Financial Reform in Korea: Unfinished Agenda

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Since the financial crisis in 1997, Korea has achieved many positive changes, ranging from stronger balance sheets of financial institutions to significant efficiency gains at the operational level. Despite the marked changes, however, much work still remains ahead for Korea's financial system. This paper reflects upon what has transpired since the containment of the crisis and further discusses emerging issues. Prudence in lending policy exercised by financial institutions should be further improved. Although they are not likely to develop into a systemic risk, corrective actions must be taken on structural problems such as excessive debts carried by households and small and medium-sized enterprises. Flow of funds should be normalized by revitalizing long-term capital market.

Keywords: Financial reform, Bank, Policy

JEL Classification: G18, G21, O16

I. Overview

As in other East Asian countries, the immediate causes of the Korean financial crisis in late 1997 were the sudden outflows of short-term capital and a weak economic system. Thanks to the foreign debt rescheduling and many swift reform efforts, however, Korea pulled through the worst phase of the crisis. Ever since, its external position has enormously improved and now remains strong. Meanwhile, by mobilizing large-scale public funds, the

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Korean Government cleaned up the balance sheets of financial institutions, the majority of which were commercial banks.

Fortunately, the Korean economy made its rebound earlier and stronger than many expected. By mid 1999, however, Daewoo, the then second largest business conglomerate, fell out. The culmination of this event was followed by a volatile financial market although the corporate sector outperformed expectations. By late 2000, the Government injected additional public funds into the financial sector, which initiated the second round of the financial sector restructuring.

To the many's surprise, Korea's financial sector has undergone drastic changes. Although it is often globally regarded exceptionally successful, financial reform in Korea is yet distant from its completion. Neither do the problems of SK Global in 2003 prove that restructuring in Korea is being rolled back. Rather, it would be fair to say that the Korean reform is now faced with more, if not greater, challenges, which will determine the sustainability of the corporate sector profitability, and thereby the long-term economic growth.

The purposes of this study are to examine Korea's experiences throughout its financial reform and discuss current, and emerging, major issues of its financial system. The background of the 1997 financial crisis, including its nature and financial reform measures, is provided in Section II. The main changes thereafter in the financial system are considered in Section III. Whereas issues critical for the system are identified to discuss their implications in Section IV, and the remaining tasks for the financial sector are discussed in Section V.

II. Background of the 1997 Financial Crisis

A. Nature of the Crisis

The more imminent cause of the crisis than the sudden outflows of short-term capital was the near depletion of the foreign currency reserve. The latent structure of the crisis owes to more fundamental factors, however. In fact, the origin of the crisis in the domestic context may be found in the long-standing structural weaknesses of the Korean economy, while the exogenous effects from the Southeast Asian crisis are worthy to recognize.

Korea was ill prepared for the challenges in the global economic environment, while falling behind the rapid pace of the globalization process. For instance, its excessive exposure to the short-term external debts made it particularly vulnerable to cyclical shocks as well as changes in market expectations. Even worse, Korea's economy has long been plagued by the pervasive moral hazard problems, as a part of which financial institutions indulged in questionable lending practices. For every reckless lender, there was also a reckless borrower, nonetheless.

Chaebols, or family owned conglomerates, pursued highly leveraged business expansion, playing their fate with the so-called "too-big-to-fail" myth. Consequently, the corporate sector suffered from heavy debts and substantial losses in investment. Naturally, this progress culminated in the staggering accumulation of non-performing loans in the financial sector and the erosion of capital base in financial institutions.

Most notably, however, a string of large corporate insolvencies and the consequent hail of bad loans had threatened the health of the financial system. Chaebol bankruptcies starting with Hanbo, Sammi, Jinro, Haitai and Kia Groups began in early 1997. One immediate impact was the steep loss of the investors' confidence. Consequently, between September and November 1997, abrupt outflows of the short term foreign portfolio investments triggered the massive capital flight and currency tumble. For instance, Korean won had plunged by 27.5 percent against the U.S. dollar in November 1997 and lost 40.3 percent of its value from the preceding year in December 1997.

In essence, Korea's crisis was not caused only from within the banking sector, but was far more complicated by inherent problems in the overall economic structure, which the Government took initiatives to reform. Overcoming the crisis, therefore, was a natural consequence of resolving excess production in the corporate sector and normalizing the financial sector with a view to accomplish the efficient allocation of financial resources available.

B. Crisis Management

In late 1997, the Korean Government's urgent task was to resolve the foreign liquidity crisis with large support from the international community, including the IMF's provision of the Supplemental Reserve Facilities, successful negotiations for the short term debt maturity extension in March 1998, and the issuance of USD 4 billion of sovereign bonds in April 1998.

By relying on the IMF's prescriptions in the early stage of the crisis, the Korean Government restrained expenditure to allow high interest rates and the Korean won to depreciate. The focus of the prescriptions was restraining the corporate investment demand, which controlled the current balance and retained foreign liquidity. Facing the imminency of system collapse, furthermore, such programs as blanket deposit insurance, foreign debt guarantees, and relief loans were introduced to recover confidence in the market.

Because the crisis was rooted in the structural weaknesses of the economy, government policies were not only limited to easing the foreign liquidity crunch, but also were multi directional to address the weaknesses properly. As the financial sector restructuring followed, insolvent financial institutions were reorganized through purchase and assumption (P&A) transactions or mergers in view of their bad assets. Public funds were injected to resolve the non-performing loans and increase the capital of financial institutions.

Following the first round of the financial sector restructuring in September 1998, the Government launched a full-blown economic recovery measure through stimulation. For instance, the flexible money supply and interest rate cuts were carried out to boost the domestic demand, ease the credit crunch, and prevent further erosion of the industrial base.

Due to the prompt government actions, together with the repletion of foreign reserve under a favorable external environment, the economy made its rebound earlier and stronger than generally expected. In fact, the recovery process in Korea has followed the classic "V-shape" until recently. The economy recovered at an increasing pace after hitting the floor in the third quarter of 1998. During the next two consecutive years in 1999 and 2000, Korea has enjoyed a solid growth.

a) Priority of the Government Policy

In the early stage of the restructuring, there was a much heated debate over the sequence of restructuring. It was argued by some that the financial sector restructuring had to precede because restructuring the corporate sector could only be effective when carried out through healthy financial institutions. However, the health of financial institutions and the profitability of corporations are the two sides of the same coin. In other words, the former can be accomplished only if the latter is accomplished, and vice versa. Consequently, Korea simultaneously pursued financial and corporate sector restructuring. In more real terms, restructuring the financial sector and financially weak corporations had to be accomplished through the lead participation of their main creditor banks. The origin of this scheme may be found in the so-called London Approach, once employed by the United Kingdom.

b) Financial Sector Restructuring

(1) First Round

The first round of the financial restructuring focused on easing the capital crunch in the corporate sector and restoring the functional system in response to the economic crisis since the end of 1997. Upon facing the danger of systemic collapse, the Korean Government had to mobilize a large amount of public funds to first stabilize and then to rehabilitate the system. Rather than concealing the problems, the Government realistically recognized losses from the loans extended to the corporate sector with assistances from the IMF, World Bank and international accounting firms.

In April 1998, the Government established the financial restructuring plan with the aim to stabilize the financial system and improve soundness and efficiency of the financial institutions. One of the main pillars of financial restructuring was to support viable financial institutions by cleaning up their bad loans and recapitalization. Another goal was to exit non-viable financial institutions from the market as soon as possible. Resolving insolvent financial institutions was the main target of the restructuring during this period.

Under the restructuring framework, internationally recognized accounting firms were commissioned to perform diagnostic reviews on financial institutions to evaluate their viability. Based on the reviews, non-viable financial institutions were liquidated and viable ones were provided with support to undergo a prompt normalization process. Consequently, the Government shut down five commercial banks, whose assets were subsequently transferred to other healthy ones. After the initial stage of the reform, financial institutions made self-rescue efforts to regain their soundness and strengthen their businesses. For instance, they sought to merge with other banks, attracted foreign capital, downsized manpower, and issued new stocks to increase their equity capital.

For normalizing the system, the Government's aggregate fiscal support has been around KRW 109.6 trillion won, or about USD 87 billion. Approved by the Korean National Assembly in 1998, most of these funds came through bond issuances by two entities – the Korea Asset Management Corporation, or KAMCO, and the Korea Deposit Insurance Corporation, or KDIC. Of the total of KRW 64 trillion, which was mobilized in May, 1998, KRW 20.5 trillion was expended by KAMCO to purchase non-performing loans (NPLs), and KRW 43.5 trillion by KDIC for recapitalization and guaranteed deposit repayments. KAMCO recycled KRW 18.4 trillion of its assets in 1999 and 2000 combined. Aside from that, other resources, as much as KRW 27 trillion, were procured and used by issuing government bonds and selling state-owned shares.

