The Korean Currency Crisis and the IMF Program: An Insider's View

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When the Korean currency crisis broke out, the IMF and many scholars blamed the whole crisis on Korea's internal problems. This paper, however, takes different stances from others towards the current crisis in several respects. We argue that both external and internal causes of the crisis should be equally addressed in explaining the current crisis. As external causes, we list the boom-and-bust cycle generated by the capital liberalization and asymmetries of financial liberalization policies. For the triggering factors of the Korean crisis, we emphasize sudden outflow of foreign capital, Southeast Asian crisis, as well as use of foreign reserves to support overseas branches of Korean banks. Regarding the IMF program, we criticize the IMF's macroeconomic policy and the complete financial opening policy. But unlike critics of the IMF program, we argue that the policy of structural reforms is necessary to strengthen the Korean economy and we should take this opportunity to implement it although such policy may exacerbate the severity of the crisis. (*JEL* Classification: F41)

I. Introduction

When the Korean currency crisis broke out in the second half of last year, the IMF and many scholars blamed the whole crisis on Korea's internal problems. They have said that the crisis was caused by government mismanagement of the economy, overexpanded chaebol, and fragile financial system, and proved the limitations of state-led development. This kind of blame was culminated by

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Krugman's (1998b, c) argument that "The crisis, in short, was a punishment for Asian sins... What were these Asian sins? We hear a lot now about 'crony capitalism'". Therefore, they argue, the medicine to cure the economic ills is to ditch the inefficient and corrupt state-led economic system.

However, at least two questions can be raised against the above blame. First, dark undersides of Asian model, for instance, crony capitalism, corruption, lack of transparency, etc., are not new phenomena but have existed for a long time. Those problems were more serious in the past than now, but there had been no crisis before like the current one. Then, why did the crisis break out last year, not in the past when crony capitalism had been more serious in Korea? Second, according to critics of Asian model who keep similar stance with the IMF, a crisis should not happen if Asian sins did not exist. Then, how could the Scandinavian crisis break out although there were no Asian sins in the region?

Unfortunately, we cannot find very clear answer to these questions if we buy the arguments of critics of Asian model. Moreover, recent trends are also against their arguments. The financial crisis is not any more a regional phenomenon confined to East Asia but becomes a global one spreading to Latin America, Russia and even some developed countries. And, despite the IMF bailout program, the economies of Korea, Thailand, and Indonesia have not improved but even worsened. This suggests that we need to examine the causes of the crisis in a different perspective from the IMF and its opinion sharers and critically evaluate the IMF bailout program, which is the purpose of this paper.

This paper takes different stances towards the current crisis in several respects. First, it is not fair at all to say that all the causes of the Korean crisis are home-grown; hence elimination of Korea's internal sins is not enough to prevent a crisis. This is not to deny that Korea had no domestic problems. But we emphasize that although Korea surely had many internal problems, both external and internal causes of the crisis should be equally addressed in examining the current crisis. Second, most studies argue that financial liberalization is the most important external factor of the crisis. Although we agree with them, we argue that too rapid liberalization itself was not a main cause to make the Korean foreign debt structure so vulnerable to external shocks but the asymmetric characteristics of the liberalization policy were. Third,

as an important triggering factor of the Korean crisis, we emphasize the movement of Japanese banks irritated by their domestic problems as well as Southeast Asian crisis. Fourth, use of foreign reserves to support overseas branches of Korean banks was a more critical reason to drain usable foreign reserves and result in the shortage of international liquidity on the onset of the crisis than the foreign exchange market intervention to defend the Korean won. Finally, regarding the IMF program, we also criticize the IMF's macroeconomic policy and the complete financial opening policy. But unlike critics of the IMF program, we argue that the policy of structural reforms is necessary to strengthen the Korean economy and we should take this opportunity to implement it although such policy may exacerbate the severity of the crisis.

The remaining of the paper is organised as follows. In Section II following the introduction, we will examine the causes that made the Korean economy so vulnerable to external shocks. We will analyze them by first dividing the causes into external and internal ones, then further emphasize how the asymmetric characteristics of the Korean government's liberalization policy contributed to the rapid accumulation of foreign debts and to the high ratio of short term debts. In Section III, we will examine external and internal factors that triggered a panic on the onset of the crisis, and policy mistakes that aggravated the crisis. In Section IV, we will briefly introduce the contents of the policy agreements, then analyze and evaluate issues such as tight macroeconomic policies, structural reform policies, and policies of floating exchange rates as well as trade and capital liberalization. Finally, in Section V we will give a short summary and touch on the direction of future economic policies.

II. What Made Korea Vulnerable?

The underlying origins of the Korean crisis are multifaceted, and external and internal factors are intermingled. The vast international capital movement generated a huge boom-and-bust cycle, internal problems such as moral hazard and the resultant financial fragility aggravated the bust of the cycle, and adverse shocks such as the South East Asian crisis and Japanese and other banks' refusal to roll over short-term debts on Korea developed the bust

into a crisis.

Let us first look at the factors that made Korea vulnerable, and examine triggering factors in the following section. Most argue that internal factors mainly contributed to the fragility of the Korean economy. We emphasize, however, external and internal factors should be treated even-handedly: At the core of the Korean crisis were large scale capital inflows into the financial system; a very important internal factor of structural vulnerability is the asymmetric liberalization policy, rather than too rapid financial opening and liberalization policy, by the Korean government.

A. External Factors

Both external and internal factors reinforced each other and cumulatively created growing macro and financial vulnerability. While much of the underlying process may have occurred without the inflows of private capital, the growing financial integration and easy access to private capital flows contributed to the dynamics, increasing the speed and magnitude of the buildup in vulnerability and the potentiality of the crisis.

