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Korea Asset Management Corporation (KAMCO): Resolution of Nonperforming Loans in South Korea[1]

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Abstract

During the 1997 Asian Financial Crisis, international capital outflows created a liquidity crisis for Korean financial institutions that had relied on foreign short-term borrowing. Korean financial institutions also faced high levels of nonperforming loans (NPLs) following years of rapid credit growth. The government mandated that the Korea Asset Management Corporation (KAMCO) purchase NPLs from banks over a five-year period starting in November 1997. By November 2002, the agency had acquired NPLs with a total face value of KRW 110.2 trillion ($88.2 billion) for KRW 39.8 trillion. Using innovative asset resolution methods, KAMCO was able to recover at a profit a large portion of the funds invested. When it liquidated the fund in 2013, KAMCO had recovered KRW 48.1 trillion, removing the financial burden to the public caused by earlier losses.

Keywords: Asian Financial Crisis, asset management, Korea, loan resolution, nonperforming loans, KAMCO.

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[1] This case study is part of the Yale Program on Financial Stability (YPFS) selection of New Bagehot Project modules considering broad-based asset management company programs.

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KAMCO

At a Glance

South Korea's economy grew rapidly in the early 1990s, driven by growing exports, domestic debt, and capital inflows. But foreign investors lost confidence in the region in 1997 after the Thai baht devalued. As the Asian Financial Crisis worsened, Korea's won depreciated. Korean financial institutions were unable to maintain their foreign short-term borrowing. At the same time, the financial sector had to confront high levels of nonperforming loans (NPLs). In August, the Korean National Assembly passed a law reorganizing the Korea Asset Management Corporation (KAMCO) and gave it a new mandate to purchase and resolve NPLs. KAMCO, previously a subsidiary of the Korean Development Bank, was set up to purchase NPLs for five years. Over that period, KAMCO acquired loans with a total face value of KRW 110.2 trillion ($88.2 billion) for KRW 39.8 trillion.

KAMCO used a variety of resolution methods. These included the issuance of asset-backed securities (ABS) for domestic and international markets, international auctions, and joint ventures with Korean and global partners. By 2002, KAMCO had recovered KRW 30.3 trillion and maintained loans with an acquisition value of KRW 12.8 trillion on its balance sheet. By 2013, KAMCO had liquidated its NPL fund. Recoveries totaled KRW 48.1 trillion.

Summary of Key Terms	
Purpose: Resolution of nonperforming loans held by Korean financial institutions	
Launch dates	Announcement: August 22, 1997 Operational date: November 26, 1997 First transfer: November 26, 1997
Wind-down dates	Expiration date for transfers: November 2002 Ceased operations: KAMCO's NPL fund liquidated by 2013
Size and type of NPL problem	5.6% of total loans at the beginning of 1997) Primarily commercial loans
Program size	Not specified
Eligible institutions	All financial institutions; open and closed bank
Usage	Acquired KRW 110.2 tn (USD 88.2 bn) for KRW 39.8 tn (USD 31.8 bn)
Outcomes	KRW 8.9 tn in profits generated by the disposal of assets
Ownership structure	Joint public-private ownership
Notable features	Early purchases allowed for ex post adjustments and put/calls on purchased assets

Summary Evaluation

Observers have recognized KAMCO for its recovery efforts and innovative loan resolution methods. The agency helped create a market for distressed assets in South Korea through the issuance of ABS. However, its financial performance was mixed. Profits from loan resolution were overshadowed by high operating costs, resulting in a net loss over its first five years. KAMCO was able to turn a profit on later loan sales. Some observers criticized the government for pressuring KAMCO to purchase loans from Daewoo, a leading conglomerate, compromising KAMCO's autonomy.

