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THE KOREAN FINANCIAL CRISIS OF 1997-98

by

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I. The Chronology of the Crisis:

The first overt signs of trouble in Korea were evident in 1996, when the current account deficit widened from 2% of GNP in 1995 to 5% in 1996, the rate of growth of exports slowed down from a phenomenal 31% to a merely high 15% and that of GNP declined from an exceedingly high 14.6% to a very high 7.1%. At the same time, foreign debt rose from a 78 billion dollars (62% of exports) in 1995 to 100 billion dollars (76% of exports) in 1996, most of it[1] short term. The slowdown in exports was due in part to: a loss of competitiveness arising from the relative appreciation of Korea's currency because of the drastic decline of the yen; a recession in Japan and Europe; and a precipitous drop in the world prices of computer chips, ships, automobiles and garments, which affected over 50% of Korea's total exports. Exporters of these products were therefore losing money on their exports. Together with increases in domestic wages and high domestic interest rates, these losses put a squeeze on corporate profits, which let to a surge in corporate failures. In January of 1997, despite a massive rescue attempt, Hanbo steel, the 14th largest chaebol in terms of assets and 17th largest in terms of sales, went into bankruptcy. This was followed by the failure of the Sammi group, another steel producer. Next came two major affiliates of the Jinro group, the 19th largest chaebol, that defaulted on their debts in April. They were succeeded by the Dainong retail chain and by the Ssangyong business group, the sixth largest. In July 1997, Kia motors, the third largest Korean auto maker, went into default. The stock market responded by a precipitous decline; by mid-November, it had dropped 50% from its mid-1997 high. The won went into a freefall on November 19th, when the won tumbled 50% during a two week span after the daily band for its fluctuation was widened from 8 to 10% and the government announced that it would henceforth refrain from intervening in currency markets; currently, the won is about 75% below its high in mid-1997. As Korea's financial troubles mounted, the government asked the IMF and other international agencies for standby loans in mid-November; the largest international financial rescue package to date was approved by the IMF board during the first week of December. Nevertheless, Korea's bonds were downgraded by Moody's and Standard and Poor's from A1 status to junk-bond status on December 11, when the IMF forced disclosure of the true state of Korea's usable external reserves and it became apparent that they were inadequate to cover the debt coming due before the end of the year. The down-grading of Korean bonds made them ineligible for portfolio-investment by international banks. The banks not only could not renew maturing loans, but started withdrawing funds from Korea to the tune of a billion a day. The swing in foreign lending from plus $100 between January and October of 1997 to minus $20 billion by the end of the year was catastrophic. With IMF and US help, talks on debt rollover with international commercial banks were started on December 29-30 1997. On January 17th US secretary of the Treasury stated that Korea had stabilized, but the President elect, Kim Dae Jung, warned that in adjustment under IMF conditions " the worst is yet to come". On January 29th of 1998, agreement between Korea and international commercial lenders was reached on a rollover of $60 billion of its

[1] In 1996, the fraction of short term debt was 54% if short term debts of foreign banks in Korea and short term corporate debt are excluded. If these two items are included, the fraction of short term debt becomes 80%.

debt, on favorable terms: the maturity of its debt was extended to between one and three years, at between 2.25 and 2.75 percentage points above the six month London Interbank Rate, with 80 percent of loans between two and three year's maturity, and the banks received government guarantees on $24 billion of the debt. Nevertheless the crisis worsened. After a landmark agreement with the union to allow firing of workers was reached, as part of IMF adjustment conditions, a general strike called for February 11th was cancelled. In February, one third of its merchant banks were closed, but deposits were guaranteed. Problem loans at banks were 6% of all loans and non-performing loans, on which payments were overdue by more than three months were between 15 and 20 percent. The debt default ratio was 62% in February, as compared to 53% in January and 1.5% in December of 1997, with over 10,000 firms defaulting on payments since last December. Industrial output in February was 1.9 percentage points lower than a year ago; during February, the rate of growth of output was negative in February. Since then, the crisis has abated and been replaced by a depression and Korea has been engaged in fundamental restructuring of its financial and corporate sectors.

The origins of the present Korean financial crisis are complex. Several elements have combined to generate it: vulnerabilities to external shocks, both inherent and strategy-induced; institutional inadequacies, both domestic and global; domestic policy mistakes; and exogenous shocks originating in the external environment. Individually, none of these would have been sufficient to generate the financial meltdown experienced by Korea between October 1977 and mid-March 1998. In the absence of substantial capital-market liberalization, the policy mistakes and domestic institutional inadequacies in Korea would merely have resulted in a recession, as they did during the previous corporate financial crises of 1972, 1980-81, and 1992. In the absence of exogenous shocks stemming from prolonged recession in Japan and Europe and contagion from financial crises in other East Asian countries the mistaken real appreciation of the won and consequent slowdown in exports and economic growth, which made Korea more vulnerable to shocks, would not have taken place. And, if the financial crisis had not been as severe, once it got going, Korea would not have had to submit to the overly stringent and partially mistakenly conceived IMF conditionality which, despite being accompanied by the largest financial-rescue package in IMF history to date, did not succeed in stemming the crisis and will slow down Korea's recovery and increase its pain. It took the combination of these factors to produce the magnitude of financial and economic disaster of 1997-98.

We now proceed to the analysis of each of the ingredients of the Korea financial crisis, in turn.

II. Strategy Induced Vulnerabilities:

First, the development strategy pursued by Korea, of export-led growth, transformed the economy from one in which exports were of marginal importance into one in which they have become vital. As emphasized by Stiglitz (1998), small open economies are inherently vulnerable to exogenous shocks. While Korea is now the 11th largest trading economy in the world and the third largest developing country, and thus does not qualify for the label "small", it is certainly extremely open, with the sum of exports and imports[2] in 1995 being 56% of its gross domestic product. The openness of the economy makes it very sensitive to influences originating in the global economy, such as price shocks (e.g. oil) and slowdown in the growth of international trade.

In the crisis of 1997-98, the specific exogenous shocks to Korea were a lengthy recession in

[2] In current won. The exports and imports are both derived from customs clearance accounts.

Japan and a worldwide decline in demand for computer chips, ships, automobiles, and garments. These impacted upon the value of its overall exports, their profitability and their competitiveness and led to a mild recession during the first two quarters of 1997, from which the economy was starting to recover. Japan's economic slowdown had started in 1990, and had led to a steadily declining exchange rate of the yen relative to the dollar; by mid-1997, the yen had declined to about 45% of its value in 1994. Since Korea's nominal exchange rate was (loosely) pegged to the dollar, Japan's declining real exchange rate meant an automatic currency appreciation of the won. Korea's trade weighted real exchange rate appreciated by 12 percentage points between 1990 and 1996[3]. This caused a decrease in the rate of growth in the value of Korea's exports and, if dollar prices were reduced to maintain competitiveness, a reduction in their profitability. It was the decline in Korea's competitiveness, rather than the reduction in the rate of growth of her exports to Japan, which was the critical element since, in 1995, Korea's exports to Japan were only 13.6% of her total exports. But Japan was Korea's nearest competitor for more than 50% of its exports. Nevertheless, the shocks arising from both sources were significant.