Following the structural reforms and liberalization of the late 1980s and the 1990s, improvements in growth performance and prospects led to expectations of permanent higher rates of return that would cover the risk in investments, providing the validation and adding impetus for higher rates of investment, and inflow of foreign capital sharply increased in Korea. Capital inflow brought about the appreciation of domestic currency while increasing domestic credit. With the increase in domestic credit came excessive economic boom; as a result assets prices in real estate and stock markets took a leap, leading to the bubble economy situation. The asset price rises and increases in wealth sustained higher consumption, which by adding to aggregate demand and output growth, reinforced the entire process of investment impetus, asset price rise and consumption growth, making the financial condition of banks and firms seem sounder than it was. In the meantime, the government implemented tight monetary policy and heavy sterilization, which sustained high interest rates and stabilized exchange rates by further providing impetus to capital inflow; this high interest rate policy only aggravated fragility in the corporate sector and therefore the financial sector.

It is true that the exchange rate remained stable while the current account deficit was offset by capital inflow. However, the current account deteriorated rapidly following the rise in import demand and the appreciation of domestic currency due to the excessive boom. As the current account deficit accumulated, the disequilibrium of fundamental economic conditions worsened. Consequently capital flew out, the exchange rate became unstable, and the circular process went into reverse. As the economic boom came to an abrupt halt, non-performing loans increased with falling firms and the financial condition of financial institutions sharply deteriorate. As a result, the international credit ratings of financial institutions fell, and they began to experience difficulty in financing foreign currencies, which eventually led to the currency crisis. The currency speculations of international investors only worsened the situation.

The process of financial liberalization and the large capital inflows that accompanied it, worked as a main force that generated this cycle and made the Korean financial sector fragile. In particular, favorable international market conditions contributed to the surge in private capital inflows. Low interest rates in Japan and the United States encouraged international investors and lenders to expand their activities in East Asian markets including Korea, in search of higher yields. Competitive upgrading credit ratings of Korea, reflecting credit rating companies' desires to expand their business scope, and the following declining spreads in both international bond and loan markets also seduced borrowers in Korea to look abroad for lower cost of financing than was domestically available.

The increase in private capital inflows provided the additional liquidity that allowed banks and non-bank financial intermediaries to increase lending. But according to the "good times are bad times for learning" theory,[1] the lending boom following macroeconomic expansion tends to lead to a deterioration of portfolio quality and an increase in financial vulnerability. For example, in order to expand a loan portfolio very rapidly, bankers typically need not only to increase the size of their exposure to their existing clientele, but also to find new borrowers about whom bankers have relatively little information. As the lending boom proceeds, therefore, the riskiness of the portfolio will rise and loans to uncreditworthy

[1]For example, see Gavin and Hausmann (1996).

borrowers are likely to increase. Also, when credit is plentiful, borrowers can easily pass creditworthiness test because they can find another lender who is willing to provide them with credit. Hence credit booms will be excessively rapid and associated with deteriorating loan portfolios.

B. Internal Factors

The current Korean crisis differs from those of other countries in that in Korea, macroeconomic fundamentals were sound compared to other developing countries that had gone through the same crisis. But Korea had structural problems such as the chaebol-centered economy, weaknesses in corporate governance, lack of transparency, and flawed regulatory and supervisory system, as other countries. These structural problems are the products of moral hazard caused by the government's intervention in business and financial sectors for the past economic development period.

For a long time the Korean government had used financing as means of industrial policy. In the process, business and financial sectors had formed expectations that the government would never let big conglomerates fail. With little chance of bankruptcy, the chaebol were given strong incentives to keep expanding without careful consideration of the associated returns and risks, and banks had little incentive to scrutinize the financial soundness of such borrowers. The chaebol's expansionary policy had heightened vulnerability of the whole economy in two ways. First, as a result of profligate loans from banks, the financial condition of the 30 leading chaebol has deteriorated to the extent that their debt-equity ratios went over 400%. These excess loans of large businesses characterize the Korean economy as a loan economy. Second, they invested a lot of money in asset markets which are particularly susceptible to boom-and-bust cycle. Consequently the chaebol became more exposed to business fluctuations and external shocks.

When the world market was booming and the chaebol made substantial profits, the fragile structure did not cause a problem. In the boom, the chaebol used up profits to expand further into already crowded industries such as automobiles, semi-conductors, steel, and so forth. When the world market including the semi-conductor market began to stumble in 1996, however, they found themselves competing with each other in similar businesses, and

TABLE 1

LIABILITY AND PROFITABILITY OF BIG BUSINESS GROUPS (%)

	1994	1995	1996	1997
Debt-equity ratio	355.7	347.5	386.5	518.9
Return on equity	7.28	11.77	1.69	---

Note: Financial subsidiaries are not included. Return on equity is for the large enterprises in manufacturing.

Source: Fair Trade Commission; Bank of Korea, *Financial Statement Analysis*.

their profits rapidly declined. The return on equity had exceeded 7.0 percent during the boom period of 1994-5, but it drastically dropped to below 2.0 percent in 1996, as shown in Table 1.

The profit squeeze of the corporate sector was greatly affected by the collapse of export prices in international markets, particularly those of semi-conductors,[2] the biggest single Korean export item which accounted for 14 percent of exports, and the following economic recession. The heated international competition after entering the OECD, the transition of the Korean economy into a stable growth period from a high growth period, and the high rate of wage increase which exceeded that of productivity, also contributed to the deterioration in profitability. As the economy began to decline and profits were squeezed, big businesses with overdebts fell into big troubles. When the rate of return of investment fell below the cost of interest rate since 1996, the equity eroded at an incredible speed, and many large companies including big chaebol such as Hanbo Steel and Kia Motors went bankrupt. With the bankruptcies of large businesses, non-performing loans of financial institutions sharply increased and the market stability was greatly exacerbated given the over-leveraged financial structure of the Korean economy.