South Korea's KAMCO: South Korea Context	
GDP (SAAR, Nominal GDP in LCU converted to USD)	$612.48 billion in 1996 $582.65 billion in 1997
GDP per capita (SAAR, Nominal GDP in LCU converted to USD)	$13,403.00 in 1996 $12, 398.00 in 1997
Sovereign credit rating (5-year senior debt)	Data for 1996: Fitch Rating: AAA Data for 1997: Fitch Rating: BBB- S&P Rating: BBB-
Size of banking system	$291.54 billion in 1996 $299.95 billion in 1997
Size of banking system as a percentage of GDP	47.60% in 1996 51.48% in 1997
Size of banking system as a percentage of financial system	87.28% in 1996 86.80% in 1997
5-bank concentration of banking system	68.51% in 1996 68.27% in 1997
Foreign involvement in banking system	NA
Government ownership of banking system	NA
Existence of deposit insurance	Yes
Sources: Bloomberg; World Bank Global Financial Development Database; World Bank Deposit Insurance Dataset.	

I. Overview

Background

In the summer of 1997, Thailand was forced to abandon its currency peg to the US dollar due to a lack of foreign currency reserves (Sharma 2001; King 2001). The financial collapse of the Thai baht triggered a crisis that quickly spread across Southeast Asia, as international investors sought to decrease their exposure in the region. While South Korea had experienced strong growth in both real GDP and consumption in the run up to the crisis, the country started experiencing difficulties as reduced capital inflows revealed structural problems in Korea's financial and corporate sectors (He 2004; Sharma 2001). After decades operating under a government-supported industrialization strategy fueled by easy credit to the country's main conglomerates, or *chaebols* (Baliño and Ubide 1999), the Korean corporate sector had developed a culture focused on gaining "market share rather than profitability along with a capital structure that relied heavily on external borrowing" (He 2004; Baliño and Ubide 1999). Financial liberalization in the 1990s thus left a financial system with eroded lending standards and a banking sector lacking skills in credit analysis and risk management. At this stage, Korean banks largely met domestic demand for funds through foreign borrowing at short maturities. As the crisis reached Korea and foreign capital inflows dried up, the country's financial sector found itself confronted with severe maturity mismatches and large amounts of nonperforming loans (NPLs) (Baliño and Ubide 1999). The situation was exacerbated by the government's lax loan classification standards, which had allowed banks to underestimate the amount of NPLs on their balance sheets[3] (He 2004).

To prevent a complete collapse of the country's financial sector, Korean government officials formally requested emergency standby loans from the International Monetary Fund (IMF) in the second half of 1997 (*CNNMoney* 1997). The crisis management strategy established under IMF guidance focused on four key elements: (1) Restoring stability in the financial system through liquidity support; (2) restoring solvency of the financial system through intervention in nonviable institutions, purchase of NPLs and recapitalization; (3) bringing prudential regulations and supervision in line with international best practices; (4) corporate restructuring measures to reduce corporate distress (He 2004; Chopra et. al 2001).

Because the resolution of NPLs held by domestic financial institutions was considered an important aspect of the strategy for crisis management and financial sector restructuring, the government announced the creation of a nonperforming asset resolution fund to be managed by the publicly operated Korea Asset Management Corporation (KAMCO). KAMCO

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[3] Classification standards were tightened in March 1998 to align with international standards. Before the crisis, only loans in arrears of six months or more were classified as nonperforming. As banks were required to tighten classification criteria, loans in arrears of three months or more were included.

began executing its new mandate on November 26, 1997, with the purchase of loans with total face value of KRW 4.4 trillion.[4] from two systemically important institutions, Seoul Bank and Korea First Bank (He 2004).

In May 1998, the government estimated that the total NPLs of all financial institutions in Korea came to KRW 118 trillion, or 27 percent of GDP. Of that total, KRW 68 trillion had been in arrears for six months or more and were considered prone to default risks. A further KRW 50 trillion in loans had been in arrears for three to six months and were classified as “precautionary.” The government said it would target KRW 100 trillion worth of NPLs for immediate disposal. It would orchestrate the disposals through two channels. Financial institutions themselves would dispose of about half of the loans themselves, either by selling collateral or calling in the loans. KAMCO would purchase and sell the remaining half. Estimates of NPLs in the system subsequently grew later in 1998 and 1999 as the government required banks and later nonbanks to redefine NPLs as in arrears for three months or more and to take into account forward-looking criteria in their credit assessment (He 2004).

