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Restructuring the Financial and Corporate Sector:

The South Korean Experience

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I. Introduction

In the wake of the Asian financial crisis, South Korea (hereafter Korea) sought the largest-ever emergency financial assistance package amounting to US$57 billion from the IMF in early December 1997 in order to avoid a moratorium on its foreign debt. The financial assistance was provided to Korea on the condition that it would undertake far-reaching structural reforms in almost every segment of its economy. In compliance with that condition, Korea has been simultaneously overhauling its inefficiency-ridden financial, corporate, public and labor sectors, sometimes beyond the IMF mandate.

Bad debts in both financial and corporate sectors were at the core of Korea's financial crisis, which was triggered by contagion and currency speculation since July 1997. In order to break a vicious circle between a banking crisis and a corporate crisis, Korea has undertaken a series of restructuring programs in the banking sector, while non-bank financial institutions (NBFIs) have also undertaken their own restructuring.

In the due process of restructuring, it was proven that both the breadth and depth of corporate and financial distress in Korea was unprecedented. The level and structure of corporate debt, the number of debtors and creditors involved, and the weak legal environment, make financial sector as well as corporate sector restructuring an enormous challenge.

While carrying out the Korea-IMF reform program, Korea experienced the worst economic setback in 1998 since adoption of the export-oriented development strategy in the early 1960s. After the outbreak of the crisis, the unemployment rate increased continuously, peaking at 8.6 percent, more than three percentage points higher than its pre-crisis level, with 1.8 million people out of work.

However and surprisingly, Korea's economy in 1999 bounced back to positive 10.7 percent growth from its lowest growth rate of negative 6.7 percent in 1998. Thanks to signs of recovery in 1999, astonishingly faster than expected, mainly due to comprehensive economic reforms as mandated by the IMF conditionality, a rapidly rising trade surplus and foreign exchange reserves, as well as a bullish stock market trend helped Korea obtain its upgrade in sovereign ratings. Moody's Investor Services lowered Korea's sovereign rating from A1 before the crisis to Ba1 on February 1999, but this rating was raised again to A3 on March 28, 2002.

However, recent economic indicators since the fourth quarter of 2000, including the GDP growth rate, unemployment rate, and managerial indexes of both finance and banking sectors, appear to prove that restructuring of both financial and corporate sectors is still incomplete. By the end of 2000, Korea's economy began to show some "reform fatigue," making the remaining items on the reform agenda still serious. Despite some important remaining reforms, on August 23, 2001, Korea was able to repay IMF loans of US$19.5 billion two years and eight months earlier than the original schedule to become the first among Asian countries which received the IMF bailout funds to complete the repayments.

The purpose of this paper is first to describe what Korea has accomplished in terms of restructuring its financial and corporate sectors over the past three and a half years, and then to address the unfinished restructuring agenda and a newly emerging development paradigm with some policy implications. A focus is given to how Korea has cleaned up its bad debts accumulated in the financial sector. Because of the intertwined nature of the financial and corporate sectors, the paper also addresses some important restructuring issues of still highly leveraged corporations, which are so critically linked to the creation of sound and healthy financial institutions.

Section II describes a "compressed growth" process and rising non-performing loans (NPLs) viewed from both the financial sector and corporate sector. Section III discusses various phases of restructuring in the financial sector that have been accomplished up to date, while Section IV discusses the restructuring of the corporate sector. Section V presents various disposition methods of NPLs by the financial community. Section VI presents a case study on the restructuring of Chohung Bank, which is the oldest as well as the largest commercial bank in Korea. Section VII discusses a post-crisis development model in addition to reviewing the continuing agenda for financial and corporate sector restructuring in the years to come. The paper concludes with some overall remarks and some policy implications.

II. "Compressed Growth," Accumulated Inefficiency and Rising NPLs

1. Intertwined NPLs

During the high growth period, and especially in the early 1990s, Korean *chaebols*, large conglomerates, undertook ambitious expansion and diversification drives including numerous overseas investment projects. Furthermore, the Korean government supported this expansion and often directed *chaebols* into specific lines of business. The *chaebols*' expansion drives were mainly funded with aggressive borrowings, often short-term, from Korean commercial and merchant banks, and quite frequently from foreign financial institutions for overseas projects (Ahn, 2001). Banks relied primarily on collateral in the allocation of credit, and paid relatively little attention to earnings performance and cash flow generation, or the corporations' ability to repay. In addition, the *chaebols* generally supplied guarantees to their affiliates and subsidiaries to secure loans. Although most of the major subsidiaries of the *chaebols* are publicly listed, they have traditionally raised little in new equity in Korea's poorly developed capital market (Classens et al., 1998).

A vicious chain of inefficiency between the financial and the corporate sectors has grown since the second stage of the heavy chemical industrial drive in the early 1980s (Ahn, 2001). *Chaebol*s have been promoted by means of government administered credit allocation to achieve the government's industrial targeting in order to take advantage of economies of scale.[1] Both administered credit allocation, which often resulted in excessive lending without prudential financial rules, and the *chaebols*' focus on increasing market share and pursuing diversification through debt financing with little attention to profitability, caused an inefficiency syndrome in Korea's economy. Consequently, the demise of the financial and corporate sectors was intertwined. As corporate bankruptcies rose, financial institutions became burdened with bad debts and were no longer able to roll over their domestic or foreign liabilities.

As Lieberman and Mako (1998) noted, this "compressed growth" policy via aggressive, leveraged expansion through debt financing worked well as long as the economy and exports expanded vigorously and the returns on new investment exceeded the cost of capital. Within this environment, high debt-equity ratios were a risky but winning strategy for Korea (Stiglitz, 1999). High leverage allowed Korean firms to grow more rapidly than if they had had to rely on retained earnings.

In recent years, however, business group financial performance among the top 30 *chaebol*s worsened in terms of free cash flow, return on equity, profit margin, and interest coverage ratio, while their debt/equity ratios recorded their highest levels by international standards(Table 1). Rapid wage increases, a result of a highly unionized and strong labor force in the wake of the democratization process during the Roh Tae Woo regime, often outstripped productivity growth (Ahn and Kim, 1997). Declining demand and falling prices for Korea's major export items such as semiconductors, chemicals, shipbuilding and steel products, further weakened profitability in recent years. For example, in 1997, profitability declined substantially, with the ordinary income/sales ratio falling to –0.3 percent and remaining at a similar level, while some substantially higher positive profitability levels were evident in the U.S., Japan and Taiwan (Table 2).

[1] For details on the background of the *chaebol*-led heavy and chemical industrial drive within the export-led development strategy, see Ahn and Kim (1997)

Table 1: Debt/Equity Ratio in the Manufacturing Industry

(Unit: percent)

	US	Japan	Taiwan	Korea		
	1997	1997	1995	97	98	2001
Debt/Equity ratio	153.5	193.2	85.7	396.3	303.0	182.2
Total borrowings and bonds payable to total assets	25.6	33.1	26.2	54.2	50.8	39.8

Source: The Bank of Korea, *Financial Statement Analysis for 1999*, 1999, p. 16.

The Bank of Korea, *Monthly Bulletin*, May 2002, pp. 55-77

Table 2: International Comparisons of Manufacturing Firm's Profitability

(Unit: percent)

	US	Japan	Taiwan	Korea		
Year	97	97	95	97	98	2001
Ordinary income/Sales	8.3	3.4	5.1	-0.3	-1.8	0.4
Operating income/Sales	7.6	3.5	7.3	8.3	6.1	5.5

Source: The Bank of Korea, *Analysis of Corporate Management*, 1998, and *Financial Statement Analysis for 1999*, 1999, p. 19.

The Bank of Korea, *Monthly Bulletin*, May 2002, pp. 55-77

2. Expanding NPLs and Forward Looking Criteria

A crucial aspect of Korea's financial restructuring efforts is related to the size of NPLs and how to dispose of them. Obviously, NPLs are the result of widespread insolvency problems in its corporate sector as well as financial sector. According to statistics released by the Bank of Korea, 17,168 firms failed in 1997, a 52.53% increase over failures in 1994. From January through April 1999, an average of 3,000 firms failed each month, pushing up the number of bankruptcy cases for the year to more than 20,000. This in turn exerted great pressure on financial institutions. A total of 188 either have been closed down or merged on their own initiative. Corporate debt of the top 28 *chaebols* reached 247 trillion won at the end of 1997, with the average debt-equity ratio reaching 449% per firm.[2]

The figure for non-performing loans of banks provided by the FSC stood at 87.26 trillion won (US$63 billion) as of the end of March 1998. This accounted for 16.89% of total bank loans, or 20.72% of Korea's GDP in 1997 (Table 3).[3] According to the data provided by the

[2] *Korea Economic Daily*, 30 March 1998. Corporate debt is approximately $177.57 billion, based on the exchange rate as of 3 June, 1998 ($1 = 1391 won)

[3][3] Korean GDP in 1997 was 420.986 trillion won. The proportion of bad loans in Korea is huge compared to that of the US during its Savings & Loans crisis; bad loans of FDIC member financial institutions almost reached 4% of total loans and 2.5% of US GDP in 1987.

