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**Korean Banking Reform  
Following the Asian Financial Crisis**

**Hisanori Kataoka**

**Discussion Paper No. 10**

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Korea has experienced amazing growth since the 1960s, joining the OECD in 1996. However, the financial crisis, which surfaced in 1997, has forced Korea to ask the IMF for a \$57 billion bailout for the first time since the early 1980s. Although the contagion effect spread from the crisis in Southeast Asia, the root of the crisis was the failure of the Korean financial system. The highly regulated and uncompetitive banking system, imprudent provision of loans funded by short-term borrowing in the international market, and the lack of transparency in the accounting and management of financial institutions are all evidence of the structural problems of the Korean financial system which laid little change for more than thirty years until the crisis. Since the collapse of its financial system in 1997, the Korean government has begun an extensive economic program focused on macroeconomic stability and structural reform of the financial sector. Individual banks, too, have been carrying out efforts to restructure their management systems. This paper focuses on restructuring efforts in the Korean banking system and evaluates the progress and effectiveness of the reform.

## **Background to the Financial Crisis**

Korean financial institutions are categorized into two groups: banking institutions (commercial and specialized banks) and non-bank institutions (development, savings, investment, insurance and other institutions) as in Figure 1. The Korean financial system has been privatized over the past fifteen years. However, traditionally heavily controlled but poorly regulated in the prudential sense, Korean financial reform was far behind the liberalization and internationalization occurring in real sectors.<sup>1</sup>

After Park Chung Hee became president in 1961, he organized a highly centralized government and nationalized all banks, taking control of all forms of institutional credit.<sup>2</sup> Government-led development lending from banks to focused industries (heavy and chemical

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<sup>1</sup>The description in this section is based largely on Heather Smith, "Korea" in *East Asia in Crisis: From Being a Miracle to Needing One?*, eds. Ross H. McLeod and Ross Garnaut. (New York: Routledge, 1998).

<sup>2</sup><http://icweb2.loc.gov/cgi-bin/query/>

industries), no matter the risk, hindered the development of risk analysis in banks.<sup>3</sup> Even after the emergence of privately owned commercial banks by the mid-1980s, persisting government control<sup>4</sup> limited banks' incentive to control their credit risk. The existence of insider

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<sup>3</sup>The cost of these heavy controls and financial repression exceeded the benefit in the 1970s. See Eduardo R. Borensztein and Jong-Wha Lee, "Credit Allocation and Financial Crisis in Korea," Working Paper WP/99/20 (Washington, DC: IMF, February 1999).

<sup>4</sup>Such as lending limits applied to large companies, subsidized lending from the central bank, etc.

relationships among banks, companies and the government<sup>5</sup>, resulted in regulatory forbearance for

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<sup>5</sup>Even after privatization, the five largest commercial banks invited their presidents from either the government, or the central bank. In the failure of Kanpo Steel, many politicians of the

authorities and lending, regardless of the rate of return, for banks. The Korean government was also very sluggish in opening money and capital markets, as these markets were not well-equipped to compete against foreign institutions or investors.<sup>6</sup> In addition to accumulating large concentrations of lending to the highly leveraged chaebol, the Korean government also pressured banks to lend to small and medium-sized companies. Some Korean banks<sup>7</sup> lent up to 45% of their capital to a single borrower, compared with more conventional limits of 15-25%. Some banks lent up to 300% of their capital to one chaebol group. This created significant potential systemic risk<sup>8</sup>, and also led to ‘financial repression,’ which was reflected in the low average rate of return on bank assets, a rate which is among the lowest in emerging economies.<sup>9</sup>

In its “1993-97 Financial Sector Reform Plan,” the government allowed greater freedom in setting interest rates and allocating loans to financial institutions, authorizing foreign

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Kim Young Sam cabinet were arrested for forcing connected lending. See Yukiko Fukawa, *Industrialized Korean Economy*, (Tokyo: Nihon Keizai Shinbun, April 1997), p.188. (*In Japanese*)

<sup>6</sup>According to the IBCA’s rating report, which was released at the end of 1998, “Even after so called privatization the influence of the state remained pervasive, manifesting itself in directed lending, regulation of interest rates and state interference in the appointment of top personnel.” [http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

<sup>7</sup>Lending limits to chaebols only applied to commercial banks, not to merchant banks. Therefore, chaebols utilized merchant banks to exploit loopholes in the regulation. “Korean Financial Crisis and Its Aftermath,” (Tokyo: Bank of Japan, May 1998) 7. (*In Japanese*) However, chaebols now are required to reform their high financial-leverage structure by the government. They must reduce their debt-equity ratio to 200% by the end of 1999 and eliminate cross-subsidiary debt guarantees by March 2000. *Korea Economic Update*, (Seoul: Ministry of Finance and Economy, December 1998)

<sup>8</sup>[http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

<sup>9</sup>Marcus Noland, “Restructuring Korea’s Financial Sector for Greater Competitiveness,” APEC Working Paper 96-14 (Washington, DC: Institute for International Economics, November 1996), 1.

participation in the banking system. While the government now gave greater discretion to banks to set interest rates and loan amounts, government control over the banking system continued. The government voided bankruptcies of large corporations by directing banks to provide rescue loans, and the central bank provided subsidized re-discounts to the banks.<sup>10</sup> Nor did the government require banks to make full provision for investment securities losses. It allowed the deferral of foreign exchange losses for Korean corporate accounts. All of this made their financial reporting “crooked.” Under the safety net provided by the government, and with the lack of prudent regulation, commercial banks’ lending continued to be aggressive<sup>11</sup> and merchant banks increased their foreign currency denominated loans.

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<sup>10</sup>The implicit co-insurance scheme existing among government, banks and industry, combined with lax prudential supervision standards, allowed banks to take excessive lending risks. Smith, 74.

<sup>11</sup>Between 1990 and 1996, the financial industry’s lending to the private sector increased by 17% annually. This is well above Korea’s nominal GDP growth rate. Smith, 74.

**Tables 1a and b: Performance of Korean Banks**

**1a. Return on Assets (%)\***

	1991	1992	1993	1994	1995	1996
<b>Korea**</b>	<b>0.55</b>	<b>0.68</b>	<b>0.51</b>	<b>0.54</b>	<b>0.34</b>	<b>0.27</b>
<b>U.S.***</b>	<b>0.53</b>	<b>0.93</b>	<b>1.20</b>	<b>1.15</b>	<b>1.17</b>	<b>1.19</b>
<b>Japan***</b> *	<b>0.15</b>	<b>0.09</b>	<b>0.08</b>	<b>- 0.02</b>	<b>- 0.43</b>	<b>- 0.01</b>

\*ROA    \*\*Commercial banks    \*\*\*FDIC member banks    \*\*\*\*City banks

Source: Bank of Japan, "Korean Financial Crisis and its Aftermath "

**1b. Non-performing loans of Korean Commercial Banks (trillion KRW)**

Year	Bad Credit*		Non-Performing Credit**	
	(% of total loans)		(% of total loans)	
<b>1990</b>	1.9	(2.0)	7.2	(7.5)
<b>1991</b>	2.1	(1.6)	8.3	(6.6)
<b>1992</b>	2.4	(1.6)	10.3	(6.7)
<b>1993</b>	2.9	(1.7)	12.1	(7.0)
<b>1994</b>	1.9	(0.9)	11.7	(5.6)
<b>1995</b>	2.3	(0.9)	12.5	(5.2)
<b>1996</b>	2.5	(0.8)	12.2	(3.9)
<b>6/97</b>	5.1	(1.5)	17.3	(5.2)
<b>12/97</b>	10.1	(2.7)	22.6	(6.0)
<b>3/98</b>	12.4	(3.4)	28.0	(7.7)
<b>6/98</b>	na		29.1	(8.6)



<b>9/98</b>	10.2	(3.4)	22.4	(7.1)
<b>12/98</b>	10.1	(3.2)	22.2	(7.4)

\* Bad credit includes credit classified as "Doubtful" or "Estimated Loss". Doubtful Credit is that in excess of the portion collateralized to customers in arrears for more than six months, or to issuers of dishonored bills and checks, or to companies under court receivership. The

Estimated

Loss category is equivalent to customers in Doubtful Credit, but the loss has been realized.