After mid-1997, one must add contagion from the financial crises in Thailand, Indonesia, Malaysia and Singapore to the exogenous shocks emanating from Japan and decline in world demand for a large share of Korea's exports. The contagion took three forms: a decrease in exports to these countries, which, in 1995, had accounted for 7% of Korea's exports; increased competition for its exports due to the precipitous fall in the value of their currencies; and a re-evaluation of Korea's creditworthiness by international banks. Of these effects, the latter was clearly the most important.

Second, the major instrument used by Korea's government to promote exports was its management of the allocation of bank-credit. This instrument was wielded through government-control over subsidized loans made first, by the government-owned banks and, next, through continued government-influence over private-bank loans coupled with interest-rate ceilings. This instrument was made all the more potent by the relative underdevelopment of Korea's financial system, which made non-bank sources of credit scarce. As indicated in our previous chapter, the stock market and non-financial intermediaries were underdeveloped throughout most of Korea's economic history and curb-market loans, which were freely available, were very expensive[4]. The result was a highly leveraged corporate sector and a banking sector whose financial health was dependent upon that of the corporate sector.

Partly as a consequence of the government's use of interest rate subsidies as a major instrument of development policy, the financial structure of corporations was unsound. More specifically, the debt-equity ratios of the Korean private corporate sector varied between 3 and 4; by contrast, those of the US manufacturing sector have ranged between .62 in 1980 to 1.82 in 1990 (as a result of the Reagan-Milken spate of leveraged buyouts), after which they declined to 1.5 in 1992[5]. As a result, the debt-service ratio[6] of the Korean non-financial corporate sector has been

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[3] Radelet and Sachs 1998

[4] Curb market interest rates were about twice as high as bank interest rates for general loans.

[5] Computed from the data in the Statistical Abstract of the United States by taking the ratio of liabilities to assets minus liabilities. 1992 is the last year for which the data was available.

[6] Computed as the ratio of interest payment to total receipts of the non-financial corporate sector

enormous: 65% in 1980, 46.4% in 1990, and 53.9% in 1992. Thus, rapid growth has been essential to the solvency of the corporate sector, in the equivalent of a corporate Ponzi game. By the same token, the quality of bank assets became highly dependent on the, at times precarious, solvency of the corporate sector.

Furthermore, the fraction of inherently more risky, government mandated, policy loans in the balance sheets of banks was very high. Even though the proportion of new policy loans to new total credit had dropped steadily, from a high of 100% in the seventies to between 60 and 80 percent in the eighties to about 15 percent in the nineties, the ratio of policy loans to assets had remained high (30% in 1992). As a result, the inherent solvency of banks was at all times precarious: they had to be bailed out by the Central Bank periodically, and in 1992 net lending from financial institutions to banks amounted to 43% of their total assets. Moreover, since banks were allowed to invest in stocks and real assets on their own account, the values of their portfolios became directly vulnerable to asset price fluctuations as well. Like in Japan, Korea's real estate market went through a price bubble, rising substantially in the eighties and declining significantly thereafter. In 1992, net real estate purchases by banks were just about as large (89%) as bank net lending and securities constituted 28% of their total assets. And Korea's stock market plunged from a high value of 1000 for the Korean Dow Jones index in 1991 to 500 in 1995. Not only were banks vulnerable to asset-price bubbles but they were also exposed to exchange rate risk[7]. Between 1995 and 1997 international claims on Korean banks had risen by 30%, from 77 billion dollars to 103 billion. It is perfectly true that the banks, both local and international, enjoyed implicit government guarantees against the insolvency of Korean banks and could thus take higher risks[8].

Evidently, the vulnerabilities of the Korean economy have been long-standing and could, in and of themselves, suffice to give rise to a vicious circle: an exogenously-induced decline in exports, which are vital to the economy, would lead to stress on corporate profits and a decline in the rates of growth of the economy, deteriorating the balance sheets of corporations and putting the private banking sector's financial viability at risk. The banks respond to these developments by a mix of increased interest rates on loans and curtailment of credit, which, in turn, further deteriorates the balance sheets of the corporate sector, reduces their profits and their ability to service debt, and curtails their growth of exports and domestic sales. And thus the vicious cycle would continue. In the absence of timely government intervention[9], a spate of corporate failures, bank failures, and lower rates of economic growth would ensue and lead to a recession ranging in severity from moderate, as in 1972 and 1992, to intense, as in 1981-1982.

III. Institutional Deficiencies:

The financial system of Korea is at an awkward stage of development: It is in a transitional

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in the National Accounts (1994).

[7] In 1992, foreign claims and debts on Korean financial institutions were only 1% of their total liabilities.

[8] Krugman (1998) attributes the entire crisis to this fact.

[9] In previous financial crises the government intervened quickly by forcing lenders on either the curb-market or banks to roll over loans, and recapitalizing banks as necessary.

state between completely nationalized and without a convertible currency, to a fully developed market-based system that enforces prudential regulations and transparent accounting practices in both banks and corporations. In this connection, it is interesting to explore why two East Asian economies, Mainland China and Taiwan, have not had financial crises like Korea's. Mainland China has not started its financial liberalization[10]: its banks are wholly government owned, by national, regional or local banks; its currency is not convertible; and, only selective foreign investment, under tightly controlled conditions of access and operation, is permitted. While China's competitiveness and exports have been somewhat affected by Japan's recession and by the financial crises of other East Asian countries, and while it is estimated that the fraction of non-performing loans held by its state banks is about 20%, the worst that can happen to China is slower overall growth and a currency devaluation. Of course, China is also inherently less vulnerable being a large country which is relatively closed.

At the other extreme in financial development and liberalization, we have Taiwan. Taiwan has followed a development strategy similar to Korea's, with qualitatively similar vulnerabilities (very open) but its financial system is considerably more advanced. The degree of financial intermediation in Taiwan is twice as high; both bank and nonbank financial institutions are more developed; it has enjoyed double-digit savings rates considerably longer than Korea, making for financially sounder corporate debt-equity ratios, lower domestic interest rates and higher capitalization rates of banks; it has been running a trade surplus for the last twenty years, as a result of which it has accumulated an extremely large reserve of foreign currency; it has been has been exporting, rather than importing, capital; and conglomerates play a less significant role in its industrial organization. Also, of course, much of its trade is with the Mainland, which, so far, has been little affected.

It seems that either extreme in financial development is stable to cataclysmic financial crises, while the middle is not.

During the sixties and seventies, Korean banks were highly controlled. During the sixties, the control was exercised by having specialized government-owned banks for special purposes (such as Export-Import, Agricultural Credit Bank, etc) and then, in the seventies, through direct targeting of loans to specific firms which the government had enjoined to carry out specific activities[11].

The first moves towards financial liberalization in Korea started in 1981-83, when banks were privatized. But, as evident from our previous chapter, privatization did not carry with it freedom from government controls. While targeted industrial policy effectively ended with the death of President Park, the government continued to mandate private-bank loans in support of solvency of the corporate sector and its expansion, as well as in support of the government's social goals. Thus, the government encouraged banks to lend for real estate mortgages to would be home buyers and ordered them not to call loans to corporations in 1992 and again in mid-1997. And it established a main-bank system, borrowed from the Japanese, in which a specific bank is designated by the government to syndicate a loan to a particular corporation for a specific activity. This meant that, although banks were privatized in the early eighties, policy loans persisted. Their continuation meant not only that banks wound up with an unsound portfolio of loans but also that

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[10] Gong Chen 1998

[11] Cho Soon 1994

there was little screening of projects and of creditworthiness of borrowers and thus that the capacity to engage in financial scrutiny of loan-applications was not developed[12]. Moreover, in return for complying with government directives on loans, banks have had, in effect, virtually unlimited insurance against insolvency, thus encouraging them to make riskier loans[13]. Indeed, banks have consistently borrowed from the Bank of Korea and the government. The institutional structure of the banking system thus promoted the development of unsound balance-sheets in banks.