Korea's progress has been quite dramatic in view of the changes made with the financial institutions. With the injection of public funds, a substantial amount of bank assets have now been managed by nationalized banks. While the worst performing five banks were liquidated, the Government demonstrated its commitment to opening the market to foreigners for market participation through the sale of Korea First Bank to the American Newbridge Capital in 1999.[1]

Throughout the entire restructuring process, the principle underlying the Government's support has been the pledge of self-rescue efforts by the financial institutions themselves. This pledge bound financial institutions to make their utmost efforts on loss sharing and downsizing, the implementation of which has been closely monitored by the Financial Supervisory Commission, or the FSC. The banks' cost saving efforts can be affirmed by the industry wide 35.6 percent reduction in the number of employees during a single year after the crisis, and the closure of 1,200 branch offices. As a result, bank assets per employee have sharply increased by almost 50 percent over the subsequent three years.

[1]Koram Bank and Korea Exchange Bank were also sold later to Citigroup and Lone Star Fund, respectively.

The FSC provided a similar treatment as to the restructuring of non-bank financial institutions. Insolvent merchant banks were closed and incorporated into Hanareum Merchant Bank, a bridge merchant bank. Self-rehabilitation measures under the initiative of major shareholders have been implemented, with the FSC closely monitoring the progress. The institutions whose self-rehabilitation measures proved inadequate were subject to either corrective actions or closure.

(2) Second Round

Throughout 1998, the Government focused on balance sheet restructuring, such as the disposal of bad loans and recapitalization. From the end of 1998, its focus seemed to be shifted toward improving elements at the operational level, such as corporate governance and credit risk management. When Daewoo fell out in 1999, however, Korea's financial system was hit hard once again. Fund flows had been seriously skewed, as the liquidity within the capital markets dried up and a significant amount of cash was withdrawn from the investment trust companies. Such fund flows in turn imperiled corporations that had come to depend on the issuance of debentures.

Private market participants were not capable of resolving these problems, which made the funding of additional public money inevitable. Additionally, asset classification standards were strictly applied against the banks' bad assets, resulting in the need for more infusion of public funds. In order to raise KRW 40 trillion of additional funds, the Korean Government obtained approval from the National Assembly in December 2000, when the second round of the financial sector restructuring was launched. The funds raised were used to, first, recapitalize ailing banks to improve their BIS ratios; shore up capital of Seoul Guaranty Corporation to honor guarantees for Daewoo Group and non-Daewoo workout companies; and inject capital to meet any shortfall for the additional sales of non-performing loans.

Launched in September 2000, the goals of the second round of the restructuring included establishing a government assisted bank holding company and improving global competitiveness. It is noteworthy that in the second round, the Government not only cleaned up the banks' balance sheets, but also successfully accomplished bank consolidation. Potentially undercapitalized banks, *i.e.*, Chohung Bank, Hanvit Bank, KEB, and Seoul Bank, presented their rehabilitation plans to the authorities. These plans were scrutinized by the Bank Management Evaluation Committee.

The banks deemed to be viable, such as Korea Exchange Bank and Chohung Bank, were allowed to implement their own normalization plans. Other severely undercapitalized banks, including Hanvit Bank, Peace Bank, Kwangju Bank, and Kyungnam Bank, however, were recapitalized with public funds and placed under the control of a financial holding company as subsidiaries. As a result, Woori Financial Holding Company was established in March 2001. Also, the second and third largest banks, Kookmin Bank and Housing and Commercial Bank, merged in 2001 to create the new Kookmin Bank, the nation's largest bank.

c) Corporate Sector Restructuring

Along with the financial sector restructuring, the restructuring of corporate borrowers' balance sheets proceeded. Basically, major creditor institutions have taken the leading role in implementing corporate restructuring policies. They have undertaken fair loss sharing practices by requiring corporations to bear restructuring costs. Meanwhile, the Government's role has only been limited to providing guidelines for a well-functioning mechanism.

Initially developed by the Government were the five tasks to foster the corporate restructuring process: (1) enhance the transparency of corporate governance, (2) overhaul cross debt guarantees and unfair transactions by and among Chaebol affiliates, (3) improve business capital structures, (4) encourage businesses to focus on core competencies, and (5) strengthen the accountability of major shareholders and top management.

In retrospect, the so called "workout scheme" may be said to have been a mechanism most significant in connection with the corporate sector. In view of the corporate bankruptcies following one after another, and creditor institutions seeking to collect debts beyond need, the Government helped creditors to reach cooperative agreements. While injecting public funds into financial institutions to resolve non performing loans and improve their capital base, the Government had provided an effective basis for them to maximize on recovering loans of the greatest default potential under a cooperative framework, and for them to take actions for enhancing financial structures of the ailing Chaebols.

In early 1998, the FSC developed basic principles and operating procedures of the workouts, by drawing the benefits from the British example of the early 1990s, further requiring creditor institutions to classify the top 64 corporates into "normal," "viable," and "non viable." In June 1998, most financial institutions including all banks entered into the Corporate Restructuring Agreement, thereby initiating efforts to improve the problematic corporates' capital structures. This Agreement had played an important role providing guidelines on workouts prior to the Corporate Restructuring Promotion Act entering into effect in 2001.

Resulting from the creditors' collective efforts included the fate of 55 businesses decided in 1998, 22 businesses including 12 Daewoo affiliates in 1999, and 6 in 2000, amounting to as much as KRW 104 trillion of corporate debts, with their capital structures improved. Not that any legal procedures did not exist, but because the number of insolvent businesses and their liabilities outweighed the courts' capacity, workout scheme based upon the creditors' voluntary, mutual consultations and decisions proved more pragmatic and effective.[2]

In addition to restructuring their balance sheets, corporations have been encouraged to establish and focus on strengthening their core competencies by resolving their overcapacity problems and selling non-core assets and affiliates. Consolidated financial statements in compliance with international accounting standards began to phase in starting last year. To build transparent management systems, dogmatic owner-management has been checked internally and externally. Rights and responsibilities of outside directors were enhanced while the requirements of cumulative voting were eased. In addition, class action lawsuits will be gradually introduced. Finally, businessmen and accountants committing accounting frauds or who are found responsible for the insolvency of their companies may face criminal prosecution. With these and other developments, we can reasonably come to a conclusion that the restructuring efforts made to date by the corporate sector are commendable.

d) Regulatory Reform

In the past, the financial sector was utilized as a policy

[2]See Kim (2002) on the analysis of workout outcome.

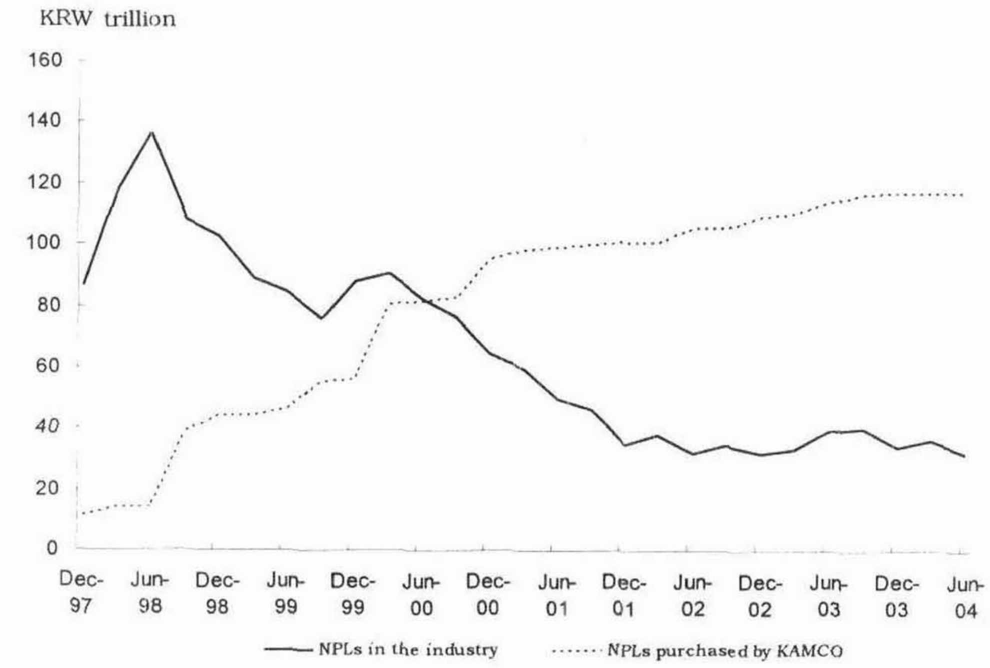
instrument to reinforce the real economy. For instance, direct allocation of capital, manipulation of monetary policy, and regulation of business prevailed. Due to the Financial Liberalization and Globalization in the 1980s, direct regulations toward the financial institutions were somewhat relaxed. In the 1990s, the authorities sought to implement deregulatory measures. However, the authorities failed to implement deregulatory measures due to various circumstances.

