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The Crisis in South Korea

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THE CRISIS IN SOUTH KOREA

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Abstract

After its impressive growth in 1960s and 1970s and successful foreign debt management, stabilization and structural adjustment in 1980s, South Korea's foreign debt crisis in late 1997 was indeed a puzzle. This paper is an attempt to answer this puzzle in Korea's development experience. First, an analytical framework is used to isolate the nature of the crisis as a transfer or liquidity problem. Then, how domestic and international players interacted to shape events in the 1990s are discussed. The paper points to premature and excessive financial liberalization as the ultimate cause of the 1997 crisis in Korea.

Keywords: Asia, Korea, Financial Reforms, East Asian Model, Foreign Capital Flows, Debt Crisis

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THE CRISIS IN SOUTH KOREA

I. Introduction

South Korea's foreign debt crisis in late 1997 caught many by surprise. This is understandably so, after the country impressed the world with its strong, perhaps "miraculous", economic performance since 1960s and 1970s. What made it an even greater object of admiration and envy was its development experience in the 1980s when it displayed its skillfulness in successfully managing its then large foreign debt while stabilizing the macroeconomy and undertaking necessary structural adjustments. This development "story" ends happily when, in 1986, Korea registered a surplus in its current account, the first one in many years. At this point, Korea undoubtedly represented a model which other heavily indebted countries could (and should) emulate.

Things changed dramatically in the 1990s. After posting current account surpluses every year between 1986 and 1989 and successfully making transfers to foreign creditors, thereby reducing the total foreign debt stock by 30 percent, Korea once again became a debtor country. Developments in the 1990s provided the opportunities and motivation for, as well as the means by which Korea would expose itself to greater external vulnerabilities, including those which affect its ability to successfully meet its foreign debt obligations. It was then a matter of time and the unfavorable turn of events before Korea would succumb to a foreign debt crisis. This time came in late 1997.

The question which puzzles many observers and scholars is why Korea, which was one of the very few countries which performed exceptionally well and avoided the foreign debt difficulties which many experienced in 1980s, find itself unable to escape the debt crisis in 1997?

This paper is an attempt to shed light on the above question. In our search for an answer, we first use the analytical framework developed in Mapalad (1994) to isolate the nature of the 1997 foreign debt crisis in Korea to be one of a transfer problem. Such problem could be traced to premature and excessive financial liberalization in the 1990s. In particular, financial liberalization was seen to be both the cause and consequence of the country's rapid build-up of foreign debt, on the one hand, and the deterioration of its international competitiveness, on the other hand. The former increased the country's foreign obligations while the latter reduced its ability to service them.

This paper goes beyond the above framework by highlighting how interactions among domestic and international players and factors contributed to the country's stepped up liberalization in the 1990s. As will become clear later, the rapid opening up of the financial sector, especially after 1992, could be seen as a way by which the Korean government "compromised" with international forces, especially in light of limited reforms in the industrial and trade sectors and at a time when the country was pursuing membership into OECD.

This paper concludes by showing the inherent incompatibility of the East Asian model and the liberalization model of development and Korea's incomplete and improperly-sequenced transition from the former to the latter. In addition, the importance of individual country differences are highlighted, as well as necessary measures and prerequisites to ensure greater success of financial liberalization.

II. An Analytical Framework

Mapalad (1994) provided a framework for analyzing and explaining why some countries experience foreign debt crises and others do not.¹ Based on the standard theory of international capital movements, one would predict that countries which borrow foreign capital will experience a faster growth in income than otherwise and should not experience episodes of foreign debt crisis.² However, the debt crisis in the 1980s, as well as the more recent Asian crisis, made it clear that the above scenario holds only under certain strict conditions. These are that foreign capital is invested by the borrowing country (the transformation criterion), that these investments are productive (the efficiency criterion), and that the borrowing country is able to generate a surplus in foreign exchange (or in domestic currency convertible to foreign exchange without substantially depreciating the exchange rate) required for debt service. The conclusion is that outcomes of success or failure depended on whether and to what extent a country meets the first two criterion independently or jointly and the third criterion.

The same work showed that, once a country decides to adopt a strategy of foreign debt-driven growth, it must alter its behavior in the way that is required in order for the strategy adopted to be successful. This is because inflows of foreign capital have a tendency to raise current income, lower the real interest, or appreciate the real value of the domestic currency.³ Each of these effects could divert funds toward higher consumption of domestic and foreign goods. Hence, the government must introduce measures or policies which counteract, fully or partially, the negative effects of foreign capital inflows on current income, real interest rate, and real exchange rate.

In the context of this framework, it will be argued that Korea's experience of a foreign debt crisis in 1997 arises from its failure to fulfill the transfer criterion, although it was able to satisfy the transformation and efficiency criteria (jointly, though perhaps not individually). In what follows, attempts are made to estimate each of the three criteria.

The Efficiency Criterion

The efficiency criterion requires that the additional income generated from the use of capital, both foreign and domestic, is at least as much as the cost or liabilities incurred in its use. Equivalently, this criterion is fulfilled if returns to investment are at least as high as the interest rate at which capital is borrowed. In this case, net productivity (or net returns) of investments is (are) positive.