The Korean banking system was privatized and liberalized but it has also been inadequately regulated and supervised. Korea's financial system was modeled on Japan's and built around "relationship-banking" rather than, like the Anglo Saxon system, around "arms length" relationships. Relationship banking gets around moral hazard issues by forging close communication channels between borrowers and lenders, in which lenders are privy to timely information about business conditions and plans. However, it is also open to manipulation and to persistence of perceptions concerning a company's soundness long after reality has changed[14]. Moreover, in relationship-banking the degree of overall transparency, disclosure, and rule-based banking supervision is low. Relationship-banking is also not well suited to globalized financial systems, which require generalized, timely, and accurate information to function properly.

In addition, starting with the eighties, Korea had pursued a high real interest rate policy, in order to encourage domestic savings and attract savings away from the curb market. The intent of the policy was to curb inflation while financing high investment rates. But this high-interest rate policy encouraged borrowing abroad, especially during the nineties, when US (and world) interest rates started declining. When restrictions on foreign capital inflows were lifted, both Korean banks started borrowing heavily on the foreign market. Between 1990 and 1995, foreign debt shot up by 70%, after declining by 68% between 1985 and 1990, and net foreign liabilities, expressed in won, increased six-fold, to 6 billion dollars[15]. Nevertheless, by 1995, foreign debt was only 12% of GNP and 44% of exports. Most of this foreign debt represented borrowing by private banks. Naturally, the foreign borrowing was denominated in dollars, exposing bank-borrowing to exchange rate risk. Since Korea was committed to maintaining a stable exchange rate, the short term debt was unhedged. Moreover, about 80% of loans were short-term, making the solvency of banks and, indirectly, chaebols very sensitive to fluctuations in foreign confidence in Korea's economic prospects.

Banking has, on the average, not been a profitable activity in Korea; indeed, the operating surplus of financial institutions has consistently been negative throughout the eighties and nineties. Despite earlier moves to free interest rates on deposits and loans, they continued to be set by the Ministry of Finance. Since banks were privatized in the early eighties, the spread between nominal

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[12] This point is made by Cho Soon (1994)

[13] Krugman 1997 applies this point only to domestic financial institutions, though it is clearly applicable to foreign financial institutions as well, given the practice of making the debtor country repay the full value of its loans from foreign institutions, which thus do not bear any of the risks from their, perhaps over-optimistic, foreign lending.

[14] This point was made by Janet Yellen, 1998,

[15] Economic Statistics Yearbook 1996. Converted from won to dollars at the 1995 exchange rate.

time-deposit rates and general loan rates has been quite low, averaging about half a percentage point, and that between time-deposit rates and policy loans has been negative, ranging between -9 to -2 percentage points. Thus, there was little, if any, cushion for mistakes in lending. When Korean merchant and commercial banks were allowed direct access to foreign lenders, they tried to improve their profitability by increasing the spread between loan rates to corporations and the cost of these loans through their ready access to cheap short-term loans from foreign banks, and by borrowing short and lending long. They also tried to improve their profitability by using some of the funds they borrowed on international capital markets to purchase bonds and derivatives in other developing countries (such as Brazil and Indonesia) that had less privileged access to international financial markets.

Korea's capital market was closed to foreigners throughout most of its development and opened only cautiously and very gradually: Foreign banks were first allowed to have branches in Korea in 1972, but substantial restrictions were placed on their activities. Portfolio investment by foreigners, through special funds which bought Korean securities and whose shares were traded only abroad, was first allowed in 1982; but these funds were limited to owning no more than 10% of paid in capital of large domestic securities companies. The complete prohibition on direct foreign investment in Korean stocks was lifted only in 1992, but restrictions were placed on these investments. Restrictions on the convertibility of the won on trade-related transactions were revoked only in 1988. In 1985, Korean firms were allowed to raise capital abroad by issuing convertible bonds. In 1990, a managed float exchange rate system, known as a market-average-exchange-rate system, was adopted. In this system the Ministry of Finance and the Bank of Korea are no longer directly involved in setting exchange rates. But the bands imposed on the daily fluctuations of the won-dollar exchange rate were narrow[16] and the government continues to exercise indirect influence on the exchange rate, through its foreign exchange transactions. Capital account convertibility for capital inflows was started in 1991, but with substantial restrictions. The opening up of Korea's capital market was accelerated after 1994, in preparation for Korea's joining the OECD and under pressure by the United States, when several steps were taken to liberalized the outflow of capital as well. It was envisaged that, by year 2000, Korea's capital account transactions will be as liberalized as that of OECD countries. This opening up permitted private-sector banks to borrow abroad without significant oversight. Together with the high-interest rate policy, it led to a rapid increase in foreign liabilities of banks, from 5.1% of their total liabilities in 1990 to 9% in 1995.

Institutionally, the international financial system is also deficient. As pointed out by Tobin[17], it is too smooth, permitting the transfer of vast sums to be carried out instantaneously; it is too large, enabling immense amounts of cash to be brought to bear on any currency at any moment in time; and it also has an inherent tendency to overshoot, generating waves of overoptimistic risk assessments, leading to overlending, followed by overpessimistic risk assessments, leading not only to the cessation of new loans but also to huge withdrawals of foreign currency.

These enormous swings in capital flows constitute the essence of financial crises.

The sheer size of the foreign exchange market is staggering. During 1993-95, the Bank for International Settlements estimates that foreign exchange transactions averaged 1.3 trillions **per**

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[16] It was widened to .8 percent in 1992

[17] Tobin, 1974

day[18]. By 1997, the daily volume of foreign exchange transactions had increased to 2 trillion[19]! Moreover, 80% of these transactions are reversed within 7 days and are thus clearly speculative in nature. No country, however large and however developed can withstand that kind of onslaught and emerge mostly unharmed. The international financial market is also inherently cyclical in nature. Korea's vulnerabilities were longstanding. If anything, they were more serious during the late seventies and early eighties than they are now. However, during the seventies the banking system was nationalized and exchange transactions tightly controlled. And during the eighties, when the banking system was privatized, foreign capital movements and portfolio investment by foreigners continued to be either prohibited entirely or severely limited by law.

Despite these vulnerabilities, when Korea increasingly opened up its financial capital markets in the nineties, it enjoyed an A1 rating from international credit rating agencies, enabling it to build up substantial foreign debt. It continued to enjoy this rating even though it was increasing its foreign indebtedness at too high a rate. Then, about six months after the East Asian financial crisis started in Thailand, Korea's credit rating was downgraded precipitously, to junk bond status, making its debt ineligible for the portfolios of international banks.

As a consequence, in late 1997, Korea experienced a huge swing in foreign capital inflows: from about 100 billion dollars inflow to 20 billion dollar outflow. It is perfectly true that Korea had some institutional vulnerabilities, was suffering from a mild recession, and made some policy mistakes which made it susceptible to downgrading. But the international financial system is designed like a crowded, high-speed highway system that demands perfect driving at all points of time from all those who participate in it, to avoid the dangers of severe periodic disasters.

