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# The Role of KAMCO in Resolving Nonperforming Loans in the Republic of Korea

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**The Role of KAMCO in Resolving Nonperforming Loans in the Republic of Korea**

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**Abstract**

**This Working Paper should not be reported as representing the views of the IMF.**
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This paper aims to provide a balanced assessment of Korea Asset Management Corporation's role in resolving nonperforming loans in the aftermath of the 1997–98 financial crisis. It argues that KAMCO's incentive to dispose of NPLs can be explained by a strong social desire for a recovery of public funds injected for financial sector restructuring. KAMCO's market-making role also helped overcome informational and coordination problems in the development of a market for distressed assets.

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## I. Introduction

Nonperforming loans (NPLs) were at the heart of the financial crisis that engulfed the Korean economy during 1997–98. The recovery has also been characterized by a rapid and drastic reduction in the level of NPLs in the financial system.[2] The government played a leading role in financial and corporate restructuring, including strengthening the legal and regulatory framework, injecting public funds, and setting up new institutions for crisis management, such as the Korea Asset Management Corporation (KAMCO).

KAMCO played an important role in facilitating the restructuring process and helping to develop financial markets. First, KAMCO purchased distressed assets from banks and other financial institutions, which allowed lending to resume at a time when liquidity was scarce. This objective was complemented by increased supervision to ensure that banks were operating on sound commercial principles. Second, KAMCO's resolution of NPLs contributed to the good progress made in Korea in recovering public funds injected by the government for financial sector restructuring. In addition, KAMCO disposed of many of these distressed assets through a number of innovative methods, including by issuing asset-backed securities (ABS), which launched an important new market in Korea.

This paper argues that the development of a market for distressed assets was critical to Korea's success in resolving NPLs. In many countries the Asset Management Companies (AMCs) experience failed because the creation of AMCs did not lead to the development of a market for NPLs. Such a market is typically missing in less developed countries because information asymmetries and a lack of creditor coordination make it very difficult to price NPLs. KAMCO played a market-making role by overcoming such informational and coordination problems. Its active marketing activities brought together and intermediated between sellers and investors of NPLs. Most notably it successfully convinced major international players looking for distressed assets to become interested in the Korean market. Participation of foreign investors, in turn, encouraged participation of domestic investors. Initially KAMCO's catalytic role was monopolistic, but, as the market deepened, it became much less dominant.

This paper also argues that KAMCO's incentive to dispose of NPLs rapidly was conditioned by a strong desire on the part of the Korean society for a quick recovery of public funds injected for financial sector restructuring (Box 1). Korea has an admirable tradition of fiscal conservatism and a deep rooted resistance to public debt (He, 2003). The political consensus on the need to reduce public debt helped KAMCO sharpen its focus on rapid disposal of acquired assets and recovery of public funds, rather than simply warehousing the assets, a problem that has plagued many publicly owned AMCs in other countries.

KAMCO's financial performance, however, has been mixed. Although KAMCO has strived to price its NPL purchases as close to approximate market values as possible, in hindsight, its

[2] For an analysis of the Korean crisis experience, see Coe and Kim (2002).

record was overshadowed by its overly generous payment for Daewoo-related claims. In addition, profits earned from disposing of the NPLs were not sufficient to cover the high operating expenses. As a result, the Non-Performing Asset Management Fund (NPA Fund) is not able to break even. This observation does not negate KAMCO's overall contribution to the recovery of the Korean financial sector from the crisis. It only indicates that pricing of NPLs during financial crisis has been and will remain the most difficult challenge for publicly owned AMCs.

The remainder of this paper is organized as follows. Section II provides an overview of KAMCO's role in the bank restructuring process. Section III describes KAMCO's governance structure. Section IV discusses operational issues involved in the purchase and disposal of NPLs. Section V analyzes financial performances of the NPA Fund. Section VI concludes.

## II. Overview of KAMCO's Role in the Bank Restructuring Process

High levels of NPLs in the Korean financial sector reflected a corporate culture that relished market share rather than profitability and a capital structure that relied heavily on external borrowing. The structural problems in the financial and corporate sectors became apparent in the second half of 1997, when the capital inflows were reversed as foreign investors—reeling from losses in other Southeast Asian economies—decided to reduce their exposure to Korea. Intensified withdrawal of credit lines quickly developed into a currency crisis (Balino and Ubide, 1999).

Under an IMF-supported program, the authorities' strategy of crisis management and financial sector restructuring comprised four key elements (Chopra and others, 2002):

- Emergency measures to quickly restore stability to the financial system through liquidity support, a blanket deposit guarantee, and intervention in systematically important nonviable institutions.

- Restructuring measures to restore the solvency of the financial system by intervention in nonviable institutions, purchase of NPLs, and recapitalization.

- Regulatory measures to strengthen the existing framework by bringing prudential regulation and supervision in line with international best practices.

- Corporate restructuring measures to reduce corporate distress and the vulnerability of financial institutions exposed to the highly indebted corporate sector.

Swift resolution of NPLs was considered a critical component of this strategy. The government announced a program of NPL acquisition as a mechanism for delivering official support for bank restructuring in November 1997. A key component of the program was the establishment of a reorganized and expanded KAMCO, and the creation of the NPA Fund. KAMCO started purchasing NPLs with a face value of 4.4 trillion won from Seoul Bank and Korea First Bank, the two insolvent and systematically important commercial banks, on November 26, 1997. This first transaction was followed two days later by a purchase of 2.7 trillion won of NPLs from 30 merchant banks.

The government released a progress report and future plans of the strategy to deal with the restructuring of the financial and corporate sectors in May 1998. The report estimated that, as of end-March 1998, the total NPLs of all financial institutions were 118 trillion won (27 percent of GDP), of which 50 trillion had been in arrears for three to six months and were classified as "precautionary," and the remaining 68 trillion won worth of loans had been in arrears longer and were considered more prone to default risks. Of the total 118 trillion won NPLs, the government decided to target 100 trillion won worth of NPLs for immediate disposal, including the core NPLs of 68 trillion won, a portion of the "precautionary" loans, and some allowance for potential increases in NPLs stemming from the corporate restructuring process. The government estimated that the total market value of these loans was about 50 percent of their book value, and planned to dispose of the loans through two channels: 1) half of the loans would be disposed of by financial institutions themselves by either selling off collateral or calling in loans, and 2) KAMCO would purchase the remaining half.