C. Asymmetries of the Financial Liberalization Policies

Yet a huge part of the responsibility for the excessive vulner-

[2]In 1996, the unit price of semi-conductors fell by more than 70 percent, which is alone estimated to have decreased the value of Korean exports by more than $10 billion (over 2 percent of GDP). In addition, international prices of many other main export items of Korea such as steel and chemical products also fell in 1996. As a result, the terms of trade deteriorated by more than 20 percent in 1996.

ability of the Korean economy in recent years lies with the government's mistaken policy response to financial opening and liberalization. Most scholars have argued that too rapid financial opening and liberalization was a main cause of the currency crisis. But we have a different view: In Korea, it was not too rapid liberalization but the asymmetric characteristic of Korea's liberalization policy that rapidly increased vulnerability of the Korean economy to adverse external shocks and eventually led to the crisis.

With financial liberalization, banks and companies borrowed huge amount of foreign capital and, after keeping stable levels until 1992, foreign debts rapidly increased from $45 billion in 1992 to $119.7 billion in September 1997 just prior to the crisis. This debt build-up was almost twice as fast as that of 1979-85, which was the country's previous near debt crisis: Korea's foreign debts grew at 17.8 percent per annum during 1979-85, while they grew at 33.6 percent per annum during 1994-6.

The government's policy of keeping the Korean won high and the miscalculation of capital cost by domestic banks and firms contributed to this expansion of foreign debts in the 1990s. When the current account deficit widened and hence the Korean won needed depreciating, the government did not adjust the overvalued currency but instead financed the deficit with foreign capital inflow by keeping the won high. The overvaluation of the currency led banks and firms to underestimate the cost of capital. Even though such an overvaluation tends to be temporary since it is reversed following the boom-and-bust cycle, banks and firms kept expanding new investments, partly as a result of myopic expectations regarding exchange rate trends. Once they were heavily indebted to foreign capital, banks and firms preferred an appreciation policy to a depreciation policy in order to reduce the cost of servicing their foreign debts. This circular process of currency overvaluation and capital-cost underestimation further increased foreign debts.

The danger, however, is not so much the size of this official figure as the total sum of foreign liabilities including both the official figure and off-shore borrowings of the private sector as well. Korean banks and firms had financed and operated abroad huge amount of foreign money. The problem was that nobody knew the exact amount of this and therefore the total external liabilities that the Korean economy was actually faced with. Only vaguely did we perceive that banks and firms were running businesses with capital

TABLE 2

TOTAL FOREIGN LIABILITIES ($bil)

	1996	Sep.1997	Nov.1997	Dec.1997
Foreign debts	104.7	119.7	116.1	120.8
Long term debts	43.7(41.7)	54.1(45.2)	54.5(47.0)	69.6(57.6)
Short term debts	61.0(58.3)	65.6(54.8)	61.6(53.0)	51.2(42.4)
Off-shore borrowings	56.0	50.9	40.8	33.6
Long term debts	27.0(30.4)	12.5(24.6)	10.2(25.0)	16.4(48.8)
Short term debts	39.0(69.6)	38.4(75.4)	30.6(75.0)	17.2(51.2)
Total external liabilities	160.7	170.6	156.9	154.4
Long term debts	60.7(37.8)	66.6(39.0)	64.7(41.2)	86.0(55.7)
Short term debts	100.0(62.2)	104.0(61.0)	92.2(58.8)	68.4(44.3)

Note: Foreign debts are based on the IBRD criterion.
Off-shore borrowings include off-shore and overseas branches borrowings.
The numbers in ( ) represent weights of long-term or short-term debts.
Source: Bank of Korea

financed abroad; we were not concerned about finding out the exact amount. After the IMF bailout program began, it was revealed that the total external liabilities amounted to $170.6 billion as shown in Table 2, 1.5 times that of the official foreign debt. If we add to this the local financing from foreign banks by the business sector, total liabilities amounted to over $190.0 billion as of September 1997, which was about 45 percent of GDP, recording the highest since Korea graduated from the IMF surveillance in the beginning of the 1980s. Moreover, the government did not as yet have a clear idea of how much offshore borrowings were made by the local bodies of Korean companies without the payment guarantees of the parent companies, nor of the off-the-record investments in derivatives made by financial institutions.

The asymmetric characteristic of the Korea's financial opening policy was directly linked to this expansion of offshore borrowings. The government took a very cautious and gradual approach to opening domestic markets for fear of capital inflow problems; restrictions on outward capital movements, on the other hand, were radically deregulated to give domestic firms and banks access to international financial markets. As a result, firms and banks borrowed and used debts abroad without repatriating it, and offshore borrowings grew very large.

The vulnerability of the Korean economy rapidly increased as short-term debts occupied excessively large portion of foreign debts. The ratio of short-term debts to total foreign debts was much higher in Korea than in Thailand or Mexico which have gone through similar currency crises. The short-term debt ratio had stayed at the level of 40-5 percent but suddenly increased and reached near 60 percent just before the crisis.

A huge part of the responsibility for the higher ratio of short-term debts also lies with another asymmetric characteristic of the government's financial liberalization policy. The government boosted incentives for short-term loans by making it mandatory to notify authorities of long-term foreign debts, whereas short-term loans were regarded as related to trade financing and therefore were not especially regulated. As the result, banks and firms had been operating on a long-term basis with short-term capital borrowed abroad, leading to significant discrepancy in the maturity structure.[3] The danger of increased short-term debts is that the shorter the maturity, the larger the liquidity squeeze when credibility declines, which is exactly what happened to Korea in 1997. It was asserted that Korea could be protected from hot money because liquid asset markets were not open to foreigners. But short-term debts themselves became hot money once the country's credibility deteriorated; this became a catalyst for further worsening the international liquidity crisis as foreign banks froze the rollover of and collected their loans.

III. Triggering Factors of the Korean Currency Crisis

Given that the Korean economy had been so fragile, even a small stroke could break out a crisis. Again, let's divide the triggering factors into external and internal ones and policy responses.

A. External Events

The foremost external factor that triggered a panic was the

[3]There is another example that the government's guidance of financial institutions contributed to increases in short-term debts. When Korea became a member of the OECD, the government expected that the sovereign credit rating would improve, and suggested that financial institutions transform long-term debts into short-term debts at lower interest rates.