At the macroeconomic level, the average productivity of investments may be proxied by the incremental output-capital ratio (IOCR, hereafter) which gives the additional output (or real income) generated per unit of capital. This represents the real benefit from investments. At the micro level, productivity of investments financed by domestic capital, on one hand, and by foreign capital, on another hand, must be estimated separately and compared with the corresponding costs.

The real cost of capital can be estimated by the real interest rate which, for domestically supplied capital, is given by domestic lending rate adjusted for inflation. For capital from abroad, the relevant cost is the foreign interest rate, adjusted for changes in the nominal exchange rate (as they are usually repaid in foreign currency) and domestic inflation. Because a combination of domestic and foreign capital are used to finance

investments, a weighted average of their costs is calculated to represent the real cost of capital.

Table 1 presents the test of the efficiency criterion. Our estimates show that Korea fulfilled this criterion by a wide margin, as indicated by the significantly positive estimates of net productivity of investments [column (2)]. That this is true during all periods, despite a decreasing trend, is evident. The decreasing trend may simply reflect diminishing returns as capital stock expanded over time [see also column (3)]. On this basis, we argue that domestic investments are sufficiently productive, on average, and that additional income was generated to service both foreign and domestic debt.

Table 1: Test of the Efficiency Criterion
(as annual averages, in percent per year)

(1) Period	(2) Net Productivity of Investments (3)-(4)	(3) IOCR ¹	(4) real cost of capital ²	(5) real cost of domestic capital (8)-(11)	(6) real cost of foreign capital (9)+(10)- (11)	(7) weight assigned to domestic capital ³
1962-71	37.3	42.0	4.7	6.3	2.9	53.92
1972-79	32.5	33.0	0.5	1.4	-2.4	77.65
1980-89	22.7	26.6	3.9	3.4	7.3	87.31
1990-96	17.9	20.8	2.9	2.9	4.1	99.42

Period	(8) domestic lending rate	(9) foreign interest rate ⁴	(10) won depreciation rate ⁵	(11) domestic inflation rate ⁶
1962-71	20.8	5.5	11.9	14.5
1972-79	16.7	8.4	4.5	15.3
1980-89	11.8	11.9	3.8	8.4
1990-96	9.3	7.8	2.7	6.4

Source: IMF (various issues); own calculations.

Notes: 1: IOCR=incremental output-capital ratio, proxy for marginal productivity of capital; 2: weighted average of real costs of domestic and foreign capital; 3: ratio of domestic savings to gross domestic investment; weight assigned to foreign capital is the complement of these figures; 4: U.S. prime rates; 5: changes in the won-U.S. dollar exchange rate; 6: CPI-based.

The Transformation Criterion

The transformation ratio, in its strict version, requires that all savings, domestic and foreign, must be used to finance investments. In other words, all savings must be "transformed" into investments and, hence, the transformation ratio is unity. However, since capital funds are fungible, the possibility arises that a portion of them may have been used to finance higher consumption or investments which are unproductive or speculative. In this case, the requirement for avoiding a debt crisis combines the transformation and

efficiency criteria in such a way that the portion of savings that is actually invested must earn a gross return that is adequate to pay for the cost of the entire capital used.

Furthermore, this concern over the magnitude of the transformation ratio becomes particularly important as the domestic financial regime moved toward deregulation and liberalization, as it did for Korea and other countries in the 1990s, while lacking regulatory control of the financial system or commercial banking skills [see Wade (1998: 8); Crotty and Dymksi (1998: 19); and Stiglitz's reference to "inadequate oversight, not overregulation" in Wade (1998: 5)].

This point was clearly recognized by a number of scholars. Park (1994: 17) notes that "(i)n the absence of asset portfolio regulation, banks can use the greater availability of their loanable funds to finance consumption rather than investment." Similarly, Cho (1989) finds that directed credit program limited share of consumer loans and loans to "unproductive" sectors such as services and leisure [cited in Vittas and Wang (1991: 13)]. A converse of Cho's finding is that an undirected credit program, i.e., one where credit allocation is largely market-determined, has a greater tendency of channeling funds toward higher consumption or activities with lower productivity. Hence, there are reasons to believe that the transformation criterion may not be fulfilled from the 1980s and moreso in the 1990s as Korea pursued financial sector reforms.

Direct estimation of the proportion of savings actually invested, i.e., the transformation ratio, is a difficult task. An alternative approach is therefore taken in this paper, in which the concept of "required" transformation ratio is introduced. We construct this to represent the minimum proportion of total savings which must be invested (and must have a return equal to the average productivity) such that the net productivity of investment is zero. In essence, this figure gives us a "break-even" point: that level of investment which generates an amount of additional income (i.e., benefits) exactly equal to the interest cost of all capital. Estimates of this figure are reported in Table 2.