Implementation of this strategy was effective. (Tables 1 and 2; Figure 1) The decline in the level of NPLs was rapid, particularly in the banking sector. NPLs as a percent of total loans in the banking sector declined from 17 percent as of March 1998 to 2.3 percent at end-2002 (Box 2). The decline was mainly due to continuing efforts of institutions to dispose of bad loans through sales to KAMCO, via issuance of ABS, extensive write-offs, and collections. KAMCO's purchase made a substantial contribution to this rapid progress, especially during the period March 1998 to December 1999. KAMCO's total purchase of NPLs amounted to 44 trillion won in this period, or 50 percent of the outstanding NPLs in the banking sector at the beginning of the period. In recent years, KAMCO's purchase has shifted toward the nonbank sector. Thanks to improved economic conditions and the development of a market for distressed assets, banks have been able to resolve and write off NPLs aggressively on their own since 2000.

As of November 2002, the fifth anniversary of the creation of the NPA Fund, and by which time the mandate of the NPA Fund to purchase NPLs had expired, KAMCO had disposed of ⅔ of the NPLs it purchased (Table 3). The trade-off between speedy recovery and maximization of asset value shaped the evolution of the resolution methods chosen by KAMCO. At the height of the crisis, quick sale of assets was favored over management of impaired assets for future sale. Nevertheless, KAMCO managed to dispose of only a small fraction of its assets in 1998, mostly through monthly foreclosure auctions and collections. Since 1999, KAMCO diversified its resolution methods by adopting advanced techniques such as international bidding and ABS issuance. It also developed methods that would enable KAMCO to profit from the upside potential of economic recovery, including sales of bad loan pools to joint-venture Asset Management Companies and large individual loan sales to joint-venture Corporate Restructuring Companies.

## Box 1. Recovery of Public Funds for Financial Sector Restructuring

The Korean government has used public funds of W 157 trillion (32 percent of average GDP in 1998–2000) for financial sector restructuring. Of this total amount, about W 60 trillion was used to recapitalize financial institutions, W 39 trillion was used to purchase nonperforming assets, W 26 trillion was used to pay off depositors of closed institutions, and W 32 trillion was used to facilitate purchase and assumption transactions. The bulk of the funds were financed by the issuance of W 104 trillion of government-guaranteed bonds by KDIC and KAMCO.

Good progress has been made in recovering public funds through sale of acquired government shareholdings, collection of NPLs, and sale of assets. The authorities had recovered 39 percent (W 63 trillion) of the total by the end of 2003, which compares well with the experience of other countries. The government estimates that it will recover a total of 56 percent (W 87 trillion), with W 24 trillion to be realized in the medium term.

For the unrecoverable residual of W 69 trillion, a burden sharing plan has been adopted: 70 percent of the unrecoverable amount will be explicitly recognized as government obligations, with the remaining 30 percent covered by a 0.1 percentage point surcharge in the deposit insurance premium, which went into effect in early 2003 and will be maintained for 25 years.

To implement the plan, W 49 trillion of the KDIC and KAMCO bonds maturing in the next four years will be converted into treasury bonds, and the remaining outstanding KDIC and KAMCO bonds of W 50 trillion will be serviced by increases in the deposit insurance premium and future recoveries of public funds. The budget will no longer provide subsidies to KDIC and KAMCO for interest payments on their bonds. The conversion of KDIC/KAMCO bonds into treasury bonds will raise explicit government debt by 8 percentage points of GDP.

Fiscal Costs of Selected Banking Crises

| | Crisis Period | Gross Outlay | Net Cost | Recovery Rate |
|---|---|---|---|---|
| | | (in percent of GDP) | | (in percent) |
| Chile | 1981–83 | 52.7 | 33.5 | 36.4 |
| Finland | 1991–93 | 10.0 | 7.0 | 30.0 |
| Indonesia 1/ | 1997–present | 56.4 | 51.9 | 8.0 |
| Japan | 1997–2000 | 6.7 | 5.6 | 16.4 |
| **Korea** | **1997–2000** | **32.2** | **21.9** | **32.0** |
| Malaysia 2/ | 1997–2001 | 7.2 | 4.0 | 44.4 |
| Sweden | 1991 | 4.4 | 0.0 | 100.0 |
| Thailand | 1997-present | 43.8 | 34.8 | 20.5 |
| United States 3/ | 1984–91 | 3.7 | 2.1 | 43.2 |
| Venezuela 4/ | 1994–95 | 15.0 | 12.4 | 17.3 |

Source: Author's estimates.

1/ Excludes a 40 trillion rupiah allocation to the deposit guarantee fund in September 2001.

2/ Losses implied by the merger of two state owned banks (Bank Bumiputra and Bank Sime) with private banks are excluded.

3/ Refers only to the Savings and Loans crisis.

4/ As of end–1998.

**Box 2. Loan Classification and Estimating the Size of NPLs**

Historical data of NPLs have been subject to upward revisions as loan classification standards were gradually tightened. Prior to the crisis, only loans in arrears of 6 months or more had been classified as NPLs. When estimating the "true" magnitude of NPLs at the end of March 1998, however, the government followed internationally acceptable standards and included loans in arrears of 3 months or more. It arrived at the figure of 118 trillion won, or about 18 percent of total loans. Subsequently, banks in July 1998 were required to tighten asset classification standards by redefining NPLs as those loans in arrears of 3 months or more. Nonbank financial institutions followed suit in March 1999. In December 1999, financial institutions adopted a forward-looking approach in asset classification, taking into account the future performance of borrowers in addition to their track record in debt service. The forward-looking criteria (FLC) required creditors to make a more realistic assessment of loan risks based on borrowers' managerial competence, financial conditions, and future cash flow. Creditors classified loans as "substandard" when borrowers' ability to meet debt service obligations was deemed inadequate. NPLs would include substandard loans on which interest payments were not made. In March 2000, the asset classification standards were further strengthened with the introduction of the "enhanced" FLC, which would classify loans as "nonperforming" when future risks are significant— even if interest payments have been made up to that point. Based on the enhanced criteria, NPLs increased from 66.7 trillion won to 88.0 trillion won at end-1999.

Questions remain about whether the reported NPL numbers truly reflect the real magnitude of impaired assets that are still held by the financial sector. Some loans were classified as "precautionary" rather than "substandard" (for example, loans to Hynix) because of temporary exemption from the FLC of loan classification for restructured corporate debt. Commentators have also pointed out that debt issued by distressed companies, that is, companies with low interest ratios, exceeded by a large margin the reported NPLs of the financial sector. According to Lim (2002) using data provided by the National Information and Credit Evaluation (NICE), a credit rating agency, companies with interest coverage ratio consistently below 1.5 throughout the period 1999–2001 had interest-bearing debt of 82.2 trillion won, which would be 11.7 percent of total loans of the financial sector. Evidence suggests that an interest coverage ratio below 1.5 for three consecutive years entails a significant risk of default. In contrast, the reported amount of loans classified as substandard and below on the balance sheet of the financial sector was only 39.1 trillion won, or 5.6 percent of total loans. However, these two sets of figures are not comparable, since those NPLs that remained on the balance sheet of the financial sector were only a part of the total outstanding debt of the distressed companies. Other possible holders of their debt include the KAMCO, ABS investors, joint-venture asset management companies and corporate restructuring companies, etc. In addition, the financial sector may have written off and removed from their balance sheets some part of the outstanding debt of the distressed companies.