\*\* Non-Performing Credit includes Bad Credit and Substandard Credit. Substandard credit is the credit due to customers classified under Doubtful Credit, but covers the collateralized portion.

Sources: Bank of Korea, [http://www.fsc.go.kr/kfsc/board/11/pt\\_0303.html](http://www.fsc.go.kr/kfsc/board/11/pt_0303.html); Bank of Japan, "Korean Financial Crisis and its Aftermath"

The introduction of a deposit insurance scheme in 1992<sup>12</sup> also removed the incentive from depositors to monitor bank management. Thus, there was enough background to create moral hazard on the part of both lenders and borrowers. Immediately following 1992, a sharp deterioration in the quality of loans was observed (Tables 1a and b). Commercial banks' capital adequacy ratios (CAR) all met the Bank of International Settlements (BIS) standard, in which BIS requests the CAR to be above 8% for all internationally operating banks since 1988<sup>13</sup>, under the guidelines of the government in 1995, and their provisions for bad loans seemed quite sufficient. However, CAR for Korean commercial banks were virtually 7% on average, given their definition

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<sup>12</sup>Actually, a deposit insurance scheme for non-bank financial institutions in Korea has been operated by the Korea Non-Bank Deposit Insurance (KDIC) since the early 1980s. However, there has never been a deposit insurance scheme for banks. The plans for a bank deposit insurance scheme were first introduced in 1992 as part of the government's 1993-97 Financial Sector Reform Plan. Dong Won Ko, *International Financial Law Review* 16, Issue 4, April 1997.

<sup>13</sup>Today, well-known, internationally operating banks have more than 10% CARs - this is now considered a minimum requirement for banks to gain international confidence. In Hong Kong, for example, the consolidated CARs for locally incorporated institutions were above 17.7% in September 1996. In the U.S., the average CAR of banks with sound ratings is 16-20%. George Fane, "The Role of Prudential Regulation," *East Asia in Crisis*, 299.

of ‘bad loans’ was much narrower than that of other OECD countries.<sup>14</sup> Fourteen commercial banks, including Korea First Bank and Seoul Bank, had CARs lower than 8%.<sup>15</sup>

When the economy started to slow and several large companies such as Hanbo Steel failed in 1997, Korean banks were hit further. Ten of Korea’s 26 commercial banks posted losses in the first half of 1997. By the end of October 1997, the total amount of bad loans held by suspended merchants banks was \$4.2 billion, or 51% of their total loans.<sup>16</sup> Banks tried to call in their short term loans to companies, but they were instructed by the government to extend maturity to help corporations and merchant banks. The non-performing loans (NPLs) of banking institutions as of September 1998 became 47 trillion KRW, or 7.6% of total loans. Including non-bank sectors, 71 trillion KRW, about 11% of total loans, was classified as non-performing at that time. The government estimates that NPLs will peak at 100 to 120 trillion KRW (18-20% of total loans) in 1999, with an asset recovery rate of 40%, translating into net system losses of 60-72 trillion KRW. However, IBCA, Ltd. (IBCA), a rating company believes that this estimate is somewhat optimistic, given the potential fallout from corporate restructuring, with its consequent impact on the number of insolvencies.<sup>17</sup> Per consultation with the IMF, which stepped in beginning in

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<sup>14</sup>In Korea, there were three categories of NPLs: “substandard” loans, which are loans past due more than six months, or loans to customers in bankruptcy court which are covered by collateral; “doubtful” loans, loans to customers which are substandard, but not covered by collateral; and “estimated losses,” loans that are uncollectible for the foreseeable future. Until late 1997, substandard NPLs were not disclosed. Moreover, until 1998, NPLs did not include “past-due” credits, loans which are in arrears of three to six months. This was true primarily because the government tolerated a common financial practice in Korea, in which customers generally do not take prompt payment of interest as seriously as borrowers in developed economies like the U.S. The collection ratio of past-due credits was also relatively high in Korea, because of the use of collateral. U.S. SEC base disclosure includes all the aforementioned requirements, including loans 90 days past due and renegotiated loans where rates were discounted.  
<http://www.bok.or.kr/cgi-bin/nph-hwp2html.data/eng8/UP/press5.hwp.19980227182443>

<sup>15</sup>The definition of bad loans included only 50% of unrealized securities losses.

<sup>16</sup>Smith, 77.

<sup>17</sup>Recovery rate to date has passed 40%. [http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

November 1997 to bailout the economy, the Korean government is now trying to rehabilitate banks and revitalize the financial system through several reforms.

### **Progress in Banking Reform**

Financial sector restructuring would be conducted in a way to compel unsound financial institutions to leave the market, resolving the overhang of bad loans, strengthening institutions' capital base, and ensuring the transparency of management.<sup>18</sup> Both the Korean government and individual banks have made major progress in bank restructuring in the past two years. However, the optimal solution is yet to be found. It is important for successful implementation of the policies that the government first specify what kind of system it is trying to establish in the long run.

Basically, a banking system is to be considered sound if the system adopts the features in Figure 1 in both policy and individual management aspects. The Korean banking system is no exception. All reform should target the 'ideal banking system' in the long run. In this section I describe the specific reforms the Korean government has enacted and then evaluate reform, revisiting the ideal banking system in the next section.

#### *Fiscal support for financial restructuring*

According to the Bank of Korea, public funds injection is unavoidable in the reform of the Korean banking system due to "the real possibility that turmoil in the financial system could trigger a crisis in all sectors of the economy, and the great difficulty for the financial institutions themselves to raise funds in the bearish stock and real estate markets."<sup>19</sup>

### **Figure 1 Characteristics of an Ideal Banking System**

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<sup>18</sup>"Bank Restructuring in Korea," (Seoul: Bank of Korea, December 1998) 2. Written for Deputy Governors' Meeting on Bank Restructuring held by BIS in Basle, Switzerland.

<sup>19</sup>Ibid.

1. The banking system should utilize market mechanisms, increasing transparency and competition among banks. Jeopardized banks should be forced to retreat from the market in order to realize market efficiency.
2. Financial restructuring should be funded by the financial institutions themselves. If public funds or safety nets are needed, strong principles to avoid moral hazard are essential.
3. The banking system should be consolidated if overcapacity exists and if inappropriate margins are being charged on loans in light of quantified credit, foreign exchange and interest rate risks. Clear exit rules should exist, including effective bankruptcy laws, so that banks are seized by their creditors and debt collection is facilitated.
4. Allowing insolvent firms to fail may increase short term instability, but it encourages medium to long term market discipline, enhancing the strength and stability of the financial system.
5. Prudential controls must be strengthened before controls over the financial sector are relaxed.
6. In writing off bad loans by selling them to credit purchasing companies (e.g., KAMCO in Korea), the government should minimize the cost to good borrowers. A bridge bank system is one tool in maintaining relationships with good borrowers.
7. The government should develop the market for securitizing banks' loan assets. This would improve both the capital ratio (by decreasing bank assets) and money/credit creating capabilities.
8. Capital markets should monitor bank management effectively. Disclosure rules should reflect financial conditions and follow global standards. This will help banks avoid moral hazard and increases the ability of public investors to gauge bank performance accurately. Clear disclosure, including a broader range (e.g. compliance to SEC standards) of NPLs for on and off balance sheet items, and implementation of internationally accepted accounting rules with mark-to-market evaluation in banks' assets are crucial to the credibility of the banking system.
9. The government's role should be limited to supporting the effective functioning of the market. When a banking crisis emerges, the government should step in for the sake of protecting depositors' and investors' interests and preventing system collapse. However, the government's bank examiner skills should be improved. Management information gathered in bank examinations should be promptly and effectively conveyed to the market. Government ties with banks (e.g., amakudari in Japan) should be abandoned as there is no evidence these ties promote responsible monitoring, indeed they are likely detrimental.
10. The range of the safety net should be narrow in order to discipline bank management. Under a complete safety net, zombie banks continue to have incentive to lend to riskier projects, hoping to bail themselves out. Deposit insurance should be limited and pay-off used as a means to close banks. In the case of public funds injection, managers responsible for bank failure should face possible jail sentences. Stockholders should also be penalized with a reduction in the net worth of the bank, if the bank is bailed out. Banks should be forced to downsize their staff and branch operations.
11. A strong corporate governance system should be implemented. Bank management styles should emphasize value for shareholders. Empowerment mechanisms should be introduced so that top management faces punishment if they fail to solve the problem of accepting liquidity injection. As in other industries, enforcing the fiduciary duties of the Board of Directors provides a monitoring function for bank management.
12. In order to reduce contagion, the government should establish an early warning system in which the government can order management to improve or even close banks, based on objective measures of bank management (e.g., NPL ratio, CAR, ROA, ROE, etc.)
13. Setting minimum CARs is the best way to reduce moral hazard, as these serve a function similar to deductibles in private insurance. Banks should set CARs of at least 10% to maintain global operation. Although higher capital reserves do not reflect financial good standing, the 8% CAR BIS standard is an inadequate benchmark in today's volatile global market. Banks should recognize, however, the trade-off between CAR and ROE unless ROA is improved through increased earnings or decreased assets.
14. Banks should introduce solid risk measures. Credit risk is the most important. Strong credit risk quantification skills should replace the collateralism and relationship-lending. Over-reliance upon collateral should be avoided as collateral may devalue suddenly and sharply.
15. Business strategies are important. Government protection left little room for choice in business strategy. Banks should clarify their business focus: whether they will withdraw from overseas operations or continue; which market will they emphasize -wholesale, retail, private banking, etc. Choosing the right strategy and focusing on their strengths would help banks gain competitiveness.