Program Description

KAMCO was founded under the Korea Development Bank Act of 1962 (He 2004) to provide the Korea Development Bank (KDB) with a legal basis for collecting overdue loans. Its scope of business was gradually expanded to include the liquidation of government-invested corporations as well as the public sale of confiscated properties (KAMCO 2012). KAMCO adopted its role in NPL resolution when it was reorganized under the “Act on the Efficient Disposal of Nonperforming Assets, etc. of Financial Institutions and the Establishment of Korea Asset Management Corporation” (KAMCO Act 1997), an amendment to the 1962 KDB Act passed in August 1997 (KAMCO 2012). Under the new framework, an NPL resolution fund was established and mandated to raise funding and purchase NPLs over a period of five years until November 2002 (Cerruti and Neyens 2016). The initial act was amended several times between 1997 and 1999 to “[strengthen KAMCO’s] asset management and disposition capabilities” (Baliño and Ubide 1999), allowing additional business functions and a more active involvement in corporate restructuring efforts (Lee 2011). While the NPL fund was initially established without a sunset date, a December 2006 amendment to the KAMCO Act specified that the fund would cease its NPL resolution operations by November 2012, 15 years after being established (KAMCO Act 1997).

Under the Act, KAMCO was reorganized as a special resolution agency with the status of a public nonbank financial corporation supervised by the Financial Supervisory Commission

[4] Approximately $3.5 billion using an exchange rate of KRW 1250 for $1. This rate is computed from the average exchange rate during the five-year purchasing period using daily data from the Federal Reserve of St. Louis.

(FSC)[5] and governed by a Management Supervisory Committee consisting of 11 members. (He 2004; Lee 2011). Its NPL fund was monitored by the Public Fund Oversight Committee, led by the Ministry of Finance and Economy (MOFE) (Cerruti and Neyens 2016). The KAMCO Act also revised the agency's ownership structure (KAMCO Act 1997). KAMCO, which had until then been a subsidiary of the KDB, issued shares for a total capital of KRW 1 trillion by 1999 (Baliño and Ubide 1999; KAMCO Act 1997; Cerruti and Neyens 2016). A large majority of its shares remained government owned with the MOFE as majority shareholder owning 42.8%, followed by the KDB with 28.6%. The remaining 28.6% of shares were held by other financial institutions (He 2004).

KAMCO's NPL resolution fund purchased nonperforming assets from distressed financial institutions over a five-year period, from November 1997 to November 2002. In line with its mandate, KAMCO considered as eligible for purchase only those loans "whose security rights and transfer were legally executable and who had been classified as substandard or below" (He 2004). Although the KAMCO Act of 1997 provides that "any financial institution may entrust [KAMCO] with the disposal of nonperforming assets" (KAMCO Act 1997), the agency would "analyze whether the loans were eligible for purchase" and "conduct due diligence on the loans" before entering an "assignment and assumption agreement" and making a payment to the seller (He 2004; Cerruti and Neyens 2016).

Assets were divided into four categories: "ordinary" loans of companies still operating; "special loans" of companies in a court-supervised receivership; "Daewoo loans," acquired mostly in 2000 after the Daewoo Group collapsed; and "work-out loans" to companies in out-of-court work-out programs (He 2004). KAMCO factored these distinctions into its pricing of NPL purchases. For ordinary and special loans that were secured by collateral, KAMCO offered a fixed percentage of the collateral value, initially 70–75%. KAMCO initially purchased unsecured NPLs at a large discount of 80% or more to face value. In September 1998, KAMCO tightened its pricing framework to 45% of the collateral value for secured loans and increased the discount on face value for ordinary unsecured loans to 97%. Work-out loans represented only 2.5% (as a fraction of face value) of assets purchased and did not follow the same pricing formula. Daewoo loans represented nearly one-third of total purchases (He 2004). See Figure 1 for further details. KAMCO treated them separately, as part of the government's strategy to stabilize the financial system after the Daewoo conglomerate failed. The government directed KAMCO to purchase Daewoo bonds held by foreign creditors and domestic investment trust companies to "facilitate a speedier out-of-court restructuring process for these loans" after the collapse of Daewoo (Cerruti and Neyens 2016).