The combination of a highly-leveraged economy; a low-information, poorly regulated domestic financial system; with an open capital market operating in a globalized financial system which is excessively liquid is a disaster waiting to happen. Indeed, the last decade has seen 67 financial crises, two thirds of which have occurred in developing countries.

IV. Policy Mistakes:

The Korean government made several policy mistakes during the period leading up to the crisis.

First, the government's exchange rate management may have been faulty. It first continued to peg its exchange rate to the dollar, refusing to devalue in tandem with the devaluation of the yen. As a result, the real trade-weighted exchange rate appreciated between 1994 and 97. However, the extent of appreciation was relatively small as the trade-weighted real exchange rate in 1997 was only about 12% above that in 1990[20]. The reasons for not devaluing were a mix of economic and political: The economic arguments for a devaluation were not clearcut. On the one hand, Korea had consistently been running a large trade deficit with Japan; the appreciation of the won relative to the yen made imports from Japan cheaper at the same time that it made exports more expensive, raising Korea's real terms of trade and reducing its rate of inflation. Also, the appreciated won made debt

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[18] Mahbub Ul Haq, Inge Kaul and Isabelle Grunberg, 1996.

[19] George Schultz, William E Simon and Walter B. 1998.

[20] Radelet and Sachs, 1998.

servicing cheaper. Moreover, as in the case of Mexico in 1994, a devaluation might have been taken as a sign of weakness and invited the very speculative attack which it was intended to fend off. Finally, with an election looming in 1997, a devaluation would reduce Korea's per capita income below the magic figure of $10,000, and erode the claims of the ruling party to an impressive economic performance.

On the other hand, the result of continuing the dollar-peg during the nineties was to reduce the competitiveness and rate of growth of exports, increase the trade deficit, and lower the rate of growth of the economy. The rate of growth of exports fell to an average of 14% annually between 1990 and 1996 as compared to 20% between 1985 and 1990;[21] the trade deficit doubled between 1990 and 1995; the current account deficit quadrupled; and the rate of growth of GNP declined from an average of 10.8% between 1985 and 1990 to an average rate of 7.5% between 1990 and 1995.

Then, when the currency attack on the won started, Korea made a futile attempt to defend its overvalued exchange rate, losing about $20 billion in the process. By the end of 1997, Korea's net usable foreign exchange reserves had dwindled to about 12 billion dollars, or about three week's worth of imports and about 60% of debt falling due. In addition, the devaluation of the won increased the debt burden on Korea's banks and corporations[22] dramatically.

Second, government policy encouraged a very rapid rate of growth of real wages, in excess of the rate of growth of labor productivity. Between 1987, when independent unions were first allowed to organize, and 1994, real wages more than doubled[23]; relative to 1990, the index of real wages in 1994 stood about 11 percentage points above that of labor productivity. that just before the crisis, the **Economist** indicated that the average wage level in Korea was about 30% above that of the United Kingdom. Again, the motivation was political: to preempt the opposition parties, which represent labor interests, from gaining popular support. It may also be true that President Kim was genuinely populist in his orientation. In response, firms tried to automate very rapidly, an effort to which a large fraction of corporate investment was devoted.

Third, the government adopted a high-interest rate, tight money policy, which set domestic real interest rates way above world markets. Prior to the crisis, the nominal interest rate was about 12-13% annually (real interest rate of about 7-8%) compared to a world-market nominal rate of about 6-7% (real rate of 3-4). This high interest rate policy was continued from the eighties and intensified both in response to IMF pressures and in order to qualify for membership in the OECD. Since the Korean stock market had declined by 50% relative to 1991, in response to the high interest rates and the squeeze on corporate earnings, firms were unable to raise new equity capital on the stock market and had to resort to borrowing. The huge interest rate differential between domestic and foreign loans, in turn, encouraged **foreign** borrowing, thus deteriorating the soundness of bank balance sheets further and endangering macroeconomic stability. As a result, the

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[21] Of course, not the entire drop in growth rate of exports can be attributed to Korea's loss in competitiveness. Some of it is due to the decline in world demand for computer chips and to the sheer size of Korea's exports.

[22] The foreign currency loans to corporations were denominated in dollars even when they were made by local financial institutions.

[23] The index of real wages in 1994 stood at 224, taking 1987 as base.

ratio of foreign to total liabilities doubled between 1990 and 1995.

These policy mistakes were costly. Their consequence was to put a severe squeeze on corporate profits. To put the squeeze on profits in perspective, in 1992[24] the operating surplus net of taxes in manufacturing was only 9.5% of manufacturing GDP. The result of the profit squeeze was to was to force 8 out of the top 30 chaebols into bankruptcy during the first six months of 1997. In addition, the policy mistakes also increased foreign indebtedness, and placed the solvency of the economy at risk.

But Korea had faced similar profit squeezes and precarious financial positions of corporations and banks before, notably in 1972, 1980-82, and 1991-92. The immediate results had been one-to-two year recessions, but not economic meltdowns of the type Korea is experiencing currently. To tackle the previous crises, several emergency measures were adopted; there was some institutional restructuring; loans to corporations were rolled over; banks were recapitalized; and then Korea grew its way out of the solvency crises. The major measure in 1972 was a freeze on repayment of curb-market debt, whose effect was to make private non-bank lenders involuntarily provide corporate solvency. Institutional restructuring of the financial system, by privatizing hitherto nationalized banks and increasing the role of non-bank financial intermediaries, was the main response to 1981-83 crisis. The privatization had the effect of infusing new capital into banks, through the purchase of equity by the private sector. In 1991-92, foreign capital inflows were liberalized, banks were asked to roll over corporate debt and their bad debts were absorbed by the government. In all these cases, Korea's fundamental adjustment strategy had consisted of adopting measures to maintain its growth rate; borrowing abroad to cover its current account deficit; and increasing its exports to service its debt[25].

By the same token, while Korea's level of foreign debt was mounting at an unsustainable rate, Korea had experienced much higher levels of foreign debt during its recent prior history. Between 1980 and 1986, the ratio of its foreign debt to GNP averaged 50%, as compared to only 12 in 1996, and the ratio of its foreign debt to exports averaged 163%, as compare to only 77% in 1996. It is true that, in the eighties, only about 30% of Korea's debt was less than one year in maturity while 80 percent of its debt was short term in 1996. It is also true that the foreign debt of the eighties was sovereign debt while the foreign debt of the nineties was largely private debt. But as against that one must put the facts that, during the eighties, the Latin American debt crisis had enhanced international concerns with lending to developing countries to almost paranoic heights; that, then, the interest rate on loans was variable, renegotiated at six-month intervals; and that world interest rates stood at double-digit levels. Moreover, between 1981 and 1985, Korea's exports were expanding at only 5% a year while increasing at an average rate of 14% annually during 1986-96 and 15% in 1996. Also, even though Korea's foreign debt in the nineties was not sovereign debt, international banks correctly perceived banking debt in Korea as having an implicit government guarantee. Nevertheless, international perception of the risk of lending to Korea actually decreased after the first Mexican debt crisis in 1982: during the seventies, the premium over the London International Borrowing Rate (LIBOR) paid by Korea was 2 percentage points; it fell to .25 percentage points in the wake of the 1982 Mexican-debt crisis.[26] By contrast, the rating of Korea's

[24] This is the last year for which the data is available.