Table 1. Non-Performing Loans at Financial Institutions 1/

| | Mar-98 | Dec-99 | Dec-00 | Dec-01 | Dec-02 |
|---|---|---|---|---|---|
| NPL or SBL (in trillions of won) 2/ | 118.0 | 88.0 | 64.6 | 39.1 | 31.8 |
| Banks | 86.0 | 61.1 | 42.1 | 18.8 | 15.1 |
| Nonbanks | 32.0 | 26.9 | 22.5 | 20.3 | 16.7 |
| | | | | | |
| As percent of total loans | 17.7 | 14.9 | 10.4 | 5.6 | 3.9 |
| Banks | 16.8 | 12.9 | 8.0 | 3.4 | 2.3 |
| Nonbanks | 20.5 | 23.0 | 23.6 | 13.7 | 9.8 |
| | | | | | |
| As percent of GDP | 26.6 | 18.2 | 12.4 | 7.2 | 5.3 |
| Banks | 19.4 | 12.7 | 8.1 | 3.4 | 2.5 |
| Nonbanks | 7.2 | 5.6 | 4.3 | 3.7 | 2.8 |
| | | | | | |
| *Memorandum items (in trillions of won)*: | | | | | |
| Total loans | 668.5 | 590.9 | 621.4 | 699.9 | 817.8 |
| Banks | 512.1 | 474.0 | 526.1 | 551.2 | 648.2 |
| Nonbanks | 156.4 | 116.9 | 95.3 | 148.7 | 169.6 |
| GDP | 444.4 | 482.7 | 522.0 | 545.0 | 596.4 |

Sources: Economic Bulletin May 1998, FSS Weekly Newsletters and Monthly Reviews, and author's estimates.

1/ Including banks, nonbank lenders, insurance companies, securities companies, and investment trust management companies.

2/ March 98 data refer to "non-performing loans", and other data refer to loans classified as "substandard and below" (SBL) using forward-looking criteria.

Table 2. KAMCO Purchase of Non-Performing Loans from Financial Institutions

| | Nov 97–Mar 98 | Apr 98–Dec 99 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|
| KAMCO Purchases (in trillions of won) | 13.9 | 48.3 | 33.0 | 6.0 | 9.0 |
| Banks | 8.4 | 44.1 | 4.4 | 4.9 | 0.2 |
| Nonbanks | 5.5 | 4.2 | 28.6 | 1.1 | 8.8 |
| As percent of NPL stock 1/ | - | 40.9 | 37.5 | 9.3 | 23.0 |
| Banks | - | 50.5 | 7.2 | 11.6 | 1.1 |
| Nonbanks | - | 13.7 | 106.3 | 4.9 | 43.3 |

Source: KAMCO.

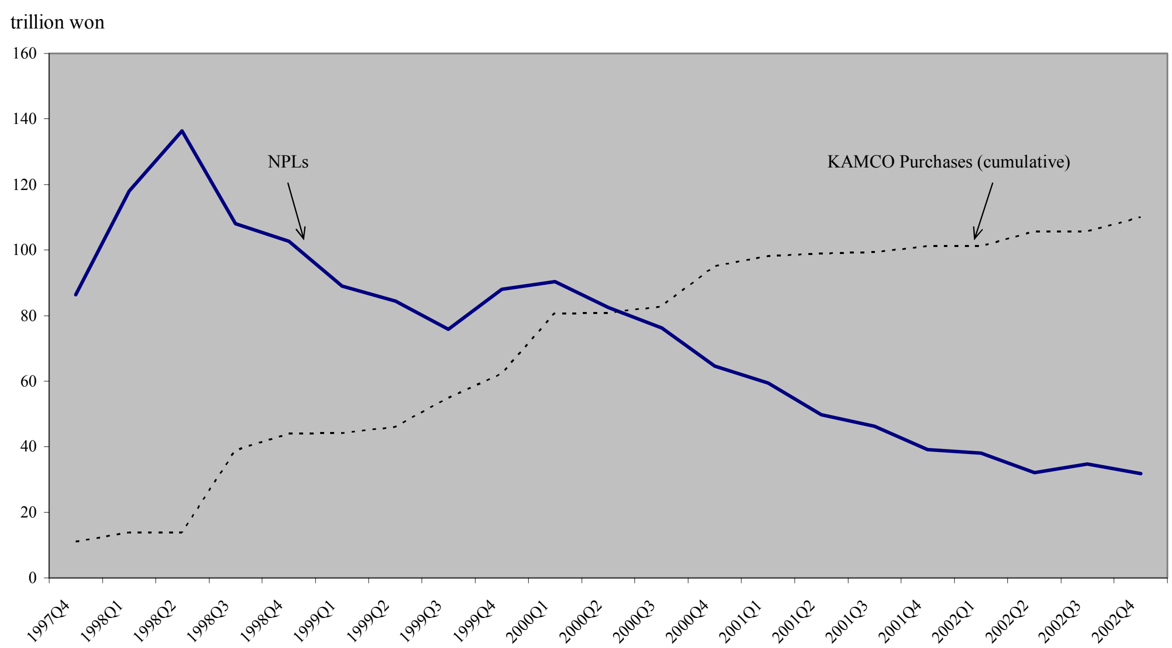
1/ NPLs outstanding in financial institutions at the beginning of the period.

Table 3. KAMCO NPL Portfolio
(As of End-April 2003, in trillions of won)

| | Amount of NPL Purchased | | Amount of NPL Resolved | | Amount of NPL Remaining | |
|---|---|---|---|---|---|---|
| | Face Value | Amount Paid | Face Value | Amount Paid | Face Value | Amount Paid |
| Ordinary Loans | 30.7 | 9.4 | 25.5 | 11.1 | 5.1 | 0.5 |
| Special Loans | 41.4 | 17.1 | 36.6 | 17.0 | 4.8 | 1.4 |
| Daewoo Loans | 35.4 | 12.7 | 3.6 | 2.8 | 31.9 | 10.4 |
| Workout Loans | 2.6 | 0.6 | 0.2 | 0.2 | 2.4 | 0.5 |
| Total | 110.1 | 39.8 | 65.9 | 31.1 | 44.2 | 12.8 |

Source: KAMCO.