FSC, the total combined debt of the top 30 *chaebols* amounted to 342 trillion won at the end of 1998.

Table 3: Non-Performing Loans (ending March 1998)

(Unit: trillion won)

	Total Loans	Non-Performing Loans (% of total)
Banks	516.6062	87.2645 (16.89)
Other Fin. Institutions	256.9355	24.7611 (9.64)
Total	773.5779	112.0256 (14.48)

Source: Financial Supervisory Commission.

Any attempt to restructure only the financial sector is likely to fail. For example, over-extended firms in the corporate sector also need to restructure their balance sheets, and to increase both equity and the maturity profiles of their debt loads, in order to become viable corporations. The longer-term process of real restructuring will need to include improved corporate governance, product line rationalization, increases in productivity, and a fundamental change in corporate strategies and culture, focusing on profitability and liquidity versus aggressive expansion at virtually any cost (Lieberman and Mako, 1999).

Indeed, the disposal of NPLs is at the heart of Korea's financial reform as well as corporate sector restructuring, because it serves to gauge how vigorously the sector has undergone the restructuring process, and how much healthier both sectors have become. Accordingly, the size of NPLs will point toward the feasibility and effectiveness of present and future reform measures, and will predict mid and long-term financial stability.

In July 1998, there was a major strengthening of provision requirements and loan classification standards based on forward-looking criteria regarding future cash flows. In accordance with international practices, loans in arrears of three months or more are now classified as substandard or below, and loans in arrears of one to three months are considered precautionary loans, as shown in Table 4. As a consequence, most of the emergency loans made to technically bankrupt companies are now reclassified as substandard loans, instead of precautionary loans. This reclassification has caused another serious problem for recapitalization in Korea's banking sector.

Table 4: Changes in Loan Classification Standards

Period of Overdue Payment	Old	New
1 month to 3 months	Normal	Precautionary

3 month to 6 months	Precautionary	Substandard or Doubtful
Longer than 6 months	Substandard or Doubtful	Substandard or Doubtful

What appears sound and solid from the first round of restructuring can go wrong, unless continued restructuring of the financial sector takes place in a timely manner. Korea's own restructuring story can be a case in point. As the NPLs of the financial sector rose again after introducing stricter asset classification rules based on forward-looking criteria, Korea's financial sector needed another injection of public funds in order to meet the IMF's mandate.

During the first half of 1999, major Korean commercial banks, after restructuring with an injection of public funds equivalent to more than 50 trillion won, obtained BIS capital adequacy status. However, stricter capital adequacy standards and additional loan loss provisions, due to the forward looking criteria adopted, sharply affected the profitability of banks that had already been exposed to *Daewoo*'s huge debts amounting to 23 trillion won.

On the corporate side, 80 corporations, including those from 15 *chaebols*, underwent corporate restructuring. Their aggregate debt at the end of March 1999 exceeded 30 trillion won, the bulk of which had already been classified as either 'precautionary' or 'non-performing.' Furthermore, the forward looking loan criteria caused a substantial part of the precautionary category of loans to be reclassified as non-performing.

Based on the International Monetary Fund (IMF) policy recommendations, the forward-looking criteria for NPLs became effective in January 2000. In addition, the provision requirement for precautionary loans has been raised from 1% to 2%. The new provision requirements were introduced for commercial papers (CP), guaranteed bills, and privately placed bonds belonging to trust accounts.

In order to capture the problematic loans given to Korea's corporate sector, including *chaebols*, it is important to see the changes that have occurred in the size of NPLs following the instruction of forward-looking criteria as recommended by the BIS and IMF. Despite Korea's proactive restructuring effort, many critics argue that the 64 trillion won fiscal support package is not sufficient to restore the health to the financial system—at least for banks. The size of NPLs is likely to continue to rise while corporate restructuring is being undertaken under a global asset quality standard.

Kwon and Nam (1999) investigated the nature of loans and the impact of NPLs on corporate restructuring based on forward-looking criteria, in which they considered the corporate sector's debt levels and its debt-servicing capability, while focusing on the future size of NPLs. They used the interest coverage ratio (computed as operating income divided by interest expenses, hereafter referred to as ICR) as a scale to determine whether the loans and credits to the sample corporations would be performing or not, a method employed by Goldman Sachs (1998), Credit Swiss First Boston (1998) and others.[4] NPLs in their study were defined as loans and credits extended to corporations with ICRs[5] of less than 100 percent. It is a standard way of assessing the debt-servicing capability of a corporate borrower. When a corporate borrower is incapable of generating enough earnings to cover interest expenses, loans and credits extended to the borrowers are regarded as ‘problematic.’ Furthermore, the recent dismantling of Korea’s second largest *chaebol*, *Daewoo*, in early 2000 aggravated the rising trend of NPLs.

According to Kwon and Nam’s study, NPLs as newly defined and applied to the 1995-1998 period, sharply increased for the two consecutive years prior to the financial crisis. NPLs held by listed companies amounted to 32.1 percent of their total debts in 1998. Furthermore, the number of companies whose ICR did not reach 100 percent accounted for 37.5 percent of the total number of listed companies (Table 5). Their investigation shows that the NPL ratio of unlisted companies appears higher than that of listed companies. Moreover, the unlisted companies’ NPL ratios had already exceeded the 30 percent level in 1996, and substantially increased to 37.8 percent in 1997, as they faced the economy-wide crisis. Such a large magnitude of NPLs of listed as well as unlisted companies is convincing evidence that the financial crisis was mainly attributable to mounting debts and low profits in the corporate sector.

Table 5: Sample Estimates on NPL Ratio and NPL Company (listed) Ratio with Interest Coverage Ratio less than 100 %

Year	NPL Ratio of Sample Firms (%)	Ratio of Sample Companies with ICR less than 100 %
1995	12.1	16.5
1996	20.1	24.2
1997	31.2	35.3
1998	32.1	37.5

4 They surveyed all non-financial listed companies numbering between 600 and 662, and over 5,000 unlisted companies over the period 1995-1998, which are subject to external auditing. The sample companies accounted for about 79.5 percent of total corporate debt in Korea as of the end of 1997, or 644.9 trillion won. The Korea Development Institute (1998) estimated total debts in the corporate sector to be 810.7 trillion won as of the end of 1998.

5 ICR is commonly defined as the ratio of earnings before interest payment and taxes (EBIT) to interest expense.

Source: Kwon and Nam (1999).

By comparing the sample estimates of NPLs based on forward-looking criteria for the year 1998, based on the borrowers' debt-servicing capability, Kwon and Nam (1999) estimated the total distressed debts of the entire corporate sector to easily reach 260 trillion won. This is equivalent to 32.1 percent of the 820 trillion won worth of total credit extended to the corporate sector in 1998. Given that the speculated NPL size is much higher than the government's current estimation of 118 trillion won in 2000, Kwon and Nam's estimation results suggest that there should be a second phase in the financial restructuring program.

Another critical issue is related to whether the banks are capable of properly assessing the future cash flows of borrowing firms. One of the many reasons for the rise of NPLs in Korea may be the downfall of corporate profitability, high interest rates, high tax rates, and high inflation rates.[6]

A drastic drop in the ICR can be made through asset sales or debt restructuring by creditor financial institutions. Debt restructuring includes a variety of options such as debt-equity swaps, debt forgiveness, debt relief, and others. The choice and related prices are, of course, negotiable between debtor and creditor. Debt–equity swaps and debt reduction will alleviate the debt burden of corporate borrowers, thereby improving their ICRs. However, the stock of corporate debt is so large that sustainable debt/equity ratios cannot be achieved over a reasonable time frame, but only through the flow of new equity, asset sales and retirement of debt (Classens et al., 1998).

III. Phases of Financial Sector Restructuring

1. Macroeconomic Background

Financial sector restructuring could be addressed more properly by looking at changes of key macroeconomic indicators during the reform period. A swift economic recovery in 1999 and 2000 from the worst economic setback in the past four decades appeared to be evident as shown in Table 6. However, the year 2001 witnessed a slowdown caused by the declining information technology sector and related downturn of the U.S. economy.

[6] The Bank of Korea's study demonstrates that there exists a very high correlation between corporate debt ratio and their variables, plus the level of autonomous management of the banking sector stage of the capital market.