While many regulatory burdens were lifted to stimulate competition in the market and to guarantee the autonomy of financial institutions, other standards of soundness and transparency were further strengthened.

From a supervisory standpoint, a more significant change than others would be valuating the assets of financial institutions on a realistic basis and recognizing the resulting losses. For instance, loan classification and provisioning standards have been strengthened, while securities are marked to market. Furthermore, forward looking criteria reviewing debtor's servicing capability in addition to the past transaction history were adopted since June 2000. Securities held by financial institutions were pragmatically valuated, and a significant portion of the risks resulting from the securities held by investment trust companies were relayed to investors, thereby effectively securing the financial system against changes arising from within the securities market. Particularly, by improving a system in connection with the money market funds (MMFs) that once risked the system as in the SK Global and credit card crises in 2003, each individual risk has been diffused before they combined would risk the entire system.

III. Major Changes After the Crisis

Since the initial focus of the financial reform in Korea was placed on restructuring of balance sheets of banks, major changes are easily found in that area. Another integral part of the reform is the rebirth of financial institutions as genuinely profit pursuing entities, free from any government intervention and the burden of having to support real economic sectors.



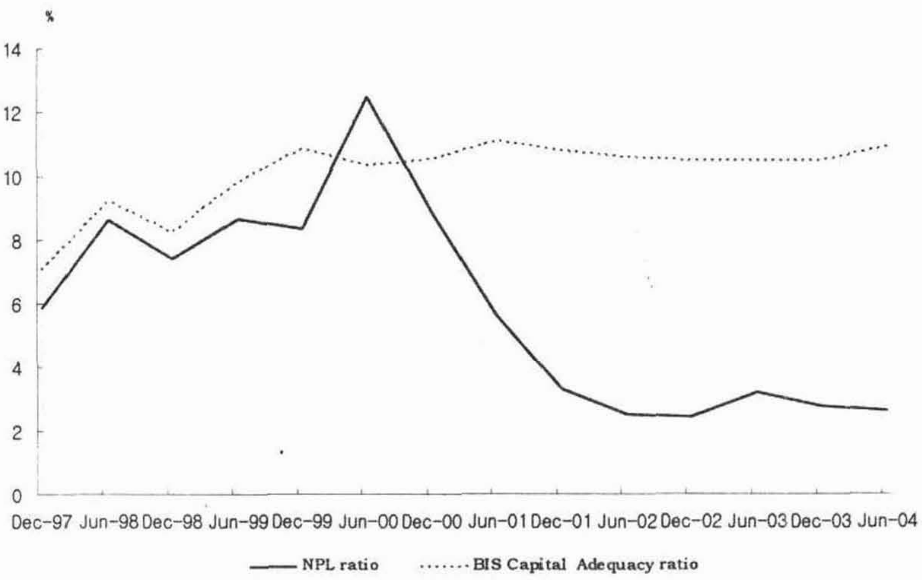
Source: Financial Supervisory Service, Bank of Korea.

FIGURE 1
NON-PERFORMING LOANS

A. Improvement in Asset Quality and Profitability

The success of the financial reform is easily found in the improved asset quality, profitability, and productivity of the financial sector as a whole.

First, a significant amount of the bad assets accumulated within the financial industry were promptly resolved. As Figure 1 illustrates, the combined and continuing efforts by the Government and the financial sector made this result possible. Although the loans classified as substandard and below by the Government as of June 1998 amounted to KRW 136 trillion, they were reduced to KRW 32 trillion as of June 2004. The largest cause of such a significant reduction was the Government's large scale purchase of non performing loans via the Korea Asset Management Corporation, or KAMCO. Consequently, resolution of the NPLs helped to stabilize the financial system and contribute towards a sustainable growth of the real economy.



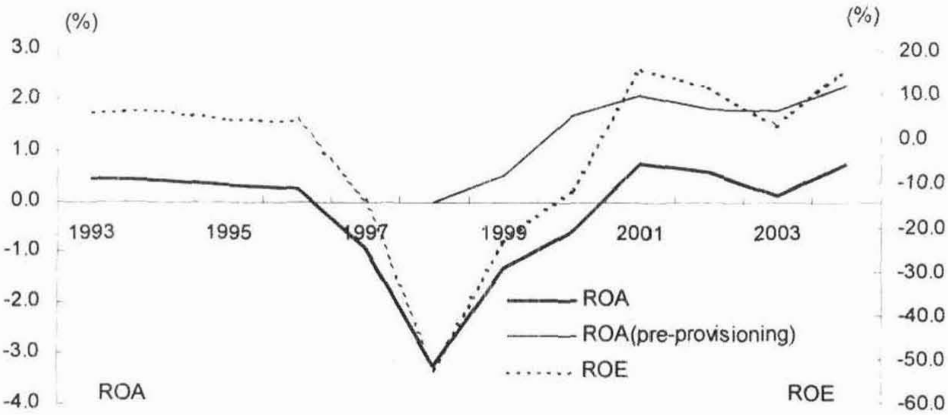
Note: NPLs were defined non accruing loans until 1999 and thereafter, as substandard and below.
Source: Financial Supervisory Service.

FIGURE 2

NPL RATIO AND CAPITAL ADEQUACY OF COMMERCIAL BANKS

In conjunction with the NPL resolution, furthermore, efforts were made by financial institutions to enhance their capital base. Immediately following the financial crisis, their profitability and earnings capability were further enhanced by the Government's recapitalization initiatives via KAMCO. As far as commercial banks are concerned, their average BIS improved to 10.45% by 2003, a big jump from end-1997 when many banks' capital was technically wiped out.

With asset quality improved, financial institutions' profitability has been enhanced. Figure 3 illustrates changes in the commercial banks' profitability before and after the financial crisis. The banks' profitability assessed by ROA and ROE rebounded since 1998 after hitting the lowest point. Between 2002 and 2003, their profitability had been challenged by the deterioration of their asset quality, especially in the household sector; however, improvements have been seen since early 2004. Whether it may overcome the 1% hurdle, and whether it could demonstrate the sustainability desired



Source: Financial Supervisory Service.

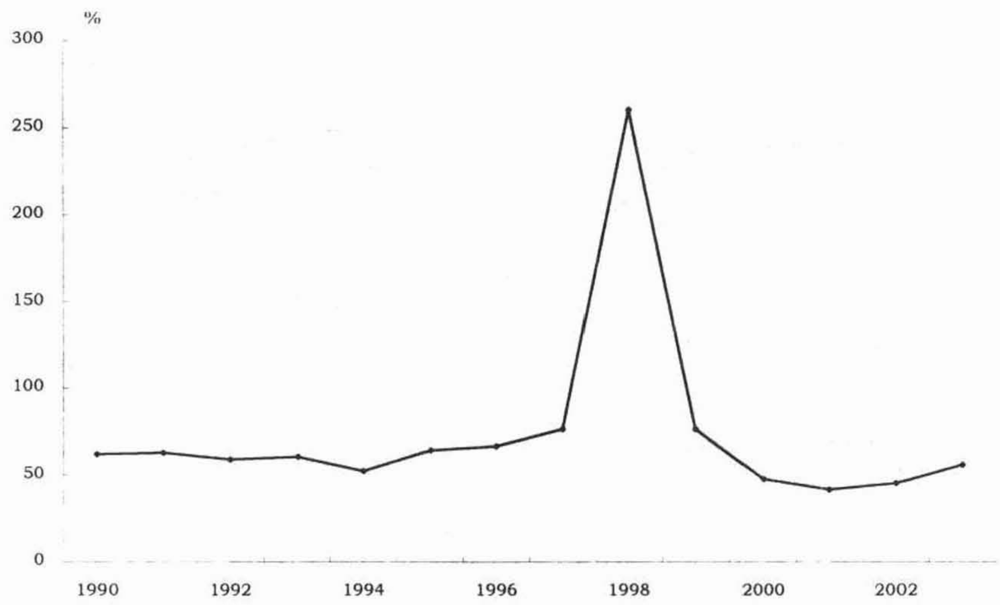
FIGURE 3
PROFITABILITY OF COMMERCIAL BANKS

after overcoming that hurdle, has become an issue of significance; nonetheless, it is not feasible to deny that it will continue to improve. Taking pre-provisioning profits into account, the consistently improving trends are identifiable.