Figure 1. NPLs of the Financial Sector




Sources: Lim (2002), FSS Weekly Newsletters, and KAMCO.

Note: NPLs refer to loans classified as substandard and below using the Forward-Looking Criteria.

## III. KAMCO'S GOVERNANCE STRUCTURE

KAMCO can be described as a centralized publicly-owned asset management company (Lindgren and others, 1999; Ingves and others, 2004). It was established in April 1962 as a subsidiary of the Korea Development Bank (KDB). The corporation's main mission initially was to liquidate KDB's nonperforming assets. In 1966, KAMCO's scope of operations was expanded to other financial institutions, and it gradually established itself as a specialized real estate management company. In the 1980s and 1990s, KAMCO was commissioned by the government to manage and sell properties confiscated by the state in the context of tax investigations and other state-owned properties.

In November 1997, with the eruption of the financial crisis, KAMCO was reorganized pursuant to the newly enacted "Act on Efficient Management of Non-performing Assets of Financial Institutions and Establishment of Korea Asset Management Corporation" (the KAMCO Act). Under the Act, KAMCO was empowered: first, to support financial institutions by normalizing their asset quality through cleaning up operations; second, to perform the role of a "bad bank" that supports corporate restructuring by extending loans, debt-equity swaps, and payment guarantees; and third, to recover public funds through efficient management and disposal of its assets. However, the KAMCO Act does not provide any special legal powers to KAMCO that the lenders from which it purchases NPLs do not have, since the Korean legal framework provides for clean transfer of titles and priority in the transaction of assets. [3]

KAMCO has the status of a public nonbank financial corporation, and is under the supervision of the Financial Supervisory Commission (FSC). Its major shareholders are the government and KDB, with the Ministry of Finance and Economy owning 42.8 percent, KDB 28.6 percent, and other financial institutions 28.6 percent, of its paid-in capital. Under the KAMCO Act, KAMCO's main mandate of purchasing and resolving NPLs is to be exercised through the Non-Performing Asset Management Fund (the NPA Fund), which is distinct from KAMCO's own accounts. Thus KAMCO is the fiscal agent of the NPA Fund, which has a separate legal identity and different funding sources from KAMCO itself. The size of the NPA Fund amounted to 21.6 trillion won, of which 20.5 trillion won came from issuance of government-guaranteed bonds, 573 billion won were assessments on financial institutions in proportion to their holdings of NPLs, and 500 billion won were loans from the KDB.[4] The Act also stipulates that the mandate of the NPA Fund to raise funding and purchase NPLs would terminate in five years. In other words, the NPA Fund could no longer acquire new NPLs after November 2002.

KAMCO is governed by a Management Supervisory Committee, which is composed of eleven members, including the Managing Director of KAMCO; representatives from the Ministry of Finance and Economy (MOFE), the Ministry of Planning and Budgeting (MPB), the FSC, and the Korea Deposit Insurance Corporation (KDIC); the Deputy Governor of the KDB; two

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[3] A few special treatments were given to KAMCO in order to facilitate the resolution of NPLs, including exemption from financial transaction taxes.

[4] The idea to establish a NAP Fund was initially floated in April 1997 with a size of 1.5 trillion won. The size of the Fund was increased a number of times as the financial condition of the financial sector continued to deteriorate in the second half of 1997, reaching 10 trillion won at the time of the establishment of the Fund in November 1997. Several further rounds of increase raised its size to 33.6 trillion won by July 1998, but it was reduced to 21.6 trillion in August 1999 as the government decided to transfer some of the resources to KDIC.

representatives from the banking industry nominated by the Chairman of the Korea Federation of Banks; and three professionals recommended by the Managing Director, including an attorney-at-law, a CPA or a certified tax accountant, and a university professor or a doctorate holder who belongs to a research institute. During the five year period of November 1997 to November 2002, the Management Supervisory Committee met on average 1.5 times per month, and passed on average 2.6 resolutions in each meeting. Resolutions were passed if over half of the committee members were present at the meeting and if over half of the attending members agreed with the decision.

As a de facto public monopoly on the buy side of the market for distressed assets, at least in the first two years of its operation, KAMCO could have degenerated into a warehouse of NPLs and been used as a political tool to subsidize selected interest groups. Being a public agency, KAMCO does not offer performance-based bonuses to its staff, although merit increases of salaries do reflect relative performances. Thus financial motivation was not a primary driving force that shaped the behavior and performance of KAMCO's management and staff. Instead, KAMCO's relative effectiveness were in large part due to the particular environment of political economy in which it operated. Such an environment was characterized by a strong public interest in scrutinizing the use of public funds, and a close watch by international lenders including the IMF and the World Bank.[5]

Nevertheless, KAMCO's public agency nature occasionally compromised its operational autonomy from the government. On such occasions, commercial principles had to give way to other policy considerations. An example is KAMCO's purchase on Daewoo bonds from the investment trust companies (ITCs) in the aftermath of Daewoo collapse. KAMCO's purchase was at the behest of the government as part of its strategy to stabilize the ITC sector in the face of heavy redemptions, and the prices paid proved to be far higher than the likely rate of recovery (see more discussion below).

## IV. The Development of a Market for Distressed Assets

When KAMCO started its operations under the new KAMCO Act in November 1997, it had little experience in purchasing and disposing of NPLs. However, with determined leadership and international assistance, it climbed up the steep learning curve and established itself as a competent and effective operator in the market for distressed assets.

### A. Purchase of NPLs

KAMCO's purchase of NPLs was selective and based on certain eligibility criteria. Eligible for purchase were salable loans whose security rights and transfer were legally executable, from among loans classified as substandard and below. KAMCO also assigned priority to purchase of NPLs whose removal was considered critical to the rehabilitation of the institution concerned

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[5] KAMCO indicated that it had an agreement with the World Bank and the IMF that it would dispose at least 50 percent of its acquired NPLs in three years.

from a public policy point of view, and NPLs that had multiple creditors. If a financial institution requested KAMCO to purchase its NPLs, KAMCO would analyze whether the loans were eligible for purchase, request relevant data from the selling institution, and conduct due diligence of the loans. A decision of purchase would be made by the Management Supervisory Committee, after which KAMCO would enter into an "assignment and assumption agreement" with the seller. KAMCO would then make a payment, receive documents evidencing the origin of the loan, and have the registration of security rights transferred.

KAMCO purchases comprised of four categories of assets: (i) "ordinary" loans of companies currently operating, (ii) "special" loans, which correspond to restructured loans under court-supervised receivership, (iii) "Daewoo loans" acquired mostly in 2000 in the wake of the collapse of the Daewoo Group, and (iv) "work-out loans" of companies in the out-of-court work-out programs. Secured special loans and Daewoo loans were the two largest categories of purchases, each representing 32 percent of the total. Secured ordinary loans took up 18 percent of total purchases. (Table 4) More than 60 percent of the loans were purchased from banks, and just over 20 percent of the loans were purchased from investment trust companies (Table 5).

