corporate casualty occurred in the second half of 1996. It was the nation’s 14th largest chaebol - Hanbo.

The investigation into the Hanbo collapse revealed that many loans to this group had been made under political pressure, loans which Korean financial institutions would not have granted on their own. The revelations of the extent of the unholy ties between politicians and industry and the scale of corruption shocked both the Korean people and foreign investors alike. And the pervasiveness of corruption uncovered began undermining the confidence of foreign investors in the government and the economy in general, and no doubt helped bring about the crisis as a result.

More high-profile bankruptcies followed. The Kia group, which was then the nation’s 8th largest chaebol, was put into liquidation proceedings in October 1997. By the first week of September, six more chaebols including Kia had been placed under a workout plan or had become insolvent. They accounted for about 10.4 percent of the total assets of the 30 largest chaebols, not a large enough amount to threaten the stability of the economy, but their demise made the economic outlook more pessimistic than otherwise. There seemed to be no end to the bankruptcies, and the economic slowdown had already dragged out for nearly two years.

By then, Korea had a lame duck government. Whatever economic control the government had still held after liberalization was even further compromised. And with the next presidential election to be held in December, there was no way the current administration was going to be able to take any serious action in restoring stability to the Korean financial markets. Foreign investors knew this all too well, prompting some of them to begin withdrawing their funds from the Korean stock market and out of Korea in early September (See Park 1998).

Reflecting the ineffectiveness of the lame duck government, exchange rate policy in the last three months leading up to the crisis drifted into inconsistency and unpredictability. Confusion in exchange rate policy suggested to foreign and domestic investors alike that the government was at a serious loss as to how to deal with the deteriorating financial situation. The won, which was overvalued, had been under
strong pressure of depreciation since the early months of 1997. Throughout the year, the government would publicly state that it would defend the won at the current level. When the won/dollar exchange rate approached the psychologically important level of 1000 won per dollar, the government made a goal-line-stand, intervening heavily in the market, but then suddenly gave up several days later.

Between June and November, the Bank of Korea’s reserve holdings fell by $10 billion, as shown in Table 3-A. During the same period the central bank sold $12.2 billion in the spot market and made forward sales amounting to $7 billion to defend the won (Table 3-B). The government further strained investors’ credulity during this time by failing to divulge the Bank of Korea’s actual level of foreign reserves or its forward market commitments. It asserted that the Bank of Korea held about $30 billion dollars in reserves, a figure which investors found implausible. The actual level of usable reserves had already dropped below $22 billion that previous March. By the end of November, it fell to $7 billion dollars.

The dire financial situation was further compounded by changes in sovereign credit ratings by global credit rating agencies. In January 1997, Moody’s gave Korea a sovereign credit rating of A1 and S&P gave it AA-. On November 28, Moody’s lowered its rating to A3, and on October 24, S&P downgraded Korea to A+. Thus, Moody’s readjusted its rating downward twice and S&P three times before the end of 1997. Whenever the sovereign rating was downgraded, the premium on Korean securities in the international financial markets rose. Foreign banks then refused to rollover their short-term loans to Korean financial institutions. As a result, the foreign exchange rate depreciated further and the market sentiment worsened. Reflecting the deterioration in the markets’ confidence in the Korean economy, the rating agencies adjusted their sovereign ratings downward again, thereby deepening the crisis further. The rating agencies were in fact generating a vicious cycle of declining ratings and market sentiment.
V. Management of and Recovery from the 1997-98 Crisis

V-1. The IMF Bailout

Toward the end of October, it became clear to policymakers as well as market participants that the financial situation was getting out of control. Foreign investors moved out of the stock market in droves, and Korean banks were increasingly unable to rollover their short-term foreign loans. In order to avoid default, they were forced to turn to the Bank of Korea for liquidity or to resort to foreign overnight loan markets. Yet, the authorities still failed to take any action, ignoring the growing clamor for much-needed financial reform and restructuring of industry and the chaebols.

On November 19, the government announced a reform package, which included measures for the disposal of non-performing loans at financial institutions and widening of the band of exchange rate movements. Under normal circumstances, the package would have been taken as a serious step toward restructuring the economy, but with the sense of panic rising by the day, the market hardly noticed.

Three days later, unable to control the situation, the government made public its decision to approach the IMF for assistance. The negotiations between the Korean government and the IMF were completed in a record time of only 10 days on December 3. The IMF agreed to provide a total of $21 billion to be disbursed in 11 installments over a three-year period from its emergency financing and other facilities. It also secured financial commitments totaling $36 billion from the World Bank, the Asian Development Bank, the United States, Japan, Germany, Canada, the United Kingdom, Australia, and other international organizations and countries, which would serve as a second line of defense.

The IMF conditionality required tight monetary policy, a fiscal surplus, sweeping financial reform, further liberalization of financial markets, and two other policy changes unusual to an IMF program; greater flexibility in the labor market and restructuring of the chaebols. Contrary to expectations, the swift and successful
conclusion of the negotiations on the structural reform and rescue package was not sufficient to satisfy foreign lenders and investors and as a result did little to change the markets’ sentiment, at least during December. The won/dollar exchange rate continued to depreciate. On many trading days, it actually hit the upper limit of the daily fluctuation band, which was widened to plus/minus 10 percent on November 20. Interest rates began to soar while the stock price index went into a nose-dive. On December 16, the 10 percent band was lifted, and a free-floating exchange rate system was introduced.