The government announced a reform package in July 1997 that included a public fund injection of \$4.4 billion into the banking system. By the end of December 1998, the government raised 64 trillion KRW, equivalent to 15% of Korean 1997 GDP, for financial sector restructuring.<sup>20</sup> Roughly half will be used to finance the purchase of NPLs, and the remainder will be spent on recapitalization, deposit payments, etc.<sup>21</sup>

In November 1997, the government established the Korea Asset Management Corporation (KAMCO) to buy NPLs from banks planning mergers or carrying out self-rehabilitation plans. KAMCO buys the NPLs at an appropriate discount<sup>22</sup> and injects new capital into the banks in the form of interest-bearing government-backed securities. By the end of September 1998, KAMCO had purchased 16 trillion KRW of NPLs with a face value of 36 trillion KRW from banks and insurance companies (Table 2). For commercial banks, the amounts purchased by KAMCO by the end of December 1998 were more than 60% of the overall NPLs of these institutions.

**Table 2 KAMCO's Non-performing Loans Purchase Schedule (trillion KRW)\***

	11/97-9/98	10/98-12/98**	1/99-6/99***	Total
<b>NPLs</b>	36.0	28.0 - 33.0	12.0 - 17.0	76.0 - 86.0
<b>Purchase Price</b>	16.5	11.0	5.0	32.5

\*including commercial banks, specialized banks, merchant banks, security companies, insurance companies and mutual savings companies  
 \*\*estimation      \*\*\* projection

Source: Bank of Korea, [http://www.fsc.go.kr/kfsc/board/11/pt\\_0303.html](http://www.fsc.go.kr/kfsc/board/11/pt_0303.html)

The government has also established a program to inject public funds into the recapitalization of newly merged banks and to make up the losses arising from the acquisition of resolved banks. The government fills the shortfall between the assets and the liabilities of the acquired banks to prevent deterioration in the assets of the acquiring banks. It also injects capital into new merged banks to bring their BIS CARs up to 10%. Before December 1998, 19.8 trillion KRW was spent for the purchase of NPLs, 13.2 trillion KRW was spent to recapitalize banks,

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<sup>20</sup>Those funds are raised by issuing bonds for the Non-Performing Asset Management Fund, run by KAMCO and the Deposit Insurance Fund, run by KDIC. Ibid., 19.

<sup>21</sup>Including 12 trillion KRW injected into a number of newly merged banks to strengthen their capital base, resulting in BIS ratios of approximately 10% for these institutions. [http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

<sup>22</sup>The discount rate was 30% for loans with collateral and 80% for those without. Ibid.

including Korea First Bank and Seoul Bank, and 7.8 trillion KRW was spent for the repayment of deposits with resolved banks.<sup>23</sup> An additional 23.1 trillion KRW is expected to be used in 1999, including the redemption of deposits of merchant banks, mutual savings companies, credit unions and other non-banks (Table 3). The Bank of Korea estimates that additional funds will be needed to cover losses resulting from the sales of the government's stakes in Korea First Bank and Seoul Bank to foreign investors, and exercise of the asset put-back option by the five banks<sup>24</sup>, which acquired the resolved banks earlier.<sup>25</sup>

**Table 3 Capital Injection Experience and Its Projections (trillion KRW)**

	11/97-12/98	1999	Total
<b>Purchase of NPLs</b>	19.8	12.6	32.5
<b>Recapitalization and Loss Coverage</b>	13.2	4.3	17.5
<b>Deposit Payment</b>	7.8	6.2	14.0
<b>Total</b>	40.9	23.1	64.0

Source: IBCA, [http://www.chosun.com/special/9901/ibca\\_report5.html](http://www.chosun.com/special/9901/ibca_report5.html)

### *Restructuring bad banks and reshaping the banking sector*

In April 1998, the government established a new agency, the Financial Supervisory Commission (FSC), which succeeded the bank supervisory function from the BOK<sup>26</sup>, to force bad restructuring, ensure capital adequacy guidelines are met and tighten up risk management and accounting standards.<sup>27</sup> FSC's medium term strategy is to strengthen liquidity and improve the quality of risk management in the banking system. Nationalization and mergers have been developed as the principal short-term strategy to stabilize the system and prepare it for

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<sup>23</sup>Ibid.

<sup>24</sup>Daedong, Dongnam, Donghwa, Kyungki and Chungchong.

<sup>25</sup>“Bank Restructuring in Korea,” 22.

<sup>26</sup>In April 1998, the Bank of Korea Act was also revised to guarantee the neutrality of BOK monetary policies through its independence.

<sup>27</sup>[http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

restructuring.<sup>28</sup> However, the government intends to undertake rapid privatization, and the participation of foreign banks is viewed as essential to achieve these goals.<sup>29</sup>

Korea First Bank and Seoul Bank were the hardest hit among twenty-six commercial banks in crisis. Korea First Bank had 0.98% of BIS CAR, which was already below 8% in December 1997. However, based on the assumption of full provisioning for loan losses and for unrealized securities losses, the ratio went to -2.70%, a negative net worth. In the same period, Seoul Bank had a 6.39% BIS ratio, but this would have fallen to 0.97% if unrealized securities losses had been included.<sup>30</sup> In December 1997, both banks were directed to carry out measures to improve their management. In January 1998, they were ordered to reduce their paid-in capital from 820 billion KRW to 100 billion KRW in each, and shareholders were forced to bear the loss of the banks' mismanagement. Then, both banks were nationalized through subscriptions of 1.5 trillion KRW securities purchased by the Korean government and the Korean Deposit Insurance Corporation (KDIC)<sup>31</sup>, bringing their capital up to 1.6 trillion KRW in each case.<sup>32</sup> The Korean government agreed with the IMF that the two banks would be sold to the private sector, following their recapitalization, by November 15, 1998<sup>33</sup>, but this was postponed to the end of January 1999, due to the absence of a suitable buyer. However, in December 1998, the government settled a deal to sell a majority stake of Korea First Bank to a consortium of American institutions, Newbridge Capital by April 1999, with an expected cost of 600 million to 1

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<sup>28</sup>As the BOK indicates, the government believes "mergers increase the competitive edge of the Korean banking industry through economies of scale and remove the inefficiency caused by the presence of many relatively small banks." In September 1998, the amended Act Concerning the Structural Improvement of the Financial Industry came into force, simplifying merger procedures and tax incentives for mergers among financial institutions. "Bank Restructuring in Korea," 14.

<sup>29</sup>As discussed earlier, the recent decision to sell Korea First Bank and Seoul Bank to foreign institutions signals a commitment to reform and openness to overseas capital that is unprecedented in Korea.

<sup>30</sup><http://www.bok.or.kr/cgi-bin/nph-hwp2html/data/eng8/UP/press4.hwp.19980226194218>

<sup>31</sup>In December 1995, the Korean National Assembly passed the Bank Deposit Insurance Act (Law No. 5042, the BDIA). Under the BDIA, the KDIC, which manages the bank deposit insurance scheme, was established in June 1996. It was modeled on the US FDIC.