Table 6: Major Economic Indicators (1996 – 2001)

Item \ Period	1996	1997	1998	1999	2000	2001
GDP growth rate (%)	7.1	5.5	-5.8	10.7	8.8	3.0
・ Private consumption	96.9	3.1	-9.6	10.3	7.1	-1.7
・ Facility investment	8.2	-11.3	-38.5	38.0	34.3	-9.8
・ Construction	3	2.7	-10.2	-9.2	-3.7	5.8
・ Commodity exports	14.5	5.0	15.6	16.3	21.6	-12.7
・ Commodity imports	13.9	-3.8	-24.6	28.9	20.0	-12.1
Current account balance (in $ 100 million)	-230.0	-81.7	403.6	244.8	103	86.2
Trade account balance (in $100 million)	-149.6	-31.8	413.3	283.7	167	133.9
・ Exports[1)](in$100 mill.)	1,299.7	1,386.2	1,321.3	1,451.6	1,767.0	1,513.7
・ Imports[1)](in$100 mill.)	1,449.3	1,418.0	904.9	1,167.9	1,600.0	1,379.8
Consumer price (%)	5.0	3.2	7.5	0.8	2.3	4.1

1) Customs clearance base.

Source: The Bank of Korea, *Monthly Bulletin,* March and April *2001*

During almost four years of reform, the most positive development occurred in Korea's foreign exchange reserve as shown in Table 7. Above all, foreign exchange reserves swelled from US$20.4 billion at the end of 1997 to greater than US$112 billion in June 2002. The won/dollar exchange rate also stabilized at about 1,100 won in 1999, from an average rate of US$1,700 in December 1997, as a completely free exchange rate policy was adopted under the IMF conditionality. The interest rate denoted by the yield on the three-year corporate bond also declined from 18.3 percent in March 1998, to 8.98 in August 2000. More importantly, Korea's composite stock index rose more than 300 percent by the end of 1999, compared to the level at the end of 1997.

Table 10: Changes in Foreign Exchange Reserves

Unit: million US$

	End of 1997	End of 1999	End of 2000	End of 2001
Foreign Exchange Reserves	20,405.5	74,054.5	96,198.1	102,821.4
Gold	36.9	67.1	67.6	68.3
SDRs	58.9	0.7	3.5	3.3
Reserve Position in IMF	599.3	286.5	271.8	262.2
Foreign Exchange	19,710.4	73.700.3	95,855.1	102,487.5

Source: The Bank of Korea, *Monthly Economic Bulletin*, Various Issues, 2001

However, beginning in the third quarter of 2000, Korea's economy started to show serious symptoms of recession, making the financial sector restructuring more difficult than originally thought. Some structural warning signals in the Korean economy were not seriously addressed prior to the outbreak of the Asian financial crisis. In this regard, intertwined bad debts between the financial and corporate sectors proved to be the most serious one.

2. Resolution of Non-Viable Financial Institutions

1) Resolution of Non-Viable Banks

Given the mounting debts accumulated during the high growth period and as the first measure to initiate the IMF mandated structural reform, the resolution of non-viable financial institutions was identified as the most urgent task. The restructuring of the financial sector was carried on as follows during the first round of restructuring. First of all, Korea First Bank and Seoul Bank, which had been in the worst trouble, were recapitalized by the Korea Deposit Insurance Corporation (KDIC) in January 1998. Next, the Financial Supervisory Commission (FSC) had accounting firms inspect the assets and liabilities of the twelve banks that had failed to meet BIS's eight percent capital adequacy ratios by the end of 1997, and required them to present management rehabilitation plans.

Upon examination of these plans, the FSC decided to order the exit of five non-viable banks. These exits were achieved through a Purchase and Assumption (P&A) formula, whereby each acquiring bank would purchase the sound assets and assume the liabilities of the acquired banks. The five acquiring banks were chosen on the basis of their BIS capital adequacy ratios, which stood at more than eight percent at the end of 1997. Meanwhile, among the remaining seven banks that had their management rehabilitation plans conditionally approved, five banks merged into two banks, while the other two banks have not been involved in merger or takeover activity.[7]

By injecting public funds into severely undercapitalized but viable banks, Korea had implemented almost 100 percent of the public support package, completing the first round of its financial restructuring, primarily in the banking sector by the end of 1999. During the first

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7 Both Commercial Bank of Korea and Hanil Bank merged into Hanvit Bank, while Chohung Bank took over Chungbuk Bank and Kangwon Bank. Korea Exchange Bank recapitalized with 350 billion won, that was contributed by Commerzbank of Germany. Peace Bank chose to withdraw from international business. Among the banks whose BIS ratios exceeded eight percent at the end of 1997, Hana Bank merged with Boram Bank, and Kookmin Bank with Korea Long-term Credit Bank.

round of restructuring, a total of 64 trillion won of public funds were injected to resolve the problem of non-performing loans in the financial sector, in order to make financial institutions clean through recapitalization.

During the second round of restructuring, the government again ordered six larger commercial banks (Hanvit, Chohung, Korea Exchange, Peace, Kwangju, and Cheju), which had been recapitalized by public funds during the first round of restructuring or whose capital adequacy ratios were again below the BIS 8 percent guideline as of June 2000, plus Kyungnam Bank, whose financial status was expected to worsen due to the realization of potential bad loans, to submit their management rehabilitation plans.

After appraising their normalization plans, the government took other comprehensive restructuring actions for these banks in 2000. First, it allowed Chohung Bank and Korea Exchange Bank to pursue their management improvement plans independently, including recapitalization and resolution of NPLs. Recognizing that it would be difficult for Hanvit, Peace, Kwangju, and Kyungnam Banks to improve their financial status independently, the government extended public funds to them to improve their financial positions and decided to bring them under a financial holding company to be established by the Korea Deposit Insurance Corporation (KDIC).

While the harsh financial reforms during the first phase restructuring were imposed by the government, the banking sector should be ready to undergo further restructuring spurred by the newly emerging market forces. Stricter asset quality standards, and a virtual elimination of the depositor protection scheme[8] effective in 2001, may force less competitive banks to fall prey to mergers and acquisitions. Hybrid financial services will appear to tear down the walls which separate different financial activities. The government must therefore address the external framework in which voluntary restructuring can take place, especially during the second round of the financial reform.

The government also pursued some global strategic alliances with foreign advanced banking institutions. In this regard, Korea sold Korea First Bank to New Bridge Capital at the end of 1999. The foreign management of Korea First Bank was expected to introduce a new credit culture to the Korean banking community. The transfer of bank management of Seoul-based leading commercial banks to foreign authorities appears to be another tangible result of the government restructuring drive.

[8] Effective in early 2001, a bank deposit only up to a half million won, including principle and interest, will be protected.

2) Restructuring of NBFIs

In the second phase of restructuring the financial sector, it may be necessary to overhaul the NBFIs, specifically the investment trust corporations. In this regard, Stiglitz (1999) pointed out:

"The NBFIs make up nearly half of the financial sector in Korea – quite a large share by international standards. This means any approach to restructure the financial sector that focuses only on commercial banks is, at best, "half-baked." The assets of the ITCs have tripled in just the past two years, as corporations – especially the top 5 *chaebols* – used the trusts as a way around the tightening of the bank credit. Use of the ITC escape hatch postponed the reckoning for *Daewoo*, allowing the *chaebol* to become even more heavily indebted as it sought to grow out of its problems."

The second round restructuring was followed to achieve the overall objectives of financial sector restructuring including non-bank financial intermediaries (NBFIs). During the year 2000, 175 financial institutions, most of them mutual savings and finance companies and credit unions, either exited the market or merged with other institutions. The government supported those ailing NBFIs with public funds of 35 trillion won through recaptalization, repayments of deposits and purchase of their NPLs.

Thus, another critical agenda item for implementing the second round of financial restructuring should be related to the other half of Korea's financial sector. The NBFIs must become more transparent and should be subject to enhanced supervision. Also, several critical measures must be introduced without delay. First, a new governance system, similar to the one already in existence in the banking sector, needs to be institutionalized to ensure a check-and-balance system. Second, the NBFIs' should be required to report their assets at market value. By and large, they should be covered by many of the same prudential regulations as the banking sector. Third, it is critical that non-financial corporations' holdings of shares in NBFIs be regulated as their shareholdings in commercial banks are. Fourth, ownership of the NBFIs should be regulated.[9]

In the past and even now, although the NBFI sector has not been covered by explicit insurance, the Korean government has offered implicit insurance. Recently, after extending the Bond Stabilization Fund by 30 trillion won at the urging of the FSC to rescue ailing NBFIs, the

[9] For example, *chaebols* with more than 50 percent of their own capital that is related to non-financial and real sector activities, should not be allowed to engage in financial businesses.

"clean" commercial banks are likely to become "unclean." As a result, the remaining reform drive in the financial sector must address the inefficiency chain that penetrates between the banking and NBFI sectors.