Southeast Asian crisis. As the crisis broke out in Southeast Asian countries such as Thailand and Indonesia, international banks and investors sharply decreased their exposure to risky assets in East Asia, collecting the loans and withdrawing capital that had been invested in the region.[4]

Table 3 shows the present state of foreign capital flow in the five East Asian countries including Korea that have been going through currency crises. First of all, capital inflow increased by 95%, from $47.4 billion in 1994 to $92.8 billion in 1996. Equity flows through direct investment or portfolio investment grew from $12.2 billion in 1994 to $19.1 billion in 1996. But a more striking increase was in borrowings from private lenders including commercial banks and non-bank creditors, from $28.2 billion in 1994 to $74.0 billion in 1996. The inflow of capital to the East Asian region had increased greatly each year due to inflows attracted by Japan's low interest rates and high returns in the emerging countries.

The increasing trend suddenly reversed, and the five Asian countries suffered a net private capital outflow amounting $12.1 billion in 1997. The net outflow of portfolio investment was $11.6 billion in 1997 while the net inflow had amounted to $12.1 billion in 1996. However, the sharpest decline was in flows from commercial banks: Borrowings from commercial banks reversed from a net inflow of $55.5 billion in 1996, to a net outflow of $21.3 billion for the five Asian countries in 1997. In Korea, capital flowed in until September 1997 but rapidly flowed out thereafter: As shown in Table 4, a net inflow of borrowings from commercial banks that amounted to $13.1 billion between January and September 1997 was reversed to a net outflow of $8.8 billion between October and November 1997.

One thing that should be considered to understand the sharp decline in net borrowings of Korea is the role of Japanese banks in rolling over maturing foreign debts. In the wake of the collapse of

[4]Some maintain that the underlying origin of the financial crises in Thailand and Indonesia was the devaluation of up to 40% of the Chinese Yuan in 1994. They argue that because of the devaluation of Chinese currency, the above countries lost their price competitiveness and these countries had continuously run a 6-7% level of current account deficit to the GDP throughout the 1990's. It was possible to maintain a stable exchange rate for quite a while through capital inflow despite the current account deficit, but such a situation could not hold on in the long-term.

TABLE 3

EXTERNAL FINANCING OF FIVE ASIAN COUNTRIES* ($bil)

	1994	1995	1996	1997e	1998f
Current account balance	-24.6	-41.3	-54.9	-26.0	17.6
External financing, net	47.4	80.9	92.8	15.2	15.2
Private flows, net	40.5	77.4	93.0	-12.1	-9.4
Equity investment	12.1	15.5	19.1	-4.5	7.9
Direct equity	4.7	4.9	7.0	7.2	9.8
Portfolio equity	7.6	10.6	12.1	-11.6	-1.9
Private creditors	28.2	61.8	74.0	-7.6	-17.3
Commercial banks	24.0	49.5	55.5	-21.3	-14.1
Non-bank creditors	4.2	12.4	18.4	13.7	-3.2
Official flows, net	7.0	3.6	-0.2	27.2	24.6
International financial institutions	-0.4	-0.6	-1.0	23.0	18.5
Bilateral creditors	7.4	4.2	0.7	4.3	6.1
Resident lending/other, net**	-17.5	-25.9	-19.6	-11.9	-5.7
Reserves excluding gold (− =increase)	-5.4	-13.7	-18.3	22.7	-27.1

Note: e=estimate, f=forecast
*: South Korea, Indonesia, Malaysia, Thailand and the Philippines.
**: Including resident net lending, monetary gold, and errors and omissions.
Source: IIF (1998)

TABLE 4

EXTERNAL FINANCING OF KOREA ($bil)

	1997.1-1997.9	1997.10-1997.11
External financing, net	25.2	-8.8
Private flows, net	25.5	-8.7
Equity investment	12.4	0.1
Private creditors*	13.1	-8.8
Official flows, net	-0.3	-0.1

Note: *: Including external financing of Korean banks and companies and their foreign subsidiaries.
Source: Bank of Korea

asset prices (equity and land) in 1990-1, Japanese financial system deteriorated with non-performing loans. The Japanese situations had not improved despite Prime Minister Hashimoto's call for a 'Big Bang' approach to financial reform in November 1996 and financial reforms in the spring of 1997. The Japanese financial system deteriorated further in the second half of 1997 with bankruptcies of a large insurance company, several securities companies including Yamaichi Securities, the fourth largest securities company in Japan, and several large regional and city banks. As the result, Japanese banks that were threatened to go bankrupt after the Southeast Asian crisis began to collect maturing debts from Asian countries and refused to roll over short-term debts on Korea.[5] Once Japanese banks, who were believed to be most familiar with the Korean situations and who were the largest creditors to Korea (see Table 5), started to refuse rollover of short-term debts, other countries' banks rightly followed them and the liquidity squeeze abruptly exploded.

But the problem lies in the fact that the capital inflow that had been increasing rapidly just before the currency crisis flowed out at an even greater speed in 1997. Although foreign lenders and investors have withdrawn their money following the currency crisis in this region, they have, on the one hand, worsened the crisis situation by the suddenly withdrawing international liquidity just before the crisis broke out. This view is also connected with the question of whether there was a significant enough economic change in this region to have reversed the private capital flow of $105.1 billion, from an inflow of $93.0 billion to an outflow of $12.1 billion, within the course of one year and to have swung the private capital flow of $34.2 billion within just a few months in Korea. If they had excessively supplied capital despite having foreseen the currency crisis in Korea, they are responsible for a moral hazard behavior; if they had not foreseen it, then they share a joint responsibility for triggering the crisis by sudden withdrawal of capital from Korea.

Another external factor of triggering the Korean crisis is the 15.8% two-step devaluation of the Taiwanese domestic currency as

[5]A source says that Japanese banks collected short-term lending of $9.0 billion from Korea between October 1997 and December 3, 1997. See Kim, Y. (1998).