Table 4. NPL Acquisition by Type of Loans
(Nov. 1997–Nov. 2002, in trillions of won unless specified otherwise)

| | Face Value | Amount Paid | Price in percent | Share of Total 1/ |
|---|---|---|---|---|
| Ordinary Loan (secured) | 10.6 | 7.1 | 67.0 | 17.9 |
| Ordinary Loan (nonsecured) | 20.1 | 2.3 | 11.4 | 5.8 |
| Special Loan (secured) | 27.0 | 12.8 | 47.4 | 32.2 |
| Special Loan (nonsecured) | 14.5 | 4.2 | 29.0 | 10.6 |
| Daewoo Loan | 35.4 | 12.7 | 35.9 | 32.0 |
| Work-out Loan | 2.6 | 0.6 | 23.1 | 1.5 |
| Total | 110.2 | 39.7 | 36.0 | 100.0 |

Source: KAMCO.
1/ Amount paid as percent of total amount paid.

## Table 5. NPL Acquisition by Type of Seller

(Nov.1997–Nov.2002, in trillions of won unless specified otherwise)

| | Face Value | Amount Paid | Price in percent | Share of Total 1/ |
|---|---|---|---|---|
| Banks | 61.8 | 24.7 | 40.0 | 62.1 |
| Investment trust companies | 22.3 | 8.4 | 37.6 | 21.1 |
| Insurance companies | 7.4 | 1.8 | 24.3 | 4.5 |
| Institutions resolved by KDIC | 6.8 | 0.8 | 12.4 | 2.1 |
| Foreign intuitions | 5.0 | 2.1 | 41.9 | 5.3 |
| Merchant banks | 3.5 | 1.6 | 46.3 | 4.1 |
| Mutual savings | 0.5 | 0.2 | 37.7 | 0.5 |
| Securities firms | 0.1 | 0.1 | 52.6 | 0.2 |
| Others | 2.6 | 0.0 | 0.4 | 0.0 |
| Total | 110.1 | 39.8 | 36.1 | 100.0 |

Source: KAMCO.
1/ Amount paid as percent of total amount paid.

## Table 6. Bonds Issued by NPA Fund

(in billions of won)

| Date | Amount | Maturity | Coupon | Type of Interest Payment |
|---|---|---|---|---|
| 11/28/1997 | 2,000.0 | 11/28/2004 | 5 percent | Balloon Payment |
| 11/28/1997 | 968.0 | 11/28/2000 | <15 percent | Floating--Quarterly |
| 11/29/1997 | 2,298.1 | 11/29/2000 | 11.95 percent | Fixed--Quarterly |
| 12/15/1997 | 1,732.0 | 12/15/2000 | 12.14 percent | Fixed--Quarterly |
| 2/19/1998 | 406.7 | 2/19/2001 | 12.14 percent | Fixed--Quarterly |
| 7/23/1998 | 498.9 | 7/23/2003 | 10~15 percent | Floating--Quarterly |
| 7/31/1998 | 606.6 | 7/31/2003 | | Floating--Quarterly |
| 9/29/1998 | 5,869.0 | 9/29/2003 | | Floating--Quarterly |
| 9/30/1998 | 1,969.1 | 9/30/2003 | <15 percent | Floating--Quarterly |
| 11/6/1998 | 233.9 | 11/6/2003 | | Floating--Quarterly |
| 12/21/1998 | 938.4 | 12/21/2003 | | Floating--Quarterly |
| 12/23/1998 | 628.7 1/ | 12/23/1999 | | 3-month LIBOR+1% |
| 12/30/1998 | 1,076.7 | 12/30/2003 | <15 percent | Floating--Quarterly |
| 2/13/1999 | 40.9 | 2/13/2004 | | Floating--Quarterly |
| 2/23/1999 | 102.6 | 2/23/2004 | | Floating--Quarterly |
| 3/31/1999 | 2.5 | 3/31/2004 | | Floating--Quarterly |
| 6/30/1999 | 918.4 | 6/30/2004 | | Floating--Quarterly |
| 9/16/1999 | 115.2 | 11/28/2000 | 11.95 percent | Fixed--Quarterly |
| 12/30/1999 | 94.3 | 12/30/2004 | <15 percent | Floating--Quarterly |
| Total | 20,500.0 | - | - | - |

Source: KAMCO (KAMCO 2000).
1/ Denominated in U.S. dollar, in the amount of $512.85 million.

KAMCO paid for its purchases with bonds issued by the NPA Fund, in the total amount of 20.5 trillion won, and by recycling recovered funds. In the former case, the selling institutions would replace their NPL portfolio with NPA Fund bonds. These bonds carry an explicit government guarantee, are tradable and listed on the Korea Stock Exchange.[6] Most of the bonds were denominated in won, issued with a five-year maturity and floating interest rates that were indexed to the average yield to maturity of Class 1 National Housing Bond in the secondary market. Interest was paid quarterly (Table 6)[7]. Trading of NPA bonds was most active in 2000, with the trading volume reaching 100 percent of the outstanding amount. Trading volume declined to 65 percent and 30 percent of outstanding volume in 2001 and 2002 respectively.

**Pricing of NPLs**

KAMCO's policy of pricing NPL purchases evolved as it gained experience through time (Table 7). Prior to September 1998, KAMCO employed the method of "blanket purchase on the condition of an ex post facto settlement", under which the final settlement prices were subject to lengthy and contentious negotiations. The discount rates used by this method corresponded roughly to the loan loss provisioning rates required by prudential regulations. Since then, it offered to buy assets at a specific price calculated using a formula that reflects the specific characteristics and terms and conditions of the loan, and it was up to the seller to decide whether to accept the price. The final settlement price could be adjusted through negotiation, but was not expected to differ by a large margin from the initial offer price.

[6] Since these bonds were explicitly guaranteed by the government, they would be assigned zero weight in the calculation of the capital adequacy ratio of the selling institution, potentially improving the ratio, although the net impact on the ratio would also depend on the net capital loss or gain arising from the transaction. The original intention on the part of the government to provide a guarantee on the bonds was to allow them to be bought by the Bank of Korea (BOK), as required by the BOK Act.

[7] The government made cash loans, annually from the budget, to the KAMCO in order for it to pay interest on the bonds. The government decided to waive the repayment of these loans from KAMCO as part of the burden-sharing plan described in Box 1.