A few days later, the 25 percent interest rate ceiling was also abolished as it had become clear that interest rates had to rise well above that level. Most capital controls were also abolished. The limit on aggregate stock ownership by foreigners was raised to 55 percent, the market for corporate bonds with maturities longer than three years was opened, and the short-term money market would also be deregulated, allowing foreigners’ investment.

The squeeze in the supply of money together with the requirement to meet the 8 percent BIS capital adequacy ratio before April dried up the availability of bank credit, especially to small and medium-sized firms. In December, the rate of loan defaults jumped to 1.49 percent from 0.14 percent a year earlier, and the number of business failures was almost five times as high as in December 1996.

The IMF financing package together with the policy conditionality did not help change market sentiment because the amount of liquidity the IMF agreed to supply was short of the amount of foreign debt repayment due before the end of the year. Foreign investors were unsure whether the IMF could enforce the implementation of financial and real sector reforms during a political transition period marked by an inept lame duck government, which would remain in power until the end of February 1998, and great uncertainties surrounding the presidential election that was to be held on December 18, 1997.

They were also concerned about the possibility that the extremely tight monetary and fiscal policies would depress economic activity so much that they would
in the long-run undermine Korea’s ability to service its foreign debt. This would clearly
defeat the purpose of the IMF program. The rollover rate at commercial banks fell to
about 10 percent, market interest rates shot up to the dizzying height of 40 percent, and
the won/dollar exchange rate continued to depreciate, reaching 1,995 won per dollar on
December 23.

The financial situation was clearly unsustainable, and rumors began to
circulate among foreign investors that Korea might have to declare a debt moratorium.
The IMF and U. S. Treasury clearly had to take stronger measures to stop further
hemorrhaging of the Korean economy. On Christmas Eve, the IMF and the G-7
countries came up with another emergency financing program of $10 billion, drawing
$8 billion from the second line of defense. The new package succeeded in turning
market sentiment around as it demonstrated the resolve of the IMF and G-7 to rescue
Korea from financial collapse. In addition to the Korean government’s compliance to
the IMF program, foreign lenders wanted to be assured of payments on the principles
and interest on their loans; otherwise, they would not return to the Korean market. They asked for and received the provision of a government guarantee on private debt
on the grounds that it would facilitate and simplify negotiations on the debt
restructuring and the supply of new credit with Korean financial institutions.

Toward the end of January, international creditor banks agreed to convert most
of the short-term debt of Korean banks ($24 billion) into long-term loans with
government guarantees that mature over one to three years. The new loans had variable
interest rates of between 2.25 and 2.75 percentage points above Libor. The new loans
were in the form of transferable loan certificates. Although the premium for the
government-backed loans was high and would keep the domestic interest rates high,
the loan deal was widely regarded as favorable to Korea.

V -2. Recovery from the 1997-98 crisis: The V- Pattern of Adjustment

2 To be fair, it is true that Korean officials alluded to the possibility of guaranteeing the
repayment with interest of Korean banks’ foreign debts on several occasions even
before the crisis broke out.
In 1998, the growth rate plunged to minus 6.9 percent from 4.7 percent a year before. Prices leaped by 7.5 percent mostly due to a marked depreciation of the won, which fell in value by 27 percent vis-à-vis the dollar in 1988, and the rate of unemployment reached the 8 percent level, which was the highest since Korea embarked on an outward looking strategy in the early 1960’s. To the surprise of many, however, the crisis short lived. Korea managed an impressive recovery, until it suffered from the global IT bubble burst in 2001, which was faster than similar episodes of recovery in other parts of the world before.

The rebounding of the growth rate was no less drastic than its free-fall: Korea grew by 9.5 percent in 1999. With the passage of time, the recovery process gained an additional momentum. The economy grew by 8.5 percent in 2000. The adjustment process in Korea that can be inferred from changes in the growth rate seems to be generally consistent with the stylized V-pattern observed from the previous crisis episodes (See Figure 3)

The initial GDP contraction in 1998 was largely caused by the collapse of investment. Compared to the investment demand, however, private consumption fell to a lesser degree. The consumption-GDP ratio remained mostly stable in the crisis period, whereas the investment-GDP ratio dropped off sharply. It fell from 36% in 1997 to 25% in 1998, generating a huge current account surplus, which was almost 12 percent of GDP. Despite the large surplus on the current account, foreign debt climbed to 47.3 % of GDP largely because of the need of replenishing foreign reserves that were depleted in 1997.

While domestic demand was sluggish, a large increase in net exports paved the way for an initial recovery. Import demand declined by 22% in 1998, while exports fell by less than 3 percent. It was therefore clear that net exports were speeding up the recovery. A real depreciation of the won amounting to more than 27 percent supported the quick surge in net exports, speeding up recovery over the next two years.

3 This section draws on Park and Lee (2002)
Figure 5, based on quarterly data on the rates of growth of exports and imports, details the pattern of adjustment in which Korea reached the trough as early as the second quarter of 1998.

According to an empirical examination of the stylized pattern of adjustment from the previous 160 currency crisis episodes from 1970 to 1995 the crisis countries undergo a V-type recovery of real GDP growth (See Park and Lee 2002). This examination also shows that a large real depreciation, expansionary monetary and fiscal policy, and an improvement in the global economic environment were responsible for the upturn in the crisis-hit economies. All of these developments were present during the recovery and, in this sense the adjustment process in Korea is not much different from the stylized pattern. However, the Korean experience was in marked contrast to the stylized pattern of adjustment in GDP growth in that the degree of the initial contraction and subsequent recovery was far greater than what could have been predicted from the previous cross-country evidence.