Table 2: "Test" of the Transformation Criterion

(as annual averages, in percent per year)

Period	"required" transformation ratio on all capital ¹	"required" transformation ratio on domestic capital ²	"required" transformation ratio on foreign capital ³
1962-71	11.19	11.05	1.43
1972-79	1.52	4.24	n.a.
1980-89	14.66	12.78	27.44
1990-96	13.94	13.94	19.71

Source: Table 1; own calculations.

Notes: 1: real cost of capital divided by IOCR; 2: real cost of domestic capital divided by IOCR; 3: real cost of foreign capital divided by IOCR.

From Table 2, we report that even if as much as 70% of funds were diverted to unproductive or consumption uses, as long as the remaining share were invested in activities with average productivity or better, Korea would have satisfied the

transformation and efficiency criteria jointly and avoid a foreign debt crisis. Hence, blaming the crisis on increased speculation in real estate and financial markets domestically or overseas will provide an inadequate explanation.⁴

The Transfer Criterion

The transfer criterion requires that a country generates an amount of surplus in foreign exchange (or convertible to foreign exchange without substantial depreciation of the domestic currency) that is as much as that required to service the foreign debt.⁵ Ultimately, what is required is a surplus in the current account of the balance of payments which can then be used to repay the principal of the debt.⁶ This is exactly what Korea did between 1986 and 1989, during which its total foreign debt stock was reduced from 47.1 billion U.S. dollars in 1985 to 32.8 in 1989 [World Bank (1992)].

To the extent that the country can continue to attract foreign capital or is able to maintain an adequate amount of foreign exchange reserves, it can sustain deficits in its current account and delay generation of the required surplus in foreign exchange.⁷ However, this scenario is only temporary. On the one hand, reliance on foreign capital inflows to finance current account deficits increases the country's vulnerability to changes in their terms and supply. On the other hand, continuous use of reserves to finance persistent current account deficits will eventually lead to its depletion. Eventually, the country must make sure that its ability to earn foreign exchange through exports will be sufficient to finance its import bill and ultimately close of the gap in the current account.

It is this criterion which Korea failed to satisfy in the 1990s. For one, growth of exports (valued in U.S. dollars) slowed between 1990 and 1996, averaging 9.2% per year and falling below growth of imports in five out of seven years covered by this period. Table 3 shows how Korea's performance during this period is markedly weaker than those during the earlier periods of its development.⁸ Consequently, after registering surpluses from 1986 until 1989, the current account turned to deficits once again beginning in 1990 (except in 1993), increasing to five percent of GNP by 1996.

Table 3: Test of the Transfer Criterion

Period	growth of exports ¹ (% per year)	growth of imports ² (% per year)	current account balance (% GNP)	foreign exchange reserves (months of imports)
1962-71	38.8	24.8	-4.3	3.7
1972-79	41.2	32.4	-4.4	3.4
1980-85	12.6	7.7	-4.0	3.2
1986-89	20.5	19.0	+5.7	2.9
1990-96	9.2	14.0	-1.9	2.6

Source: IMF, *International Financial Statistics Yearbook*, various issues; own calculations.

Notes: 1(2): Exports (Imports) of goods and services valued at U.S. dollar.

As earlier noted, as long as foreign capital inflows are uninterrupted, financing of these deficits will not be problematic. However, in the event that this state of affairs were to change as it did in July 1997 in response to the onset of the crisis in Southeast Asia, Korea could have avoided a crisis on its foreign debt if its foreign exchange reserves had

been adequate. As a rule-of-thumb, reserves equal to three months worth of imports are considered the critical level. Data show that Korea was not able to maintain this critical level every year between 1990 and 1996, during which reserves averaged 2.6 months of imports. Average figures for other periods were higher and above the critical level.⁹

At the same time that Korea's ability to service foreign debt is reduced (as noted above), the amount of debt service required increased as lending terms deteriorated. International lending rates, as proxied by U.S. prime rates, rose from 6% in 1993 to 8.8% in 1995. At the same time, average maturity period became shorter, reflecting the increasing share of short-term debts (i.e., those which mature in one year or less) to total [48% in 1985, 60% in 1989, and 72% in 1997; see Crotty and Dymski (1998: Figure 8)]. All of these developments combine to make it more difficult for Korea to fulfill the transfer criterion.

III. Explaining the Transfer Problem: Opportunities, Motives, and Means

The 1980s ushered in a new era of thinking known as neoliberalism, which in economics became encapsulated in the principles of privatization, deregulation, and liberalization.¹⁰ All of these suggest a reduction in the government's role in the economy to the bare minimum (i.e., that "size" necessary to correct for the presence of market failures) and a greater reliance on markets to allocate resources and coordinate otherwise uncoordinated, independent private actions.

Economic reforms undertaken by Korea after its near foreign debt crisis in 1979 embodied these principles. The most notable liberalization effort began in 1983 in the trade sector and continued throughout most of the decade. The general objective was to increase competition in both domestic and international markets. The former was reflected by the lowering of entry barriers faced by foreign producers and suppliers who were attracted to the growing size of the domestic market and had a competitive edge vis-a-vis domestic producers. The latter took the form of efforts to neutralize export promotion policies, including adjustments of the exchange rate, which foreign competitors see as ways in which Korea manipulated or "induced" its international competitiveness.