Table 7. Pricing of NPL Purchases

| Ordinary Loans | Pricing Formula | | Price Determination |
|---|---|---|---|
| | Secured | Nonsecured | |
| Nov. 97–Jul. 98 | 70–75 percent of valid collateral value 1/ | Doubtful: 10–20 percent of face value<br>Assumed loss: 1–3 percent of face value | subject to ex post adjustment |
| Since Sept 98 | 45 percent of collateral value 2/ | 3 percent of face value | fixed at the beginning |

| Special Loans | Pricing Formula | | Price Determination |
|---|---|---|---|
| | Secured | Nonsecured | |
| Nov. 97–Jul. 98 | 70–75 percent of face value | 20–60 percent of face value | subject to ex post adjustment |
| Sep. 98–Jun 99 | 45 percent of collateral value 2/ | | |
| Since Jul 99 | present value of projected cash flows 3/ | | fixed at the beginning |

Source: KAMCO (KAMCO 2000).
1/ Valid collateral value is the least of “appraisal value - senior liens”, “face value”, or “maximum collateral amount”.
2/ Collateral value = appraisal value - senior liens.
3/ Discount rate = basic discount rate + credit risk spread + maturity risk spread.

On average KAMCO paid 36 percent of the face value of the NPLs it purchased; in other words, the average discount was 64 percent. However the actual discount varied greatly from transaction to transaction (Figure 2). The type of loans bought appeared to be the primary factor determining the price. The highest prices were paid for secured ordinary loans (67 percent) and the lowest prices were paid for nonsecured ordinary loans (11 percent) (Table 4). The variation of prices paid for loans bought from different lenders did not appear to be significant, except that loans bought from institutions to be closed and resolved by the KDIC were priced much lower than loans bought from institutions that were going concerns.

KAMCO appeared to have paid more on average for its NPL purchases in the period prior to mid-1999. After that, the prices were lower and more realistic, and indeed turned out to be low enough to allow the private market to price itself in and compete with KAMCO, facilitating the development of the private market for distressed corporate debt. Nevertheless, the numbers were distorted by the Daewoo affair.

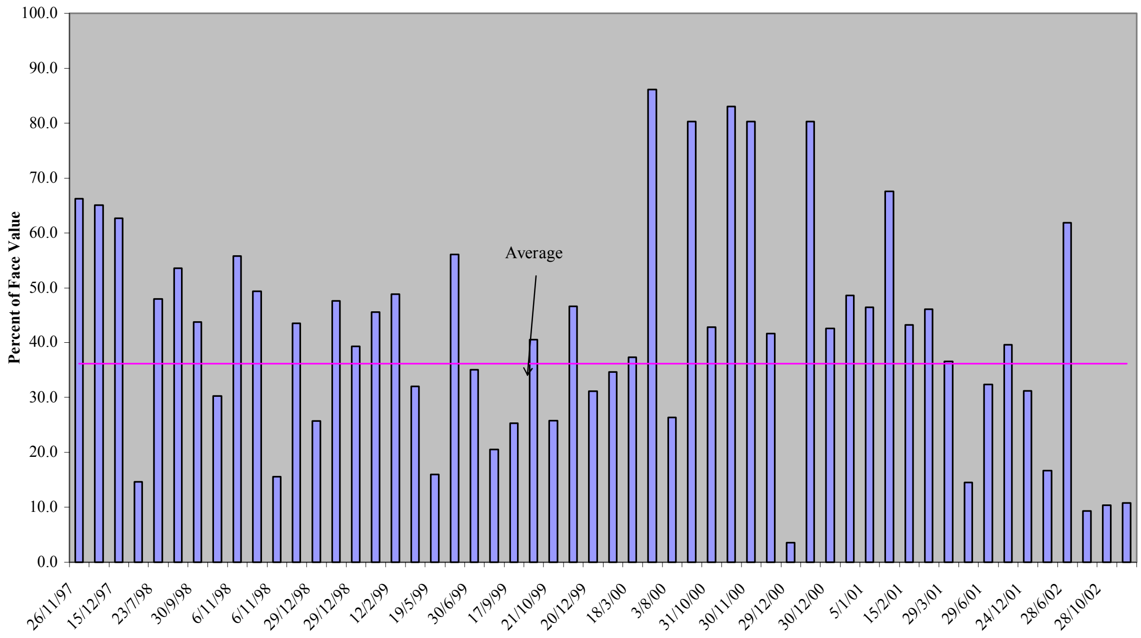
KAMCO was directed by the government to purchase Daewoo bonds held by foreign creditors and by the investment trust companies (ITCs) at inflated prices, as part of the government’s strategy to stabilize the financial system in the wake of the collapse of the Daewoo group. Although their purchase price was on average only 32.6 percent of face value (for assets other than secured commercial paper), the expected recovery rate on these unresolved Daewoo claims was much lower, as discussed below.[8] The pricing strategy of Daewoo debt to a large extent reflected the deficiency of the corporate insolvency framework—in order to speed up debt restructuring of the Daewoo group, the government opted for out-of-court settlement and some premium above the "fair value" identified by a due diligence review was paid to the creditors. In hindsight, a more transparent intervention strategy (for example, a court-supervised insolvency proceeding) would have allowed Daewoo debt to be priced more realistically. Nevertheless, it was courageous for the government to let Daewoo group fail.

## B. Disposal of NPLs

KAMCO adopted a number of techniques to dispose of the NPLs it acquired. In addition to traditional methods such as competitive auctions, collection of rescheduled repayments and recourse to the original seller, KAMCO also developed innovative techniques that broadly include bulk (pooled) sales, individual sales, and joint venture partnerships (Table 8). The choice of a particular method depended on the nature and size of NPLs. Bulk sales typically include the issuance of ABS and international bidding, and aim for early resolution of NPLs and quick cash flows. The emphasis of bulk sales is usually paced on the price-fixing of each asset pool, and the value of each individual asset is accorded less importance. In contrast, individual sales focus on discovering the market value of each individual asset. Individual sales include public auction of collateral, foreclosure auction, and sales of individual loans. Joint venture partnerships are used as a vehicle to cooperate with foreign and domestic investment companies who have specialized technology and know-how in asset management and corporate restructuring.

[8] It is noticeable from Figure 2 that in 2000, a number of purchases paid a price of more than 80 percent of face value, which appeared to be outliers from the norm. Those purchases were primarily secured commercial paper of the Daewoo group held by domestic banks. While the price paid for the Daewoo commercial paper was extraordinarily high, KAMCO seemed to have resolved these assets with a profit.

Figure 2. Purchase Price Through Time




Source: KAMCO.