**Exchange Rate Depreciation and Openness**

An important structural factor that was driving the speedy adjustment was Korea’s higher level of openness. With a relatively large trade sector and export-orientation, Korea benefited from a large depreciation of the real exchange rate. The level of openness in terms of the share of export and import in GDP was over 80 percent. Thus, compared to other crisis-hit economies before, the depreciation appears to have had a bigger impact on the Korean economy.

In fact, the impact of depreciation on real output showed as early as one year after the crisis, a feature of the recovery that is not found in other episodes of debt crises. The large real exchange depreciation therefore restored external balance without much delay. The flexibility in the labor market may have facilitated this swift
adjustment. Nominal wages dropped by almost 20 percent, which was equivalent to a cut in real wages by 10 percent. This wage adjustment together with the real appreciation made Korean exports more competitive in the global market places... The flexibility of the labor market also made it easier to shift resources from the non-tradeables to the tradeables sector elicited by the massive real exchange rate depreciation.

● Favorable External Environment

As had been the case in the 1979-80 crisis, Korea also benefited from an improvement in the external trading environment in pulling itself out of the 1997-98 crisis. The global economy was strong in 1999. The U.S. economy was able to absorb a large amount of exports from East Asian economies. The U.S. per capita GDP growth rates were 3.3-3.4% in 1998 and 1999, and jumped to 4.4% in 2000, which by far exceeded the average growth rate of 2.0% over the period from 1970 to 1995. In general, the upswing in the global economy had a strong impact on the post-crisis recovery, in particular in the early years following the crisis. The deterioration in the terms of trade that in part precipitated the crisis was reversed in 1999. In particular, the increase in the price of semiconductors helped boost Korean exports. After a three year slide the Yen again reversed course to appreciate and to give Korean exporters a competitive edge in global markets.

● Macroeconomic Policy Adjustments

During the first quarter of 1998, it appeared that the economy was falling into a deeper recession. Realizing the depth of the slowdown, the IMF agreed to relax monetary and fiscal policies in April of 1998. Fiscal policy had become contractionary immediately after the crisis, but was reversed quickly to be expansionary. This was followed by change in monetary policy to an expansionary or accommodating stance. Once the depreciation of the currency was arrested and stability returned to the foreign exchange market, Korean authorities were able to adjust gradually the interest rates
downward and expand money supply. The rather swift change in the stance of macroeconomic policy contributed to arresting a further contraction of domestic demand, thereby quickening the pace of recovery (Park and Lee 2002)

The positive role of expansionary macroeconomic policies in the post-crisis recovery has raised the question of whether the initial tightening of monetary and fiscal policy was too harsh, maintained for too long and as a consequence deepened the crisis. In order to deal with the crisis itself - stopping bank runs, protecting the payment system, and stemming capital outflows - the IMF chose to prescribe a traditional policy prescription designed for managing a current account crisis that comprised of tight monetary policy together with fiscal austerity. Korea suffered a capital account crisis, and as such the high interest rates that followed the tightening resulted in the widespread bankruptcy of many firms, small as well as large, before restoring financial stability and foreign investors’ confidence in the Korean economy.

The IMF and supporters of the contractionary monetary policy argue that in the absence of such a policy capital outflows and the bank run would have continued. Disputing this view, many others including Radelet and Sachs (1998) and Feldstein (1998) criticized the IMF policy as having been unnecessary because Korea was suffering from a liquidity problem. They imply that the traditional IMF resolution strategy may have done more harm than good as it drove many highly leveraged but viable firms out of business, thereby deepening the downturn of the economy.

VI. Lessons of the Two Crises

VI-1. Similarities and Differences of the Two Crises

The analyses of the two debt crises – one in 1979-80 and another in 1997-98 – in the preceding sections show that there were many similarities between the two. They were in part precipitated by an investment boom financed by foreign borrowing. The
investment boom led to deterioration of the current account that was perceived to be unsustainable, although the current account connection was much less serious in the case of the 1997-98 crisis. In both cases, Korea rebounded swiftly, but the scars of the crisis were more extensive and deeper in 1997-98.

The ratios of external debt to GDP were similar, and Korea exacerbated the crisis by adhering to a rigid foreign exchange rate system in both episodes. There were no significant differences between the two as far as other economic fundamentals such as total factor productivity, the saving rate, quality of labor, the level of investment in education and technology development, and flexibility of the labor market were concerned. Indeed, there is no evidence that structural weaknesses in the financial and corporate sectors, which are often claimed to have deepened the crisis in 1997 when it broke out, were any worse in the 1990s than two decades before. Korea was as aggressive in promoting exports in the 1990s as it had been in the 1970s.

However, there were many significant differences between the two crises. In resolving the 1979-80 crisis, the Korean policymakers sought to borrow their way out of it in the belief that Korea’s economic fundamentals were strong and hence the economy was afflicted by a transitory current account imbalance, which did not require a permanent adjustment. Instead of curtailing domestic demand by tightening monetary and fiscal policy, they therefore borrowed from international financial markets to cover the deficit. The growing-out was a risky strategy, but it paid off, because policymakers’ all out efforts by policymakers to secure foreign financing were successful.