Faced with increased competition domestically and "coercive" competition abroad¹¹, Korean firms (especially the chaebols which supplied a large share of the domestic market and many were themselves exporters) saw the need to undertake massive investments, most of which had long gestation period and were intensive in capital and technology. Financing of such investments had to come from external sources as internal savings were limited.

The 1985 Plaza Accord also created opportunities for Korean firms and banks to invest abroad. With the consequent appreciation of the yen vis-a-vis the U.S. dollar, Japanese firms attempted to regain lost competitiveness by relocating production sites where production costs (in yen) were lower. Countries whose currencies were essentially pegged to the U.S. dollar were strong candidates, and those in Asia (particularly, Southeast Asia) geographically attractive. The flow of Japanese direct investment, as well as the recycling of Japan's huge trade surplus, generated an investment boom in Southeast Asia and created a general environment of optimism. Subsequent inflows of foreign capital spread into other sectors, namely real estate and financial (or "emerging") markets.

Indeed, Korean banks, behaving not differently from banks and investors in many Western countries and Japan, saw "speculation" in these markets to be quite attractive and potentially profitable. They also invested heavily in "junk" bonds in Russia and Latin America in a similarly speculative way [Wade (1998: 14)].

In Korea itself, parallel developments were occurring. With the real appreciation of the won during this period coupled with a general reduction in export subsidies, the latter in line with its trade reforms, investment in the trade sector became less attractive and diverted funds away from export activities and into real estate and financial assets. However, it must be mentioned that this, by itself, is not a significant factor to explain the occurrence of the 1997 crisis, although it would have implications for the transformation criterion (as earlier noted).

The above accounts suggest an increased demand for funds by Korean banks to accommodate the investment needs of chaebols and to take advantage of investment opportunities in Southeast Asia.

That the international financial system was awashed with liquidity in the late 1980s and early 1990s is well noted elsewhere [see Wade (1998: 7) and Crotty and Dymksi (1998: 18)]. Limited investment opportunities in Western economies, bleak economic outlook in Japan following the collapse of the "bubble economy", the expansionary nature of monetary policy of these economies, and persistently huge Japanese trade surpluses vis-a-vis the U.S. contributed to the greater supply of investment funds.

On the one hand, motivated by interest rate differential between foreign and domestic capital and the relative absence of exchange rate risk (vis-a-vis the U.S. dollar), Korean banks and chaebols sought out foreign funds. On the other hand, foreign banks and fund managers found higher returns to investment overseas attractive, especially in economies with strong macroeconomic fundamentals, in general, and in a country like Korea with excellent credit standing, exceptional growth record since 1960s, and well-noted stabilization and structural adjustment success in 1980s. Moreover, the impressively rapid rate at which it repaid its foreign debt stock in the second half of 1980s earned Korea much admiration from scholars and policymakers alike for its successful use of a foreign debt-driven growth strategy.

The more rigorous implementation of a program of financial deregulation and capital liberalization in 1990s, especially after 1992¹², provided the means to bring together the higher demand for funds by Korean banks and chaebols and the higher supply of funds in the international financial system. It is then not surprising to see the very rapid build-up of debt owed by Korea to foreigners, and with it, the large share of short-term to total.¹³ Data show the country's total external debt stock increased from 47 billion U.S. dollars in 1990 to approximately 150 billion U.S. dollars by December 1997. This represents a tripling of the debt stock in a matter of seven years. What has a greater implication for the burden of servicing this debt is the share of short-term to total, which rose from 48% in 1990 to between 75 to 80% in 1997.

As earlier noted, a part (perhaps, a large one) of these foreign capital inflows financed long-term investments by chaebols, thereby giving rise to a term mismatch, i.e., short-term liabilities essentially "relying" on long-term assets to pay-off. This elevated the risk of illiquidity faced by domestic banks (who borrowed foreign funds and lent to chaebols) and chaebols which borrowed directly abroad.

In addition, domestic banks which used part of borrowed foreign funds to finance speculative activities and construction boom in Southeast Asia, especially Thailand and Indonesia, faced higher uncertainty on returns. They also made Korea vulnerable to the crisis which unfolded in July 1997 in the region. Consequently, the country could not be spared from the "contagion effect."

At the same time that Korea's foreign debt obligations were rapidly accelerating, its ability to meet them (e.g., its export performance) has weakened due to a number of factors.

Korea's decision to liberalize its financial sector in the 1990s created a *de facto* fixed exchange rate regime [see Wade (1998: 7, 10); Crotty and Dymski (1998: 11)].¹⁴ This is clear in the stability of the won's value vis-a-vis the U.S. dollar between 780 and 800 from 1992 to 1996. In addition, foreign capital inflows in excess of the amount required to finance current account deficits added to the foreign exchange reserves and the monetary base, putting upward pressure on the price level.¹⁵ The resulting inflation, although low by historical standards, averaged 6.4% between 1990 and 1996, exceeding those in most trading partners. A more important determinant of international competitiveness are changes in production costs, e.g., real wages which grew 8.1% during the period. Consequently, the real exchange rate appreciated 1.5% per year on average between 1990 and 1996.