[5] The Financial Supervisory Commission served as South Korea's main financial regulator during the Asian crisis. It was renamed the Financial Services Commission in 2008.

Figure 1: KAMCO's NPL Acquisitions by Loan Type

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: He 2004.

KAMCO's purchases were funded by 4 different sources (He 2004):

(i) issuance of government bonds (KRW 20.5 trillion);

(ii) assessments on financial institutions in proportion to their holdings of NPLs (KRW 500 billion);

(iii) loans from KDB (KRW 500 billion);

(iv) recovered funds from NPL resolution (Cerruti and Neyens 2016).

The KAMCO Act did not impose a resolution method, giving KAMCO the liberty to adopt a number of techniques to dispose of its NPLs. During the first year, these methods included "traditional methods such as competitive auctions, collection of rescheduled repayments and recourse to the original seller" (He 2004). Later, KAMCO experimented with more innovative methods such as "bulk (pooled) sales, individual sales, and joint venture partnerships" (He 2004). Following the enactment of the 1998 Asset-Backed Securities Act, KAMCO began issuing ABS for the domestic market (He 2004).

Outcomes

Over the course of its operations, KAMCO acquired assets with a total face value of KRW 110.1 trillion at a total price of KRW 39.8 trillion,[6] for an average discount of 64% (He 2004). In total, the NPLs purchased amounted to 9% of financial sector assets. While most

[6] These figures are adopted from the IMF report, *The Role of KAMCO in Resolving Nonperforming Loans in the Republic of Korea* (He 2004), which breaks purchases down by year, loan category, and selling institution. KAMCO reported the total as KRW 39.2tn (KAMCO Annual Report 2013).

loans were purchased from banks, KAMCO also purchased loans from nonbank institutions, including investment trust companies, insurance companies, merchant banks, mutual savings, securities firms, and foreign institutions. In total, KAMCO acquired over 300,000 loan accounts (Fung et al. 2004). See Figure 2 for further detail. KAMCO's portfolio was heavily concentrated, with "roughly 1 percent of borrowers [accounting] for 90 percent of the face value of [loans acquired]"(Cerruti and Neyens 2016). This probably reflects exposures to *chaebols*, which accounted for a large fraction of credit extended in the years leading up to the crisis.

Figure 2: KAMCO's NPL Acquisitions by Selling Institution

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 institutions	5.0	2.1	41.9	5.3
Merchant banks	3.5	1.6	46.3	4.1
Mutual savings	0.5	0.1	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: He 2004.

KAMCO was able to resolve a large share of its NPL portfolio through foreclosures, collection or recourse and cancellation[7]. Together, assets resolved through these channels account for more than 60% of recovered funds. Beyond these traditional methods, KAMCO used a variety of innovative tools including the issuance of asset-backed securities, joint ventures, and international auctions (He 2004).

KAMCO's ABS issuances were well received, with a total of KRW 4.2 trillion recovered. ABS were issued on 15 separate occasions between 1999 and 2001 (KAMCO's Experience 2002). The securities were mostly intended for the domestic market (Oh 2002). The only international issuance occurred in July 2000, when KAMCO partnered with UBS and Deutsche Bank to issue ABS with a face value of $395 million for international investors.

[7] Assets resolved through recourse and cancellation were returned to the original seller after the transfer to KAMCO. This could occur upon request by KAMCO or the seller (see Key Design Decision regarding acquisition pricing).

Major international investors included Japanese institutions Norinchukin Bank and Nomura Principal Finance, as well as the California-based fixed-income investment firm Western Asset Management (KAMCO's Experience 2002).

KAMCO also entered into several successful joint ventures, accumulating KRW 1.6 trillion of recovered funds across eight deals (KAMCO's Experience 2002). Partners included domestic and foreign financial institutions. The deals were concluded with a variety of partners, including Samsung Life Insurance and Hyundai Capital as domestic partners and Deutsche Bank, Morgan Stanley, Colony Capital, and Lehman Brothers as international partners. These partnerships, "in which KAMCO typically held a 50 percent ownership interest," were established to extend the agency's role as a corporate restructuring vehicle by "farming out the longer-term management and normalization of impaired assets to specialized JVs [joint ventures]" but also served as "knowledge transfer [vehicles] for KAMCO" (Cerruti and Neyens 2016; He 2004). At the same time, they provided KAMCO with an "opportunity to participate in the upside if recoveries exceeded certain levels" (Cerruti and Neyens 2016).