B. Enhanced Efficiency

Provided that public funds were injected, requiring downsizing of the branch network and manpower, financial institutions have significantly improved productivity and cost efficiency as a result. The banks' entrenched management behaviors and increased productivity are easily identifiable through the efficiency ratio.[3] Figure 4 illustrates steep declining of the operating income during 1998; however, the efficiency ratio since 1999 has declined. In a way, 45.9 percent of the ratio speaks for how the Korean banks are competitive even against the banks in the U.S., the U.K., and other advanced economies. One caveat admitted, however, is the difficulty entailed in directly comparing the Korean banks to the others, given that the latter invest more heavily in the information technology. Moreover, that the efficiency ratio in 2001 was 41.5

[3]Efficiency ratio is operating expenses divided by the sum of net interest income and non interest income.



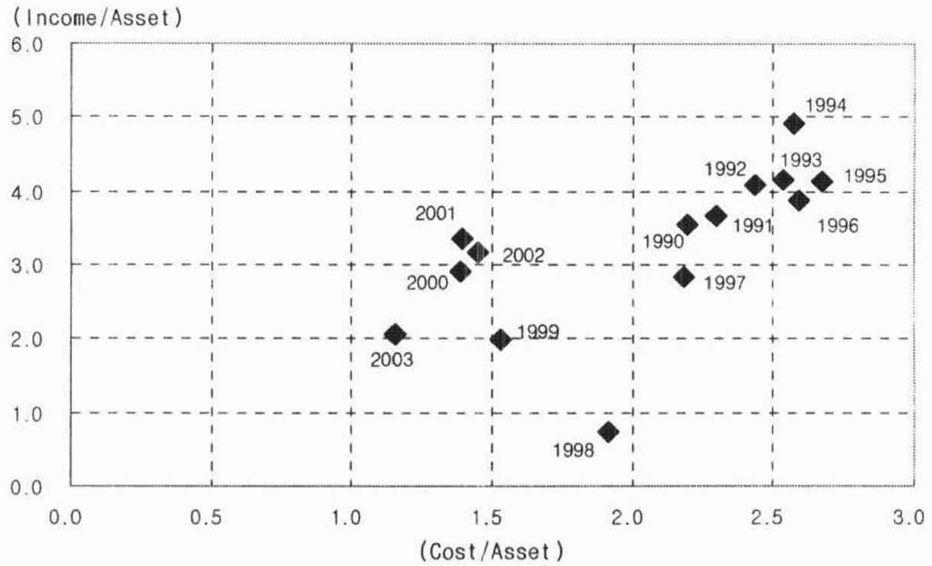
Source: Financial Supervisory Service.

FIGURE 4
EFFICIENCY RATIO

percent implies that there is not much room to improve efficiency within the Korean banks.

It is clear, however, that the Korean banks have improved efficiency following the crisis. What is apparent has been further looked into by breaking down the efficiency ratio into the return on asset and the cost to asset ratio, because focusing upon any of the cost as the numerator and the income as the denominator would yield improvement. Figure 5 illustrates the cost to income ratio by looking at income/assets on the vertical axis and cost/assets on the horizontal axis. The dots represent the years over the period. Due to the costs reduced and enhanced operating income, trends after the crisis are distinguished from those before the crisis.

In the course of the reform in both the corporate and financial sectors, accountability has been seated into management performance. Roles articulated and assigned among the board of directors and management, and management improvement agreements reached for assessing the performance of the management leading



Source: Financial Supervisory Service.

FIGURE 5

DE-COMPOSITION OF EFFICIENCY RATIO

state owned banks, are some of the examples of how systemic improvements were achieved. It is noteworthy, in particular, that Korean banks have developed such governance structure as to meet global standards by comprising board of directors with outside directors and instituting audit committees within. Performance based culture has also made its way into the business environment since the late 1990s with the entries made by foreign financial institutions into the Korean market, followed by the increasingly vitalized participation of foreign specialists in bank management.

Moreover, as the significance of the risks and profitability has continuously been emphasized from the management perspective, internal control underpinned by performance indices emerged as a priority. With the guidelines on best practices developed on risk management as per each financial sub sector, the participants have been able to pursue innovations of their own. There are numerous developments under way, such as improving credit evaluation model, building examiners' council, enhancing loan review system, and renovating other such infrastructures as information technology system and manpower.

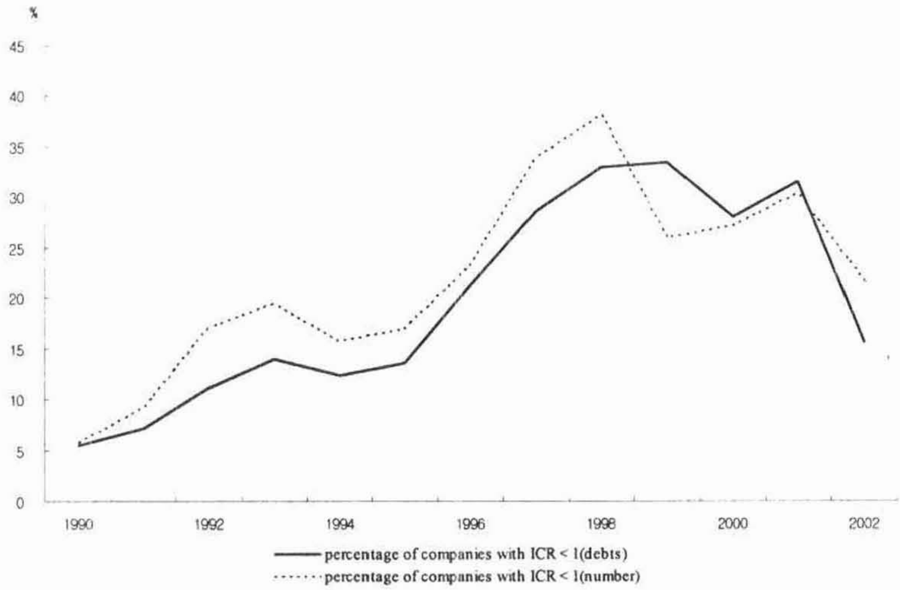
C. Changes in Corporate Sector

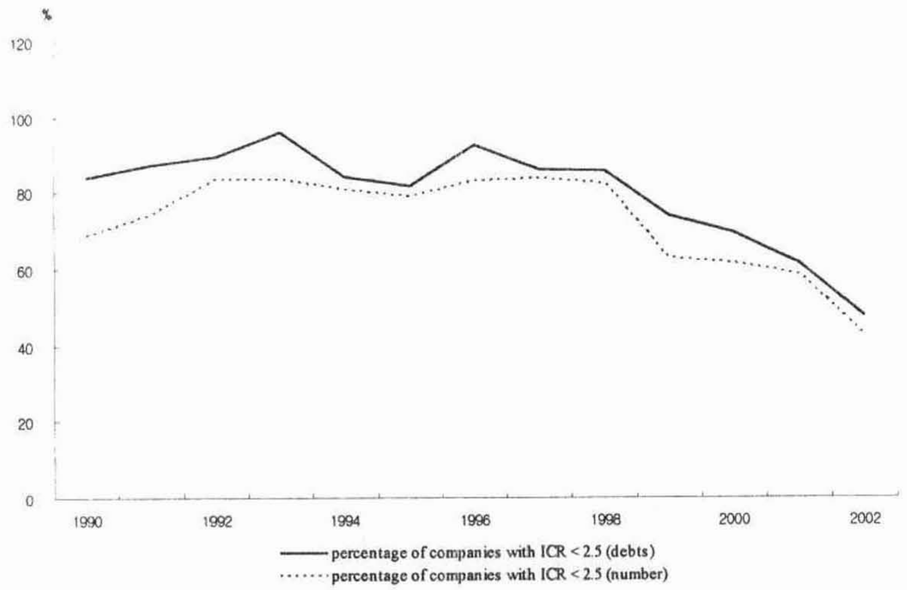
There have been also significant changes on the parts of corporate borrowers. A scrutiny of the corporates financial condition done by Lee and Kwon (2003) particularly of those listed on the Korea Stock Exchange, shows indications of improvement in their capital structure. By the standards of their creditor banks, however, corporate borrowers' financial stability is yet to be seen. While improvement in corporate profitability is mainly attributable to low interest rates and reduced debt, operating activity and volume expansion remain restricted. In this light, it is not easy to have full confidence over their profitability at least for the near term.

Moreover, the corporates debt servicing capability has been polarized, while the stratum of those with lower profitability and debt servicing capability continues to claim a higher proportion. According to Lee and Kwon, the listed companies whose EBIT-interest coverage is less than 1 peaked in their proportion in 1998 and demonstrated recovery somewhat thereafter. In the first half of 2002, by the number of listed companies, it went down to 14.9 percent and, by the proportion of borrowings, 9.3 percent. On the other hand, because the average interest coverage ratio of the corporates rated BB, or the lowest rating of those qualified for investment grade, is 2.3 in the United States, credit risks yet remain high with the corporates. Equally significant were the average interest coverage ratio enhanced in the first half of 2002 to less than 2.5, and the weight of the corporates in number and borrowing size, up to 40 percent.