Korea was not able to follow the same strategy in the second crisis. Instead, Korea had to seek IMF rescue financing that subjected it to a bewildering array of policy changes and structural reform. Despite or perhaps because of the IMF assistance, Korea had to pay a much higher price in terms of lost output and the cost of resolving bankrupt financial institutions and bailing out insolvent corporations, which amounted 16 percent of GDP in 1998, in managing the second crises. Korea had absolutely no chance of replicating the borrowing-out strategy in the 1997-98 crisis, largely because by then Korea had been transformed into a much more market oriented and open
economy that narrowed the scope and limited available instruments of macroeconomic policies.

What were then the factors – both internal and external – that explain the difference in the severity of the two crises? One factor was economic liberalization. Since the mid-1980s Korea had followed a gradual but sustained pace of economic liberalization that established a trade regime of which openness was comparable to the average degree of liberalization of OECD members. Korea also opened its financial intermediation industries and deregulated to a considerable degree capital account transactions as well. The pace of financial market opening gathered speed when Korea was preparing for its bid to join the OECD in the early 1990s. By the time the 1997-98 crisis broke out Korea had been reforming institutions and restructuring its financial, corporate, and public sector for more than a decade. Most important of all, Korea had successfully transformed itself into a democratic society.

Market deregulation and opening brought about fundamental changes in Korea’s external relations. By the mid-1990s Korea had become an important player in the world trading system as the 11th largest exporter and its financial markets were being integrated with the regional as well as global financial system. Financial market deregulation and opening therefore exposed the Korean economy much more than before to the vagaries of international financial markets and made it highly susceptible to contagion of financial crises.

Economic liberalization also called for fundamental changes in the management of macroeconomic policy, in particular exchange rate policy. It was apparent that monetary policy would become less effective when capital movements in and out of the economy grew in volume and volatility in a fixed exchange rate regime. Although Korea had moved to a variety of the BBC exchange rate regime in 1983, it became soon after a de facto dollar pegger. As a result, Korea’s monetary authorities were gradually losing much of their ability to control the supply of money and interest rates. Korea had more leeway in managing macroeconomic policies in the 1978-79 crises; it did not have to worry about large capital outflows that could be set off by a
deteriorating current account. Unlike in the 1979-80 crisis, Korean policymakers were not confident that they could finance the current account deficit externally, although it was smaller as a proportion of the GDP than in the late 1970s.

In a financially open economy with a rigid exchange rate system, there is no effective buffer against external financial shocks that could play havoc with domestic financial markets. For an orderly financial market opening it is also imperative that an efficient financial regulatory system be created to improve monitoring the risk taking at financial institutions and speculative capital movements. The reform of the regulatory system was ignored and set aside despite its urgency, although banks, non-bank financial intermediaries, and securities firms were taking new and more risks in lending and investing in foreign securities. More seriously, they could not match their balance sheets in terms of maturity and currency as they were borrowing short from international financial markets and lending long to domestic firms in local currency. Yet, the regulatory authorities turned a blind eye to the excessive risk taking of these institutions.

VI-2. Severity of the 1997-98 Capital Account Crisis

According to Eichengreen and Wyplosz (1996), there are three types of distortions that could give rise to a financial crisis. One type of distortion is asymmetric information and the herding behavior on the part of foreign investors and financial institutions. Another is moral hazard in both the domestic and international financial system. The third is any distortion including a political one that could lead to multiple equilibria in the foreign exchange market. All of these distortions were present in Korea in the run up to the 1977-98 crisis.

In identifying some of the reasons that may explain the severity of the 1997-98 crisis, many authors have pointed to imperfections of international capital markets including panic and herding of international financial market participants as the main culprit that worsened the 1997-98 crisis (Park 2006). Before market liberalization and
opening got underway, foreign lenders and investors did not care to learn about the structural weaknesses of Korea in the areas of banking standards, accounting, and corporate governance because their loans and investment had government guarantees. With the growing exposure of the Korean economy to international financial markets, foreign investors became aware of the seriousness of the structural weaknesses of the financial system and the high leverage and balance sheet mismatch problems at banks and large chaebols.

By the time the Thai crisis was spreading to other parts of East Asia in September and October, Korea began losing reserves. Foreign investors and lenders were questioning whether Korea held a sufficient amount of foreign exchange reserves to cover those financial institutions and large chaebols delinquent in servicing their foreign debts. Knowing that Korea did not have enough reserves, they began recalling their long-term loans and investments and refusing to renew even short-term loans. Under these circumstances, once the crisis erupted and an exodus from Korea of those foreign investors frightened by the incipient current account deficit began, there was little Korean policymakers could do to avert the crisis.

The 1997-98 financial crisis demonstrates that both domestic borrowers and foreign lenders were clearly to blame for bringing on the crisis and that the IMF was not as effective as hoped in resolving the crisis. Borrowers-usually taking the lion’s share of the blame for crises-with their disregard for prudence and ignorance of risk management, especially with regard to exchange rate risk, need to be controlled in some way. Lenders need to be curbed as well. With little else driving them but short-term profit considerations and the herd mentality, they are capable of disturbing an economy in a catastrophic way as they withdraw their investments and exit at the first sign of serious danger.