International auctions were similarly successful with a total of KRW 1.8 trillion recovered over seven auctions. Buyers included investment banks Goldman Sachs and Morgan Stanley, as well as Cerberus Capital Management and Lone Star Funds, two private equity funds specialized in distressed assets (KAMCO's Experience 2002).

Last, KAMCO also utilized individual loan sales to dispose of assets. These deals were concluded with Korean companies and took the shape of M&A agreements wherein the buyer took over the managerial rights of the distressed company, as well as simple loan sales after which the buyer took over KAMCO's position (KAMCO's Experience 2002).

Within five years of the first purchases, KAMCO was able to liquidate a large portion of the ordinary, special, and work-out loans it acquired but maintained a large holding of Daewoo loans. The face value of assets resolved by December 2002 represented 58.6% (64.6/110.1) of the face value of assets acquired. As of April 2003, KAMCO maintained NPLs with acquisition value of KRW 12.8 trillion (KRW 44.2 trillion face value) on its balance sheet. With an acquisition value of KRW 10.4 trillion, Daewoo loans constituted by far the largest share of assets remaining on KAMCO's balance sheet (81.2%) (He 2004). In total, KAMCO acquired Daewoo-related loans from various Daewoo affiliates, which remained unresolved at the end of the operating window (Oh 2002). In 2009, KAMCO reported that 11 former Daewoo companies had successfully completed their work-out programs leading KAMCO to recover additional funds (KAMCO 2009).

In total, KAMCO recovered KRW 30.3 trillion by the time its operating window ended in November 2002. The average resale price for loans was 14% higher than the purchase price, with an average recovery rate of 46.8% on face value. This resulted in a gross profit of KRW 3.8 trillion. However, this profit vanished after accounting for fund operating costs. With total operating costs between 1999 and 2002 amounting to KRW 7.9 trillion, the fund accumulated net losses in excess of KRW 4 trillion during its early operations, which "[would] have to be financed by a net increase in public debt and repaid by future tax revenues" (He 2004). However, KAMCO turned a profit by the time of the fund's liquidation in 2013. As the NPL resolution fund reached its sunset date, KAMCO reached KRW 48.1

trillion in total funds recovered, exceeding the total purchase price of the NPL portfolio by KRW 8.9 trillion and removing the financial burden to the public by covering the high operating costs of its early operations (KAMCO Reports).

II. Key Design Decisions

1. Part of package: Policymakers established KAMCO's NPL resolution fund as part of a broader stabilization strategy agreed upon with the IMF that included recapitalization.

Under an IMF-supported program, South Korean authorities established a crisis management strategy, which among other aspects, focused on "restructuring measures to restore solvency of the financial system by intervention in nonviable institutions, purchase of NPLs and recapitalization" (He 2004). KAMCO was reorganized and tasked with the management of a resolution fund for NPLs.

2. Legal authority: South Korea's National Assembly passed legislation to establish KAMCO as a public nonbank financial corporation under supervision of the Financial Supervisory Commission.

Following the enactment of the "Act on the Efficient Disposal of Nonperforming Assets etc. of Financial Institutions and the Establishment of Korea Asset Management Corporation," KAMCO was established as a public nonbank financial corporation under supervision of the Financial Supervisory Commission (He 2004) and had its NPL fund monitored by the Public Fund Oversight Committee, led by the Ministry of Finance and Economy (Cerruti and Neyens 2016).

The KAMCO Act was amended several times after 1997 to expand the scope of KAMCO's activities. Through a series of amendments between 1998 and 1999, KAMCO's business functions were expanded to allow it to serve the role of a "bad bank" and be more actively involved in corporate restructuring efforts and workout programs (Baliño and Ubide 1999; Lee 2011).

3. Special powers: Policymakers did not appear to give KAMCO special powers related to its NPL resolution fund function.

Available documentation does not suggest policymakers gave KAMCO any extraordinary powers.