On the NBFI side, the government suspended a number of merchant banking corporations, which were suffering from a flight of deposits due to their worsening credibility in the wake of the dismantling of the Daewoo Group. As a result, the number of merchant banking corporations in normal operations decreased from 30 before the financial crisis to just five at the end of 2000.

In dealing with the investment trust companies, the government split two Investment Trust Companies, whose normal operation had been impossible due to Daewoo financial problems, into two units: a securities company and investment trust management company. While extending public funds to improve the financial positions of the securities companies, the government concluded MOUs concerning management normalization with them, requiring self-rescue efforts such as disposal of assets and rationalization of their staff and branch networks.

After evaluating the financial status of eight life and six non-life insurance companies whose payment reserve requirement ratios were below 100 percent, the government ordered three life insurers and two non-life insurers to implement prompt corrective actions to attain 100 percent ratios. In 2001, 41 mutual savings and finance companies and 125 credit unions with little possibility of normalization as a result of accumulated bad loans and unauthorized operations either exited the market or merged with other financial institutions.

A rapid development of financial engineering techniques appears to play an important role in the NBFI sector. For example, cyber trading commissions at some brokerages that offer online stock trading have already fallen from 0.5 percent to 0.1 percent. The advent of cyber stockbrokers will lead to further drops in commission fees. Within this new environment, small and medium sized securities companies without much capital or specialty will either be closed or will have to find a means of survival.

Table 8 summarizes changes in the number of financial institutions as a result of two rounds of comprehensive financial sector restructuring during 1998-2001. The exit of non-viable financial institutions continued in 1999, 2000 and 2001 through mergers, debt-equity swaps, and liquidations. As shown in Table 8, a total of 446 financial institutions exited out of the market over the four-year period 1998-2001.

Table 8: Changes in the Number of Financial Institutions[1] during 1998-2001

	Number of Institutions at the end of 1997	1998~2000			2001			Number of Institutions at the end of 2001
		Exit[2]	Merger[3]	Newly Established	Exit[2]	Merger[3]	Newly Established	
Banks	33	5	6	-	-	2 [4]	-	20
Merchant Banking Corporations	30	18	3	1	4	3 [5]	-	3
Securities Companies	36	6	1	14	-	-	3	46
Investment Trust (Management) Companies	31	6	1	3	-	-	3	30
Life Insurance Companies [6]	31	5	5	-	2	-	-	19
Non-life Insurance Companies	14	-	1	-	-	-	1	14
Mutual Savings & Finance Companies	231	72	25	12	23	1	-	122
Credit Unions	1,666	257	101	9	48	1	-	1,268
Total	2,072	369	143	39	77	7	7	1,522

Notes:

1) Excluding bridge financial institutions and branches of foreign institutions

2) Including revocation of license (application), bankruptcy, and liquidation.

3) The number of financial institutions that ceased to exist following mergers.

4) Kookmin Bank and Housing and Commercial Bank merged as Kookmin Bank; Peace Bank converted into a credit card company.

5) Hyundai-Ulsan Merchant Banking Corporation and Tongyang Merchant Banking Corporation merged to form Tongyang-Hyundai Merchant Banking Corporation. This subsequently absorbed Regent Merchant Banking Corporation but was in turn absorbed by Tongyang Securities Company. As a result, the three merchant banking corporations ceased to exist following the mergers.

6) Excluding Postal Insurance.

Source: The Bank of Korea, 2001 *Annual Report*, p. 50.

IV. Corporate Sector Restructuring

Another aspect of Korea's major restructuring efforts is related to the widespread insolvency problem in its corporate sector, especially during the restructuring period. According to statistics released by the Bank of Korea, 17,168 firms failed in 1997, a 52.53% increase over failures in 1994. From January through April 1999, an average of 3,000 firms failed each month, bringing annual bankruptcy cases to nearly 23,000 (Table 9). This in turn exerted great pressure on financial institutions. A total of 188 have been either closed down or merged on their own initiative. The corporate debt of the top 28 *chaebols* reached 247 trillion won at the end of 1997, with the average debt-equity ratio reaching 449% per firm.[10] The figure for non-performing loans of banks provided by the FSC stood at 87.26 trillion won ($63 billion) as of the end of March 1998. This accounted for 16.89% of total bank loans, or 20.72% of Korea's GDP in 1997 (Table 10).[11] The figure for the top 30 *chaebols'* debt, provided by the FSC, was 342 trillion won at the end of 1998.

Table 9: Number of Bankruptcies: 1994-2002

No. of Firms	1994	1995	1996	1997	1998	1999	2000
Total	11,255	13,922	11,589	17,168	22,828	6,718	6,693
Incorporated Firms	4,503	6,031	5,157	8,226	10,536	3,371	3,840
(%)	40.0	43.3	44.5	47.9	46.2	50.2	57.4
Large Firms	5	5	7	58	39	7	33

* percentage of total bankrupted firms

Table 9 cont'd…

	2001				2002	
Year Total	Sep	Oct.	Nov.	Dec.	Jan.	Feb.
5,277	373	414	409	447	384	285
3,220	246	242	274	286	250	194
61.0	66.0	58.5	67.0	64.0	65.1	68.1
11	3	1	0	1	1	0

Source: The Bank of Korea.

Table 10: Non-Performing Loans (ending March 1998)

(Unit: trillion won)

	Total Loans	Non-Performing Loans (% of total)
Banks	516.6062	87.2645 (16.89)
Other Fin. Institutions	256.9355	24.7611 (9.64)
Total	773.5779	112.0256 (14.48)

Source: Financial Supervisory Commission.

Given the level of corporate debt, it is evident that overcoming the financial crisis is directly

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[10] *Korea Economic Daily*, 30 March 1998. Corporate debt is approximately $177.57 billion, based on the exchange rate as of 3 June 1998 ($1 = 1391 won).

[11] Korean GDP in 1997 was 420.986 trillion won. The proportion of bad loans in Korea is huge compared to that of the US during its Savings & Loans crisis; bad loans of FDIC member financial institutions almost reached 4% of total loans and 2.5% of the US GDP in 1987.

related to industrial and corporate restructuring, success of which, in turn, hinges upon the orderly exit of ailing firms. A competitive market with free entry and exit would ensure that the assets of failed firms are efficiently utilized through liquidation via cash auctions. However, the Korean capital market is largely underdeveloped and imperfect. For example, there may not be a market for the insolvent firm's assets, or these assets may be undervalued, while a firm that is fundamentally sound but only temporarily illiquid may not be saved. While liquidation of truly distressed firms releases resources for other, more productive activities, saving firms that are temporarily insolvent but fundamentally sound can increase social welfare.

One way to save such a firm is for debtors and creditors to renegotiate the terms of debt by means of a debt-workout program.[12] However, private workouts are often difficult to achieve due to collective action problems on the part of creditors as well as the high cost of renegotiating the debt structure every time a debtor defaults. Due to problems related to private workouts, most countries have developed standard legal mechanisms within which financially distressed firms are protected from their creditors, and are given the chance to reorganize.

Throughout the decades of government-induced growth, *chaebols* became closely entwined with politicians. The government provided the top 30 *chaebols* with a host of implicit guarantees. As a result, company managers were more concerned with garnering outside influence than they were in making their companies profitable, and their boards of directors or minority shareholders had little power to curb the managers' misbehavior. Moral hazard was prevalent, and conglomerates that were "too big to fail" consequently wielded considerable power in society.

Corporate restructuring has been a major goal of post-crisis reforms in Korea. Even before his inauguration on February 25, 1998, both President-elect Kim Dae-Jung and business leaders agreed upon the five principles of corporate restructuring listed in Table 11. Since then, Korea's corporate sector restructuring has been carried on with a clear timetable on the basis of these guidelines, despite short-term difficulties.

Table 11: Five Major Principles of Corporate Restructuring

1. Transparency of corporate management
2. Dismantling cross-debt guarantees
3. Significantly improving capital structure
4. Identifying core businesses and strengthening cooperative relationships with small and medium-sized companies
5. Enhancing accountability of controlling shareholders and enhancing their management accountability

[12] The debt-workout, or simply workout program, is out-of-court settlements between creditors and debtors who have defaulted, utilizing the so-called London Rules. A Corporate Restructuring Accord (CRA) has been signed by 200 banks and non-bank financial institutions, which commits them to follow the agreed workout procedure. The Corporate Restructuring Co-ordination Committee (CRCC),

Among the concrete measures adopted so far is the requirement for the top 30 *chaebols* to submit consolidated financial statements, which link all affiliates from 1999. These financial statements will provide a more accurate picture of *chaebol* management by clarifying intra-*chaebol* transactions, publicizing shares held between affiliates, and highlighting cross-payment guarantees and credit trading. Out of 30 *chaebol*s, the top five account for about half of Korea's total debt, equivalent to US$500 billion (150 percent of GDP), and more than a third of manufacturing output.[13]

Following the complete dismantling of the Daewoo Group in November 1999, Korea's corporate restructuring performance could best be measured by determining the extent to which the five major principles of corporate restructuring were implemented by the remaining top four *chaebols*. As shown in Table 12, these top four *chaebols* by-and-large succeeded in keeping their promises as agreed upon in the restructuring MOU with the government by the end of 1999.