<sup>32</sup>"Bank Restructuring in Korea," 8.

<sup>33</sup>Coopers and Lybrand was selected as the accountant responsible for evaluating the two banks' assets. Morgan Stanley was chosen as lead manager for the sale.

billion KRW.<sup>34</sup> On February 22, 1999, the government announced the sale of Seoul Bank to HSBC Holdings for \$900 million, including an initial 70% stake for the bank and a call option, which provides 51% of the new entity shares. The sale capped off a \$27 billion bad loan buyback<sup>35</sup> and recapitalization effort, which should go a long way toward normalizing commercial bank operations.<sup>36</sup>

In February 1998, the Bank of Korea (BOK) ordered management improvement in twelve other commercial banks (Table 4) which had BIS CARs below 8% at the end of 1997. The BOK required them to submit rehabilitation plans, including capital enhancement, by April 1998. The FSC, which succeeded the BOK's bank supervisory function, selected six domestic accounting firms associated with internationally recognized accountants to inspect the Assets and Liability Management (ALM) and feasibility of the rehabilitation plans of twelve troubled commercial banks. The Management Evaluation Committee (MEC), consisting of experts from the private sector, was then established by the FSC in June 1998 to deliberate on the basis of the accountants' assessment as to whether the rehabilitation plans should be approved.<sup>37</sup> Based on the inspection, in June 1998 the FSC decided to order the exit of five commercial banks<sup>38</sup> through the Purchase & Assumption (P&A) method, for the first time in Korean history. The sound assets of those banks were purchased by five banks<sup>39</sup> which had more than 9% BIS ratios at the end of 1997, following public funds injection and put-back options granted by the government.<sup>40</sup> The bad assets of the resolved banks were sold to KAMCO with a book value of

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<sup>34</sup>The government will retain 49% interest in KFB, but will delegate its voting rights to Newbridge for two years, subject to an undertaking by the latter to keep the bank open, hold the capital structure in place and uphold the government's interest. The sale is conditional on the government writing down all existing bad loans and assuming responsibility for any loans that go bad the first year, and a certain portion that go bad in the second year.

<sup>35</sup>The Korean government promised to take responsibility for all existing loans that turn out to be bad in 1999, and for a portion of such loans in 2000.

<sup>36</sup>Dow Jones Newswire, March 3, 1999.

<sup>37</sup>"Bank Restructuring in Korea," 10.

<sup>38</sup>Daedong, Dongnam, Donghwa, Kyungki, Chungchong

<sup>39</sup>Kookmin, Housing & Commercial, Shinhan, Korea and Hana

<sup>40</sup>Under the option, bad assets could be sold back to KAMCO within one year after the acquisition turned sour.



4.16 trillion KRW in September 1998. KDIC put up the 5.78 trillion KRW by which the liabilities of the resolved banks exceeded their assets in September 1998.<sup>41</sup>

Seven commercial banks<sup>42</sup> were designated conditionally-approved banks; their BIS CARs were below 8%, but their turnaround plans were approved by the MEC. The FSC is promoting restructuring of these banks through mergers, attracting foreign capital, consolidations with subsidiaries, and partial limitation of their banking business.<sup>43</sup> The FSC required some banks to change their management by appointing outside directors, including foreigners.<sup>44</sup> In 1999, additional mergers among those conditionally approved banks took place.<sup>45</sup>

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<sup>41</sup>In the non-bank sector, the Korean government revoked the foreign exchange licenses of eight merchant banks (Gyongnam, Samyang, Hangil, Coryo, Yeungnam, Daehan, Samsam and Kyungil that were unable to meet their liabilities at the time IMF negotiation began in November 1997. Nine merchant banks (Samsam, Hansol, Gyongnam, Coryo, Hangdo, Sangyong, Shisegae, Chongsol and Kyungil, owing to liquidity shortages, were ordered to suspend business on December 2, 1997. Five additional merchant banks (Daehan, Central Banking, Shinhan, Hanhwa, and Nara) were ordered suspension ten days later. In total, 18 merchant banks' operations were suspended, of which 16 had their licenses revoked. Only 14 merchant banks were operating as of December 1998 compared to 30 before the crisis. In addition, four security companies (Dongsuh on December 2, 1997; Coryo on December 5, 1997; KLB Securities and KDB Securities on July 25, 1998) out of 58, one investment trust management company (Sinseki Investment Trust on December 19, 1997) out of 31; 31 mutual savings and finance companies out of more than 200; and 50 credit unions out of 1700 were ordered to suspend business by January 1999. "Bank Restructuring in Korea," 7-11 and [http://www.mofe.go.kr/cgi-vin/e\\_mofe/body.txt](http://www.mofe.go.kr/cgi-vin/e_mofe/body.txt)

<sup>42</sup>CBK, Hanil, Chohung, KEB, Peace, Kangwon and Chungbuk

<sup>43</sup>"Bank Restructuring in Korea," 12.

<sup>44</sup>KEB appointed two directors from Commerz Bank in July 1998 in line with the FSC order. Ibid. 16

<sup>45</sup>Mergers between CBK and Hanil, Hana and Boram, and Kookmin and Korea Long-Term Credit Bank were already approved, and another merger between Chohung Bank and Kangwon Bank, together with Hyundai International Merchant Bank would create a new bank in March. Government also injected public funds to prevent the possible deterioration of those merged banks' capital adequacy ratios, with the condition of reducing their capital and turning themselves around.

**Table 4 BIS Capital Adequacy Ratios of Korean Commercial Banks as of End of 1997**

<b>8% or more</b>	12 banks: Kookmin; Housing & Commercial; Shinhan; Koram; Hana; Boram; Daegu; Pusan; Kwangju; Jeonbuk; Cheju; Kyongnam
<b>6-8%</b>	6 banks: Chohung; CBK; Hanil; KEB; Chungchong; Kyungki
<b>less than 6%</b>	6 banks: Donghwa; Daedong; Peace; Kangwon; Chungbok

Source: Bank of Korea, [http://www.fsc.go.kr/kfsc/board/11/pt\\_0303.html](http://www.fsc.go.kr/kfsc/board/11/pt_0303.html)

*Reform in prudential regulatory standards - increasing transparency*

In order to improve bank supervision, the Korean government pursued several reforms to strengthen prudential policy. In January 1998, the government amended the “General Banking Act” to enable supervisory authorities to carry out ‘fit-and-proper’ tests of shareholders and senior management by inspecting the adequacy of the composition of shareholders, the source of funds used in the acquisition of stocks, and the integrity and suitability of management teams.<sup>46</sup> The “Act Concerning the Structural Improvement of the Financial Industry” was also amended in January 1998, so that the government can order the destruction of the equity of shareholders deemed responsible for the insolvency of banks that the government has recapitalized or decided to recapitalize.<sup>47</sup> In April 1998, the related legislation was changed so that the FSC can demand management changes, capital reduction, merger, business transfers and third party acquisitions in banks whose CAR is below the 8% BIS standard. Thus, a new early warning system based on the BIS CAR was introduced (Korean Prompt Corrective Action).<sup>48</sup>

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<sup>46</sup>“Bank Restructuring in Korea,” 16.

<sup>47</sup>Ibid.

<sup>48</sup>The legal basis for Prompt Corrective Action was established by the Act Concerning the Structural Improvement of the Financial Industry in 1997. Corrective actions are described as “the step by step imposition of obligatory corrective measures by supervisory authorities on unsound financial institutions that fall below a certain level of capital adequacy.” Three levels of corrective measures are used, based on the soundness of the bank’s management: management improvement recommendations, management improvement measures and management improvement orders. The last applies to the worst managed banks, and includes orders of merger, lay-off, manager transfer, etc. by BSA. “Update on Progress of Strengthening Prudential Supervision & Regulations,” Team for Improving Supervisory Regulations of the Financial Supervisory Commission (Seoul: Bank Supervisory Authority, December 1998), 3. The FSC also altered the bank management evaluation system from CAMEL to CAMELS, which incorporates market risk assessment, in January 1999. The FSC also began to develop an electronic checking system for financial institutions in 1999, using some indicators to identify the symptoms of

Following the accumulation of NPLs and deteriorating banking profits, prudential regulation was tightened further in July 1998, by introducing a stricter definition of NPLs to include loans in shorter period arrears, so that potential NPLs could be captured early.<sup>49</sup> The government also introduced a system requiring banks to match the gap between foreign currency assets and liabilities<sup>50</sup> and minimize possible foreign exchange shortage risk in the banking system. The evaluation of marketable securities held by banks was changed to mark-to-market in 1998. In January 1999, new asset quality classifications were introduced, based on the assessed future repayment ability of borrowers.<sup>51</sup>

Disclosure rules are also being improved. Lack of transparency is one of the major causes of the financial crisis, because foreign investors could not capture the real shape of Korean banks' losses, and therefore lost confidence in them. Korean banks' disclosure of information utilized neither mark-to-market in evaluating the loss of bank-held securities, nor included the broad base of NPLs.<sup>52</sup> The FSC has improved disclosure requirements toward the regular disclosure items in

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problems in the early stages. "Bank Restructuring in Korea," 17.