TABLE 5

KOREA'S FOREIGN DEBTS BY COUNTRY ($mil)

Country	Jun.1996	Dec.1996	Jun.1997
Japan	22,152	24,324	23,732(23.0)
Germany	8,529	9,977	10,794(10.4)
France	6,994	8,887	10,070(9.7)
USA	9,582	9,355	9,964(9.6)
UKB	4,140	5,643	6,064(5.9)
Belgium	2,312	3,731	3,899(3.8)
Netherlands	1,651	1,926	1,736(1.7)
Swiss	n.a.	1,609	n.a.
Italy	1,024	1,208	1,369(1.3)
Canada	869	1,355	1,325(1.3)
Austria	1,257	1,269	1,212(1.2)
Luxemburg	448	539	528(0.5)
Spain	357	469	546(0.5)
Finland	147	170	106(0.1)

Note: The numbers in ( ) represent the percentages for the country.
Source: BIS

Thailand's currency crisis broke out. One of the reasons that the Korean crisis was accelerated by this was the expectation that if Taiwan, which had 80 billion dollars' worth of foreign reserves and had maintained a current account surplus, devalued its currency, Korea with its current account deficit and fast-decreasing foreign reserves would devalue its currency at a still greater rate.[6] The Taiwanese devaluation and the following crash in the Hong Kong stock market shocked investors and precipitated the withdrawal of capital from Korea.

B. Internal Factors

An important internal factor that triggered the Korean crisis was a series of corporate and bank failures since the beginning of 1997. After Hanbo Steel collapsed under $6 billion in debts in January 1997, big chaebol such as Sammi, Jinro, and Kia followed the same fate. As many conglomerates went bankrupt, there were widespread

[6]Some view that Taiwan's large currency devaluation was as attempt at destabilizing the economies of Hong Kong and China. For details, see Bergstern (1997).

TABLE 6

COMMERCIAL BANKS' NON-PERFORMING LOANS (bil won)

	1995	1996	Sep.1997	Dec.1997
Non-performing loans	14,778	14,317	29,912	32,200
Ratio to total loans (%)	6.1	4.9	9.5	10.0
Ratio to GDP (%)	4.2	3.7	7.1	7.6

Source: Office of Bank Supervision, Bank of Korea

disclosures revealing that many of the large lending decisions had been made at politicians' or government's discretion, and that the size of the non-performing loans in the financial market that had accumulated with the bankruptcies of big chaebol was much larger than had been originally thought. By the end of September 1997, the amount of non-performing loans was estimated to be near 30 trillion won, which was over 7 percent of GDP (see Table 6). This amount was large enough to scare off foreign investors and lenders.

Thus, foreign banks began to collect their investment funds at a rapid rate as they lost faith in the Korean economy due to its shaky industries and weak financial system. As a result stock prices fell and the exchange rate rose sharply. Also, as the foreign investors left the shock market one after another for fear of further rise in the exchange rate, the vicious cycle of declining stock prices and rising exchange rate continued, swiftly developing into a currency crisis.

Political uncertainty also hastened the credit withdrawals because Korea faced the potential for a change in government (Korea has changed the government after the crisis broke out). Before the election that was scheduled on December 16, 1997, many efforts to reform the economic structure, in particular, the financial system, had been made in vain only to fail and disappointed investors started to turn their back to Korea. For example, when the PCFR (Presidential Commission for Financial Reform) submitted financial reform bills to the National Assembly for deliberation and enactment, political parties could not easily get consensus due to political considerations facing the upcoming Presidential election.

C. Policy Mistakes

Mistaken policy responses to the crisis by the government further

aggravated the crisis. First of all, when the government announced its intention to publicize Kia Motors, a panic was triggered and the capital outflow was speeded up. The government had originally decided to aid Kia facing bankruptcy, through capital from the government-run KDB (Korea Development Bank). Foreign investors worried that this would make the KDB insolvent; consequently the financial bond prices of the KDB sank to the level of junk bonds and foreign credit-rating agencies lowered the credit rating of Korea from A− to B+ by seven levels at once. Inability to deal effectively with severe hardships in the international financial market after the Kia incident was one factor that accelerated the currency crisis.

A much more important factor that triggered a panic in Korea, however, was that the Korean government was revealed to have little liquidity to prevent a crisis. As large companies fell and the financial sector weakened, the confidence in the Korean economy deteriorated and foreign banks refused to roll over prior existing loans and foreign investors began to collect their money. Since the Korean financial institutions and companies had been operating on a long-term basis with short-term capital borrowed from abroad, leading to discrepancy in the maturity structure, they were unable to secure international security and the squeeze of international liquidity became so severe.

If the government had enough foreign reserves to provide the international liquidity, the crisis could be much tamed. However, not only was the official foreign reserves insufficient, but also a significant part of that reserves was unusable. There were two reasons that usable foreign reserves was rapidly drained. First, the government used foreign reserves to bail out overseas branches of Korean banks by transferring deposits in foreign banks to deposits in foreign branches of Korean banks, because the branches could not attract liquidity and were on the brink of insolvency. As can be seen in Table 7, although the official foreign reserves had decreased by $4.1 billion from $33.2 billion in December 1996 to $29.1 billion in March 1997, the deposits in overseas branches of Korean banks by the Bank of Korea had increased by $4.2 billion, in effect greatly decreasing the usable foreign reserves by $8.3 billion from $29.4 billion to $21.1 billion in the same period. The same thing happened again in November 1997; while the official figure decreased by $6.1 billion, the deposits in overseas branches increased by $8.9 billion and usable foreign reserves were drained by $15.0 billion in one

TABLE 7

FOREIGN RESERVES

($bil)

	96.12	97.1	97.2	97.3	97.4	97.5	97.6
Foreign reserves	33.2	31.0	29.8	29.1	29.8	31.9	33.3
Oversea branches deposits	3.8	3.8	8.0	8.0	8.0	8.0	8.0
Others	-	-	-	-	-	-	-
Usable foreign reserves	29.4	27.2	21.8	21.1	21.8	23.9	25.3