Table 12: Implementation of Restructuring MOU as Agreed between the Top Four *Chaebols* and Creditor Banks.

	Plan		Implemented	Execution Ratio (%)	
	1999 (A)	(1Q – 3Q) 1999 (B)	(1Q – 3Q) 1999 (C)	C/B	C/A
Self-Rescue Efforts (in million won)	33.6	22.2	26.8	120.6	79.8
· Asset Sales	13.7	8.8	10.9	124.7	80.0
· Recapitalization	19.9	13.4	15.9	117.9	79.7
Inducement of Foreign Capital (100 million $)	71.9	50.9	61.6	121.0	85.6
Elimination of Cross-Debt Guarantee (in trillion won)	2.7	1.6	2.7	166.2	99.2
Spinoffs (cases)	173	131	427	326.0	246.8
Introduction of New Governance System (cases)	136	136	143	105.1	105.1
Reduction of Subsidiary (cases)	84	55	61	110.9	72.6

Source: Financial Supervisory Commission website, November 1999.

Perhaps one of the most dramatic examples of corporate restructuring is found in the near complete dismantling of the Daewoo Group, Korea's second largest *chaebol* in terms of asset

an arbitration committee, has been created to resolve the differences between financial institutions and a debtor in the event they cannot reach an agreement.

13 Sri-Ram Aiyer (1999), "Corporate Reform: Key to Consolidating Korea's Recovery," p.3.

size. Daewoo was loaded with an excessive debt burden totaling 60 trillion won, including nearly US$10 billion in foreign debt, half of which would have fallen due within 1999. However, the government, after a thorough review of the group's financial situation, allowed an exit strategy for non-viable firms. It also permitted, through market forces, the M&As of viable firms, as well as workout programs by the creditor banks for those remaining viable firms that could not be successfully merged.

The Daewoo story clearly demonstrated that the traditional belief of "too big to fail" in Korea no longer holds. Analysts viewed the restructuring program for Daewoo as a manifestation of the government's determination to reform the nation's family-controlled *chaebols* under a "convey management" practice.

Because the domestic macroeconomic situation has greatly improved since the first quarter of 1999, with 10.7 percent growth prospects, and a more than 300% rise in Korea's composite stock index compared to the level at the end of 1997, Korea's economy is well positioned to provide a sufficient cushion to deal with some adverse side effects of vigorous corporate restructuring. Taking advantage of Korea's bullish stock market in 1999, most *chaebols* were able to meet the debt/equity ratio of 200 percent largely through new equity issues and asset revaluation schemes, without having to make serious efforts to sell-off their subsidiaries or assets.

Finally, the government has adopted a special program for SMEs troubled in the wake of the financial crisis. Realizing that it could not address corporate restructuring needs of large groups and concurrently assess the needs of SMEs, the government decided to roll over the debts of the SMEs by extending working capital maturities. The scope of corporate workout programs is now also being expanded to include SMEs. Creditor banks have evaluated the financial status of approximately 22,000 SMEs with outstanding loans of 1 billion won or more, and have classified about 13,000 of these as viable. These viable SMEs were then selected as candidate firms for workout programs.

V. Disposition Methods of NPLs

1. Injection of Public Funds

Because of the rising NPLs on the part of the banks that already received public funds during the first round of restructuring, the government needs to inject further public funds amounting to 50 trillion won. The government requested five banks to submit rehabilitation proposals to determine whether each bank could be viable through its own self-rescue efforts.

Those banks that are regarded as non-viable are subject to regrouping or M&As. To this end, the government encouraged the establishment of financial holding companies to ensure more efficient and easier M&As in the financial sector.[14] This might allow financial institutions to grow bigger and engage in various financial businesses with reduced risk. A critical issue is related to what extent *chaebols* can participate in the financial holding companies.

Cleaning up of bad debts accumulated in the financial sector required a substantial amount of public funds. The total amount of public funds injected by the end of May 2002 is presented by sub-sector of financial community and support type in Table 13. The public funds continue to support financial sector restructuring. Table 14 shows the amount of public funds mobilized by source and support type during the period of November 1997 to May 2002. Over the same period, the Korean government poured in a total of about 156.3 trillion won.

Table 13: Injection of Public Funds as by May 2002

(Unit: billion won)

	Recapitalization	Contribution	Deposit Payment	Purchase of Asset	Purchase of NPLs	Total
Banks	33.9	13.6	-	14.0	24.5	86.0
Non-banks	26.3	2.8	26.1	0.9	11.9	68.0
Overseas Financial Subsidiaries	-	-	-	-	2.3	2.3
Total	60.2	16.4	26.1	14.9	38.7	156.3

Source: The Ministry of Finance and Economy, "Public Fund White Paper" 2001 and Public Release, June 25, 2002

Table 14: Use of Public Funds for Financial Sector by Source and Support Type

(November 1997~May 2002)

(Unit: billion won)

	Recapitalization	Contribution	Deposit Payment	Purchase of Asset	Purchase of Asset	Total
KDIC	47.5	16.4	26.1	8.6	-	98.6
KAMCO	-	-	-	-	38.7	38.7
Fiscal Resources	11.8	-	-	6.3	-	18.1
Bank of Korea	0.9	-	-	-	-	0.9
Total	60.2	16.4	26.1	14.9	38.7	156.3

[14] The *Korea Times* on January 5, 2000 reported the government's intention by quoting a New Year's speech by Finance-Economy Minister Kang Bong-Kyun to the Audience of Senior Banking Officials.

Source: The Ministry of Finance and Economy, *Public Fund White Paper,* 2001 and
Public Release, June 25, 2002

2. Rehabilitation Actions

Of course, the injection of public funds into troubled banks was provided on the condition that the banks downsize their employees and operational units. Table 15 shows that more than 40 percent of bank employees, and 20.2 percent of local branches, have been closed down over the four-year time period. Indeed, the financial restructuring was accompanied by the painful action of laying off a large numbers of employees, for the first time in Korea's modern development history.

Table 15: Change in Number of Employees at Domestic Financial Institutions

	End-97 (A)	End-2001 (B)	Difference (A-B)	(A-B)/A
No. of Employees	113,994	68.360	45.634	40.0%
No. of Local Branches	5,987	4,776	1,211	20.2%

Source: Financial Supervisory Service, *Monthly Financial Statistics Bulletin*

3. Restructuring Tools

1) Institutions Involved

An immediate focus of restructuring efforts in the corporate sector has been on troubled large conglomerates. Various financial restructuring methods include debt/equity conversions, asset sales, inducement of foreign investment, and new equity infusions.

The government has relied heavily on bank-led voluntary corporate debt workouts for the *chaebols*. Hence restructuring and recapitalization of banks is a central element in the strategy for corporate and financial restructuring. Eight major creditor banks, identified as leading banks, took the responsibility for negotiating workouts with the 64 major corporate groups. Each of the banks has formed its respective workout unit.

In order to facilitate the restructuring process of the corporate sector, regulations governing foreign ownership in listed stocks have been changed to allow 100 percent foreign ownership. The M&A regime has been liberalized to allow hostile takeovers by foreigners; tax incentives (e.g. on asset sales) have been introduced; the real estate market has been opened to foreigners; financial disclosure and reporting have been strengthened, and insolvency procedures have been improved. Changes have also been made to the labor law, which now allows layoffs, and measures have been taken to improve labor market flexibility.

A bridge bank has assumed distressed assets from merchant banks, and the Korea Asset Management Company (KAMCO) has bought non-performing loans from commercial banks. By the end of September 1998, 37 trillion won of such loans had been purchased by KAMCO, at a cost of 17.2 trillion won. KAMCO will have to restructure these loans and has a number of tools at its disposal, including asset-backed securities, loan portfolio sales, asset sales, and M&As or direct investment. By May 2002, KAMCO had bought NPLs amounting to 38.7 trillion won. KAMCO should therefore be viewed as an important actor in the corporate restructuring process.