<sup>49</sup>The government began to classify loans in arrears for three months or more as "substandard" instead of "precautionary," and those for one to three months as "precautionary" instead of "normal." The required provision rate for precautionary loans was raised from 1% to 2%. The criteria for calculating BIS capital adequacy ratio was also revised to deduct the provisions of those classified as substandard or lower from Tier 2 capital. "Update on Progress of Strengthening Prudential Supervision & Regulations."

<sup>50</sup>Net foreign exchange assets is regulated to be more than 0% to total foreign exchange assets for the maturity of 0-7 days, less than -10% for 7-30 days and less than -20% for one to three months.

<sup>51</sup>At the request of the IMF, the FSC decided to introduce mark-to-market accounting in financial institutions, but only gradually, in order to minimize the negative impact. Banks, security companies, investment trust companies, lending specialized companies and credit unions have implemented the program from the settlement of the first half of fiscal year 1998 and fiscal year 1999. "Update on Progress of Strengthening Prudential Supervision & Regulations," 6.

<sup>52</sup>The Korean government only disclosed so-called "bad credit", which was the portion not covered by the collateral of commercial banks. Neither NPLs covered by collateral, nor bad debt of merchant banks, which actually were in crisis (14 of 16 merchant banks were shut down in the first half of 1998), was disclosed. In November 1997, the government disclosed NPLs (including those past due more than six months, with collateral) of commercial and merchant banks for the first time. "Korean Financial Crisis and its Aftermath," 10. As the FSC admitted, "disclosure contents have not been up to the minimum level of public disclosure requested by International Accounting Standards (IAS). "Update on Progress of Strengthening Prudential Supervision & Regulations," 7.

accordance with the internationally accepted standard, with additional disclosure in risk management, off-balance sheet activities, asset classification, etc.<sup>53</sup> The requirements for minority shareholders' right to initiate class action were eased in February 1998, and listed banks are now forced to appoint external auditors at the request of a nomination committee consisting of internal auditors and outside directors representing shareholders and creditors.<sup>54</sup>

### *Improving Efficiency of Banking Management*

All Korean banks are being forced to improve their management in order to survive. Conditionally approved banks are drastically downsizing their organization and staff. By December 1998, many banks had cut more than 32% of their workforce, despite strong protest by unionized employees.<sup>55</sup> The banks also shrunk head offices and closed many branches (Table 5).<sup>56</sup> However, the FSC declared that conditionally approved banks would be required to trim their workforces by an additional 10% to 25% in order to continue to receive financial aid from the government.<sup>57</sup>

Restructuring the managing board is also important for appropriate corporate governance. It is necessary to enlarge the numbers of non-executive directors, to expand the coverage of external audits, and to strengthen the surveillance function of interested parties such as shareholders, depositors, etc. According to the FSC<sup>58</sup>, as of March 1999, the number of total directors of 19 commercial banks decreased by 36.4% from the year before. The share of non-standing directors to total directors increased from 59.4% to 70.7% in the same period. However, the number of executive officers increased in many banks in order to fill in the gap created by the decrease in standing directors. Eighteen of nineteen banks elected outsiders as auditors with the aim to enhance their independence and professionalism. Five banks now

**Table 5 Downsizing Figures for Korean Banks in 1998**

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<sup>53</sup>The FSC also increased the frequency of regular disclosure from once to twice a year from 1998. "Update on Progress of Strengthening Prudential Supervision & Regulations," 7 and "Bank Restructuring in Korea," 5.

<sup>54</sup>"Bank Restructuring in Korea," 18.

<sup>55</sup>They also protested because the downsizing decision was government-led, not bank-led and they objected to the compensation package. "Several Hurdles Remain in Banking Reform," *Business Korea* 15, Issue 10, October 1998.

<sup>56</sup>"Bank Restructuring in Korea," 18.

<sup>57</sup>"Several Hurdles Remain in Banking Reform"

<sup>58</sup>"Shareholders' Meeting Results at Commercial Banks," by FSC, March 1999.

<b>Bank</b>	<b>Employees % change over 1997</b>	<b>Branches % change over 1997</b>	<b>Net Income change in billion KRW over 1997</b>
Korea First	-39.1	-19.5	-2,600
Seoul	-35.9	-20.3	-840
Choheung	-35.3	13.9	-1,970
Korea Exchange	-32.2	-18.3	-840
Hanvit	-32.1	-12.7	-3,350
Korea Housing	-30.1	08.3	-450
Peace	-27.7	-20.4	na
Kookmin & KLB*	-18.2	05.6	74
Shinhan	-02.9	08.5	59
Hana & Boram*	15.7	31.5	110
Koram	29.0	73.4	53

\* merged

Source: Henny Sender, "New Kid in Town," *Far Eastern Economic Review*, February 1999

differentiate between bank president and chairman of the board of directors, possibly to implement more objective corporate policy and to reduce the risk of autocracy on the part of the president in bank management. Thirteen banks now use stock options as part of their incentive plan for directors.

### **Remaining Tasks for Korean Banking Reform: Policy Related Issues**

To date, the Korean government has implemented related reforms swiftly and banking consolidation has been carried out on a relatively large scale. However, many tasks remain that should be carried out without delay to establish a better banking system.

#### *More Efficient Public funds injection*

Prompt injection of public funds is a must for successful restructuring and was executed as early as July 1997, the year when the Korean financial crisis began. Timely restructuring with huge public funds injections put the U.S. financial system in the strongest position in the world,

while the hesitant and protracted Japanese action aggravated its financial crisis.<sup>59</sup> Korea seems to have handled the issue relatively well, at least in terms of its prompt action.<sup>60</sup> However, although public funds injection is no corporate project to be evaluated via the Net Present Value method, it should be used with care, particularly because any losses incurred are paid ultimately by taxpayers. IBCA worries the Korean government may be overestimating the banks' capacity to enforce a workout in the face of chaebol intransigence and the banks' own very limited experience with commercial risk management. Therefore, IBCA expects government expenditure on financial reform will likely be increased in the future.<sup>61</sup>

The government must consider how to effectively minimize the cost of public funds injection. The disposal of KAMCO's acquired NPLs, for example, remains superficial, due to the economic depression and a subdued real estate market<sup>62</sup>, yet the government is planning to inject more than half its public funds into KAMCO in 1999 to support its NPL purchases. Given the current government budget deficit<sup>63</sup>, it is expected that unless land prices go up and the price of collateral increases, the loss in resale of the loan will probably increase, and must ultimately be borne by taxpayers. Strategies such as reducing real estate taxes to revitalize the real estate trade, or developing a bad-loan securitizing market (referred to in a later section) would be a more appropriate policy to minimize budget loss. Also, the government should recognize the risk that public funds injections may promote moral hazard in private banks. As was shown in the closure of Korean First Bank and Seoul Bank, the government should request of each fund-injected bank, a reduction of net worth, a management purge, and business restructuring to clarify the responsibilities of management, employees, and shareholders. In order to minimize government spending, the government should inject funds into viable banks only - those which have the

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<sup>59</sup>In Japan, public funds injection had been a touchy issue for some time after the failure to convince the public of the need to inject funds into insolvent banks when the Jusen collapsed in early 1996. The 685 billion yen finally injected to write-off the Jusen was essentially used to rescue agricultural cooperatives, a large constituency for the LDP. Tax payers felt the bailout was improper. The Japanese government could not open public funds injection to debate until the end of 1997, although the banking system was very fragile.