	97.7	97.8	97.9	97.10	97.11	97.12	98.1
Foreign reserves	33.7	31.1	30.4	30.5	24.4	20.4	23.5
Oversea branches deposits	8.0	8.0	8.0	8.0	16.9	11.3	10.9
Others	-	-	-	0.2	0.2	0.2	0.2
Usable foreign reserves	25.7	23.1	22.4	22.3	7.3	8.9	12.4

Note: Usable foreign reserves = Foreign reserves − Oversea branches deposits − Others

Source: Bank of Korea

TABLE 8

SHORTAGE OF INTERNATIONAL LIQUIDITY

($bil, %)

	1996	Sep.1997	Nov.1997	Dec.1997
Foreign debts(A)	104.7	119.7	116.1	120.8
Long term debts(B)	43.7	54.1	54.5	69.6
Short term debts(C)	61.0	65.6	61.6	51.2
Total external liabilities(D)	160.7	170.6	156.9	154.4
Long term liabilities(E)	60.7	66.6	64.7	86.0
Short term liabilities(F)	100.0	104.0	92.2	68.4
Current account deficits(G)	23.7	18.2	13.9	8.6
Official foreign reserves(H)	33.2	30.4	24.4	20.4
Usable foreign reserves(I)	29.4	22.4	7.3	8.9
I/C (%)	48.2	34.2	11.8	17.3
I/F (%)	29.4	21.6	8.2	13.0
I/(F+G) (%)	23.8	18.3	6.9	11.6

Note: The current account deficit is the sum of the previous twelve months.

Source: Bank of Korea

TABLE 9

FOREIGN EXCHANGE MARKET INTERVENTION ($bil)

	97.1	97.2	97.3	97.4	97.5	97.6
Spot market	2.75	4.00	1.76	0.55	-2.59	-2.09
Forward market	0.00	2.31	1.53	-0.47	-0.81	-1.28

	97.7	97.8	97.9	97.10	97.11	97.12	sum
Spot market	0.19	1.83	2.43	2.09	5.66	1.57	16.99
Forward market	0.57	1.60	1.35	3.19	0.90	0.00	8.89

Note: (+) = dollar sales, (−) = dollar purchases.
Source: Bank of Korea

month from $22.3 billion to $7.3 billion, which was short of two months' worth of imports.

Table 8 shows how serious the shortage of international liquidity was. According to the table, while the ratio of short-term debts to gross debts remained continuously high, the ratio of usable foreign reserves to short-term debt had decreased from 48.2% in the end of 1996 to 34.2% in March 1997, and sharply to 11.8% by the end of November. The ratio of usable foreign reserves/total short-term external liabilities had further decreased to 8.2 % by the end of November, proving that the international liquidity was literally drained. Once the crisis broke out, therefore, financial institutions and companies were unable to secure international liquidity.

Second, in assessing the shortage of international liquidity, i.e. usable foreign reserves drain during the currency crisis, we must also consider how much of the dollars was sold in the forward market for the purpose of stabilizing the currency. As Table 9 shows, the government intervened in the foreign exchange market through the forward transaction in 1997 because selling the dollar in the forward market does not affect the present foreign reserves. However, foreign reserves were decreased on the date of maturity when the forward contract was delivered, and the shortage of international liquidity became much more serious than the current usable foreign reserves stood for.

IV. IMF Program and Its Evaluation

A. IMF Program

The government, faced with a currency crisis, had no choice but to ask for the IMF financial support on November 21, 1997. The government and the IMF agreed upon the contents of the IMF program on December 3 of the year. The initial program assumed growth in 1998 of 2.5 percent and included the followings.[7] The Korean government will implement comprehensive financial sector restructuring that introduced a clear and firm exit policy for financial institutions, strong market and supervisory discipline, and independence for the central bank. The operations of nine insolvent merchant banks were suspended; two large distressed commercial banks received capital injections from the government, and all commercial banks with inadequate capital were required to submit plans for recapitalization.

The budget surplus should be maintained at about 2 percent of GDP to make room for the costs of financial sector restructuring in the budget. Fiscal measures for this include widening the bases for corporate, income, and VAT taxes and reducing the government expenditure. Efforts should be made to dismantle the nontransparent and inefficient ties among the government, banks, and businesses by preparing measures to upgrade accounting, auditing, and disclosure standards, require that corporate financial statements be prepared on a consolidated basis and certified by external auditors, and phase out the system of cross guarantees with conglomerates.

Trade should be liberalized by setting a timetable in line with WTO commitments to eliminate trade-related subsidies and the import diversification program, as well as streamlining and improving transparency of import certification procedures. Capital account will also be liberalized by opening up the Korean money, bond, and equity markets to capital inflows, and liberalizing foreign direct investment. Labor market reform was also demanded to facilitate the redeployment of labor. Finally, the publication and dissemination of key economic and financial data including usable foreign reserves were required.

[7]For more explanation on the Letter of Intent, see IMF (1998).

The contents of the program have frequently been updated considering the progress made and the new external and internal changes.

B. Evaluation of the Programs

The contents of the IMF support agreement between the Korean government and the IMF can be grouped into macroeconomic policy, structural reforms, and liberalization program.

a) Macroeconomic Policies

The IMF insisted on very tight credit and budget cuts to achieve economic stability and to restore and sustain calm in the markets. There is no doubt that in order for Korea to overcome the current crisis, we must put the priority in maintaining price stability and at the same time lessen the current account deficit. However, it is hard to understand how recessionary fiscal and monetary policies will restore calm and confidence in the market.

In the agreement of monetary policy, the IMF advises Korea to maintain short-term interest rates at a fairly high level until the exchange rate shows a definitely stable trend. This advice is founded on the logic that a high interest rate would promote the inflow of foreign capital, decrease consumption and investment, and increase savings, thereby enabling the stabilization of the exchange rate within a short period of time. The IMF says that the high interest rate will stabilize the exchange rate through the following two mechanisms: First, if the domestic and international interest rate difference widens due to the high domestic interest rate, then huge foreign capital will flow in, and therefore the exchange rate will fall (rise in the value of the won); second, high interest rates will increase savings and decrease consumption and investment, thereby improving the current account and making the exchange rate fall.