[25] Richard N Cooper 1994

[26] Richard N Cooper 1994

bonds by Moody's and by Standard and Poor's dropped abruptly from A1 prior to June of 1997 to junk-bond status in November 1997[27]. Interestingly enough, between 1990 and late 1997, while Korea's foreign debt was building up at an unsustainable rapid rate, its ranking was A1. Also, during the rapid debt-buildup period, Korea's relative Euromoney country risk rating increased from thirtysecond most creditworthy nation among 180 in March of 93 to 22 most creditworthy in March of 1997 [28]. So much for the intertemporal rationality of global financial markets!

So what was different during the present financial crisis? The two major differences were contagion from the rest of Asia and a much more open capital market. In 1982, contagion from the Latin American debt crisis had not spread to Korea, since Korea was correctly perceived to have been qualitatively different in its development strategy, more successful, and therefore more creditworthy. Banks were then under pressure to lend, since they were receiving a large inflow of petro-dollars on which they were paying high interest rates and the rate of economic growth in the OECD countries had plummeted. But contagion from East Asia did spread to Korea in 1997, because international financial markets perceived it as being quite similar to the other East Asian countries affected by financial crises. Also, the inflow of petro dollars into US banks had dropped substantially with declining oil prices and the US was growing rapidly, so that it provided a vibrant market for new lending. This meant that, after the 1997-98 crisis started, Korea could not adjust to the decline in its exports and to the decline in its corporate profits by increasing its foreign borrowing to maintain its growth of GNP and exports and bailing out ailing corporations and banks, as it had done successfully in previous crises.

Thus, perhaps the critical, fundamental policy mistake of Korea was the premature liberalization of capital its markets, which enabled private, as distinct from government, borrowing from abroad. The drive toward premature liberalization was the result of President Kim's desire to join the OECD during his term in office, in order to increase his legitimacy and popular support. Joining the OECD requires, as a precondition, free capital markets and macroeconomic stability. In this context, it is indicative that the Mexican crisis of 1994-95 occurred only six months after she became a member of the OECD.

The pace of liberalization of Korea's capital account, once started, was quite rapid. In Constraints on foreign exchange transaction on capital account were weakened substantially in 1993. In 1994, President Kim Young Sam issued a Declaration of Globalization, in preparation for joining the OECD, which significantly accelerated the opening up of Korea's capital markets to foreign security firms and foreign investors. The liberalization of capital markets enabled Korea's private sector to rely unchecked upon foreign borrowing and thereby become excessively sensitive to fluctuations in foreign confidence in the soundness of Korea's economy. When, partly as a result of the financial turmoil in Thailand, Indonesia and Malaysia, international banks got worried about loans to all Asian countries and refused to roll over Korean debt, and when the credit rating of Korea's bonds abruptly plummeted, Korea found itself in serious trouble.

The Korean meltdown need not have taken place if Korea had waited five to seven years before joining the OECD and used the interim period to: (1) strengthen the balance sheets of banks and the corporate sector;(2) grant greater independence to banks in making loans; (3) increase the capacity of banks to evaluate the financial soundness of proposed projects and the solvency of

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[27] Radelet and Sachs, 1998.

[28] Quoted from Radelet and Sachs 1998.

corporations; and (4) raise the transparency of corporate accounting practices. The combination of exogenous shocks, vulnerabilities, institutional inadequacies and policy mistakes need only have resulted in a (mild?) recession[29], as it had during previous financial crises and external policy shocks.

Of course, the above statement is predicated on the assumption that, under these circumstances, international capital markets would have recognized that Korea's economy is sounder than, say, Indonesia's and not downgraded its credit rating so precipitously when crises developed in the other East Asian economies. Alas, there is no guarantee that this would have been the case. Despite the fact that quite substantial restructuring had taken place before the 1994 Mexican crash, international financial markets did not recognize the difference between Mexico of 1982 and Mexico twelve years later[30]. Moreover, the last decade has seen serious financial crises in over twenty OECD countries, including the United States in the early 1980s, even though their financial systems, by and large, met all of the structural criteria enumerated above.

V. Policy Responses to the Crisis:

The initial governmental responses to the crisis were perverse. Korea was poorly situated to tackle the crisis as it was developing. With an election only a month away, its President, Kim Young Sam, placed the good of the ruling political party ahead of the needs of economic development. Moreover, like the Mexican President in 1994, President Kim had surrounded himself with corrupt politicians, who were very influential in formulating and executing economic policy. There were also a split on appropriate economic policy between the Ministry of Finance and the Bank of Korea, which caused costly delays in undertaking corrective steps.
Thus, at this critical juncture, leadership commitment to development was lacking and the government's moves to tackle the crisis had low credibility. Indeed, the Korean stock market continued to drop after each major government-response to the crisis was announced, on August 25th and on November 19th of 1997.

Prior to the crisis, businessmen had repeatedly asked the President to correct the three policy mistakes described in the previous section. But he turned a deaf ear to their pleas, putting short-term political considerations above the needs of economic development. Not only was leadership commitment to development lacking but the institutional development of private banking system, in which banks were only nominally independent of the government, made Korea's financial system vulnerable to corruption. The President's son, who was in charge of economic policy, bartered corporate loans to financially troubled chaebols for substantial bribes, a fact for which he is currently under indictment. Instead of correcting the policy mistakes discussed in the previous section in a timely fashion, the President initially attempted to paper over the evolving corporate crisis.

During 1996, a costly, and ultimately unsuccessful, bailout of Hanbo steel, the 14th largest chaebol, was attempted. Commercial banks were forced by politicians intimately linked to President Kim to extend new loans to Hanbo, amounting to 7.2 billion dollars, under threat of firing

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[29] The October 1997 World Economic Outlook of the IMF predicted a 1998 growth rate of 6% for Korea, a small decline relative to 1997. Quoted from Radelet and Sachs, 1998.

[30] Calvo and Mendoza 1996.

their presidents; those bank presidents who disobeyed the order to extend loans to Hanbo steel were put in jail. Thus, corruption played a role in the loans to Hanbo steel[31]. Hanbo steel had been started by a low-level retired tax official with no business experience but who maintained close personal relationships with many corrupt politicians who were intimates of the President. Hanbo steel was seriously mismanaged, had an astronomic debt-equity ratio of 16 and folded in January 1997, despite the rescue attempt. Naturally, the attempted bailout of Hanbo left Korea's merchant banks in a precarious financial position.

During October and November 1997, an unsuccessful effort was mounted to hold the line on the devaluation of the won, by selling foreign exchange. It used up 60% of the country's dollar reserves, without achieving its objective. The futility of this stabilization effort could easily have been predicted, when one realizes that the global volume of foreign exchange transactions is 2 trillion dollars per day and that 80% of these transactions are reversed within 7 days[32]. In addition, to maintain its international creditworthiness, the Bank of Korea shifted large amounts of its reserves to offshore branches of Korean banks to help them repay the short term debt falling due by the end of the year. The combination of these moves left the Bank of Korea with only 6 billion dollars in usable foreign exchange reserves in early December.