Incompletely informed investors display excessive optimism and then excessive pessimism, investors follow the lead of other investors, committing funds to markets with good prospects such as in East Asia... Bad news or simply a change of sentiment often provokes a violent reaction. There is evidence that Korea was a victim
of contagion of the Southeast Asian crisis and, in particular, the speculative attack on the Hong Kong dollar. (Park and Song, 2001) After what took place in Hong Kong, the Korean economy suddenly looked vulnerable in the eyes of many foreign investors. A stampede of frightened investors then followed. In the end, changes in expectations caused by the contagion of the Southeast Asian crisis shifted Korea from a relatively stable to a bank run equilibrium.

As noted earlier, foreign equity investors began to withdraw their investments from the Korean stock market as early as the first week of September of 1997. In retrospect, they not only have precipitated the financial crisis, but aggravated it. Since they are driven largely by liquidity and short-term performance considerations, portfolio capital inflows including equity investments are obviously far more volatile than bank loans as they can leave a country within a few hours whereas medium-term bank loans cannot... Taking their cue from these portfolio investors, foreign banks soon stared to refuse to rollover their short-term loans to Korean financial institutions.

The growing importance of portfolio capital made contagion of a financial crisis more likely, as was the case in East Asia, and also deepened and complicated the management of the crisis. Korea’s experience with the crisis management during the 1997-98 crisis therefore adds to the growing evidence that financial market opening that permits the predominance of portfolio capital inflows can easily give rise to sudden capital outflows, resulting in inordinate increase in interest rates and excessive depreciation of the foreign exchange rate.

The imperfections of international financial markets cannot and should not bear all the blame, however. The Korean policymakers should also be held responsible for their failure to carry out much needed economic reform. This failure had embedded many market distortions in the economy. One of the distortions that increased the probability of a crisis was moral hazard in the Korean banking system. As is widely known, commercial banks and merchant banking corporations had long operated with implicit government guarantees in Korea before the crisis. Although a deposit insurance system was in place, few believed that the government could allow these
institutions to go bankrupt. This guarantee together with inadequate supervision provided incentive to banks to borrow larger amounts of funds abroad for domestic lending than they would otherwise and to invest in riskier projects in the expectation that the government would bail them out in the event they incurred serious losses.

See Park (2006) for these market distortions.

This moral hazard appears to have affected the behavior of foreign financial institutions lending to Korean banks and other financial institutions as well. Since they expected to receive national treatment, they also believed that, like domestic depositors, the payment of the principle and interest on their loans was guaranteed by the government, although there was no formal arrangement of guarantee to that effect. Because of the implicit guarantees, foreign banks did not feel the need to conduct careful credit analyses of the Korean financial institutions to which they were lending vast sums of money. When some of the symptoms of the crisis began to surface, few foreign banks were trying to reschedule their loans to troubled Korean banks, in sharp contrast to what they normally would do if dealing with delinquent borrowers at their home bases.

Information in Korea’s corporate sector and financial institutions including the intelligence that most of the published corporate and banking data were unreliable was available. Much of the information asymmetry problem originated in the moral hazard in the lending behavior of foreigners; outside investors did not even try to gather and analyze the available information. They also knew that as a group they could exert pressure on the Korean government to come forward with the promise of guarantee by threatening a financial and currency crisis by withdrawing their loans. Indeed, when some signs of a financial crisis began to appear, this was precisely what they did, and very successfully at that: international banks and institutional investors began putting pressure on the Korean government to seek IMF financing.
They did this because a debt moratorium would not be an efficient or realistic mechanism of debt resolution for the simple reason that there were too many investors and too many types of investors; negotiations would not have been feasible. The insistence of international banks and institutional investors on Korea of accepting an IMF rescue program also reflected the fact that the IMF program favors creditors more than debtors (Soros 1998). The IMF assistance for Korea meant that the foreign banks would be able to recover their investments with relative ease and perhaps even profit as the austere monetary and fiscal policies that the IMF was requiring of Korea portended extraordinarily high interest rates.

VII. Concluding Remarks

Korea has suffered a number of external debt crises on its way to becoming the 12th largest economy with a per capita income close to $15,000 in 2004 by pursuing an export led development strategy. Korea managed to resolve all of its crises without any IMF rescue financing with the exception of 1997-98. This study has chosen two crises episodes of Korea to analyze the dynamics of a debt crisis from the build-up to a final resolution in an emerging economy from a comparative perspective.

The first crisis in 1979-80 was a traditional current account crisis precipitated by an excessive investment in the middle of the 1970s in an economy where capital account transactions were tightly controlled and the nominal exchange rate was pegged to the US dollar. To the extent that the crisis originated in the current account, its resolution called for a stabilization program that included devaluation of the won. Korean policymakers would defy such an orthodox prescription; instead they attempted to spend out of the crisis with the belief that it was a transitory crisis that did not require real adjustment. The viability of such a growing-out policy depended on the availability of external borrowing required to finance a large deficit on the current account that the policy would entail.
The second crisis that erupted in 1997-98 was a capital account crisis in a setting that was different from the previous cases. Neither Korean policymakers nor the IMF realized that a crisis triggered by a current account imbalance would cause such massive capital outflows, provoking a liquidity and credit crisis at the same time. In managing the capital account crisis, the traditional IMF stabilization program did not work. Nothing short of an infusion of fresh capital into the economy will help stop the bleeding of the economy. Perhaps this is the most important lesson to be drawn from Korea’s management of the 1997-98 crisis. Only after the bank run symptoms caused by investors’ panic and herding subside, should a stabilization program be put into effect. Tight monetary and fiscal policy with devaluation administered immediately after the 1997-98 crisis broke out failed to allay the fears of foreign investors that the crisis would intensify. Instead the stabilization first before pumping liquidity into the economy exacerbated financial instability and economic downturn.