Although this may make sense in theory, it will not work and the effect will be very limited considering the Korean economic situation. For example, after the program began, the exchange rate had been showing huge fluctuations due to the speculative demands on the currency and the uncertainty regarding the economy. Moreover, foreign capital had been slow in flowing in despite of the high interest rates because the credit risk involved in the payment of principle was too high. Unless the uncertainty

towards the future of the economy is significantly reduced, there will be a limit as to how much foreign capital can be attracted by the high interest rate policy. Merely a domestic and international interest rate gap is insufficient for the exchange rate stabilization mechanism to operate properly through interest arbitrage; there has to be less investment risk.

The exchange rate will be stabilized only when international credibility is restored through the smooth structural adjustment of companies and financial institutions and foreign capital voluntarily flows in; such structural adjustment, however, cannot be achieved only through the tight monetary policy. Therefore it is virtually impossible to stabilize the currency in a short period of time through only the maintenance of high interest rates as a monetary policy.

Also, stabilizing the exchange rate by improving the current account through a high interest rate policy which would supposedly curtail additional consumption and raise savings has its limits in a country like Korea whose savings rate is already over 30%. On the other hand there are severe side-effects to maintaining high short-term interest rates. Artificial maintenance of high call rates may raise the long-term and short-term market interest rates regardless of the market situation. Although it is inevitable to implement the tight policy for exchange rate and price level stability, the high interest rate will be followed by a series of company bankruptcies because of increased financing burdens, even before the goal of stable currency is realized. If company bankruptcies lead to the insolvency of financial institutions, additional fall in international confidence, and stagnancy in the inflow of foreign capital, we may even fail in stabilizing the currency as explained above.

Until quite recently, the IMF had demanded that the Korean government maintain the call rate at a level higher than the market equilibrium rate. As a result, the call rates and also the short-term Currency Stabilization Bond interest rates oscillate at a fairly high level. When the debt-equity ratio is as high as in Korea, there will be extreme difficulties regarding the payability of companies and it would be hard to maintain normal business activity if interest rates all at once more than double the level prior to the IMF financial support. Excessively tight monetary policy demanded by the IMF was unreasonable and had to be readjusted in the negotiation

process. Excessive monetary stringency may lead to stops on capital flow in the capital market due to the continuous fall of companies and financial institutions; and such a tight-money market may bring about a further financial panic, possibly eliminating any potential growth by the roots. Many American economists pointed out that the tight-monetary policy was a main factor to deepen the Great Depression.

The IMF's prescription of budget cuts also had a problem. If the budget deficit was a cause of the crisis as in Latin America, the prescription would be reasonable. In Korea, the budget had been kept in balance or in slight surplus which is quite different from the usual IMF cases. Moreover, in the crisis, the government needs to spend the budget to bolster the social expenditure program including the unemployment benefits and to provide resources for business and financial sector restructuring. Therefore, the IMF's prescription of budget cuts that was a standard medicine to deal with irresponsible governments running large deficits was not appropriate for Korea, and became a factor to further accelerate the crisis.

b) Structural Reforms

The IMF emphasized structural problems of the Korean economy and said that it would provide credit only as Korea address such problems. There is a debate as to whether it is appropriate for such demands of reforms in the financial, industrial, and labor sectors to be made by the IMF, which acts as the lender of last resort in the international financial market (Feldstein 1998). Critics of the IMF argued that the IMF's demand of reforms is beyond its role, and that making the reforms in the midst of a currency crisis would be very poor timing and worsen the situation.

However, in a lot of cases these reforms do indeed help the Korean economy; therefore it would be advisable for us to enforce the necessary reforms at this opportunity.[8] Bearing in mind that the current crisis had started with the structural problems of the economy and developed into a crisis with triggering factors, ulti-

[8]During the talk between the Korean government and the IMF last year, the IMF delegates carried and referred to the PCFR report which includes a comprehensive reform package to overhaul the Korean financial system. A large part of the reforms demanded by the IMF overlaps with the proposals in the report.

mately we would be able to overcome the crisis only if we effectively implement structural adjustments and reforms in the business and financial sectors and the government. Up till now, both the government and the private sectors have been unable to transform themselves. If we are able to use this crisis in solving the structural and institutional problems of the economy, then it will become an opportunity for us.

c) Liberalization Policies

Before the crisis, the government had prepared and implemented the trade, capital, and foreign exchange liberalization plan step by step. However, right after the crisis, the government abruptly adopted a complete floating of exchange rates. The government also agreed on capital liberalization that first of all the stock investment ceiling for foreigners be allowed up to 55% by the end of 1997 and completely abolished by the end of 1998. Also, in 1998 the purchases of domestic corporate bonds and short-term financial assets by foreigners must be allowed without limit, and limits on foreign borrowing by private corporations will also be abolished.

The problem is that it was not done through the active judgment and notified rescheduling by the government, but was acted out in a shocking and passive way in a state of emergency of currency market paralysis by the IMF's strong demands. Without the proper institutional environment for hedging risks related to currency fluctuations, the Korean economy is directly exposed to currency risks as the exchange rate becomes completely liberalized. Moreover, even the stock and bond markets having been liberalized, it seems highly likely that the speculative attacks of speculators of developed countries will become more ruthless. This makes it all the more urgent for us to search for plans to efficiently deal with the uncertainty, by activating the futures market, developing new commodities to cope with the currency risk, and improving risk management techniques. However, when the financial market is paralyzed, such plans to manage market instability cannot successfully be implemented and even a small shock will have a much greater impact than normal times should currency speculation arise.