Table 8. Resolution of Non-Performing Loans by KAMCO
(Nov.1997-Dec.2002, in trillions of won unless specified otherwise)

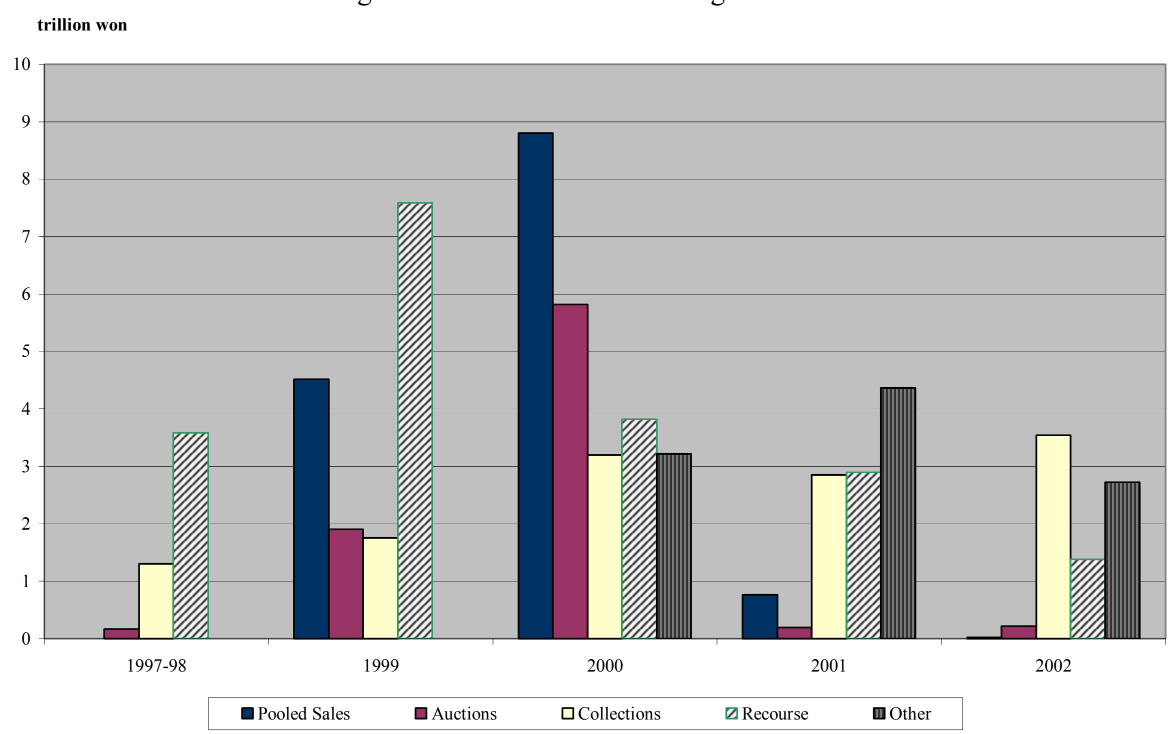
| Resolution Method | Face Value | Purchase Price | Amount Retrieved | Recovery Rate 1/ |
|---|---|---|---|---|
| International bidding | 6.1 | 1.3 | 1.6 | 26.4 |
| ABS Issuance | 8.0 | 4.2 | 4.2 | 52.0 |
| Foreclosure & public auction | 8.3 | 2.6 | 3.2 | 38.9 |
| Collection | 12.7 | 4.3 | 5.9 | 46.9 |
| Individual loan sale | 2.6 | 0.6 | 0.9 | 35.0 |
| Sale to AMC | 2.6 | 0.7 | 0.9 | 35.6 |
| Sale to CRC | 1.8 | 0.4 | 0.7 | 36.5 |
| Daewoo | 3.3 | 2.2 | 2.7 | 81.3 |
| Subtotal | 45.4 | 16.3 | 20.1 | 44.3 |
| Recourse and cancellation | 19.3 | 10.2 | 10.2 | 52.8 |
| Total | 64.6 | 26.5 | 30.3 | 46.8 |

Source: KAMCO.
1/ The ratio of amount retrieved to face value, in percent.

At the height of the financial crisis and in the early stages of KAMCO's existence, KAMCO's operations focused on the purchase of NPLs, and disposal of NPLs was minimal. The pace of disposal gradually became brisk from late 1998, when the macroeconomic environment was improving, the sovereign rating was being upgraded, and KAMCO's active marketing activities such as road shows were beginning to bear fruit.

In KAMCO's first international auction in 1999, the sale of NPLs was accompanied by a simple profit sharing agreement. The subsequent bids became increasingly more diversified, both in terms of assets pooled and the target investor base. In 1999, KAMCO broke new ground by international securitization of its NPL portfolio through issuance of ABS. With this transaction, KAMCO entered into its first joint venture with the Lone Star Fund to manage the disposal of assets. Its subsequent portfolio sales also attracted well-known names in the distressed-debt business, including Deutsche Bank, Morgan Stanley Dean Witter, Goldman Sachs, Cerberus Capital, and GE Capital. ABS issuance reached its peak in 2000. Also in 2000, the agency extended its resolution methods to direct sale of NPL pools and workout loans to JVs. These partnerships are charged with raising recovery values through efficient management of impaired assets and normalization of workout companies. By farming out the longer term management and normalization of impaired assets to specialized JVs, the agency has extended its role as a corporate restructuring vehicle. In 2001, KAMCO focused on resolution of Daewoo related loans by establishing joint ventures, and in 2002, it focused on individual loan sales (Figure 3).

Figure 3. NPL Resolution Through Time




Source: KAMCO.

In the process of adopting resolution methods to maximize recovery values, KAMCO has helped nurture a solid investor base in a new market for impaired assets by diversifying its products for various risk appetites. Several banks followed the path opened by KAMCO and have been selling their NPLs directly to foreign investors, including to KAMCO's partners. This new competition for NPLs is likely to have increased asset value and helped to speed up corporate and financial restructuring. The successful securitization of NPLs through ABS issuance has led to the development of an ABS market backed not only by impaired assets but also by healthy ones, further developing capital markets.[9] The issuance of ABS, which amounted to 6.8 trillion won in 1999, increased to 49 trillion won in 2000, 51 trillion won in 2001, and 40 trillion won in 2002. ABS issued by non-financial firms amounted to 29 trillion won in 2002, making up ⅓ of total corporate bond offerings.[10]

## V. Financial Performances of the NPA Fund

The NPA Fund has earned a profit on the NPLs it has disposed of so far. By December 2002, it retrieved 30.3 trillion won from resolving NPLs with a face value of 64.6 trillion won, for which it had paid 26.5 trillion won when the NPLs were purchased from the financial institutions (Table 8). However, this 3.8 trillion won profits was less than half of the operating expenses of the Fund (Table 9). The operating expenses of the NPA Fund have been high, amounting to on average 20 percent of the inventory of NPLs purchased, and close to 30 percent of the NPLs disposed of each year.[11]