The top 25 percent corporate group accomplished an astounding level of improvement since the crisis, followed by that of the subsequent 25 percent group. Conversely, however, the top 50 to 75 percent group accomplished a sheer average improvement, whereas the lowest 25 percent, minimal in 1999. Eventually, the EBIT interest coverage ratio turned negative. Those corporates are distinguished from among themselves in terms of the debt servicing capability affects the banks' policies on corporate exposure.

It is also widely known that the corporates' financing demand, including internal funding, has significantly declined since the financial crisis. Their demand has mostly been covered by utilizing what they had internally accumulated, the same which would

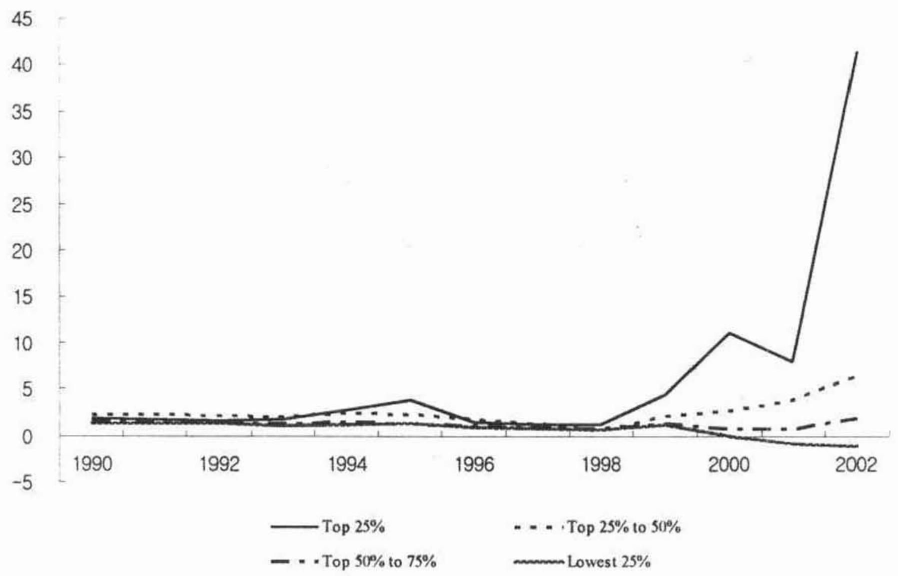




Source: Lee and Kwon (2003).

FIGURE 6

LISTED COMPANIES WITH INTEREST COVERAGE < 1 (2.5)



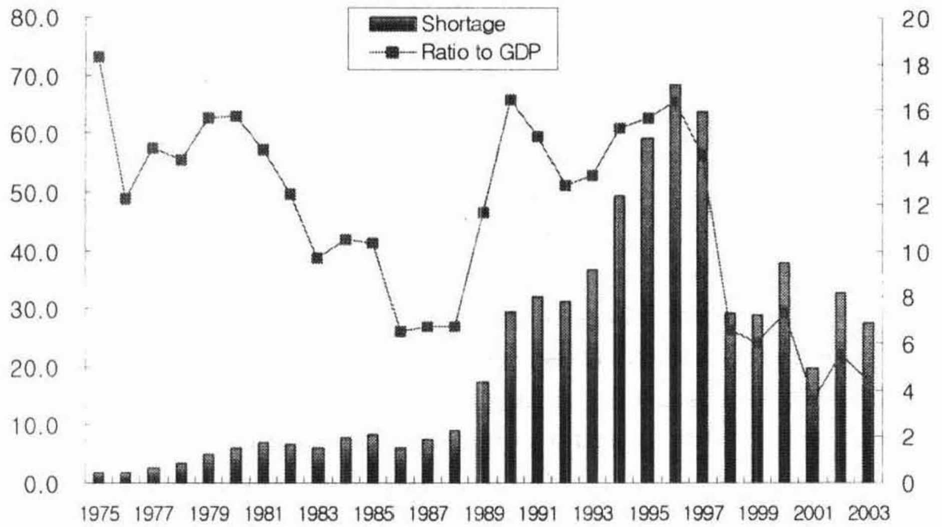
Source: Lee and Kwon (2003).

FIGURE 7
INTEREST COVERAGE COMPARISON

correspond to subtracting changes in their financial assets from changes in their financial liabilities.[2] According to the Bank of Korea's cashflow accounts, the shortage of the corporate funding as illustrated by Figure 8 since 1980, had reached its apex both in absolute and relative economic terms. Its scale and economic proportion had rapidly declined and so continued since 1998.[4]

There were occasions where the proportion of the corporates' funding shortage to the entire economy steeply declined even prior to the financial crisis. For instance, in the late 1970s and 1980s, this was the case and at which time, the economic growth rate was rather greater than the rate of change in the shortage. In the aftermath of the crisis, however, the absolute size of the shortage

[4]In absolute terms, the corporates' investment shortages differ from their funding shortage. Where the corporates' financing demand and capital supply are adjusted via appropriate pricing mechanism, the corporates consequently borrow a certain size of funds, the resultive figures of which show in the corporates' funding shortages.



Source: Bank of Korea.

FIGURE 8
TRENDS IN CORPORATES' FUND SHORTAGES

has significantly been reduced and the economic growth rate demonstrated lesser momentum. In other words, the rate of growth for the corporates' financing demand by large has declined after the crisis and the GDP growth rate returned to an appropriate level, thereby implicating possibilities of the Korean economy entering into a low growth pattern.

It is not easy to pin down exactly by how much the corporates' financing demand will recover. However, it is deducible that, from the rapidly declining investment demand from within the restructuring process, and the recessions taking place since 2000, the corporates' financing demand subsided. Even without taking the economic cycle factor into account, nevertheless, it is unlikely that the demand will soar as in the pre crisis period. Instead, the corporates would shift towards pursuing profitability centric management rather than external expansion, and financial institutions would undertake stricter reviews of debtors' servicing capability and their business feasibility.

Perhaps the most likely factor in deciding what the future demand for corporate financing will be, would be the demand for facilities investment. The greater the corporates' investment demand, the greater would be their financing demand. Even of their investment demand, facilities investment will play to be the largest variable. Until recently, corporates have significantly been prudent in making facilities investment, as a consequence of which they have rapidly reduced their financing demand.

There are only a few studies undertaken on whether there were structural changes in the Korean businesses' investing patterns. Even so, their length of observation is not long and, since the economic cycle factor plays a greater part, it is not easy to reach a quick conclusion. With these restraints in mind, Song (2002) is notable. In this research, he argues that the coporates' investment decisions were made based upon profitability and financial stability focused upon growth. Reflected by the coporates' increased sensitivity towards operating profits, liability ratio, and interest coverage ratio, is their recognition of the greater importance for profitability, stability, and debt servicing capability than growth potential.

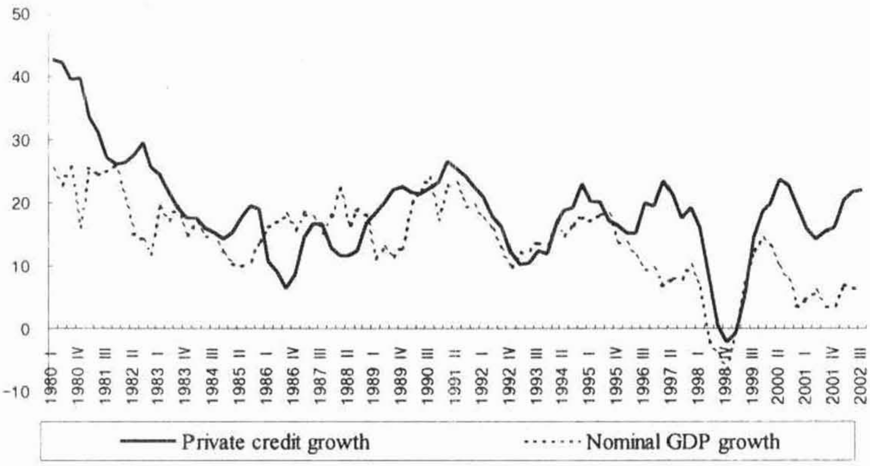
IV. New Frontiers of Reform

As discussed in the previous sections, much has improved with the Korean financial system. Despite these marked changes in the financial industry and markets, however, much work still remains ahead for Korea's financial service industry and the system as a whole to be globally competitive. This section addresses various issues, especially ones newly emerging after the containment of the 1997 crisis.

A. Prudence in Lending Policy

Since the financial crisis had primarily resulted from the lending institutions' imprudence in their lending policy, the prudence in their lending policy would be most important for the sound development of the financial industry. The rate of growth in the bank loans after the crisis has been modest, as easily identifiable in a simple illustration. Before the crisis, the rate of growth in the loans superseded that of GDP; however, it is now the opposite.