V. Conclusion

A. Summary

The causes of the Korean currency crisis are multifaceted and both external and internal factors should be treated even-handedly. With financial liberalization and large capital inflows, Korean banks and firms had been overdebted and the Korean economy had been exposed to boom-and-bust cycles generated by international capital movements. Internal structural problems in Korea such as the chaebol-centered structure, the inefficiency of loaning process, lack of transparency, and poor regulation and supervision accelerated the vulnerability of the economy.

The vulnerability was much more aggravated by the asymmetric characteristic of Korea's liberalization policy, i.e. tight restriction on capital inflow vs. radical deregulation on capital outflow and restrictive control on long-term borrowings vs. no regulation on short-term borrowings. Due to excessive borrowings abroad in the private sector, foreign debts accumulated at great speed. Banks and firms thought that the exchange rate would be stably maintained at the ongoing level, and therefore borrowed as much as possible from abroad. Meanwhile, because many banks and firms have operated funds abroad in order to evade restrictions on domestic capital inflows, the amount of offshore borrowings approached the level of official foreign debts and total external liabilities was 1.5 times larger than the official figure. Also, the portion of short-term foreign debts rapidly increased to near 60 percent of total debts, which made the economy so vulnerable that even a slight shock would lead to a serious liquidity squeeze.

Given the vulnerability of economic structure, Southeast Asian crisis, Japanese banks' reaction to it, a series of corporate failure, and political instability due to the Presidential election caused international confidence to take a deep dive, and developed into the currency crisis. The crisis was exacerbated by policy mistakes such as publicizing Kia and foreign reserve drain by supporting nearly insolvent foreign branches of Korean banks and forward intervention in the foreign exchange market.

Of the IMF advisory policies, the macroeconomic policy of budget cuts and tight credit seems problematic. The IMF maintains that a high interest rate policy will accelerate the inflow of capital and the

adjustment of industrial structure and that budget cuts reduce aggregate demand and improve current account. But the Korean crisis is different from that of Latin American countries in the past which had been brought about by accumulating current account deficit through careless fiscal expenditures. Also, macroeconomic fundamentals of Korea are much sounder than were those of Latin American countries. As was pointed out by Jeffrey Sachs (1997, 1998), the IMF's prescription of curtailing fiscal expenditures and implementing high interest rate is not appropriate for the Korean situation.

The complete trade, financial, and foreign exchange liberalization in the midst of crisis are also inappropriate because when the financial market is almost dead but completely exposed to capital movements, even a small shock may bring about a much great instability in the market. Considering that this liberalization was not so urgent to avoid the crisis but had continuously been demanded by developed countries, the IMF can be blamed for acting as an agent for the developed countries.

Regarding structural reforms, however, we have different views from those of critics of the IMF program; we think that these reforms do indeed help the Korean economy, and urge to accept and swiftly implement the reforms demanded by the IMF.

B. Policy Suggestions

At the moment, while it seems that a corner has been turned in the current crisis, difficult challenges still remain ahead. Although a large part of short-term foreign debts has been transformed into long-term ones, it does not mean that the problem is resolved. The total sum of foreign liabilities that Korea is indebted to has not been decreased since the crisis broke out, and still amounts to 45 percent of GDP. Especially when we take into account that much higher additional spread is now applied to foreign debts and servicing foreign debts will be more burdensome than before, the difficulties in foreign debt management would be paramount to those that followed right after the second oil shock. Moreover, the real economy will further be staggering and Korean firms and banks still have too high debt-to-capital ratios. When the markets fluctuate by adverse shocks, the management of foreign debts will be very thorny and there is a possibility that foreign debt manage-

ment problem develop into another currency crisis.

To deal with the difficulties that lie ahead, therefore, it should be an immediate agenda to take special care on foreign debt management and dealing with business and financial sector distress. For the purpose, the main thrust of policies should be the acceleration of reforms to address the roots of structural inefficiencies so as to attract foreign direct investment into Korea. An increase in foreign direct investment would decrease foreign debts, raise the competitiveness and efficiency of industries, and consequently help in securing international liquidity as well by restoring international confidence.

In tandem with structural reforms, in order to resolve internal problems in the long run, we need financial policies to prevent moral hazard in both the financial and business sectors by oversight and regulation of the financial system and to establish the correct incentives to encourage prudential and productive behavior.

Besides financial policies, the government should keep good management of the economy through sound macroeconomic policies, because the greatest single contribution that any government can make to a better financial system is to create a stable macroeconomic environment. Monetary policy needs to take an inflation targeting strategy, considering the highly volatile and uncertain situation following the crisis and the complete financial market opening afterwards. Exchange rate policy may be used to stabilize the current account unless they are in serious conflicts with inflation targeting.

To limit the influence of vagrant short term capital, many measures have been suggested. However, these measures may not be effective and meaningful in practice unless the foreign debt structure is sound because short-term debts can easily be turned into hot money with the deterioration of credibility. Therefore, institutional mechanisms need to adapt to the changed environment and the measures need to be implemented at a global to close loopholes. Also, such measures should be consistent with a comprehensive program of more fundamental reforms and supplemented by prudential requirements in regard to term structure and capital adequacy ratio.

In addition to hot money controls, since overexpansion of credit to Korea and Asian countries have been in large part because of irrational exuberance by international banks which tend to behave

on the assumption that excessive lending cannot be sanctioned by systemic default, we need to prepare measures to solve the moral hazard problem of lenders as well as that of borrowers: Examples include automatic reducement of a country's foreign debts or stopping the clock of repayments while maintaining market access in case of a crisis.

A regional monetary bloc has attracted much attention as a means to cope with the crisis through collective action. However, such an idea would not be feasible, and hence not helpful, in preventing a recurrence of a crisis for the time being. Monetary cooperation in Asia should consider the diversity in the region. Thus we suggest that monetary cooperation start with a loose form of cooperation and proceed in a pragmatic way, perhaps first at the bilateral level and eventually as regional collective action. Moreover, Asian monetary cooperation must be harmonized with global monetary cooperation.

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