Furthermore, the NPA Fund is likely to make a loss on the remaining NPLs yet to be resolved. As of April 2003, the NPA Fund still held 44.2 trillion won worth of NPL at face value that would need to be disposed of. (Table 4) All indications are that, in contrast to the 47 percent recovery rate it achieved on the disposal of the first ⅔ of the NPLs, the recovery rate on the ⅓

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[9] The enactment of the Asset Securitization Act in September 1998 was instrumental in facilitating the development of a market for distressed assets. Asset securitization allows the separation of assets from the originating institution and the use of these assets as backing for securities with different characteristics that appeal to investors of different risk appetite. The Asset Securitization Act ensures that the credibility of the ABS is separate from that of the originator, and the asset transfer from the originator to the Special Purpose Company (SPC) takes the form of a "true sale" from a legal and accounting perspective. From the investor's point of view, the non-recourse credit risk is mitigated by a number of methods, including due diligence and credit enhancement by a third party.

[10] FSS Weekly Newsletter, February 15, 2003.

[11] In the United States the liquidation expenses (including legal fees) of the Resolution Trust Corporation (RTC) and the FDIC amounted to less than 15 percent of collections on the NPLs.

remaining NPLs will be much lower, at around 15 percent.[12] A majority of these NPLs (70 percent) were Daewoo-related loans, for which KAMCO paid an average price of 36 percent. Thus a major source of the losses of the NPA Fund would be expected losses on Daewoo-related NPLs, which represented 32 percent of its total acquisitions.

As a result of these expected losses and high operating costs, the NPA Fund has accumulated a large negative equity (Table 10). This negative equity is part of the net cost incurred for financial sector restructuring. It will have to be financed by a net increase in public debt and repaid by future tax revenues.

Table 9. Operating Expenses of NPA Fund
(in billions of won unless specified otherwise)

| | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|
| Net interest expense | 762.4 | 957.4 | 710.6 | 350.5 |
| Administrative expenses | 61.0 | 65.1 | 62.1 | 52.1 |
| Selling expenses | 70.5 | 96.8 | 43.7 | 16.3 |
| Other net operating expenses | 881.8 | 2,306.1 | 767.1 | 666.2 |
| | | | | |
| Total | 1,775.7 | 3,425.4 | 1,583.4 | 1,085.2 |
| As percent of total assets | 10.1 | 20.0 | 10.2 | 10.2 |
| As percent of NPL inventory | 15.9 | 25.2 | 16.5 | 27.0 |
| As percent of amount of NPL disposed | 18.4 | 38.3 | 29.8 | 27.2 |
| As percent of profits from disposal | 136.4 | 407.1 | 189.0 | 146.0 |
| | | | | |
| *Memorandum items*: | | | | |
| Total assets 1/ | 17,598.0 | 17,162.4 | 15,533.2 | 10,668.0 |
| Inventory of NPLs and real estate owned 1/ | 11,191.2 | 13,581.9 | 9,622.4 | 4,016.3 |
| Proceeds from NPL disposal | 9,654.7 | 8,934.0 | 5,321.5 | 3,987.4 |
| Profits from NPL disposal 2/ | 1,301.6 | 841.5 | 837.9 | 743.2 |

Sources: KAMCO and author's estimates.
1/ At the end of period.
2/ Difference between amount retrieved and amount paid for purchase.

## VI. Conclusions

This paper has aimed to provide a balanced assessment of KAMCO's role in resolving the NPLs of the financial system in the Korea. It has argued that a proper understanding of the incentive structure of KAMCO's governance and operations should start from an analysis of the political and economic environment. As Kang (2003) has argued, pressure for a speedy recovery of

[12] KAMCO expects to recover 7.3 trillion won by 2018 through disposing of the remaining NPLs. It is not clear to what extent this estimate reflected recent improvements in the share prices of former Daewoo subsidiaries.

public funds injected for bank restructuring was a driving force behind the reprivatization of state-owned commercial banks. The same pressure was also driving KAMCO to resolve NPLs quickly and to experiment with innovative techniques of asset management and disposal. Such efforts led to the development of a market for distressed assets in Korea and contributed to the deepening of broader financial markets. On the other hand, KAMCO's operations have been expensive. In addition, inflated transfer prices on Daewoo-related claims, though possibly justified by the government strategy of speedy out-of-court debt workout, overshadowed KAMCO's strive to follow commercial principles in pricing loan purchases.

Table 10. Balance Sheet of the NPA Fund
(As of end of period; in billions of won)

| | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|
| Current Assets | 6,157 | 3,131 | 4,842 | 4,588 |
| Inventories | 11,191 | 13,582 | 9,622 | 4,015 |
| NPL purchased | 11,024 | 13,498 | 9,586 | 3,979 |
| Ordinary loans | 2,563 | 873 | 621 | 591 |
| Restructured corporate loans | 6,437 | 2,567 | 1,699 | 1,029 |
| Work-out corporate loans | - | 11,495 | 10,332 | 7,080 |
| Non-settled NPL purchased | 4,047 | 3,118 | 1,949 | 113 |
| Total | 13,048 | 18,052 | 14,600 | 8,812 |
| (Allowance for bad debts) | (2,024) | (4,553) | (5,014) | (4,833) |
| Real estate owned | 169 | 82 | 36 | 36 |
| Long-Term Assets | 247 | 450 | 1,068 | 2,065 |
| Investment securities | 247 | 450 | 1,068 | 2,065 |
| Total Assets | 17,595 | 17,162 | 15,533 | 10,668 |
| Current Liabilities | 3,384 | 1,707 | 3,889 | 13,315 |
| Long-Term Liabilities | 15,431 | 19,357 | 16,289 | 4,249 |
| **Total Equity** | **(1,219)** | **(3,901)** | **(4,646)** | **(6,896)** |
| *Of which*: net loss during the year | (518) | (2,557) | (669) | (2,235) |
| Total Liabilities and Equity | 17,595 | 17,162 | 15,533 | 10,668 |

Source: KAMCO.

KAMCO's work is not yet finished—it still remains to dispose of all distressed assets purchased by the NPA Fund. KAMCO's future has also been subject to much public debate. It has been active in providing technical expertise to AMCs around the world and is purchasing newly emerging NPLs, such as nonperforming credit card debt, on its own account. Given KAMCO's experience, there is a case to preserve its accumulated expertise and not simply close shop. One promising strategy would be to sell the government-owned shares of KAMCO to the private sector. This would ensure a commercial orientation, thereby creating incentives to focus on core competencies, economize on operating costs, and maximize profits and efficiency.

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