Korea's deteriorating international competitiveness was exacerbated by depreciation in the currencies of its major competitors: the Chinese yuan in 1994 and the Japanese yen in 1995. Furthermore, the elimination of most export subsidies since 1980s reduced the incentives for Korean producers to sell in markets overseas while import liberalization gave Korean producers and consumers greater access to foreign goods. Lastly, slow growth in Western economies and Japan combined with a general over-investment by their producers aimed at enhancing competitiveness generated an oversupply of goods in the world economy [see Crotty and Dymski (1998: 4-7) for their discussion on the tendency of neoliberal regime toward excess supply].

All of these factors contributed to the slower growth of Korean exports and rapid growth of imports during this period, which combined to tilt the balance of the current account from the surpluses of 1986-1989 to deficits from 1990 onwards (except 1993), increasing to five percent of GNP in 1996. Financing of these deficits had to rely on the inflows of foreign capital, mostly loans and short-term. Clearly, as long as foreign capital continues to flow in and terms remain favorable, Korea could sustain deficits in the current account and still meet its foreign debt obligations. This is particularly important given the inadequate amount of foreign reserves which Korea maintained during this period. Consequently, Korea's heavy dependence on foreign financing exposed it to developments in the international trade and financial markets over which it had little control. Hence, it put itself in a very precarious state of being dangerously integrated with the international system.

Summary

Korea's foreign debt crisis in December 1997 has its roots in the financial liberalization program which it implemented in 1990s. Such program led to a rapid build-up of foreign obligations, on the one hand, and a weakening of its exports performance.

Taken together, Korea found it increasingly difficult to generate the resources by which it could meet the transfer required by foreign creditors, marking the onset of a crisis and forcing it to seek assistance from the IMF in November 1997.

IV. Implications

A Crisis of Illiquidity in Foreign Exchange, not Insolvency

From the above analysis, we share the conclusion by Wade and Veneroso (1998: 2) that "(t)he crisis is a crisis of illiquidity more than of insolvency." In particular, to find that the crisis is due to illiquidity at the micro level (i.e., Korean banks and chaebols lacked the liquidity to pay for foreign debt service) is perhaps nothing new, but must be noted to have been a general correlate of development model of Korea since 1960s. Data on the ratio of foreign assets to liabilities of Korean banks exceed unity for all, except four years, between 1967 and 1996 (IMF, various years).¹⁶

That this sort of micro illiquidity did not translate to a macro illiquidity and a crisis in the past reflects the role of the government and the economy's transition from an East Asian model in 1960s and 1970s to a market-oriented one in 1980s and 1990s. The reduced role of the government in the economy in the latter period is consistent with the shrinking of its area of responsibility. In the past, because the state itself encouraged chaebols to undertake massive investments in order to accelerate growth and development, it made available to them the necessary credit. This was done with the state's full knowledge of the heavy indebtedness of chaebols. Stability of such a system was maintained by the deliberate and skillful coordination among the state, banks, and chaebols. As the state itself approved and encouraged the heavy indebtedness, thereby causing banks and chaebols to be financially fragile, it has taken responsibility for ensuring that the macroeconomy would remain afloat. Ways by which this scheme was secured were the maintenance of a more than adequate foreign exchange reserves and an excellent credit standing in international financial markets.¹⁷

In contrast, as the economy underwent liberalization and market reforms in the 1980s and 1990s, economic decisions including those relating to investments and foreign borrowing resulted from increasingly private choices. With these developments came the greater responsibility to be borne by the private sector. As such, micro illiquidity then became an important consideration [see Wade (1998: 12-13)]. In essence, liberalization in general and financial liberalization in particular created a wedge between micro and macro stability (or the converse: fragility).

The above discussion, nonetheless, leaves the conclusion that the crisis in Korea was not due to macroeconomic insolvency. Equivalently, the crisis did not occur because Korea's macroeconomic fundamentals were weak. Evidence to support this claim are plentiful. The usual macro indicators of real income growth, inflation, and resource balances in the 3 years before the crisis, i.e., 1994-96, would not alarm even the most conservative policymakers (Table 4). The overall evaluation of the economy remained favorable, even months prior to the onset of the crisis. This was reflected in the WB-IMF's acknowledgement of "Korea's continued impressive macroeconomic performance" [cited in Wade (1998: 4)]. As regards the country's international solvency, ratios of

foreign assets to liabilities exceeded unity by a significant margin, although these figures decreased over the three year period between 1994 and 1996.

Table 4: Korea's Macroeconomic Fundamentals

	1994	1995	1996
	(as percentage of GNP)		
Domestic Saving	35.7	36.8	35.2
Gross Investment	35.7	36.5	36.8
Overall Fiscal Deficit	0.34	0.31	-0.07
	(as percentage per year)		
GNP Growth	8.5	8.9	7.1
Inflation (CPI-based)	6.2	4.5	2.5
	(in billions of U.S. dollars; ratio)		
Foreign Assets	46.5	60.7	70.4
Foreign Liabilities	20.8	31.6	45.4
Assets/Liabilities	2.2	1.9	1.6

Source: IMF, *International Financial Statistics Yearbook 1997*.