<sup>60</sup>Perhaps this is related to the difference between the presidential system, where the president is elected directly by the public and the cabinet system, where the prime minister is only indirectly elected by the public. The president may be able to take more drastic steps toward public funds injection.

<sup>61</sup>[http://www.chosun.com/special/9901/IBCA\\_report5.html](http://www.chosun.com/special/9901/IBCA_report5.html)

<sup>62</sup>KAMCO could sell only 240 billion KRW by the end of September 1998. "Bank Restructuring in Korea," 20.

<sup>63</sup>At the end of December 1998, the government budget deficit was already 5% of Korea's GDP.

potential to recover and gain a competitive edge in the domestic or international sector in the future.

### *Improvement of Disclosure Rules and Enhancement of Market-Based Monitoring*

It is an urgent task to establish a general practice of allowing market forces to monitor and resolve bad financial institutions in order to reduce moral hazard and reduce the cost of bailing-out banks. Specifically, timely information at least about 1) financial performance, 2) financial position (including capital, solvency and liquidity), 3) risk management strategies and practices, 4) risk exposure, including credit risk, market risk, liquidity risk as well as operational, legal and other risks, 5) accounting policies, and 6) basic business, management and corporate governance information, should be disclosed.<sup>64</sup> Establishment of an accounting system and practices congruent with international standards, in addition to a fair and transparent tax system are also key issues.<sup>65</sup>

Also, clearer definition of NPLs is desirable, so that individual banks cannot “cook their books.” NPLs are decreasing in nominal terms, but the definition of NPLs is still ambiguous. Since it seems the disclosed NPLs do not include renegotiated loans, in which banks’ re-discounted interest rates and other similar conditions allow borrowers to survive, and as the renegotiated portion is supposedly the largest proportion of bad debt (as was the case in the Japanese banking crisis), the disclosed NPLs are not credible, they do not show the true state of Korea’s banking health. Moreover, by re-lending to borrowers, and having them repay interest payments, banks can significantly reduce the disclosed portion of the loans past due more than six months.<sup>66</sup> As Korean chaebols begin to restructure in the next few years, bankruptcy of these companies will likely increase and therefore, the bad debt of Korean banks will also rise. Thus, promptly establishing guidelines for disclosing NPL figures is extremely important for both the government and investors.

Banks should disclose information on a consolidated basis. Affiliate leasing companies of banks are also in financial crisis, but there is no legal way to force the shutdown of insolvent

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<sup>64</sup><http://www.bis.org/publ/bcbs41.html>

<sup>65</sup>Byong Ho Kang, “Restructuring of Financial Institutions and the Corporate Sector in Korea,” *Journal of Asian Economies* 9 (4) 1998.

<sup>66</sup>Some Korean analysts argue the true bad debt of Korea’s financial system is 200 trillion KRW, which is twice as large as the current worst case estimate. Catherine Lee, “The Wrong Medicine: Nationalization of Commercial Banks in South Korea,” *The Banker*, December 1998. Morgan Stanley estimates Korean NPLs will peak at 30% of total loans, a n amount more than four times larger than today, by the end of 1999. Henny Sender, “New Kid in Town,” *Far Eastern Economic Review*, February 11, 1999.

companies. Nine troubled leasing companies out of a total 25 were closed in July 1998.<sup>67</sup> Considering that the failure of these affiliates aggravates the parent banks' balance sheets when banks write-off their loans and considering that the possibility that those banks are forced by the government to rescue those affiliates through acquisitions, all relevant information, including all NPLs, should be disclosed.

### *Reforming the Safety Net System*

Limiting deposit insurance protection to small savers, putting uninsured depositors and large creditors at the end of the line for any recovery following resolution of a failed bank, and wiping out shareholder equity when a bank fails, are key success factors in increasing market discipline and investors' monitoring incentives over bank management in Korea. In addition, the interim blanket guarantee, which was introduced after November 1997 to cover deposit and interest payment in full until the year 2000, was partially removed. If deposits made after August 1, 1998 amount to more than 20 million KRW per depositor, only the principal is guaranteed. From the year 2000, a maximum insurance limit of 20 million KRW per depositor will apply to all deposits, in order to reduce moral hazard.<sup>68</sup> However, a more sophisticated deposit insurance system, such as that which charges a deposit insurance premium based on the risk of the banks, is crucial. Flat-rate premium systems still cannot resolve problems of moral hazard, because risky banks take greater chances knowing there is no difference in insurance premiums regardless of the amount of risk they take. Charging higher premiums based on banks' NPL size, CAR or credit rating will effectively reduce the risk of moral hazard and the cost of the deposit insurance system.<sup>69</sup>

### *More Large-Scale Financial Consolidation with Clear Exit Rules*

Although the total number of commercial banks declined from 27 to 14 in 1998, further consolidation and exit of banks should be promoted strongly. The Korean banking system still appears "over-banked". The number of financial institutions, including the non-bank sector, is excessive when compared with the U.S. or Japan. This over-banking, combined with banks' poor credit risk quantification skills, has forced Korean banks to earn relatively thin interest rate margins. Byong Ho Kang shows that Korean commercial banks currently charge 3.57% interest

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<sup>67</sup>Byong Ho Kang, 659.

<sup>68</sup>"Bank Restructuring in Korea," 18.

<sup>69</sup>In the U.S., until the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) introduced a risk-based premium scheme, the deposit insurance system regularly led to moral hazard because it charged all member banks a uniform rate. "Recommendations," *International Financial Law Review* 16, Issue 4, April 1997.



rate margins, which is far narrower than those in the U.S.<sup>70</sup>. The Korean interest rate margin is the lowest among the countries compared (Table 6).<sup>71</sup>

**Table 6 Comparison of Interest Margins (%)**

	<b>Korean Banks*</b>	<b>U.S. Banks**</b>	<b>Japanese Banks***</b>
<b>Average Loan Interest Rate (A)</b>	11.43	9.10	2.53
<b>Average Deposit Interest Rate (B)</b>	7.86	4.02	0.42 †
<b>Average Interest Margin (C = A - B)</b>	3.57	5.08	2.11
<b>Ratio of Interest Margin (C/A)</b>	31.20	55.80	83.40

\*Korean banks include 26 commercial banks for 1997    \*\*U.S. banks include all commercial banks for 1996

\*\*\*Japanese banks include all nationwide banks for 1996

† Average deposit interest rate of 3 major amount ranges of nationwide banks

Source: Byong Ho Kang, "Restructuring of Financial Institutions and the Corporate Sector in Korea"

The possible reasons for this thin spread are: 1) Korean banks didn't establish the appropriate risk-quantifying skills to charge higher interest rates on riskier loans and/or 2) that this over-banking situation forced Korean banks to charge lower interest rates on their loans due

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<sup>70</sup>Japan's interest margin is lower than Korea's. Many analysts indicate Japanese banking system is overcapacity, which forced Japanese banks to charge lower interest rates than they should have according to risk profiles. Hidehiro Kikuchi, *Ginkou Big Bang - Big Bang in Banking*, (Tokyo: Toyo Keizai, October 1997). (In Japanese)

<sup>71</sup>Byong Ho Kang, 660. We must be cautious in using this figure. Considering the crisis, the loan interest rate to troubled companies should be reduced to an extraordinarily low level, thus nominally lowering the loan interest rates.

to the severe competition.<sup>72</sup> It is expected that any over-guaranteed and poorly regulated financial system, under the pressure of disintermediation, led to over-lending in risky projects.<sup>73</sup>

If the over-banking situation forces Korean banks to charge inappropriately low loan rates, then the banking system definitely has to be further consolidated in order for viable banks to earn appropriate profits.<sup>74</sup> The head of the FSC stated in a recent report by Mackenzy Consulting, that four or five leading banks would be enough for Korea's economic scale.<sup>75</sup> As a means of consolidation, the government is promoting the acquisition of insolvent banks by viable banks, particularly restructuring upper-class banking institutions (commercial banks). According to the Bank of Korea, public funds were used to nationalize the banks, rather than force them to exit the system, because "if the two banks were liquidated, all remaining banks would have faced bank-runs with severe systemic risk for the financial industry."<sup>76</sup> This acquisition system seems not only to ignore the strategy of the acquiring, healthy banks, but is also opaque from the outside. These

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<sup>72</sup>The bottom line is that due to the progress of disintermediation and greater competition with non-banks, traditional banks had to either go into non-bank fields (e.g., securities, insurance, etc.) or loan to riskier borrowers unable to go to the market due to their risk profile without charging sufficient interest. In Korea, non-bank financial institutions were long allowed relatively greater freedom in their management of assets and liabilities, and most importantly, permitted to apply higher interest rates on deposits and loans than banking institutions. The market share of banking institutions in terms of deposits dropped from 71% in 1980 to approximately 30% in 1997, while that of non-banks increased from 29% to 70% in the same period. As for loans and discounts, the market share of banking institutions dropped from about 63% to 41%, while that of non-banks expanded from 37% to 59% in the same period. See "Financial System in Korea" in the BOK website. <http://www.bok.or.kr/kobank/owa/>

<sup>73</sup>Some researchers have used regression analysis to argue this was not true in Korea. Borensztein and Lee, for example, found no evidence that credit flows were directed to the relatively riskier projects in the last three decades.