2) Introduction of Corporate Restructuring Vehicles (CRVs) and Debt/Equity Swaps

To facilitate the resolution of bad loans held by financial institutions, the Corporate Restructuring Vehicle Act (effective from Oct. 23, 2000) and its associated Enforcement Decree (effective from Oct. 31, 2000) were promulgated. A corporate restructuring vehicle (CRV) is a paper company, which generates profits through asset operations and distributes them to its shareholders. The operation of its assets is done by making investments in companies, which have signed a corporate improvement planning agreement with creditor financial institutions, or by purchasing bad loans from the financial institutions which have concluded such agreements. To establish a CRV, more than three promoters, including at least two creditor financial institutions, should register it with the FSC. The minimum capital of a CRV is 500 million won and its maximum life is five years. Creditor financial institutions are entitled to hold stocks of the CRV in excess of the investment limit stipulated in business-related legislation, including the General Banking Act.

The goal of the CRV would be to manage insolvent firms put under debt workout programs in place of creditor banks, but in a more efficient and effective manner by using specialists and investment techniques.[15] Under the present system, the role of creditor banks is limited to external supervision due to the lack of management expertise, while the management of the workout firms is left to the firm’s officials, who caused the mismanagement in the first place. Some benefits of a CRV are a) to facilitate disposal of assets by creditor banks; b) facilitate effective management and governance on companies undertaking a workout process, c)

[15] Creditor banks are currently required to oversee the management of these firms as well as schedule their debt.

encourage foreign capital investment, and d) stimulate capital markets. In other countries, asset management companies (AMCs) have played the role of absorbing distressed banks' assets and restructuring financially troubled enterprises.

In Korea, debt/equity swaps have proved to be one of the most effective methods to restructure highly leveraged corporations and creditor banks. As debt/equity swaps are employed as a method for corporate restructuring, the government controls companies via the state-run banks. As a result, the overall economy might be influenced by government policy, not by market principles. Nevertheless, in practice, debt/equity swaps are frequently used in Korea to resolve potential bad loans and to raise capital adequacy ratios. In order to prevent moral hazards like this, it is necessary to build a responsible management system in the financial sector, which might lead corporate restructuring.

3) Capital Market Development

Given the huge size of the overall debt of corporate firms in Korea, a key strategy for corporate restructuring will have to be achieved by a substantial conversion of debt to equity, which will bring a change in the domestic capital market and also a shift in household savings patterns. Improvements have to be made in the corporate financial market structure in order for corporations to raise directly their necessary funds. Therefore, serious efforts have to be made to expand the equity market in Korea by encouraging collective investment vehicles, including mutual funds and investment and trust business. Deeper capital markets will help shift corporate finances away from debt and associated risks hitherto carried by the banking system.

4) Improvement of Corporate Performance

As a result of a series of corporate restructuring efforts, Korea's corporate debt-equity ratio has substantially reduced over the period of 1997-2001 as shown in Table 16. The low debt-equity ratio has also been accompanied by a significant improvement in corporate profitability.

Table 16: Corporate Performances (1995-2001)

(Unit:%)

	1995	1996	1997	1998	1999	2000	2001
Debt equity ratio	286.8	317.1	396.3	303	214.7	210.6	182.2

Ordinary income to sales	3.6	1.0	-0.3	-1.9	1.7	1.3	0.4
Operating income to sales	8.3	6.5	8.3	6.1	6.6	7.4	5.5
Interest Coverage Ratio	149.6	112.1	129.1	68.3	96.1	157.2	132.6

Source: The Bank of Korea, Financial Statement Analysis, Each year.

VI. The Case of Chohung Bank Restructuring

1. Profile

Established in 1897, Chohung Bank (CHB) is the oldest commercial bank in Korea with 104 years of history and has been one of the leading financial institutions in the country in many respects. As of the end of September, the Bank ranked among the top four banks in terms of total assets, along with an extensive branch network including 446 domestic branches and 11 overseas. During the first round of restructuring, the Bank was recapitalized by the Korea Depositor Insurance Corporation (KDIC) which currently owns 80% of its equity.

2. Post-Crisis Restructuring

Since the Asian economic crisis, most Korean banks have suffered from substantial difficulties in every managerial aspect. CHB was exception in terms of asset quality and profitability and its very existence was threatened. The Bank experienced both management and financial difficulties that undermined its credibility in the financial market. However, comprehensive management and financial restructuring have been pushed to turn this situation around.

In order to cope with such crisis, the bank carried out aggressive restructuring measures such as streamlining its labor force and organization, aggressive reduction of NPLs, enhancement of corporate governance system, improvement of credit decision process, and re-engineering into a performance-based organizational structure. Evaluating these restructuring efforts, the Financial Supervisory Service (FSC) officially approved in November 1998 Chohung Bank’s rehabilitation plan and reconfirmed its independent viability among the financial institutions supported by the government’s public funds.

During the restructuring period, first of all, Chohung Bank saved 210 billion won by reducing employees and downsizing its organization. Chohung Bank reduced its staff by 42% to 6,614 employees, and the number of branches by 30% to 452 compared to the figures in the pre-crisis year 1997. The bank gained annually 70 billion won as a result of closing down 12 unprofitable subsidiaries—9 domestic and 3 overseas.

Another strong restructuring initiative involves the improvement of its asset quality, which is one of its most impressive post-crisis restructuring measures. In the midst of the economic crisis, the Chohung Bank suffered from a serious deterioration of its asset quality as most commercial banks did. The accumulative outstanding balance of NPLs at the end of 1997 amounted to 11.3 trillion won. The bank successfully reduced its NPLs totaling 9.4 trillion won with various measures such as a) sales to KAMCO, b) international auctions, and c) write-offs, to name a few implemented over the past four years. As a result, the NPL ratio has significantly improved from 16.5% in 1999 to 5.7% in the 3rd quarter, 2001.

In 2001, the Chohung Bank became more actively involved in cleaning up its balance sheet and sold off 1.63 trillion won of NPLs by a series of international auctions since December 1999. Successful candidates in this deal have been Lone Star, Lehman Brothers and Salomon Smith Barney. With a favorable recovery ratio of over 49% by these auctions compared with KAMCO sales of 45%, and sufficient loan loss reserves, related losses by these deals amounted to 260 billion won but has been fully covered by a huge amount of operating income.

In addition, the bank sold 730 billion won worth of loans which had been written off for the past 10 years, to Value Meet Investment through a public bidding process. This marked the first time in Korea that written-off loans were sold and by doing so the Bank gained 58 billion won in extraordinary gains.

By the end of this year, the bank's NPL ratio is expected to reach 3.85%, fully satisfying the MOU target. It should be mentioned that Chohung Bank's recapitalization efforts were successful even though its capital position was substantially eroded by a large amount of losses since the Asian crisis. In addition to the capital injection by KDIC totaling W2.7 trillion, Chohung Bank successfully increased W302.5 billion of its paid-up capital by rights offerings in November 1999 and a series of subordinated debt issues at home and abroad. Since 1998, the bank issued both won-denominated and US dollar-denominated subordinated debts worth 450 billion won and US$500 million, respectively. The successful sub-debt issues were strong evidence that Chohung Bank had regained its credibility in the international financial markets. As a result, its BIS capital adequacy ratio as of the end of June 2001 reached 10.69%, and is expected to be above 10% by the end of this year, in sharp contrast to 0.93% in 1998.

Furthermore, the Bank plans to attract strategic foreign partners in such key areas as ITC and the credit card business. By selling off minority shareholdings to potential investors, the Bank's financial position will be remarkably improved, as well as induce advanced expertise including product development capability and risk management, etc. With these efforts, Chohung Bank will gain momentum to be reborn as the nation's leading commercial bank.

3. Restructuring of Managerial Practices

1) Corporate Governance and Transparency

One of the key goals of the Chohung Bank's restructuring is to increase transparency and accountability by adopting an international style corporate governance system. Currently, the Board of Directors is comprised of four standing directors and seven non-standing directors. Most importantly, the position of the Chairman and CEO has been separated. The Board is now required to elect the Chairman of the Board from among the non-standing members.

The Board of Directors meeting is held on a regular basis to discuss the key strategic issues of the Bank, while ensuring check and balance functions between standing and non-standing board members. Furthermore, the Bank established four sub-committees; namely a Governance Committee, Compensation and Management Committee, Risk Policy Committee, and Audit Committee. The chair of each sub-committee must come from outside the board.

2) New Credit Culture

Chohung Bank has revamped entirely its credit approval process during the past three years. The Bank's policy priority has been set to improve its asset quality as well as to tighten its credit extension policy. As a result, a Credit Risk Rating System (CRRS, effective December 1999) for corporate customers and Credit Scoring System (CSS, effective July 1999) for retail customers were put in place.

Furthermore, the Chohung Bank developed the Credit Management System (CMS) in September 1999, the first of its kind in the Korean banking community, in consultation with Boston Consulting. CMS allows the bank to control automatically the whole credit decision process from the initial loan application phase to the ex post facto management phase. These measures are likely to enhance the paradigm of loan operations.