One gets a very different picture upon examination of Korea's international liquidity. Data reported in Table 5 suggest a strongly decreasing share of the country's foreign assets held in the form of foreign exchange reserves, the ultimate source of its international liquidity.

This is also where the issue of convertibility gains importance. Although the country had large domestic savings (which stood in excess of 35% of GNP), its ability to convert these savings into foreign exchange was limited by an insufficient amount of reserves.

Table 5: International Liquidity

	(in billions of U.S. dollars; ratio)						
	1962-71	1972-79	1980-89	1990-96	1994	1995	1996
Foreign Exchange Reserves	0.3	2.8	8.7	22.1	25.0	31.9	33.2
Reserves/Foreign Assets	0.97	0.84	0.83	0.53	0.54	0.53	0.47

Source: IMF, *International Financial Statistics Yearbook*, various years; Table 4; own calculations.

The finding that the Korean crisis in 1997 is one of illiquidity and not insolvency leads one to question the IMF's prescription of a "system overhaul." The comprehensiveness of structural and institutional reforms included as policy conditionalities of the IMF bail-out package are not necessary to solve the problem of illiquidity. As Wade (1998: 16) correctly observed, "(these conditionalities) go far beyond what is necessary to restore Korea's access to capital markets." Instead, along with a call for further financial and capital liberalization, they were actually designed with

the goal of speeding up toward completion Korea's transformation from an East Asian economic system to a western-style one [Crotty and Dymksi (1998: 22)]. That this process would effectively dismiss all developmental advantages of the former system has been noted [Wade (1998: 17); Wade and Veneroso (1998: 7)].

In fairness to the IMF, it has publicly acknowledged itself as agent for international and domestic banks, expressing its specific goal of restoring and strengthening the financial health of these banks and not that of pursuing wider economic and social goals. A literature on reforming the IMF itself exists, but the subject is beyond the scope of this paper.

A Crisis due to Premature and Excessive Financial Liberalization¹⁸

In the previous section, we reach the conclusion that the Korean foreign debt crisis in 1997 is rooted in the country's financial liberalization program in the 1990s. Two particular aspects of Korea's experience with this program deserve attention. First, the very rapid pace at which the domestic financial sector was opened up after 1992 did not give the country sufficient time to overcome the necessary structural adjustments, especially the high debt-equity ratios of many chaebols and the still significant share of non-performing loans in domestic banks' balance sheet (largely as a result of restructuring in the early to mid-1980s). From hindsight, the gradual, sometimes stop-and-go, government-guided approach to financial reforms taken by Korea throughout most of the 1980s until 1992 seems appropriate in light of the financial fragility of domestic banks and chaebols.

In addition, financial liberalization in the 1990s was premature in that it occurred before domestic banks could build up the skill to allocate credit along commercial principles. Furthermore, the extent to which the financial sector was liberalized in the 1990s was excessive in that government's role in the sector became "too little". This occurred despite clearly identifiable justifications for government intervention such as the public good nature of the payments system [see Park (1994: 15)], prevalence of information problems and the consensus about the need for appropriate regulatory and prudential framework.

Given these findings, it is then surprising that the IMF included greater financial and capital market liberalization as one of the policy conditionalities of its bail-out package to Korea when, as noted by Wade (1998: 17), "it was (private companies') uncoordinated borrowing that set up the crisis in the first place."

Incompatibility of the East Asian Model and Financial Liberalization

It follows from the above implications that the crisis cannot be taken to be a flaw of or an indictment against the East Asian model. Rather, it attests to the incompatibility of two economic development models: East Asian versus liberalization models.

The main elements of the East Asian model are as follows: (1) It is a development strategy that is an integrated and coherent whole [Crotty and Dymksi (1998: 11)], (2) comprised of three main policies, namely, industrial (e.g., targeting of "priority" activities/sectors); trade (specifically, promotion of exports and protection of domestic industries from foreign competition); and financial (with emphasis on the allocation of credit according to national priorities) (3) coordinated in some "perfect" combination by a

government whose primary objective is rapid economic growth (and overall stability of domestic economy). As the above model suggests the centrality of the government in the development process, it stands in distinct contrast to the liberalization model in the 1980s which saw a smaller economic role for government and a larger one for markets.

Forces Behind Korea's Liberalization in 1980s and 1990s

After achieving success in restoring macroeconomic stability, the Korean government could focus its efforts on restructuring the economy. Such restructuring was designed to increase the market orientation of the entire Korean economy, motivating the introduction of reform measures in several economic sectors. This section will focus on three sectors which are most significant in the East Asian model described above. In particular, the following explanation will be put forth: the outcomes of reforms in the industrial, trade, and financial sectors in Korea reflect the culmination of domestic and external pressures in favor of or against these measures and the effect of these pressures on government's actions.¹⁹ As earlier noted, the excess and premature liberalization of the financial sector can be seen as a way by which the Korean government compromised with external actors and as a "compensation" for inadequate success and unsatisfactory progress in reforming other sectors.