<sup>74</sup>The Korean commercial banks posted a combined loss of 14.48 trillion KRW in 1998, far higher than the 3.88 trillion loss in 1997. A banking analyst at ABN Amro Asia estimates the loss in the sector could reach a maximum of 10 trillion KRW in 1999 with potential NPLs realized. Michael Schuman, "South Korean Banks Post \$12.32 Billion Loss --- Results Are Sharply Worse Than in 1997, and Pain Is Likely to Continue," *Wall Street Journal* Feb 10, 1999, p. A14.. In game theory, when a financial sector is monopolized, the system is considered safer because the large financial institutions have incentive to keep the system from failing, in order to continue to benefit from their monopolistic rents. However, empirical studies do not support this argument and there is little evidence that large banks are necessarily safer.

<sup>75</sup>"Several Hurdles Remain in Banking Reform."

<sup>76</sup>"Bank Restructuring in Korea," 8.

acquisitions of commercial banks definitely expand the asset and equity size of the acquiring banks and reduce their profitability figures (ROA or ROE), which are becoming more important in evaluating the efficiency of bank management under international standards. Nor can the acquiring banks focus their strategies (e.g., concentrate on sectors in which they hold comparative advantage, be it wholesale, retail, international, or domestic markets), if they are forced to acquire weak banks. Although the government is supporting acquisitions financially, in order to allow the acquiring banks to maintain the appropriate BIS CAR, the room for banks to acquire an insolvent bank is growing slim due to the declining profits of many banks. In the worst case scenario, it is conceivable that some of the acquiring bank's shareholders may file lawsuits against the government (or the managing board of the acquiring bank) over the forced acquisition. The moral hazard problem of insolvent banks cannot be eliminated (not on the part of managers of insolvent banks, but also for depositors and borrowers) when rescue via acquisition, and therefore continuity of business, is anticipated.

The government should announce clearly that the insolvent banks are to be closed<sup>77</sup> and deposits to be paid-off, while good borrowers can continue their borrowing through bridge banks.<sup>78</sup> In order for the pay-off to function effectively, increasing the available fund of deposit insurance is also needed. Clear exit rules in the banking system should be established, including effective bankruptcy laws, so that banks are seized by their creditors and the collection of debt is facilitated.

The shutdown of troubled banks could lead to a credit crunch. To complement the credit reduction of commercial banks or non-banks, government should use a bridge bank, and/or specialized banks or development institutions, such as the Industrial Bank of Korea or Korea Development Bank to maintain or initiate the loans to borrowers with solid credit records.

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<sup>77</sup>Some papers indicate Purchase and Assumption (P&A) should work better to minimize the length of takeover process and the damage to depositors, borrowers, buyers and the government. Normally, it takes 3 years for liquidation to be completed, 6-9 months for merger, but two months for P&A in Korea. Byong Ho Kang, 657. However, key to reducing moral hazard is letting the interested parties bear the cost of bank failure, and to monitor bank management preemptively. Therefore, the cost of the process should be maximized. Moreover, if P&A is the method used to close banks, there is no need for a deposit insurance system.

<sup>78</sup>A "total plan" was introduced in the Japanese Financial System Reorganization Plan and passed the Upper House on October 12, 1998. Failed banks are nationalized when their stock is transferred to the bridge bank established by the Deposit Insurance Corporation (DIC), and their NPLs are sent to the collecting bank (Japanese version of RTC). The DIC supports and loans the nationalized banks' operating capital. This protects creditworthy borrowers left in the lurch by failed banks while a merger partner is sought. The nationalized bank's good assets are sold or its operations are merged with a commercial bank within one year. The time limit can be extended to 3 years if approved by the DIC.

### *Development of a Bad-Loan Securitizing Market*

Currently, the major source for purchasing the NPLs of Korean banks is KAMCO. KAMCO is accumulating NPLs, as was discussed earlier. In order to liquidate them more easily and effectively, a secondary loan trading market, including an Asset Backed Security (ABS) market must be established and organized.<sup>79</sup> The legislation for establishing a basis for ABS was enacted in September 1998.<sup>80</sup> These will be sold to domestic or foreign investors through the Special Purpose Company established for this purpose. Historically, Korea has had a very high household savings rate, but households may not be the appropriate buyers of securities, given the financial crisis. Potential buyers should be sought overseas. The Korean government should permit the creation of intermediate institutions, such as professionally managed mutual funds or pension funds to enhance the bad-loan security market and introduce foreign investors to the market.

### *A Sophisticated Early Warning System*

Prompt correct action has been established to reduce the possibility of bankruptcy of financial institutions and to decrease the social costs of terminating unsound banking operations. However, the government should establish a more sophisticated risk-adjusted CAR than the simple BIS ratio as quickly as possible.<sup>81</sup> Current calculations of BIS CAR do not differentiate

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<sup>79</sup>For example, the secondary loan market has just emerged in Japan with the newly established SPC rules and the initiative of some foreign investment banks. The government could utilize RTC rules, as happened in the S&L bailout in the U.S., or use existing public institutions to promote the liquidation of loan assets. The Resolution Trust Corporation (RTC) was a state-owned enterprise created to resolve the S&L crisis in the late 1980s. From its start in August 1989 until its end in 1995, RTC acted as the receiver of the assets of failed S&Ls, most of which were sold or liquidated. It resolved 747 failed financial institutions with a book value of \$458 billion. Including the capital loss of \$61 billion in the resale of the assets, RTC incurred a cost of \$81.9 billion dollars, ultimately borne by U.S. taxpayers. RTC actually took control of failed S&Ls, using private contractors to manage and liquidate S&L assets. If Korea were to establish a similar institution, experts recommend that it hire a competent, full-time staff with strong financial background who can also serve as educators in management training for the reformed Korean banks. Edward M. Graham, "A Radical but Workable Restructuring Plan for South Korea," Institute for International Economics, a speech translated into Korean and printed in *The Korean Economic Daily* on October 15, 1998 and Frederic S. Mishkin, *The Economics of Money, Banking and Financial Markets*, 5<sup>th</sup> edition (NY: Harper Collins, 1997) chapter 12. This should reduce the bad loans purchased by KAMCO in the Korean case.

<sup>80</sup>Byong Ho Kang, 661.

<sup>81</sup>Minimum CARs have three weaknesses if used in an early warning system: 1) measured capital adequacy responds on with long lags to true capital adequacy. 2) enforcing CARs when

risk among borrowers, so long as borrowers are in the same category (e.g., no matter how risky the company, the risk weight of a corporation is only 100%). More sophisticated risk-adjusted measures should be introduced, such as a ratio based on the FSC's bank asset classification through on-site examination. Also, adding to the CAR, other indicators, such as value-at-risk (VAR), liquidity, maturity-gap, etc., should be taken into account in evaluating overall bank soundness at an early stage.

*Restructuring the Relationship among the Government, Banks and Corporations - Abolishing Connected Lending and Regulatory Forbearance*

Bank restructuring must be linked closely to the reform, not only of the corporate sector, but also of the government sector. The restructuring process is progressing within the top business groups or chaebol, under the Big Deal. Workout programs for weak, but viable company groups are also being put in place by creditor financial institutions.<sup>82</sup> However, reforming the connections among governments, banks and corporations is crucial. Arbitrary government guidance in allocating loans resulted in connected lending between banks and corporations. The government's role should be limited to supporting the effective functioning of the market mechanism in the banking system. If bank examiners know they may be invited to positions at the top of banks after their retirement (a system referred to as *amakudari* in Japan), they have no incentive to demand reform. As there is no evidence that the *amakudari* improve bank management<sup>83</sup>, a strict firewall should be established between the government and banks and corporations in human resource management<sup>84</sup>.