A Granger Causality test was used to ascertain the causal relationship between the lending policy and the rate of economic



Source: Bank of Korea.

FIGURE 9
CREDIT EXPANSION AND GDP GROWTH

growth with more precision. First, from applying the test against the period running from 1980 to 1996 prior to the financial crisis, we discovered that the rate of growth in private loans caused the rate of economic growth. We rejected the null hypothesis at a 5 percent level of significance, but could not do so in the opposite direction. During the same period, it was apparent that financial institutions tended to increase their loans for the economic growth, while there were numerous financial policies reflective of the Government intents.

Meanwhile, for the 1997 to 2002 period, the test proved conversely, that the economic growth rate caused the rate of growth in private loans. We were unable to reject the null hypothesis that the rate of growth in private loans at a 5 percent level of significance does not cause the economic growth rate. All in all, it might be said that in the aftermath of the financial crisis, the patterns in which the financial sector aiding the growth of real economy significantly were reduced, and the financial institutions' lending policy became more prudent.

Some could argue that the post-crisis 'boom and bust' episode associated with the credit card business proves the Korean banks' inability to properly handle risk management. Although it would be

TABLE 1
GRANGER CAUSALITY TEST FOR GDP GROWTH AND CREDIT GROWTH

Period	Null Hypothesis	F-statistics (p-value)
1980-1996	GDP Growth $\nrightarrow$ Credit Growth	0.29 (0.59)
	GDP Growth $\nleftarrow$ Credit Growth	4.24 (0.04)
1997-2002	GDP Growth $\nrightarrow$ Credit Growth	10.58 (0.01)
	GDP Growth $\nleftarrow$ Credit Growth	3.63 (0.07)
1980-2002	GDP Growth $\nrightarrow$ Credit Growth	2.74 (0.10)
	GDP Growth $\nleftarrow$ Credit Growth	0.03 (0.87)

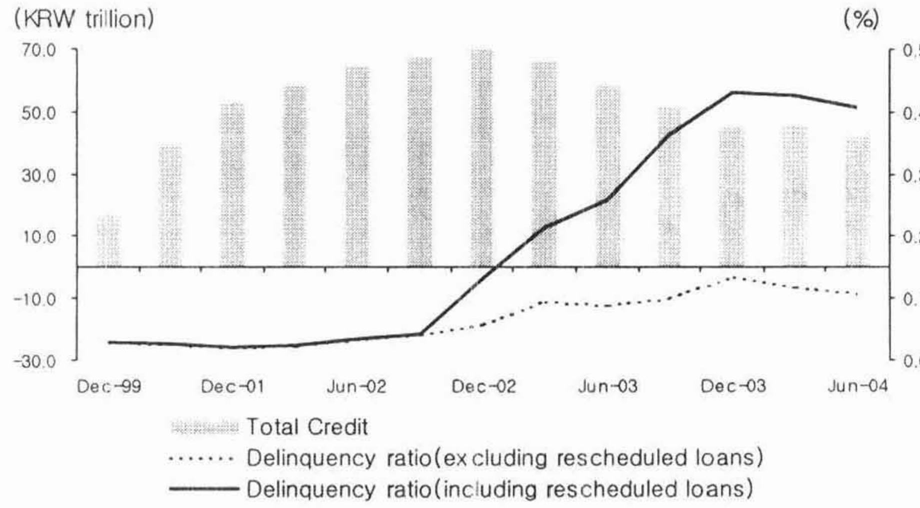
difficult to deny it by its entirety, it must be noted that numerous systemic changes and improvements have been made to prevent recurrence of such problems. The Government, regulators, and banks all together have made significant strides since the financial crisis to reduce the financial institutions' credit risks and improve their corporate governance.

B. Properties of Stability

Following the consideration of the banks' lending policy, it would be worthwhile to review the quality of the banks' assets in loans in view of the financial system's stability.

a) Consumer Loans

Asset qualities of the Korean banks in the aftermath of the crisis were aggravated by the corporate loan delinquency. Conversely, they were adversely affected by the consumer loan delinquency since 2002. The largest problem faced was caused by the overly spending behavior of the lower income bracket and younger generations. Restricted from having financial access in the past, they spent beyond their income with credit cards. Assuming the re-aged assets are all delinquent, and the ABS divested of are written in the book, the amended delinquency ratio would exceed 40 percent. Since the newly delinquent are less, the worst phase of the delinquency situation would likely be over during the year. Meanwhile, the mono-line credit card issuers were helped to stabilize by the Government and their creditors.

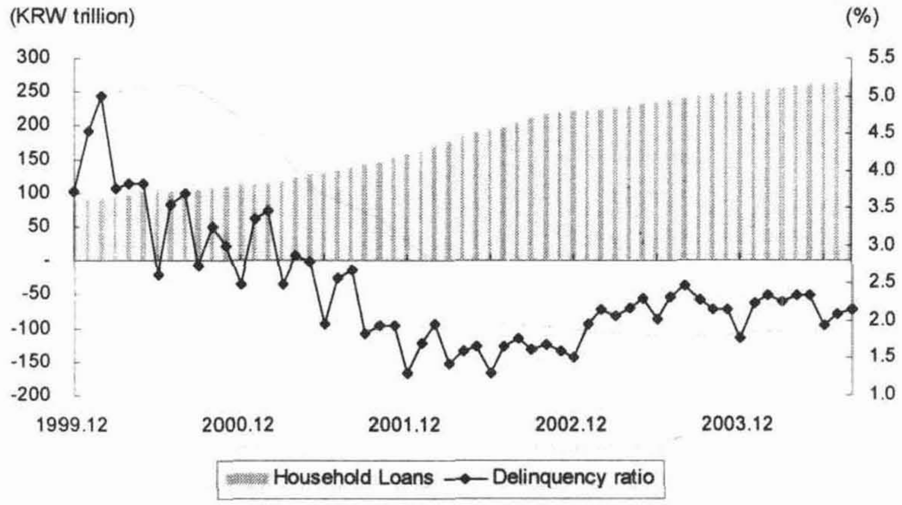


Source: Financial Supervisory Service.

FIGURE 10
CREDIT CARD BUBBLE

After the consumer loan delinquency spread over to the household credit and home equity loans, the banks were hit hard as manifested over the past few years. Given KRW 269.1 trillion of the banks' collateralized loans, and KRW 30.2 trillion of the non banks' lending assets, including those extended by savings banks and insurance companies, comprising 21.2% of the total assets within the financial industry as a whole at the end of Jun 2004, steep depreciation of the real estate property values may significantly affect the asset quality of the entire financial businesses. According to the Bank of Korea, Korean households as of 2001 have in their possession approximately 83% of their assets in residential properties, including *chonse*[5] deposits. In effect, the shorter the maturity term, and the earlier the depreciation of real estate property values take place. A deluge of available properties for sale will result, thereby fueling a far much more aggressive

[5]In Korea, most residential property is leased via the chonse system, which essentially gives the landlord a large deposit of 50-70 percent of property value. The deposit is returned to the tenant upon expiration of the lease.



Source: Financial Supervisory Service.

FIGURE 11
HOUSEHOLD LOANS AND DELINQUENCY

depreciation of their values and, hence, aggravating the debtors' ability to pay back on a faster basis.

On the other hand, however, rapid appreciation of the real estate property values since 2000 has nonetheless been a global phenomenon due to low interest rates. With aggressive interest rate cuts immediately following the crisis in 1998, it would be difficult to assume that it was just a bubble effect of any significance. Moreover, given the low interest rates continuing, any rapid depreciation of the property values would be unwarranted. The 60 percent loan to value ratio the banks maintain is relatively respectable against those discovered within the advanced economies such as the United States and Europe. It is also unlikely that even 20% depreciation will have any grave effect upon the asset quality of financial businesses.

What is necessary, however, is extending the term of maturity due to the credit crunch potential arising from the concentration of short termed secured loans, maturing in 3 years or less. If mortgagors roll over their mortgage loans rather than repaying the principal, the debtors' debt servicing capabilities need to be improved. Although the banks' profitability on consumer loans is within a reach, the level of exposure non banks have, especially that of mutual savings and credit cooperatives, to the low income bracket will continue to affect their asset quality and profitability.