Could any contemporary emerging economy emulate a growing-out strategy in managing an external crisis? In a new economic environment where the Washington Consensus prevails as the norm of macroeconomic policy, policymakers of emerging economies would be better advised if they stayed with a stabilization program instead of a growing out policy. This is because international financial markets would be averse to supporting such a strategy even if the crisis were deemed to be transitory. One might argue that emerging economies could rely on the IMF credit facilities to finance a current account deficit to the extent the deficit does not dictate a permanent adjustment. The IMF may indeed be prepared to render support to these economies. But the problem is that before the IMF can help fix the problem, the current account deficit can easily provoke a capital account crisis.

After a series of financial crises that followed the Asian crisis of 1997-98, most emerging economies have come to realize that rational and disciplined macroeconomic policies are not necessarily sufficient in shielding them from external financial shocks, and in seeking a more effective measure they have taken to accumulate large amounts of foreign reserves as self finance against future financial
crises by generating current account surpluses. Whether such a self-protection would be effective in fending off crises in the future remains to be seen. However what is clear is that it has been a very costly means of preventing crises as it has led to misallocation of resources in emerging economies and has brought about huge global trade imbalances between the US and many emerging economies.

International financial markets are hardly a good source of short-term liquidity to many emerging economies, in particular when they are experiencing financial instability. In fact, international financial market participants have shown the tendency to recall their loans and investments from those economies showing signs of financial turbulence even when the financial difficulty is short term and transitory in nature, thereby triggering a crisis that could be prevented.

If these emerging economies are assured of adequate liquidity assistance in case they suffer from a short run liquidity crisis from international financial institutions including the IMF and regional financial cooperative arrangements such as the Chiang Mai Initiative in East Asia, they will be less inclined to accumulate reserves and hence less constrained in managing their macroeconomic policies including exchange rate adjustments. After the Asian crisis of 1997-98, many initiatives were proposed to restructure the international financial system so as to tame volatility of capital flows and also create new credit facilities to help those economies coming under a speculative attack. Imperfections international financial markets also call for the creation of new international regulatory mechanisms to be put into place.

In an increasingly integrated world economy, better means for managing crises once they erupt need to be worked out. However, since 2001 there has been no visible movement toward international financial reform and there is not likely to be any renewed interest in constructing a new international financial architecture. At the same time, there is growing consensus that emerging economies are not likely to benefit from capital account liberalization as it has done little in the way of promoting growth or stabilizing domestic financial markets (Park 2006). There is the danger that emerging economies may therefore withdraw themselves from global financial
integration insofar as developed countries are not willing to lead the reform of the international financial system. This withdrawal means that emerging economies will be left to go it alone in preventing financial crises in the future. Whatever the cost of holding large reserves may be, many emerging economies apparently believe that there is no better policy option than the reserve accumulation.
Table 1-1. Macroeconomic Indicators, 1975-1985 (Percentage)

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<tr>
<td>GDP (at 2000 price)</td>
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<td>10.6</td>
<td>10</td>
<td>9.3</td>
<td>6.8</td>
<td>-1.5</td>
<td>6.2</td>
<td>7.3</td>
<td>10.8</td>
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<td>6.8</td>
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<td>Investment</td>
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<td>20.7</td>
<td>30.2</td>
<td>34.4</td>
<td>10.0</td>
<td>-10.7</td>
<td>-3.1</td>
<td>11.1</td>
<td>17.4</td>
<td>10.9</td>
<td>5.3</td>
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<tr>
<td>Construction</td>
<td>8.0</td>
<td>13.5</td>
<td>26.9</td>
<td>26.1</td>
<td>4.9</td>
<td>-4.5</td>
<td>-5.7</td>
<td>17.8</td>
<td>22.7</td>
<td>7.2</td>
<td>4.5</td>
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<td>Facilities investment</td>
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<td>37.3</td>
<td>51.0</td>
<td>18.0</td>
<td>-19.8</td>
<td>1.1</td>
<td>0.9</td>
<td>8.2</td>
<td>17.8</td>
<td>5.1</td>
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<td>Saving/GDP</td>
<td>19.8</td>
<td>25.0</td>
<td>28.4</td>
<td>30.3</td>
<td>30.0</td>
<td>25.0</td>
<td>25.4</td>
<td>26.3</td>
<td>29.5</td>
<td>31.8</td>
<td>32.2</td>
</tr>
<tr>
<td>Investment/GDP</td>
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<td>26.7</td>
<td>28.7</td>
<td>33.1</td>
<td>36.1</td>
<td>31.8</td>
<td>29.6</td>
<td>28.7</td>
<td>29.0</td>
<td>30.3</td>
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<td>Inflation</td>
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<td>15.3</td>
<td>9.8</td>
<td>14.7</td>
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<td>28.7</td>
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<td>Real wage</td>
<td>—</td>
<td>17.6</td>
<td>19.8</td>
<td>18.2</td>
<td>8.5</td>
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<td>7.9</td>
<td>7.2</td>
<td>6.4</td>
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Table 1-2. Indicators of the External Sector, 1975-85 (US $, Billions)