4. Mandate: Policymakers charged KAMCO with two tasks, the purchase of nonperforming assets and the disposal of the assets to minimize the public's financial support of restructuring.

KAMCO adopted its role in NPL resolution when it was reorganized under the "Act on the Efficient Disposal of Nonperforming Assets, etc. of Financial Institutions and the Establishment of Korea Asset Management Corporation" (KAMCO Act 1997), an amendment to the 1962 KDB Act passed in August 1997 (KAMCO 2012). Under the new framework, an NPL resolution fund was established and mandated to raise funding and purchase NPLs over a period of five years until November 2002 (Cerruti and Neyens 2016). Policymakers mandated that KAMCO purchase NPLs "to support normalization of financial institutions and corporate restructuring" (Chopra et. al 2001).

KAMCO's mandate required that the "disposal of these assets . . . minimize public burden of financial restructuring" (Chopra et. al 2001).

5. **Communication: KAMCO officials operated the NPL fund in a transparent fashion that has been commended by researchers in subsequent years.**

The Public Fund Oversight Committee monitored KAMCO's NPL fund (Cerruti and Neyens 2016), while KAMCO audited its accounts semiannually and published the results (Baliño and Ubide 1999). Cerruti and Neyens (2016) described KAMCO's "frequent public reporting" as a good practice for AMCs.

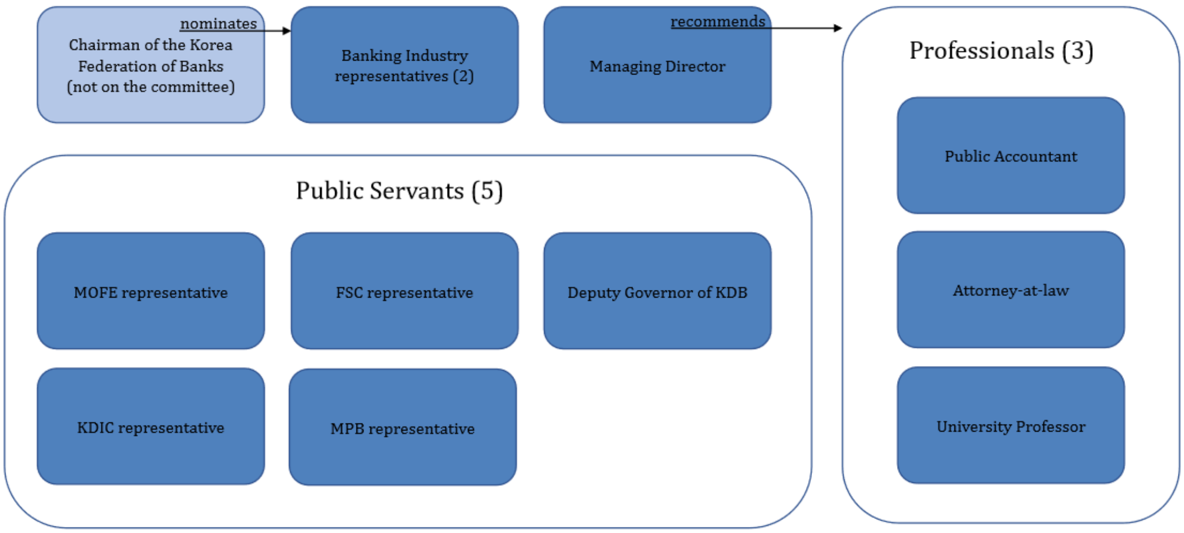
6. **Ownership structure: KAMCO, established in 1962 as a subsidiary of the KDB, changed its ownership structure in 1997 with the enactment of the KAMCO Act, issuing shares that resulted in its being partially owned by Korean financial institutions.**

Previously established as a subsidiary of the KDB, policymakers reorganized KAMCO's ownership structure, and the reorganized agency issued shares for a total capital of KRW 1tn by 1999 (KAMCO Act 1997). A majority of shares were left in government ownership, with the Ministry of Finance and Economy owning 42.8% and the KDB 28.6%. The remaining 28.6% of shares were owned by other financial institutions (He 2004).