In addition, the credit decision process has been further improved by implementing a committee or group-based decision system, deviating from the past mode of decision-making based on the discretion of individuals. The bank also emphasized credit-based lending rather than collateral-based lending.

3) Introduction of Business Unit System

In order to provide higher quality services for customers and to focus more clearly on profitability and accountability of respective business units, Chohung Bank introduced a business unit system in April 2000. At present, there are five profit center units including retail, corporate, treasury, trust and merchant banking groups, and 4 supporting units.

4) Building Six Major Sets of Infrastructure

Much of Chohung Bank's recent increase in operating income has been generated due to the thorough overhaul of its internal structure. The bank is continuing to implement five discrete sets of infrastructure, all based on the bank's Data Warehouse, the sixth and central system. The Data Warehouse collects and processes all data relating to each set of infrastructure and serves as a central repository of customer information. Each of set of infrastructure is presented below.

(1) Profit Management System (PMS)

The bank developed the PMS in July 2000, in consultation with Price Waterhouse Coopers. By utilizing this system, Chohung is able to conduct an accurate profitability analysis of each business unit, products and customers, based on Activity Based Costing (ABC) and Funds Transfer Pricing (FTP). The PMS also allows the bank to identify performance evaluation by respective business unit and to introduce a profit sharing scheme.

According to the system, 13% of high net-worth customers account for approximately 100% of the bank’s operating income. By utilizing the Data Warehouse system, the bank is likely to attract a greater number of customers to move into the high-margined customer segment. This is what is called “productive profitability growth” compared to the asset driven growth of the past.

(2)Enterprise-Wide Risk Management System

Since the Asian economic crisis, a more efficient risk management system has been introduced to improve the bank's overall management. A Risk Policy Committee, attended by outside directors, makes key decisions over such areas as risk allowable limit, optimal investment and stop-loss limit, and relevant regulations.

In addition to building up the Value at Risk (VAR) system, the bank's market risk is being controlled based on the Risk Adjusted Return on Capital (RAROC). Chohung Bank also developed the Enterprise-Wide Risk Management System in April 2001, the first system in the nation's banking community that allows the bank to integrate the market risks of banking and trust accounts, as well as combine the risks of credit, market, liquidity and interest rate. The bank is also able to implement optimal capital allocation based on capital-at-risk, and conduct profitability control within an allowed risk ceiling.

(3) Credit Management System (CMS)

CMS was developed in September 1999, in consultation with the Boston Consulting Group; its main purpose is to integrate the loan process system from application to post management, in order to reduce the operating costs of administering loans.

(4) Credit Scoring System (CSS) and Credit Risk Rating System (CRRS)

The Credit Scoring System was adopted in July 1999 in consultation with NICE, to evaluate the credit quality of individual customers based on their historical credit records and current financial status. The Credit Risk Rating System was implemented in December 1999 to reduce the risk of incurring NPLs from corporate clients.

(5) Individual Performance Management System

Chohung Bank built up an Individual Performance Management System, in consultation with Watson Wyatt, to evaluate individual employees' performance and contribution to the bank's profitability.

(6) Data Warehouse System

The Data Warehouse System was independently developed to build up customer information to effectively provide customized service and productively implement target marketing.

5) New Marketing Strategy

Chohung's retail operations produce a full range of services and products for its 9 million customers through numerous distribution channels. The bank has analyzed its customer base to concentrate greater resources on the more profitable accounts, and convert the loss making customers into profitable customers. Also, Chohung is encouraging the use of automated banking services for unprofitable customers.

The Bank is promoting efficient and effective marketing through the use of data mining tools, and by the introduction of the Marketing Scoring System (MSS) and Deepening Customer Relationship Branches (DCRB). Chohung Bank is now implementing target marketing for retail customers backed by MSS. As a result, total loan outstanding as of the end of September 2001 applied through MSS reached 310 billion won with over 62,000 transactions. This successful performance was made during just past three months. Chohung Bank intends to fully explore new revenue opportunities in the retail sector, particularly by cross-selling products and introducing private banking business.

4. Future Strategy

In due course after 2002 upon completion of the MOU with the government, CHB is likely to emerge as an independent financial holding company. It will cover such areas as commercial banking, credit cards, asset management, investment banking, bancassurance and securities, designed to provide more efficient and high-quality services for its customers.

With regard to the establishment of asset management companies, the bank plans to attract world-renowned financial institutions on a joint-venture basis. In order to expand investment banking activities into underwriting of securities, structured finance and M&As, as well as boost fee-based income, Chohung is considering merging with a local merchant bank.

Bancassurance will be opened to Korea's financial community in the near future. Then, an alliance with non-bank financial institutions will be more useful and beneficial than a merger with other commercial banks, in terms of managerial efficiency, profitability and mutual benefits.

VII. Continuing Agenda

1. From "Administered Restructuring" to "Market Induced Restructuring"

In the future round of restructuring, both the institutional and regulatory frameworks must be firmly established so that "market induced restructuring" can replace the "administered restructuring" that was inevitable during the crisis period. In this regard, the sequence and schedule of privatizing "nationalized banks" must be clearly spelled-out in advance.

Once both screening and exit of non-viable financial institutions are determined by the government, a policy focus can be placed on stimulating the economy by lowering interest rates, in order to facilitate the restructuring process. It should be noted that the timely exit of non-viable firms out of the market should be accelerated to restore more confidence in the market. The Corporate Reorganization Law, the Composition Law and the Bankruptcy laws were amended in 1998 to achieve this objective.

2. Facilitation of Corporate Restructuring

To facilitate the prompt disposal of financial institutions' non-performing loans and avoid additional bad loans, the Corporate Restructuring Promotion Act was passed, a system was put in place to allow the setup of real estate investment companies for corporate restructuring and the period of corporate reorganization proceedings was shortened.

The Corporate Restructuring Promotion Act (which came into force on September 15, 2001; subsequent dates in parentheses are dates of entry into effect) is to remain in effect as a temporary measure until the end of 2005, together with its associated Enforcement Decree (September 15, 2001). It empowers creditor financial institutions to initiate prompt restructuring measures against companies displaying symptoms of insolvency and establishes a system for the adjustment of outstanding credits among financial institutions. The Act calls for creditor banks to regularly appraise the credit risk of companies that have obtained credits from financial institutions to a total of at least 50 billion won and take appropriate measures for post hoc management.

In particular, for a company exhibiting symptoms of insolvency on evaluation of its credit risks, if the main creditor bank considers its turnaround feasible after appraising the company's business plan, it may have that company adopt measures for corporate restructuring. These may include joint management by creditor financial institutions, joint management by creditor banks, management by the main creditor bank, and composition of its debts or corporate reorganization. Where there appears no possibility of a turnaround, however, the main creditor bank is obliged to submit an application to the court for the company to be declared bankrupt or have the company file for dissolution, liquidation or bankruptcy.

In the event of a main creditor bank pursuing the restructuring of a company exhibiting symptoms of insolvency through joint management by creditor financial institutions or creditor banks, the committee should consist of creditor financial institutions or creditor banks. The committee should make decisions on the designation of a company exhibiting symptoms of insolvency, the joint management by creditor financial institutions, the period for deferment of claims, plans for the readjustment of claims or new credit extension, and the conclusion of an agreement to implement a management turnaround plan. The committee's decisions should be made with the approval of creditor financial institutions holding at least 75 percent of gross credit outstanding to the company. Meanwhile, creditor financial institutions opposing the decision for joint management the readjustment of claims, or new credit extension are entitled to demand to the committee that the other creditor financial institutions purchase their loans. The main creditor bank should examine the performance of the company on a quarterly basis concerning its implementation of the turnaround plan after concluding an agreement with the company on its rehabilitation.

If on the basis of the findings of the quarterly examination, the committee considers that the execution of the management rehabilitation plan will be problematic, the main credit bank must halt the joint management agreement.

3. Strengthening the Management of Public Funds

To enhance the fairness and transparency of the management of public funds and push for their effective use, the Public Fund Management Act (effective from Dec. 20, 2000) and its associated Enforcement Decree (effective from Feb. 14, 2001) were passed into law. It provided for the establishment of a Public Fund Committee at the Ministry of Finance and Economy, entrusted with the comprehensive overseeing of the operation of public funds and screening and coordinating their provision and collection. The Minister of Finance and Economy should submit a quarterly report on the use of public funds to the National Assembly, and the Public Fund Committee should publish a white paper on the management of public funds by the end of August every year.

As a means of preventing moral hazard on the part of financial institutions, those which receive public funds are obliged to conclude an MOU for the implementation of management normalization plans with the government or the Korea Deposit Insurance Corporation (KDIC). Management normalization plans should include details concerning the target capital adequacy ratios the profit to assets ratio, the bad loan ratio, restructuring plans, and the written consent of the in-house labor union to restructuring.