In response to the string of corporate failures during the first two quarters of 1997, in August, after about six weeks of unavailing resistance, banks were mandated by the President to refrain from calling in loans to chaebols. In their search for liquidity, financial institutions had previously increased their attempts to collect on loans to corporations. The mandate to refrain from calling in loans left banks with even more precarious balance sheets. In early December, the government attempted to shore up large conglomerates through a combination of direct budgetary injections of funds and large loans from the Bank of Korea. But these attempts also failed, as the spate of corporate failures has continued. A Presidential Commission established in 1998 to examine the soundness of the corporate sector declared 55 corporations insolvent in July of 1998. The failed attempt to rescue Hanbo steel and the failures of the other chaebols has made it clear that Korea's business groups have grown both too big to be allowed to fail and too big to rescue.

Thus, the initial policy responses by Korea's government to the crisis as it developed were both futile and perverse: they increased the vulnerability of Korea's financial system even further without succeeding in solving the corporate crisis. They also ate up Korea's cushion of foreign exchange reserves at a juncture at which the liberalization of financial and foreign exchange markets had made preservation of foreign exchange reserves and financial system soundness critical.

In November of 1997, the government announced a fundamental restructuring package to deal with the escalating financial crisis. It entailed: enhancing the financial capacity of the Korean Asset Management Corporation to purchase distressed assets, which would then be purchased by the government within two years; facilitate the restructuring of financial institutions through mergers and injections of new funds by domestic and foreign investment; provide vastly increased deposit insurance by raising the capital of the Deposit Insurance Corporation almost tenfold; liberalizing the capital account further by raising the limits on individual investments by foreigners

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[31] In late 1997, the Korean congress and courts investigated the Hanbo corruption case and put several politicians and bank presidents in jail

[32] Ul Haq, Kaul, and Grunberg 1996.

and guaranteeing corporate bonds with maturities over three years; and strengthen financial disclosure standards and loan classification requirements. But, this package was announced less than two weeks before the election, and was not viewed as credible. So, both the stock market and the won continued their declines.

By contrast, the responses of the corporate sector to the crisis have been totally appropriate to the (sorry) conditions in which it found itself. Unable to roll over foreign loans, the banks could not provide new credit to the corporate sector, even for exports, thus giving rise to a general scramble for liquidity. The banks also increased interest rates even more, from a high of 15% to a high of 25% in December 1997. In response, the business groups have all cut investment rates; have reduced management and professional salaries; sold off firms to foreign (and, where possible) domestic buyers; reduced their degrees of diversification; and are striving to increase their productivity and competitiveness. So far, the chaebols have more or less held the line on worker-layoffs, except by retirement and attrition. The unemployment rate has nevertheless increased, from about 2% in October 1997 to about 6.5% in June of 1998[33], largely as a result of bankruptcies of small and medium-sized firms. While appropriate, the corporate reactions to the crisis have led to a severe recession. It is estimated that the rate of growth of GNP during the first two quarters of 1998 has fallen to -1.5% from approximately +7.1% in the previous year.

In late November of 1997 the government reluctantly approached the IMF for an emergency loan. The policy responses mandated by the IMF, as part of its conditionality, were mixed. The IMF built upon the Korean program of November 19, 1997, but required an accelerated pace of adjustment and made the conditions of adjustment more stringent. First, to achieve a sounder financial structure the IMF required immediate closure of 14 technically insolvent merchant banks and two commercial banks, with full protection of depositors. The closed merchant banks constitute about half the total number of merchant banks. The closed banks were required to submit a restructuring plan to the Ministry of Finance and merchant banks given three months and commercial banks four to implement it; if they do not succeed in implementing the plan, they are to be permanently closed. In December, the government provided 11 trillion won to the two commercial banks to initiate their recapitalization. Other commercial banks were given four months to compensate for impaired assets and security losses. Second, to reduce future moral hazard problem, by the end of year 2000, the government is to withdraw its full deposit-guarantee and replace it with more limited insurance protection. Third, to improve soundness, bank supervision is to be strengthened by setting up an independent supervisory commission outside the Ministry of Finance; prudential regulation is to be strengthened; and large banks will be required to engage foreign firms to audit their books. Also, chaebols are to be required to produce consolidated financial statements. Fourth, to increase competition in the banking system, foreign institutions are to be allowed to participate in friendly mergers with domestic banks and permitted to acquire as much as 100 percent stake in merchant banks. Fifth, bank governance is to be improved by the government's complete withdrawal from the management and lending decisions of banks; the abolition of policy loans; and corporate bankruptcies are to be allowed to take their course. Sixth, the IMF availed itself of the opportunity to insist on further opening of Korea's capital markets by raising ceilings on foreign ownership and setting a time table for eliminating restrictions on direct access to foreign borrowing by corporations. Korea is also required to submit a time table for complete elimination of trade barriers and trade related subsidies. Seventh, in the macroeconomic

[33] Wall Street Journal

area, Korea is to raise interest rates; pursue a tight monetary policy; increase its fiscal surplus to 1.5% of GNP through a combination of higher taxes and lower spending; and accumulate foreign exchange reserves.

Though imposing a severe institutional shock upon the economy because of their accelerated time scale, the first five provisions in the IMF agreement are appropriate remedies for lessening chances of a future repetition of the current crisis. The sixth and seventh are controversial, however. It is not clear how improving the access of Korean corporations to foreign borrowing (part of the sixth provision) will help avoid a foreign debt crises in the future. It is also unclear how macroeconomic austerity (the seventh provision) will help the adjustment process. One might legitimately ask the following questions about these fiscal and monetary provisions: How will increasing the credit-crunch in an already credit-starved economy that will be undergoing massive bank closures assist economic recovery? How will imposing higher taxes on a population whose incomes are shrinking ease the pain of restructuring? How will reducing government expenditures, when unemployment is increasing and safety-net provisions must be raised, help ease the human costs of Korea's adjustment? It is not as though Korea has not already been pursuing fiscally and monetarily prudent policies. It is also not as though Korea did not attempt to accomplish the combination of macroeconomic stringency and corporate restructuring in 1980-83 and fail. It is also not as though similar medicine, imposed (legitimately) on Latin America during the eighties, did not lead to what most development economists would call "a lost development decade", from which most of them are just starting to emerge after more than ten years of immiseration.

It is also not clear why the macroeconomic austerity provisions were imposed at all. Pre-Keynesian thinking? Reflex? Standard IMF boiler-plate? Or, as Radelet and Sachs (1998) suggest, did the IMF mistakenly view Korea's financial crisis as a macroeconomic crisis, akin to that of Latin America in the eighties, and recommend its standard macroeconomic fix? If so, the diagnosis of the crisis as due to macroeconomic excesses is incorrect: Korea has had a central government budget surplus between 1993 and 1995, and a very small deficit (.1% of GDP) in 1996; a small trade deficit (2% of GDP in 1995 and 5% in 96) and a small capital account surplus (2.5%) over 1990-1996. While the money supply was increasing by an average annual rate of 19%, the inflation rate averaged only 5% between 1993-1997. Also, the ratio of broad money to GNP was low for an economy at Korea's level of development: it was only .46 in Korea as compared with 1.7 in Taiwan and 1.1 in Japan. There was also no indication that there was a buildup of excess capacity. Even though overall capacity in manufacturing increased by 30% between 1990 and 1995, the operating ratio in manufacturing rose by 3.5 percent over the period.