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<tr>
<td>Current Account/GDP (%)</td>
<td>-8.8</td>
<td>-1.1</td>
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<td>-2.0</td>
<td>-6.6</td>
<td>-8.3</td>
<td>-6.4</td>
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<td>-1.8</td>
<td>-1.4</td>
<td>-0.8</td>
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<tr>
<td>Real export growth</td>
<td>13.9</td>
<td>51.8</td>
<td>30.2</td>
<td>26.5</td>
<td>18.4</td>
<td>16.3</td>
<td>21.4</td>
<td>2.8</td>
<td>11.9</td>
<td>19.6</td>
<td>3.6</td>
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<td>Terms of Trade (1985=100)</td>
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<td>99.3</td>
<td>106.2</td>
<td>111.3</td>
<td>108.9</td>
<td>94.4</td>
<td>92.5</td>
<td>96.5</td>
<td>97.4</td>
<td>99.5</td>
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<td>Nominal Exchange Rate</td>
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<td>484</td>
<td>484</td>
<td>607</td>
<td>681</td>
<td>731</td>
<td>776</td>
<td>806</td>
<td>870</td>
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<td>Real effective exchange rate (1993=100)</td>
<td>93.4</td>
<td>108.6</td>
<td>113.1</td>
<td>107.6</td>
<td>120.1</td>
<td>107.6</td>
<td>108.4</td>
<td>106.3</td>
<td>101.9</td>
<td>99.3</td>
<td>93.4</td>
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<tr>
<td>Total external debt as percent of GDP (%)</td>
<td>39.5</td>
<td>35.5</td>
<td>33.2</td>
<td>28.1</td>
<td>32.1</td>
<td>42.6</td>
<td>45.4</td>
<td>48.7</td>
<td>47.8</td>
<td>46.2</td>
<td>48.4</td>
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<tr>
<td>Short-term Debt as percent of total external debt (%)</td>
<td>28.2</td>
<td>28.6</td>
<td>29.4</td>
<td>26.2</td>
<td>27.1</td>
<td>34.6</td>
<td>31.5</td>
<td>33.4</td>
<td>30.0</td>
<td>36.5</td>
<td>22.9</td>
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<td>Debt Service Ratio</td>
<td>12.7</td>
<td>10.4</td>
<td>—</td>
<td>11.3</td>
<td>13.7</td>
<td>14.0</td>
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<td>16.1</td>
<td>16.3</td>
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<td>Foreign Exchange Reserves</td>
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<td>5.7</td>
<td>6.6</td>
<td>6.9</td>
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<td>-----</td>
</tr>
<tr>
<td>Foreign Exchange Reserves as percentage of short-term external debt (%)</td>
<td>66.7</td>
<td>100.0</td>
<td>116.2</td>
<td>125.6</td>
<td>103.6</td>
<td>70.2</td>
<td>67.6</td>
<td>56.5</td>
<td>57.0</td>
<td>66.7</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Note: *Long-term debt only

<table>
<thead>
<tr>
<th>Table 1-3. Stance of Monetary and Fiscal Policy, 1975-85 (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-------</td>
</tr>
<tr>
<td>M2 (rate of growth)</td>
</tr>
<tr>
<td>M3 (rate of growth)</td>
</tr>
<tr>
<td>Interest rate</td>
</tr>
<tr>
<td>Unified budget deficit as percent of GDP</td>
</tr>
<tr>
<td>Fiscal Impulse*</td>
</tr>
</tbody>
</table>

Note: *IMF measure starts with a base year in which actual and potential real output are assumed to be the same. A more than proportionate increase is defined as expansionary, and a less than proportionate increase is contractionary. The measure uses potential GNP obtained from a regression equation.


<table>
<thead>
<tr>
<th>Table 2-1. Macroeconomic Indicators, 1995-2004 (Percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>-------</td>
</tr>
<tr>
<td>GDP (at 2000 price)</td>
</tr>
<tr>
<td>Investment</td>
</tr>
<tr>
<td>Construction</td>
</tr>
</tbody>
</table>
### Table 2-2. Indicators of the External Sector, 1995-2004

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Facilities investment</td>
<td>18.3</td>
<td>9.2</td>
<td>-9.6</td>
<td>-42.3</td>
<td>36.8</td>
<td>33.6</td>
<td>-9.0</td>
<td>7.5</td>
<td>-1.2</td>
<td>3.8</td>
</tr>
<tr>
<td>Saving/GDP</td>
<td>36.5</td>
<td>35.7</td>
<td>35.8</td>
<td>37.9</td>
<td>35.8</td>
<td>33.9</td>
<td>31.9</td>
<td>31.4</td>
<td>33.0</td>
<td>35.0</td>
</tr>
<tr>
<td>Investment/GDP</td>
<td>37.7</td>
<td>38.9</td>
<td>36.0</td>
<td>25.0</td>
<td>29.1</td>
<td>31.0</td>
<td>29.3</td>
<td>29.1</td>
<td>30.0</td>
<td>30.2</td>
</tr>
<tr>
<td>Inflation</td>
<td>4.4</td>
<td>5.0</td>
<td>4.4</td>
<td>7.5</td>
<td>0.8</td>
<td>2.2</td>
<td>4.1</td>
<td>2.7</td>
<td>3.6</td>
<td>3.6</td>
</tr>
<tr>
<td>Real wage</td>
<td>6.4</td>
<td>6.7</td>
<td>2.5</td>
<td>-9.3</td>
<td>11.2</td>
<td>5.6</td>
<td>1.5</td>
<td>8.6</td>
<td>5.7</td>
<td>2.8</td>
</tr>
</tbody>
</table>