Reforms in the industrial and trade sectors did not go as far as they did in the financial sector. This is largely attributable to chaebols' resistance of these reforms and their economic and political clout that these conglomerates achieved over time. In both industrial and trade sectors, chaebols were unreceptive to government's efforts to increase domestic market competition (e.g., by liberalizing the entry of FDIs or imports)²⁰ and to reduce their monopolistic or oligopolistic power. Furthermore, measures to neutralize export incentives of the earlier periods were resisted by chaebols, many which sold to international markets, for fear of losing competitive edge vis-a-vis foreign suppliers. The combination of pressures to liberalize the industrial and trade sectors exerted by external players, on the one hand, and those to resist these pressures favored by chaebols, on the other hand, served to limit the extent to which these sectors were liberalized.

When it came to financial sector reforms, interests of both external and domestic players coincided to create pressure on the Korean government to push open its financial sector (these arguments were more fully articulated in an earlier section). On the domestic front, chaebols and large banks which saw opportunities to finance domestic and overseas investments through a greater access to foreign capital. On the international front, the "excess" liquidity of the international financial markets in the late 1980s and early 1990s, as well as the search by foreign banks and fund managers for profitable opportunities abroad could be accommodated if financial sectors in many countries, especially in the fastest growing region and including Korea, were to be more open. With both forces pushing for a more liberalized financial sector, the Korean government's response was not surprising. This response was further motivated by the country's bid for membership to OECD as well as the limited reforms undertaken in the industrial and trade sectors (as earlier noted).

A summary of these arguments is contained in Table 6.

Table 6: Forces Behind Korea's Liberalization

<i>Areas</i>	<i>International Players</i>	<i>Domestic Players</i>	<i>Net result</i>
Industrial	foreign direct investors ("push" force)	chaebols (with domestic market monopoly) ("pull" force)	some liberalization (reduced barriers to entry in domestic industries)
Trade	foreign producers / exporters to Korea ("push" force)	chaebols (exporters) ("pull" force)	some liberalization of imports; neutralization of export incentives
Financial	foreign banks, fund managers; OECD membership ("push" force)	domestic banks (which lent to chaebols or speculated in SEAsia; chaebols ("push" force)	excessive and premature liberalization

Aside from the fact that the nature of liberalization in the financial sector was premature and excessive, the combined result of Korea's reforms in the industrial, trade, and financial sectors was problematic as it defied the "consensus" on sequencing of reforms. As Patrick (1994: 344) clearly noted, "real reform before financial, domestic reform before international."²¹ In this context, Camdessus (1998) might be right to attribute the crisis to improper sequencing and phasing. However, despite the apparently limited reforms in the industrial and trade sectors undertaken by Korea by early 1990s, it was surprising that the World Bank and IMF supported a speeding up of financial reforms after 1992 [see Dalla and Khatkhate (1995)].

V. Must one be anti-financial liberalization?

There is no simple answer to the above question. Much depends on what is now known to be important factors, as well as on existing concerns on which some general consensus have now been reached. In particular, there is widespread acceptance of the importance of implementing the necessary measures before the domestic financial sector should be fully and completely liberalized. These include the need to ensure that proper prudential and regulatory infrastructure is in place; develop the skills and orientation of domestic financial managers in commercial banking practices²²; and strengthen the financial system by reducing financial fragility of domestic banks and indebtedness of domestic firms²³.

Unlike the above requirements which are generally applicable, lessons learned from the recent crisis must take account of specific differences among countries. This study implies that countries which formerly pursued an East Asian model of development, especially those with a heavily-indebted private sector, face major challenges as they reorient their economies, in general, and domestic financial sectors, in particular, along market principles. Policies designed to counteract the potentially destabilizing effect of financial liberalization and ensure that structural adjustments aimed at transforming the financial sector require necessary government intervention. Mistakenly interpreted as an indication of a departure from an overall stance toward greater market orientation, such intervention may face resistance and its importance might be overlooked.

For countries which have not systematically followed the East Asian model, the occurrence of the crisis can be explained by the "standard" IMF diagnosis that either

macroeconomic fundamentals were weak or governance was poor, or both. In addition, both factors limit the ability of these countries to escape the contagion effect brought on by the "herd-like" response of foreign investors to the Thailand crisis in July 1997. The Philippines is a case in point in which all three explanations applied.²⁴ As such, logical solutions to the crisis include improving government policies and operation (e.g., by correcting the tendency toward peso overvaluation or reducing corruption and rent-seeking); replacing government intervention in the economy with market forces (including greater liberalization of economic sectors, financial sector included); or relying on market forces to bring about the necessary improvements in the government's ability to act as economic manager and political institution.