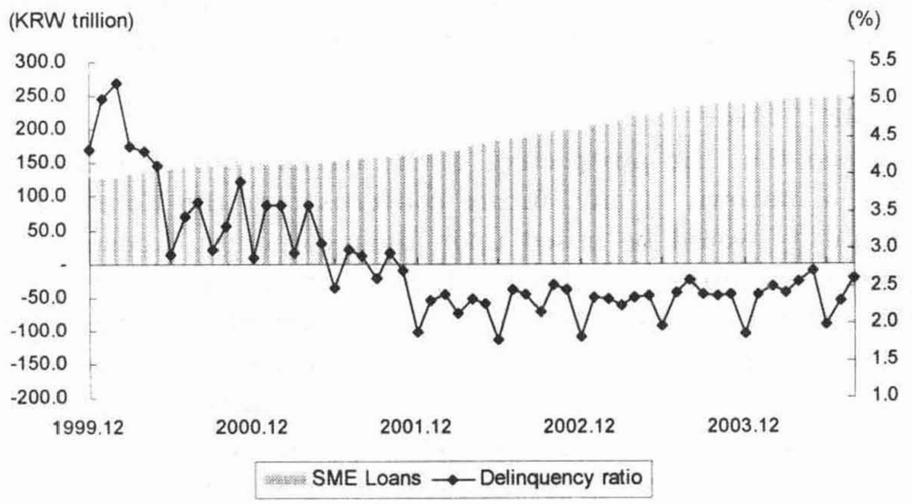
b) SME Loans

Provided that the prospecting of the banks' consumer loans has validity of its own, if any, future concerns over the Korean banks' asset quality would be based upon their corporate exposure. Large corporate exposures have been reduced to 10 percent or less of the banks' total exposures. In spite of the reduction, however, they continue to be potentially detrimental against creditor bank, as in the recent SK Global case. More worrisome than the large corporate exposures are the small and medium sized enterprise (SME) loans.

Even in 2002 when the fast growth of consumer loans started to lose its momentum, the SME loans increased by 22.6%, followed by 17.9% in 2003, thereby comprising 45.4% of the entire loan portfolio, equivalent to KRW 235 trillion, within the banking sector as of end 2003. In view of the continued slowdown of the national economy since 2002, sudden outgrowth of the SME loans may place a heavy burden upon the asset quality of financial businesses in the future. Statistically speaking, the delinquency ratio of the SME loans seems to have followed the GDP growth by a two-quarter lag. There is a potential that the recession continuing since 2003 may contribute toward increasing the delinquency ratio of the SME loans. While the SME loans have increasingly been extended to non-manufacturing businesses for domestic consumption, the continuing severe plight in domestic consumption would provide a basis to understand that the SME loan situation is less propitious than what might be suggested by the bank books.

Unlike the credit cards, however, approximately 50 percent of the SME loans are secured and the loan to value ratio remains at 45 percent. The loans extended to SMEs, whose cash flows and debt servicing capability are uncertain, would burden the banks on an incremental basis.[6] By the same token, Korean banks will continue to play a pivotal role in the corporate restructuring in progress.

[6]See the reports on corporate management periodically provided by the Bank of Korea.



Source: Financial Supervisory Service.

FIGURE 12
SME LOANS AND DELINQUENCY

Worthy of attention in connection with the restructuring of SMEs is the Government's role in providing credit guarantees. The scale of the guarantees provided against bankruptcies since the currency crisis has continued to grow even after the national economy has returned to its normal path. This essentially restricts an effective credit risk management in line with market principles, further to adversely affecting the restructuring of the SMEs. It is also clear that ever greening the businesses of least potential for survival via extending loan maturities and guarantees will only be restricting competition and will result in greater losses borne by financial institutions.

The provision of the SME related credit guarantees by the two government-owned credit guarantee funds,[7] grew from KRW 17 trillion in 1997 to approximately KRW 50 trillion by 2003. It is likely that the SMEs of lesser means to service their debts are surviving solely by relying upon the renewal of the guarantees by their guarantors to extend their loan maturities. For the banks,

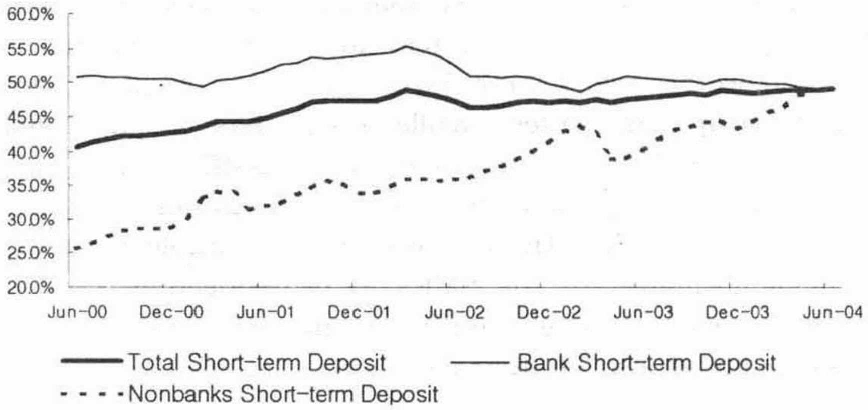
[7]Korea Credit Guarantee Fund and Korea Technology Credit Guarantee Fund.

because such guarantees provide loss coverage on the average of 85 percent for the secured loans, maturity extension will not be a problem, so long as the guarantees are properly obtained. These practices, however, result in reduced extension of guarantees and aid for start-up businesses. While Korea has a large scale of assistance in the form of guarantee for the SMEs, when compared with other advanced economies, its guarantees for the venturing businesses are minimal. Thus, it would be desirable for the policy funds made available for the SMEs to be reduced in size for the SME guarantees. Its weight on providing assistance for start-up businesses should also be increased.

C. Short Term Maturities of Assets and Liabilities

Following the consummation of the second round of the financial sector restructuring in 2000, the financial system's overall credit risk has declined and its stability enhanced. However, other concerns have surfaced, one of which is market funds taking on the short term investment traits, including bank deposits and MMFs of one year or less maturity. As illustrated by Figure 13, the weight of the short-term deposits of the total liabilities has continued to grow and, recently, flow of funds has become instable. Furthermore, instable flow of funds has resulted in by investors' seeking high returns from securities and real estate markets to a speculative extent. The greater weight of the short-term deposits also translates into an inefficiency of the intermediation as a matter of function.

One of the causes may be found in the declining yield rates from the funds supply perspective. With the continuing economic slow-down since 2000, savings and deposit rates, for instance, have remained at a 5 percent level, resulting in negatives by 2004. In this light, funds invested in long-term products were only limited, making the short-term capital markets more attractive. On the other side of the equation, lesser demand in the long-term money market also provided a cause. As previously discussed, while the corporates' investment decisions were out of proportion for their ultimate goals targeting expansion only by volume, so to speak, their recognition for the significance of healthy balance sheets since the crisis resulted in their behavior curbing long term borrowings. Furthermore, short-term borrowing has the benefit of lesser interest



Source: Bank of Korea.

FIGURE 13

INCREASING PROPORTION OF SHORT-TERM DEPOSITS AT FINANCIAL INSTITUTIONS

payment burden than the long term, especially within the low interest rate environment, in addition to the ease with which funding is more readily available.[8]

At least for now, attractiveness of short-term funds would seem to continue for some time, provided that the supply and demand for bonds and equities simultaneously had declined. It would also led to a reasonable conclusion that the declining trend of interest rates will continue, together with persisting uncertainties in the performance of the economy and policies.

To be sure, shorter maturities of assets and liabilities held by financial institutions may well cause confusion within the financial market by distressing stocks and real estates, further to being vulnerable against even external shocks of little scale. In the real estate market, for instance, false signals triggered by government policies may result in confusions, while the stock market would become dysfunctional and invite speculative activities at best. With more than 42% of the market capital owned by foreign investors in the Korea Stock Exchange, Korean individual and institutional

[8]It is also noteworthy that the corporates' utilizing short-term instruments like commercial paper and usance to repay on corporate bonds provided part of the cause.

investors alike are already concentrated on short term trading.

Due to the shorter cycles experienced by the assets and liabilities of financial businesses, the liquidity risk within the financial system has been growing larger than ever. Meanwhile, market participants continue to have an unsatisfactory level of recognition for the liquidity risk and, hence, the infrastructures pertaining to accounting and credit valuation remain far less than the required. Unfortunately, these risks are yet not reflected in the pricing of the financial assets.

Some of the primary examples would include the investors' trading patterns, their pricing process, and the credit rating agencies' capability to undertake valuation on card issuers' debts, which were apparent within the process by which credit card bubbles were formed. Given the insufficiency of client information, credit card issuers should have strengthened its credit risk management against rapid growths in cash advances and unsecured credit card loans. It is the discipline that they could have exercised, but left unexercised to date. For the issuers seeking fast expansion of their business without due diligence of their clients' credit worthiness, risk premiums corresponding to the liquidity and credit risks should have been required.