The Korean government should also limit its control of the banking industry. Specifically, the government should re-privatize troubled banks promptly once they've been nationalized. Before the sell-off of Korea First Bank and Seoul Bank, 29% of the Korean banking system including development institutions, such as Korea EXIM Bank, was under government control.<sup>85</sup> It may be necessary to nationalize troubled banks in an emergency situation, in order to limit the

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banks are in crisis can worsen panic among depositors and creditors 3) banks try go conceal NPLs by rolling them over so that their CAR looks better. See Fane, 1998.

<sup>82</sup>“Bank Restructuring in Korea,” 24.

<sup>83</sup>Akio Horiuchi, “Japan,” *East Asia in Crisis*.

<sup>84</sup>Kim Woo Choong, the founder and chairman of Daewoo, intends to set up an international bank owned by chaebols. Currently, chaebol ownership in banking is limited to 4% in nationwide commercial banks and to 15% in regional banks. However, the ruling party is revising banking laws to abolish the ceiling. This will further aggravate the connected lending situation. Catherine Lee, “Vicious Circle Continues,” *The Banker*, July 1998.

<sup>85</sup>Catherine Lee, “The Wrong Medicine.”

systemic risk of bankruptcy, but in light of the nightmare of dictatorship in the 1960s and 1970s with a nationalized banking system, the government should show a clear and credible path to privatize nationalized banks. In order to establish a principle of self-responsibility in banks and to implement better, cutting-edge management skills in operating banks, nationalization should be of limited duration.

### **Tasks Remaining to Banks**

Viable banks whose management rehabilitation plans were authorized by the FSC review team in September 1998 are currently carrying out their plans through merger, capital increase via the inducement of foreign capital investment, consolidation with subsidiaries, and partial limitation of their banking activities. Several improvements, however, should be carried out in future.<sup>86</sup>

#### *CAR Improvement*

The requirement to meet BIS CAR standards (8%) before the year 2000, adds a new dimension to Korea's credit squeeze. Fourteen commercial banks (including Korea First Bank and Seoul Bank) did not meet the 8% requirement in 1997. Now, banks will be forced to increase their equity capital, issue subordinate bonds and increase capital through asset revaluation. CAR is the best means to reduce banks' moral hazard and increase financial soundness. However, an 8% CAR is an inadequate benchmark under today's highly volatile global market. George Fane advises other troubled economies in Asia adopt a minimum 20% CAR, given their volatile banking systems.<sup>87</sup> Although the severity of the financial crisis in Korea is less than that in Indonesia, Korea, too, should consider a CAR of at least 15% in order to reduce moral hazard and acquire international credibility. Introducing foreign investment should also be an option in raising capital.<sup>88</sup> At the same time, banks need to recognize that the trade-off between CAR and ROE (the denominator increases when capital rises), unless ROA is improved appropriately through increasing earnings or decreasing assets. Therefore, banks should restructure their management further, cutting assets which do not produce appropriate returns and streamlining their operations.

#### *Establishing Managerial Responsibility*

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<sup>86</sup>“Bank Restructuring in Korea, 13.

<sup>87</sup>George Fane, 299.

<sup>88</sup>The government eased limitations on bank shares in the General Banking Act, and allowed 25-30% of voting stock holding by non-residents for the “conditionally approved” commercial banks (CBK, Hanil, Chohung, KEB, Peace, Kangwon and Chungbuk). Actually, Commerz Bank of Germany purchased 350 billion KRW shares in KEB. By the end of October 1998, those conditionally approved banks sold 9.33 trillion NPLs to KAMCO.

To prevent moral hazard arising in the course of resolving troubled banks, shareholders, employees and managerial staff must share the pain and responsibility of the trouble they created. As was seen earlier, many banks are increasing the number of non-executive or external auditors. It is necessary to establish strong corporate governance systems and management empowerment mechanisms in bank management. Ultimately, each bank should concentrate on operating efficiency on the basis of maximizing shareholder value.

#### *Establishing Loan Risk Quantifying Measures via Default Probability*

Korean banks are particularly encouraged to adopt an advanced management system based in proper credit risk analysis. As of the end of 1996, the collateralized loans of 25 commercial banks were only 32% of overall loans, or 68 trillion KRW (Table 7).<sup>89</sup> Korean banks expanded non-collateral based loans on the credibility of chaebols (considered to be “Too Big to Fail”) due to political pressure by the government and were burdened with huge NPLs following the chaebols’ collapse. The passive attitude of Korean banks in examining loans spoiled their credit analysis skills. As discussed previously, Korean banks’ thin interest margin is due partly to inappropriate credit analysis - the failure to charge sufficient spread on their loans. It is crucial that banks improve their credit screening skills and develop risk management techniques, including their ability to quantify credit risk.<sup>90</sup>

#### *Adopting a Strategic Approach*

Formerly, operating under the government’s protection, there was little room for Korean banks to form a business strategy. Traditional trade theory (emphasizing comparative advantage) and financial theory (stressing the importance that investors diversify, but companies focus their energies) affirm the importance for banks of choosing the right strategy, focusing on their strengths and nurturing their business competencies. It is still unclear where individual Korean

**Table 7 Korean Commercial Bank Loans (year end, trillion KRW)**

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<sup>89</sup>Takuma Takahashi, *Asian Financial Crisis* (Tokyo: Toyo Keizai, August 1998) (*In Japanese*) 178-9.

<sup>90</sup>Banks’ lending decisions concerning large companies have been based on a notion they were “Too Big to Fail”. Banks did not analyze fully the profitability of a firm’s investment project, but believed the government would ultimately rescue a company, given repercussions of failure. When lending to small and medium-sized companies, banks’ lending decisions relied on the collateral offered. “Bank Restructuring in Korea,” 5. Reform is progressing. According to the Bank of Korea, “much of the discretionary authority concerning loan decision making formerly given to presidents and branch managers has been removed, and banks have now generally established credit appraisal committees whose main function is to assess the status of would-be borrowers before providing any large-scale loans.” “Bank Restructuring in Korea,” 18.

	1990	1995	1996
<b>Collateralized Loans</b> (share %)	32.0 (42.2)	67.0 (37.6)	67.8 (32.0)
Real Estate	26.5	54.4	54.6
Moveable Properties	0.9	3.4	2.2
Securities	3.3	7.0	9.3
Others	1.3	2.2	1.6
<b>Guarantees</b> (share %)	4.8 (6.4)	11.8 (6.6)	12.9 (6.1)
<b>Non-Collateralized Loans</b> (share %)	39.0 (51.4)	99.6 (55.8)	131.2 (61.9)
<b>Total Loans</b>	75.8	178.3	211.9

Source: Takuma Takahashi p. 179

banks will head once the current crisis is overcome. Without a blueprint for their future, banks will never achieve independence from government control.

### Concluding Remarks

Korean bank reform accompanies many adjustments, both in government regulation and in the bank's individual operations. For the past 30 years, the basic functions of the financial industry, including credit analysis and corporate governance, have been largely neglected. The financial sector was able to survive previously, avoiding international competition and managerial innovation by taking shelter under government protection and control. However, the current financial crisis is forcing both the government and the banks themselves to implement painful changes in order to improve competitiveness and efficiency.

The crisis provides an excellent opportunity for Korea to establish a real, open financial system. While many tasks remain for the future, the historical gradualism of reform is facing pressure from the international market. Indeed, some banks are now controlled by international organizations. Banks are being forced to abandon practices that encourage moral hazard and are beginning to operate their businesses in accordance with "market discipline, which requires transparent, profit-oriented, sound and accountable management."<sup>91</sup> Globalization and deregulation in finance is now an irrevocable trend in the Korean economy. The next year or two are a crucial time for Korea to seize the opportunity to continue reform. If successful, Korea will establish an internationally competitive banking system and possibly assume the role of a regional financial center in Asia, effectively completing the real "Korean Big Bang", in which the financial sector becomes the leading, rather than dragging force in the Korean economy.

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<sup>91</sup>"Bank Restructuring in Korea," 27.