Ultimately, whether one supports financial liberalization hinges on the relative importance of two types of failures: market and government. In cases where the government is able to effectively correct market failures in the financial sector, benefits from liberalization may be limited while the risks of undertaking such move are known. On the other hand, where the quality of government intervention in the economy is questionable, subjecting the financial sector to market discipline may well be worth the risks.

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¹ Using a framework designed to analyze an "old" (i.e., 1980s) problem is justified by the observation that the relevant lessons are fundamentally the same. The seeming difference between the 1980s and 1990s debt crises are due to changes in world conditions, including the wider application of neoliberal principles of deregulation, privatization, and liberalization, and how these influence national governance and domestic policies. These developments are reflected in the fact that the majority of foreign debt incurred in the 1997 crisis are owed by the private sector, unlike in 1980s when the public sector was the responsible for a large share of foreign debt.

² This work compared the experiences of South Korea (1962-86) and the Philippines (1950-92) in their use of a foreign debt-driven growth strategy. The former was chosen to represent a country which succeeded in using the strategy and, consequently, avoided foreign debt crisis in 1980s, and the latter to typify a number of developing countries which faced difficulties in meeting their obligations to foreign creditors.

³ The latter reflects the effect of higher supply of foreign exchange on the nominal exchange rate and monetary base (and inflation).

⁴ A similar view is expressed by Dymski (1998) who argued that "Korea's land and stock market bubble peaked nearly a decade" prior to the crisis [cited in Crotty and Dymski (1998: 16)].

⁵ If debt is domestic or repayable in the same currency as income from investments, then this criterion simply requires that the borrowing sector generates surplus or savings enough to cover the amount required to service the debt. In this case, for a given amount of debt, "sustainability" requires that income grows at or above the interest rate charged on the debt. Equivalently, additional uncommitted income is earned at least as rapidly as the increase in debt obligations.

⁶ The current account balance is equal to the trade balance plus unrequited transfers, which include interest payment on outstanding foreign debt.

⁷ Simply put, as long as the country can continue to borrow from foreigners or has enough foreign exchange saved away, it is able to spend beyond its income.

⁸ Despite the fact that current account deficits averaged 4% of GNP in 1960s and 1970s, given Korea's comparatively stronger export performance during these periods and in relation to the growth of its imports, it was able to narrow the gap in its current account by 1986.

⁹ The average is slightly below three (i.e., 2.9 months of imports) between 1986 and 1989, but maintaining the critical level during this period is not that important because of surpluses in the current account. In principle, reserves equal to three months of imports could have been maintained if Korea had instead reduced its foreign debt repayment by the amount of the shortfall and added it to its reserves.

¹⁰ Parallel principles include globalization, (market) integration, and democratization.

¹¹ On the latter, see Crotty and Dymski (1998: 5-7, 17-18).

¹² Kim Young Sam's government portrayed membership to OECD as a must, providing a strong motivation for making concessions to external players.

¹³ See Crotty and Dymski (1998: 6-7, 10) for their explanation of foreign capital owners' preference for short-termism.

¹⁴ The reverse causality is also feasible, i.e., fixed exchange rate regime reduces exchange rate risk faced by foreign investors, thereby attracting large inflows of foreign capital.

¹⁵ The lower inflation rates in the 1980s and 1990s clearly reflect the more conservative monetary and fiscal policy stance of the Korean government. The former also captures a major shift in Korea's monetary policy objective from maximization of economic growth in the 1960s and 1970s (and the complementary credit creation and monetary expansion) to control of inflation. In the absence of this policy shift, the real value of the won would have appreciated even more.

¹⁶ The exceptions occurred in 1967, 1973, 1977, and 1993.

¹⁷ Park (1994: 169) notes the financial sector bearing the risk of such scheme, saying that "the Korean government could have chosen a different system for absorbing and distributing the risk, but the use of the banking system has been least objectionable to the public and hence politically expedient."

¹⁸ The terms "premature" and "excessive" were also used by Crotty and Dymski (1998: 19) to describe the financial liberalization experience of Korea in 1990s.

¹⁹ Root et al. (1999) discussed the interaction among the interests of domestic and international players and their implications for the extent to which financial, enterprise (i.e., industrial/trade), and labor reforms will be undertaken.

²⁰ This is reflective of the pressure on the Korean government exerted by foreign direct investors who were increasingly attracted by Korea's growing domestic market.

²¹ Industrial and trade sector reforms are "real"; capital account liberalization (i.e., "international") occurred prior to completing reform of the domestic financial sector.

²² These would include screening borrowers, evaluating expected profit and risk of investment projects, and allocating credit according to market principles.

²³ Firm's debt-equity ratios must be brought down to western (or Basle) standard if a western-style financial system is to be adopted.

²⁴ Jurado (1998) criticized the first explanation, noting that the Philippines was hit the least by the Asian crisis, despite being the country in the region with the weakest macroeconomic fundamentals. De Dios, et al. (1997) pointed to incorrect government policies, overvalued exchange rate in particular, as the source of the country's weak fundamentals which, in turn, made it more vulnerable to speculative attacks on the currency as the contagion in the region led to large outflows of foreign capital.