It is also important to understand that the growth of liquidity risk and insufficient recognition are not limited to credit card issuers or financial companies alone. Notwithstanding far less debt ratios attained by the corporates, improvements on their financial structures and short-term indebtedness are only achieved to a limited extent. Although the average debt ratio of domestic companies as of the end of 2003 came to 123.4%, compared with 154.8% for U.S. companies, the proportion of short-term debt averaged 54.8%, considerably higher than 17.0% for U.S companies. This appears to be mostly due to the preference for short-term capital because of the persistent gap between short-term and long-term interest rates and the uncertainties many companies face in raising long-term capital in the debt and equity markets because of market volatility.

As with the credit card issuers, the same risk seems not to be sufficiently reflected in the pricing of financial assets, which in turn significates that confidence in the market is weak and stability of corporate funding is threatened to signal a greater liquidity risk.

TABLE 2

TRENDS IN LEVERAGE AND SHORT-TERM BORROWING OF CORPORATES

	Year	Debt-Equity Ratio	Dependency on Borrowings	Short-Term Debts/Liabilities	Liquidity/Short-Term Debts
Korea	1997	396.3	54.2	50.1	25.8
	1998	303.0	50.8	46.6	33.7
	1999	214.7	42.8	46.1	34.5
	2000	210.6	41.2	54.3	30.9
	2001	182.2	39.8	42.4	40.4
	2002	135.4	31.7	48.4	60.5
	2003	123.4	28.3	54.8	62.5
U.S.	2001	160.0	27.3	21.6	105.0
	2002	167.3	26.4	18.7	129.3
	2003	154.8	25.4	17.0	158.3

Sources: Korea Stock Exchange; and U.S. Department of Commerce.

In view of the national economy at its whereabouts, liquidity risk in reaching investment decisions is now a prerequisite for consideration. For the corporates intending to act upon aggressive financial strategies, their dependency upon short-term funds must be reduced via issuing long term corporate bonds, thereby enhancing their cushion against liquidity risks. Even from the investors' viewpoint, enhancements would need to be made on their recognition and management of the information disclosed on short term money markets.

D. Growing Dependence upon Banking Industry

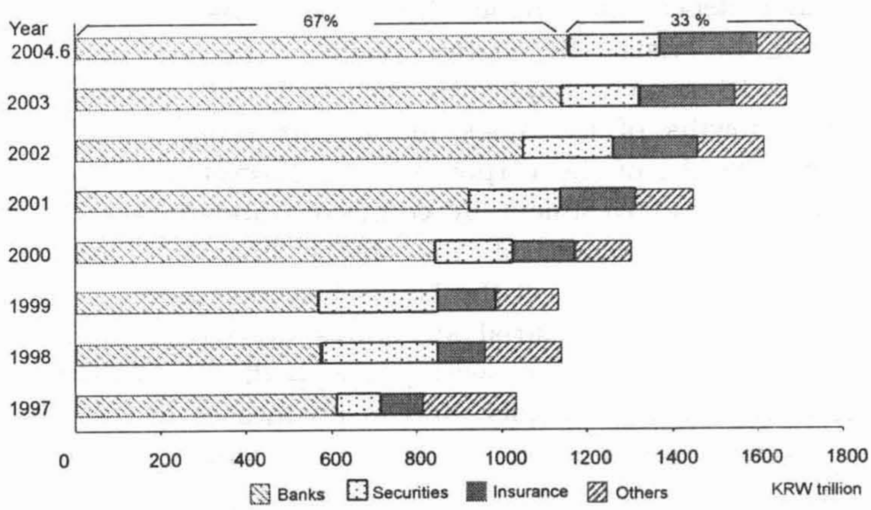
A corollary issue following the findings in the previous section is that its growing dependence upon the banks is more readily identifiable from a larger perspective. The banks' asset qualities have significantly improved relative to the non-bank financial institutions', and with the money flowing into the banks, the systemic dependence upon the banks has become even greater. Even the proportion of the deposits taken by the banks is continuing to grow at a faster rate relative to the non-bank financial institutions.'

In fact, if bank loans, corporate bond issues, and total market value of the stock market in Korea are classified for the purposes of comparing the direct financing market against the indirect, it is evident that dependency upon the bank loans has consistently grown since the crisis. The relative weight of the total market value hovering at 18 percent implicates that both the quantitative and qualitative growths of the stock market are limited. Furthermore, the reduced weight of the corporate bond market attributes to the decreased facilities investment by corporates and their polarization. Consequently, the weight of the direct financing market has reduced and, in turn, that of the banks has increased.

Given that Korea's industrial structures are device oriented, the financial system needs to be developed with the focus upon capital markets rather than the banks. Korean businesses in the past may be said to have relied upon the banks for long term investment financing, thereby causing increased maturity mismatches and systemic risks as a result. To resolve these problems, increasing the weight of corporate financing through the direct financing market would be desirable, as it is conventional in other advanced economies.

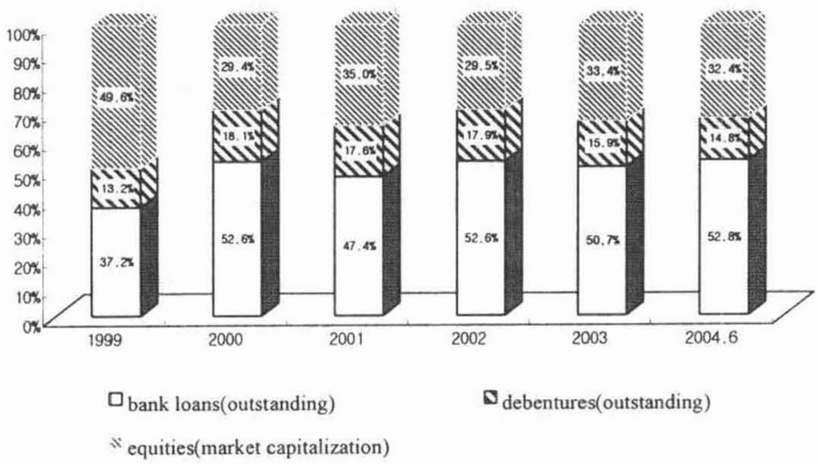
For the more stable corporate funding and capital markets, Korea needs to further develop its market for long-term corporate bonds. Shallow corporate bond market would mean structural weaknesses of the market. Unlike Korea, in other such advanced economies as the United States, the stock and bond markets mutually complement each other. Thus, Korea has not efficiently consumed shocks, such as credit events, that may arise domestic and abroad, thereby resulting in the capital pushed toward a single direction and the scale of variance in the pricing of all types of financial assets significantly increased.

Although long term investors and short-term traders should coexist, financial businesses such as securities companies and investment trust companies have been sensitive towards short-term capital gains. National pension is probably a single best example of the long term bond investor; however, it is likely that the base for the demand of corporate bonds will grow, if the weight of the pensions and insurance will be greater within the market for long term investment. In addition, successful introduction of derivative products would help resolve maturity mismatches and manage interest rate variances, among other risks.



Source: Bank of Korea.

FIGURE 14
ASSETS BY SECTORS



Source: The Bank of Korea, Korea Stock Exchange.

FIGURE 15
INCREASED BANK DEPENDENCY

V. Conclusion: Future Tasks

Despite marked changes in the financial industry and markets, much work still remains to be done for Korea's financial industry to be globally competitive. Before others, continued efforts must be made on the issues that remain in spite of the restructuring initiatives undertaken to date. Efforts need to be made in respect of mutual savings banks and credit cooperatives, while corrective actions must be taken on structural problems such as excessive debts carried by households and SMEs.

In order for the financial businesses to enhance their competitiveness, sound competition structures need to be in place, while deregulating mechanisms that prevent proper exercise of the financial market's dynamics. Policy makers should work on implementing more effective and streamlined regulations so as to eliminate obstacles that may dampen market dynamics while fully supporting sound competition among financial institutions. Furthermore, incentives deducible from the supervisory framework need to be reformed to help continue the financial businesses' restructuring efforts at the operational level, such as risk management and corporate governance improvements.

Capital markets must also be further vitalized and their infrastructures be enhanced to introduce market centric virtuous patterns of cashflows. To improve the market participants' confidence, systemic reforms on corporate accounting must continue, while enhancing disclosure systems to ensure that information is timely and sufficiently delivered to the investors. Meanwhile, other systemic improvements are needed to provide a basis for the institutional investors' growth on a qualitative and quantitative basis.

Another important task is to detect and preempt potential risks that can arise from ever-changing market environments. Continuous monitoring and early warning system make it possible to detect problems earlier and take measures in advance, thereby reducing contagion and restructuring costs. It is imperative that a risk-based supervision focusing upon the financial businesses' risk management capability is in place. Developments are also necessary to improve methods and procedures of the supervision and examination, thereby creating market friendly customs and practices. In addition, preparations are required in order to successfully meet challenges of the new BIS agreements and their compliance within the next couple of years based upon collaborations by and among the regulators and financial businesses.

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