In a bid to promote recovery of public funds, a Sales Screening subcommittee is to be set up under the Public Fund Committee and given the task of screening the appropriateness of the sale of assets, including the financial institution stockholdings of the government, the KDIC, and Korea Asset Management Company (KAMCO). Should a financial institution which has received public funds become insolvent or be dissolved, the court is obliged to designate the KDIC or a member of its staff as a receiver or liquidator, other pertinent legislation not withstanding.

At the same time, the Depositor Protection Act was revised, effective January 1, 2001. In the event of designating financial institutions as non-viable financial institutions or financial institutions showing signs of insolvency, the KDIC is also able to demand that the relevant financial institutions submit documents concerning their business and property status or investigate them directly. Where the KDIC judges it necessary to suspend the repayment of deposits or cancel the license of financial institutions following an investigation of their business and property status, it may request the Financial Supervisory Commission (FSC) to take the appropriate actions to deal with the troubled financial institutions. The Act stipulates that defaulters on debt repayments to ailing financial institutions should be included among those bad-loan related persons whose relevant business and property status can be investigated by the KDIC. The KDIC is also entitled to withhold the payment of deposit insurance claims to those responsible for bad loans and those having a special relationship with them.

In preparation for possible losses stemming from fraud or embezzlement by the staff of financial institutions or their malfeasance, the KDIC is able to demand that financial institutions buy compensation liability insurance. If financial institutions decline to buy such insurance, the KDIC is authorized to conclude an insurance contract with an insurance company on their behalf and at their own expense.

4. Facilitation of Bad Loan Resolution

In order to facilitate the resolution of bad loans held by financial institutions, a CRV should operate over 50 percent of its total assets through the purchase of securities floated by companies that have concluded corporate improvement planning agreements, the purchase of credit for loans to such companies, or the extension of loans and payment guarantees to them. A CRV may borrow funds up to twice its equity capital and float corporate bonds up to an amount ten times its capital and reserves.

In a parallel move, the government revised the Enforcement Decree of the Act Concerning the Efficient Disposal of Financial Institutions' Non-Performing Assets and Establishment of the Korea Asset Management Corporation (effective from May 29, 2000). This extended those financial institutions from which KAMCO may acquire non-performing loans to subsidiaries that are established by financial institutions for the purchase and resolution of claims, and financial institutions established under the Depositor protection Act to resolve claims.

By May 2002, 156.3 trillion won in public funds had been used to support financial sector restructuring. According to the report to the National Assembly by the government, the government had retrieved about 24.3 percent, or 32.8 trillion won of the public funds spent so far by early 2001.

By November 19, 2001, the government had retrieved some 32.8 trillion won, or 24.3 percent of the total public funds injected. Of the total, about 21.6 trillion won came from the rescale of non-performing loans or their collateral while the remaining 11.2 trillion won was[16] recovered through equity sales and other sources.

The low recovery ratio of public funds causes a supply and demand imbalance arising from the conversion of maturities. It also suggests that the delay of repayment of public funds is inevitable at least over a generation. As a matter of fact, the Public Fund Overseeing Committee announced to delay repayment of public funds up to 20 years.[17] As public funds were raised mainly through the issue of state bonds repayable in five years and maturities for public funds converge in a short period, the government bonds need to be placed to repay and refinance maturing debts.

5. Protection of Investors Including Minority Shareholders

To strengthen the protection of stock investors, including minority shareholders, the government made it obligatory for registered corporations to include outside directors on their boards of

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[17] See *The Korea Herald*, November 19, 2001, page 11

directors and eased conditions for cumulative voting requirements and the exercise of minority shareholders' rights in listed or registered corporations. It also made investment trust management companies responsible for compensating investors for damages.

Under the revised Securities and Exchange Act (April 1, 2001) and its associated Enforcement Decree (July 7, 2001), registered companies, excluding venture firms with total assets of less than 100 million won, must have at least one quarter of their board of directors consist of outside directors. The number of outside directors for registered corporations with total assets of over 2 trillion won should be not less than three and they should make up at least half of the total membership of the board of directors. An audit committee should also be set up to oversee the exercise of their duties.

For the election of directors of listed or registered corporations with total assets of over 2 trillion won, the minimum shareholding required for the exercise of cumulative voting rights was lowered from 3 percent to 1 percent. In relation to a vote to change the articles concerning cumulative voting, the voting rights of shareholders with a holding greater than 3 percent were limited to 3 percent.

When listed or registered companies give notice of a general meeting of shareholders, they should disclose details of transactions with the largest shareholder or those standing in a special relationship to them. In particular, where the scale of the transactions with the largest shareholder or those standing in a special relationship to them surpasses a certain level, a listed or registered corporation with total assets of at least 2 trillion won must receive the requisite approval from the board of directors and report the details of the relevant transactions to the general meeting of shareholders.

6. Public Sector and Labor Sector Reforms

Under the IMF conditionality, Korea was also required to carry on reforms in both the public and labor sectors. Public corporations needed to be privatized, and a new governance system introduced to improve profitability. Korea's traditional labor-management relationship caused inflexibility in the labor market. Layoffs are now allowed when a company faces serious managerial difficulty. The government has provided a social safety net for those unemployed as a result of restructuring. However, Korea's achievement in reforming the two sectors has not been as satisfactory as the financial sector reforms. Privatization of public corporations must be accelerated, and the flexibility of the labor market has to be enhanced while seeking ways to resolve the occasionally militant labor union activities.

VIII. Concluding Remarks

In essence, Korea's restructuring of its financial sector has been a process of breaking away from the vicious chain of inefficiency that exists between the financial sector and the corporate sector. While following dutifully the IMF prescriptions, the predominant sequence of major restructuring has involved first the financial sector, and has then moved to the corporate sector, to ensure normalization of financial intermediation.

The Korean reform story after the Asian financial crisis clearly suggests that a serious financial sector restructuring is not a "once and for all matter"; it requires a never-ending drive in a consistent and transparent framework. Financial restructuring is also deeply linked to the restructuring of the corporate sector. After breaking up the chaebol system into a series of independent business units, Korea needs to design a new industrial structure for the forthcoming digital economy. This calls for reinvigoration of the economy by encouraging a climate of innovation led by SMEs and venture set-ups in parallel with large enterprises. Product development and continual improvements in quality should be encouraged through sophisticated technology. Meanwhile, the industrial structure has to be transformed to create high value-added industries, such as knowledge-intensive industries.

As Pagano (1993) suggested, effective financial intermediation that ensures efficient allocation of scarce capital to where it has the highest payoff, is a critical component in the search for a new development paradigm in Korea. In this context, as Stigltiz (1999, p. 15) pointed out, Korean banks must continue working to "learn how to be banks." They should break away from the embedded traditions and customs, such as implicit government guarantees as expressed in the belief that "banks should never to fail," or tight and "friendly" long-term relationships with large borrowers. In addition to the changing credit culture, banks must develop modern management practices for risks such as liquidity risk, foreign exchange risk, and interest rate risk.

In order to make the financial sector the "brain" of any well-functioning market economy,[18] Korea needs an injection of new managerial expertise into the financial sector, especially into the banking sector, which has been branded as a cradle of old, tradition-bound people who built their careers during the high growth period.

In the years to come, successful structural reforms for the financial sector could be achieved by completing the following key tasks: a) return of "nationalized banks" to the private sector; b)

[18] See Stiglitz (1999) on the "brain function" of the financial sector. He pointed out that long term relationships between lenders and borrowers can be a conduit for crucial information that helps the brain function, but they can also atrophy the ability to judge creditworthiness.

restructuring of non-banking sectors to include the introduction of a new governance system, and separation of ownership between industrial conglomerates and financial conglomerates; c) accelerated restructuring of heavily indebted corporations; d) further improvements in accounting, auditing and financial disclosure; e) gradual reduction of the budget deficit by tax reform and by issuing fewer bonds to keep the budget deficit below 2.5 percent of GDP, and f) modernization of the insolvency system.

During the past four years, Korea's conglomerates have undertaken a far-reaching restructuring program in terms of debt reductions, downsizing, elimination of inter-unit debt guarantees, asset sales, recapitalization and foreign capital attraction. These efforts clearly suggest that subsidiary companies of *chaebols* should become independent viable business units. An unexpected and exuberant KOSDAQ venture market during the reform period is signaling some important changes in the *chaebol*-dominated economic structure. The advent of e-commerce and related knowledge-based economy is also making a clear impact. With a newly emerging financial sector as the "brain" of a well-functioning market economy, Korea should be able to search for a new growth engine from newly born and viable *chaebols,* SMEs and venture businesses and succeed in establishing a sound knowledge-based economy.

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