In addition, there already were some signs of a domestic recession before the IMF intervention: a slowdown in the rate of economic growth in 1996 to about (sic!) 7.1%; a decrease in the rate of growth of exports to (sic!) 15%; a decrease in corporate earnings; a rise in major corporate failures; and an increase in inventories. Under these circumstances, tightening domestic credit further and reducing domestic absorption-- the standard macroeconomic-crisis conditionality imposed by the IMF-- is obviously not an appropriate medicine for Korea's current crisis[34]. The IMF defends raising interest rates further as a measure necessary to attract foreign capital[35]. At the time of writing, interest rates in Korea have risen to 30% per year-- surely overkill for attracting

[34] This point is also made by Stiglitz (1997) and Radelet and Sachs (1998)

[35] Stanley Fisher 1998.

foreign capital and more than enough to choke off not only investment but also most economic activity, including exports. Indeed, international financial markets were alarmed rather than calmed by the draconian nature of the IMF's conditionality ; the drastic downgrading of Korea's credit rating occurred after its letter of agreement with the IMF was made public[36].

It is instructive to compare Korea and Japan in this context. Both countries have been suffering from recessions, long in Japan, short in Korea. Both countries have inherently unsound banking systems, with a large percentage of non-performing loans (about 20% in Japan and 30% in Korea). Nevertheless, both countries are economic powerhouses with fundamentally sound economies and with very high rates of national savings. Yet the remedies that the international community has urged upon the two countries are fundamentally different: Japan has been urged to assume the non-performing debts of its banks, create a "bridge facility" that would continue to extend credit to its corporate sector, and reflate its economy, by, in effect, running a large fiscal deficit. By contrast, Korea is being forced, as a condition of IMF credit, to tighten credit even further, close many of its banks, restructure its corporate sector and sell off corporate assets to foreign firms at, what the Wall Street Journal describes as "bargain basement prices". In effect, with similar ailments, the treatment of choice prescribed by the international community has been diametrically opposed. While Japan is being urged to shift its aggregate demand schedule outward, Korea is being asked to shift it inward. Which remedy is appropriate? In the short run, with a fundamentally sound economy, it would seem to us that the response urged upon Japan is the correct response for Korea as well. After all, an adjustment strategy similar to that currently urged on Japan had worked well in Korea during the eighties. In the intermediate run, both Japan and Korea need to restructure their banking systems substantially so as to make banks subject their loans to more stringent economic scrutiny. They both also need to decrease the debt-equity ratios of their the corporate sectors.

Of the two countries, we are more sanguine that it is Korea that will take the appropriate steps to reform its financial and corporate institutions swiftly. Korea is already showing every sign of doing so: In early 1998, Korea formed a Blue Ribbon Committee to examine the solvency of private banks. In addition, a similar committee, appointed to examine the solvency of Korea's corporate sector, has identified 55 insolvent large corporations. And, by March of 1998, less than six months after the crisis broke, Korea has already stepped back from an economic abyss[37] to what is merely a severe recession. By contrast Japan is giving no indications of intentions to engage in fundamental institutional reform. After a decade of recession, it has finally been persuaded by the G7 countries to apply Keynesian-stimulus policy package and rescue its banking system by assuming the banks' bad loans without restructuring them.

Why the asymmetry in response to the economic doldrums of the two countries? In Japan's case, the international diagnosis was that Japan's financial woes have been due to a prolonged Keynesian-type recession, as evidenced by its very low rate of GNP-growth during the nineties. And the recession has, in large part, been attributed to (chronic) underconsumption. Also, Japan is correctly perceived as being too big to fail without severely adverse, if not cataclysmic, consequences for the world economy on both the trade and, more importantly, capital-flow sides.

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[36] Martin Feldstein, 1998

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By contrast, together with the other Asian tigers, Korea has been misdiagnosed as suffering from overexpansionary policies, as evidenced by its continued high rate of economic growth. The "overexpansionary" diagnosis is being applied to Korea despite its very high rate of national savings (35.2% of GNP in 1995); despite the fact that the ratio of its gross domestic investment to GNP was only .9% of GNP higher than its rate of national savings in 1995; and despite a very high rate of capacity utilization (103% in 1995 relative to 1990). Because of the "overexpansionary" diagnosis, Korea is, being urged to cut down on its growth through standard policies of fiscal and monetary restraint. Korea is also, unfortunately correctly, perceived as being only at an awkward stage: big enough so that a severe recession in Korea might cause significant declines in stock markets and profits worldwide but not big enough so that its economic woes will lead to even a recession, let alone economic collapse, in the world economy.

VI. Future Prospects:

Despite its current travails, we nevertheless think that Korea's future prospects are bright. We believe that, in retrospect, the current crisis will appear as a short interruption in Korea's growth path, which will result in strengthening its institutional structure and lead to a continuation of its impressive past growth performance, albeit at a rate that is more consonant with the growth rates of developed countries. The rude awakening that the current financial shock has imparted will also vividly demonstrate to Korean policy makers that open, globalized market economies require paying continuous attention to good economic policy to achieve the combination of high rates of economic growth with reasonable economic stability.

Our optimism is based on the following considerations:

First, we judge the newly elected President, Kim Dae Jung, to be a committed individual, who is dedicated to the pursuit of the welfare of the whole society, possessed of a great deal of resolve, and who puts the common good above political considerations and above his personal predilections and interests. Despite campaign speeches against asking the IMF for a loan, once fully apprised of the gravity of the crisis, he quickly and fully endorsed this step and obligated himself to the conditionality-provisions contained in the IMF loan commitment. While his ideology is nationalistic, anti chaebol, pro-union, and pro-parliamentary democracy, in the interests of tackling the current crisis, he has steps that go against his grain. Though anti-business, his first priority has been to ensure corporate survival. To that end, he has extended government guarantees on bank loans to foreign banks so that they would roll over loans to Korean banks and thereby enable them to finance Korean big business. However, since he favors breaking up the chaebols, he has willingly gone along with the IMF's conditionality, and exacted the price of substantial banking system and corporate restructuring, in exchange. Though pro-labor, he introduced legislation in the National Assembly to make the firing of workers easier and warned unions that he is prepared to use the power of the state to curb strikes. Though nationalistic, he has introduced legislation enlarging the scope for direct and portfolio investment by foreign entities and allowing friendly takeovers and mergers with foreign corporations. And though pro-parliamentary- rather-than-presidential democracy, he strong armed the National Assembly into approving his choice of Prime Minister and passing the necessary restructuring legislation.

Second, Koreans have again demonstrated their high levels of social commitment (social capital) in the current disaster, once they realized its magnitude. In the past, they were willing to work long hours under unsafe working conditions to enable Korea's economic miracle to take place. When the current crisis broke, women lined up at banks to surrender their gold jewelry to help solve the acute foreign exchange shortage. Also, the corporate restructuring has been implemented by distributing the pain so that those most able to bear it were hit first. Salary cuts and redundancies

started at the management and professional levels, in both government and corporations, and have only proceeded to workers with substantial delay. And, despite the innately militant character of the Korean unions, they have been relatively quiet in the current crisis. So, even though the population blames the past President, his entourage, past policy-makers and the international community for the current economic disaster, the disaster has not generated substantial political unrest.