Note: *Debt Service Ratio*
### Table 2-3. Stance of Monetary and Fiscal Policy, 1995-2004 (Percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>M2 (rate of growth)</td>
<td>23.3</td>
<td>16.7</td>
<td>19.7</td>
<td>23.7</td>
<td>5.1</td>
<td>5.2</td>
<td>8.1</td>
<td>14.0</td>
<td>3.0</td>
<td>5.2</td>
</tr>
<tr>
<td>M3 (rate of growth)</td>
<td>19.1</td>
<td>16.7</td>
<td>13.9</td>
<td>12.5</td>
<td>8.0</td>
<td>7.1</td>
<td>11.6</td>
<td>13.6</td>
<td>4.7</td>
<td>6.3</td>
</tr>
<tr>
<td>Interest rate</td>
<td>13.8</td>
<td>11.9</td>
<td>13.4</td>
<td>15.1</td>
<td>8.9</td>
<td>9.4</td>
<td>7.1</td>
<td>6.6</td>
<td>5.4</td>
<td>4.7</td>
</tr>
<tr>
<td>Unified budget deficit as percent of GDP</td>
<td>0.3</td>
<td>0.2</td>
<td>-1.4</td>
<td>-3.9</td>
<td>-2.5</td>
<td>1.1</td>
<td>1.2</td>
<td>3.3</td>
<td>1.1</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Fiscal Impulse

Note: *IMF measure starts with a base year in which actual and potential real output are assumed to be the same. A more than proportionate increase is defined as expansionary, and a less than proportionate increase is contractionary. The measure uses potential GNP obtained from a regression equation.


### Table 3-A. Foreign Reserve of the Bank of Korea (end of period, billion U.S. dollars)

<table>
<thead>
<tr>
<th></th>
<th>96</th>
<th></th>
<th>97</th>
<th></th>
<th>98</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>March</td>
<td></td>
<td>June</td>
<td></td>
<td>Sep.</td>
</tr>
<tr>
<td>Official Foreign reserves (A)</td>
<td>33.2</td>
<td>29.2</td>
<td>33.3</td>
<td>30.4</td>
<td>30.5</td>
<td>24.4</td>
</tr>
<tr>
<td>Deposits at Overseas Branches (B)</td>
<td>3.8</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>16.9</td>
</tr>
<tr>
<td>Other (C)</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Usable reserve (A-B-C)</td>
<td>29.4</td>
<td>21.1</td>
<td>25.3</td>
<td>22.4</td>
<td>22.3</td>
<td>7.3</td>
</tr>
</tbody>
</table>

Note: Official foreign reserve holding’s are based on the IMF definition. Deposits at overseas branches are those deposits made by the Bank of Korea at overseas branches of domestic commercial bank. In November, when the domestic commercial banks were unable to repay their loans from the foreign banks, the Bank of Korea supported them by making foreign currency deposits at their overseas branches.

Source: The Bank of Korea
Table 3-B. Central Bank Intervention in the Spot and Forward Exchange Market in 1997  (100 million U.S. dollars)

<table>
<thead>
<tr>
<th>Month</th>
<th>Spot</th>
<th>Forward</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>27.5</td>
<td>0.0</td>
<td>27.5</td>
</tr>
<tr>
<td>2</td>
<td>40.0</td>
<td>23.1</td>
<td>63.1</td>
</tr>
<tr>
<td>3</td>
<td>17.6</td>
<td>15.3</td>
<td>32.9</td>
</tr>
<tr>
<td>4</td>
<td>▲ 5.5</td>
<td>▲ 4.7</td>
<td>▲ 10.2</td>
</tr>
<tr>
<td>5</td>
<td>▲ 25.9</td>
<td>▲ 8.1</td>
<td>▲ 34.0</td>
</tr>
<tr>
<td>6</td>
<td>▲ 20.5</td>
<td>▲ 12.8</td>
<td>▲ 33.3</td>
</tr>
<tr>
<td>7</td>
<td>1.9</td>
<td>5.7</td>
<td>7.6</td>
</tr>
<tr>
<td>8</td>
<td>18.3</td>
<td>16.0</td>
<td>34.3</td>
</tr>
<tr>
<td>9</td>
<td>24.3</td>
<td>13.5</td>
<td>37.8</td>
</tr>
<tr>
<td>10</td>
<td>20.9</td>
<td>31.9</td>
<td>52.8</td>
</tr>
<tr>
<td>11</td>
<td>56.6</td>
<td>9.0</td>
<td>65.6</td>
</tr>
<tr>
<td>12</td>
<td>15.7</td>
<td>0.0</td>
<td>15.7</td>
</tr>
<tr>
<td>Total</td>
<td>222.8</td>
<td>114.5</td>
<td>337.3</td>
</tr>
</tbody>
</table>

Note: ▲ Indicates the central bank’s purchases of U.S. dollars
Source: Board of Audit and Inspection
Figure 1. Quarterly Changes of GDP Growth Rate (y-o-y, %)

Source: The Bank of Korea
Figure 2. Quarterly Changes of GDP Growth Rate (y-o-y, %)

Source: The Bank of Korea
Figure 3. Changes of Saving and Investment of GDP (%)
Figure 4. Changes of Saving and Investment of GDP (%)

Source: The Bank of Korea
Figure 5. Korea’s Export and Import Growth Rates (\%)
References