Third, Korea is once more demonstrating its flexibility and ability to change course quickly and in fundamental ways. This ability was most evident in the 1980-83 period, when the combination of assassination of President Park, second oil shock, inflation and severe recession caused privatization of banks, led to increases in the role of markets and to attempts to introduce measures that would enhance competition in the corporate structure. The ability to absorb change is also evident now, in the banking system reorganization, which is well under way. The ability to restructure is also apparent in the business sector, where the pace of divestiture by the chaebols of "non-core" firms, through outright sale and through partnerships and mergers with foreign multinationals in the appropriate line of business, is proceeding very rapidly. The process has been facilitated by the 50% devaluation and 50% drop in the stock market induced by the crisis, which have made Korean business ridiculously cheap, even when allowance is made for the substantial burden of debt with which the buyer will be saddled. It has been estimated, for example, that the entire Samsung business group, the largest conglomerate, can now be bought on Korea's stock market for what it would cost to erect a single one of its plants!

Last but not least, the financial response by the international community is affording Korea the necessary breathing space. The magnitude of the financial rescue package by the IMF and World Bank; the speed with which the emergency packages were implemented; the second-line-of-defense bilateral loan commitments from the United States and Japan; and the roll-over and maturity extension of loans by international banks are enabling the resumption of business activity, especially in exports. The 50% devaluation caused by the crisis will also help the export effort, though much of its effect is negated by the concurrent (accelerated) 50% devaluation of the yen and the comparable devaluations of other East Asian currencies with whose exports Korea competes.

Conclusion:

The Korean 1997-98 crisis cannot be explained by fiscal or monetary excesses. It is not due to a single factor but rather to a confluence in time of a multitude of factors to which both domestic and international circumstances contributed significantly. On the domestic front we have: lack of leadership commitment to development, major instances of corruption as well as a drifting towards an incorrect mix of government-intervention with market forces[38]. The incorrect mix consisted of: combining government-mandated, corruption-motivated loans to mismanaged business groups, notably Hanbo, with a laissez faire attitude towards the activities of unions which allowed them to push wages above productivity; maintaining a high interest rate regime, with too low a spread between deposit rates and loan rates, while refusing to intervene in the foreign exchange market to prevent overvaluation of the won; an incorrect mix of regulation and liberalization in its financial system, characterized by very little prudential regulation of banks and corporations combined with greater freedom in borrowing and lending; and removing controls on financial capital markets combined with setting high domestic interest rates and maintaining domestic financial repression.

[38] The incorrect mix of state and market is stressed by Larry Westphal, 1998

On the foreign level, the most important contributing factors were the prolonged refusal by Japan to take the necessary measures to reflate its economy and the excessively optimistic evaluation of Korea's creditworthiness between 1990 and 1997 followed by its excessively pessimistic evaluation after the start of the crisis in the rest of East Asia. Thus, mistakes were made by both borrowers (Korea), who were too eager to rely on cheap but volatile foreign short-term loans, and lenders (banks in the rest of the world), who were initially too eager to extend them and subsequently too quick to withdraw them. Unfortunately, Korea is paying the brunt of the cost for these mistakes while international banks are getting off more or less scott free: international banks have renegotiated their loans to Korean banks at higher interest rates and with the Korean government assuming explicit legal responsibility for the repayment of loans to Korean private banks.

One might also view the crisis as the result of a fundamental incompatibility between an independent financial policy, which Korea tried to pursue, with smoothly functioning, unregulated global capital markets. Two of Korea's major policy mistakes were in trying to have an exchange rate policy which was out of alignment with its purchasing power parity and an interest rate which was out of alignment with world interest rates while having largely liberalized its capital flows. The Korean crisis demonstrates graphically that this is an economic impossibility. Global financial markets preclude governments from having independent exchange and interest rate policies. This is something well understood by OECD governments, as the regular, periodic G7 consultations and the drive towards European Monetary Union demonstrate. With respect to interest rates, if, as happened in Korea, the domestic interest rate is set above world market then the result is a buildup of foreign indebtedness; if, as happened in Japan, the domestic interest rate is set below world market the result is an outflow of domestic savings in the form of portfolio investment in foreign bonds and securities and of real investment abroad; the consequence is lower domestic economic growth. Globalization of capital markets in a fluctuating exchange rate regime is also incompatible with an independent exchange rate policy, especially one that attempts to peg the exchange rate. Attempts to maintain an overvalued currency (as in Korea) require using foreign exchange reserves to buy foreign currency to prevent a devaluation; eventually, the supply of foreign exchange reserves will be exhausted and the currency will devalue anyhow. Attempts to maintain an undervalued currency (as in Japan) will, in the absence of restrictions on currency outflows, cause an outflow of domestic currency with adverse effects on domestic investment and domestic growth. Thus, globalization imposes severe fundamental constraints on the policy levers which governments can exercise in their management of the domestic economy.

The crisis also demonstrates how unforgiving global capital markets are to mistakes in economic policy and to institutional inadequacies within countries and how severe the penalties for mistakes are. This is not surprising to specialists in international finance. Keynes (1930), Tobin (1974) and Davidson (1997) have long warned us about the dangerously excessive volatility of world financial markets and urged alternative ways of restructuring them so as to make them more robust. But the Asian economic crisis, which occurred in the best performing economies in the world, brings this forcefully to the fore. Thus, one important lesson from the East Asian crisis is that international capital flows can pose serious threats to economic stability and that, iconoclastic as it may sound, some regulation or other impediments to short-term capital flows is required[39].

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[39] This is also the conclusion reached by Stiglitz (1998). Calvo and Mendoza (1996) attribute the 1994-95 Mexican financial crisis to the same cause.

References

Calvo Guillermo A and Enrique G. Mendoza (1996) " Mexico"s Balance of Payments Crisis: a Chronicle of a Death foretold" **Journal of International Economics** 41 pp 236-264.

Cho Soon (1994) **The Dynamics of Korean Economic Development** (Institute for International Economics, Washington, DC).

Cooper Richard N. (1994) in Haggard et al **Macroeconomic Policy Adjustment in Korea 1970-1990**(Harvard University Press, Cambridge).

Davidson Paul (1997) "Are Grains of Sand sufficient when Boulders are often Required to do the job?" **Economic Journal** v107 pp 129-143.

Feldstein Martin (1998) " Refocusing the IMF" **Foreign Affairs**

Fisher Stanley (1998) " The Asian Crisis: A view from the IMF" mimeographed.

Gong Chen (1998) " The Looming Financial Crisis in China" **The China Strategic Review,** pp 11-19.

Keynes John Maynard (1930) **A Treatise on Money** (Macmillan, London).

Krugman Paul (1998) "What Happened to Asia?" mimeographed.

Tobin James (1974) " The New Economics one Decade Older" **The Janeway Lectures on Historical Economics** Princeton University Press.

Schultz George, William E Simon and Walter B. (1998) "Who Needs the IMF?" **Wall Street Journal** Feb.3

Stiglitz Joseph (1998) " Sound Finance and Sustainable Development in East Asia"**Keynote Address to the Asia Development Forum** mimeographed.

Thurow Lester (1998) "Asia: The Collapse and Cure" **New York Times** February 5.

Radelet Steven and Jeffrey Sachs (1998) " Onset of the Financial Crisis" mimeographed.

Ul Haq Mahbub, Inge Kaul and Isabelle Grunberg (1996) The Tobin Tax (Oxford University Press, New York and Oxford).

Yellen Janet (1998) "Lessons from the Asian Crisis" mimeographed.

Westphal Larry (1998) "The East Asian Economies: What Happened?" mimeographed.