7. **Governance/administration: KAMCO was governed by a Management Supervisory Committee consisting of 11 members representing the government, the banking industry, and the public. Its NPL fund was monitored by the Public Fund Oversight Committee.**

Members of the Management Supervisory Committee included the managing director of KAMCO; representatives from the MOFE, the Ministry of Planning and Budgeting, the FSC, and the Korea Deposit Insurance Corporation; the deputy governor of the KDB; two representatives from the banking industry nominated by the chairman of the Korea Federation of Banks; three professionals recommended by the managing director, including an attorney-at-law, a certified public accountant or a certified tax accountant, and a university professor or doctorate holder who works for a research institute (Cerruti and Neyens 2016; He 2004). See Figure 3 for further detail.

Figure 3: KAMCO's Management Supervisory Committee



Source: He 2004.

8. **Size: Although KAMCO's NPL resolution fund had no formally predetermined size, asset purchases were limited by constraints on funding and the timing of purchases.**

KAMCO was allocated KRW 21.5 trillion in funding to finance its NPL purchases over a period of five years starting in November 1997. KAMCO was allowed to finance additional purchases through funds recovered from the sale of NPLs. However, no further purchases could occur after the end of the five-year window in November 2002 (Cerruti and Neyens 2016).

9. **Funding source: KAMCO was partially funded by industry sources based on assessments tied to the size of NPL portfolios.**

By the end of the operating window, KAMCO's NPL fund had acquired NPLs amounting to a total purchase value of KRW 39.8 trillion. Most of the required funds were provided through government-guaranteed bonds issued by KAMCO to selling institutions. The bonds were issued on 19 separate occasions between 1997 and 1999 and amounted to KRW 20.5 trillion in total. Additionally, KAMCO collected KRW 500 billion in assessments on financial institutions in proportion to their holdings of NPLs and received a loan from the KDB for KRW 500 billion. Later purchases, mostly related to failure of Daewoo, were financed through funds that KAMCO had already recovered from the resolution of assets previously acquired (He 2004; Cerruti and Neyens 2016).

10. Eligible institutions: Any financial institution was eligible to request that KAMCO acquire its NPLs.

Per the KAMCO Act, "any financial institution" could request that KAMCO acquire its distressed assets (KAMCO Act 1997). This resulted in a diverse set of sellers. While banks represent the largest share of the asset acquisitions, the agency also purchased loans from several nonbank institutions (see Figure 2). The decision to include nonbank institutions was a consequence of the severity of the crisis in the corporate sector which was exposed to a variety of financial institutions. Unlike other Asian countries, Korea's financial sector was very diversified as the crisis hit, justifying the inclusion of a larger set of institutions in KAMCO's operations.

11. Eligible assets: Eligible assets were mostly commercial loans classified substandard and below whose security rights and transfer were legally executable.

KAMCO considered eligible for purchase "salable loans whose security rights and transfer were legally executable, from among loans classified as substandard and below" (He 2004). However, priority was given to loans "whose removal was considered critical to the rehabilitation of the institution from a public policy point of view, and NPLs that had multiple creditors" (He 2004). Officials in other countries utilizing AMCs have implemented similar strategies that target an economy's largest, important debtors.

Policymakers allowed KAMCO's NPL fund to purchase loans from a variety of financial institutions, including banks, trust investment companies, insurance companies, merchant banks, and securities companies. Officials created the wider asset net "because Korea had a more diversified financial system than other Asian countries, and because of the severity of the crisis in the corporate sector, which was exposed to a variety of financial institutions" (Cerruti and Neyens 2016). Still, KAMCO purchased mostly commercial NPLs (Cerruti and Neyens 2016).

12. Acquisition mechanics: Acquisitions occurred upon request from distressed financial institutions.

KAMCO considered NPL acquisitions upon request from distressed financial institutions. "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." Final decisions were made by the Management Supervisory Committee. If a purchase was approved, KAMCO entered an *assignment and assumption agreement* with the seller. Eventually, KAMCO "[received] documents evidencing the origin of the loan and [had] the registration of security rights transferred" (He 2004).

The bonds issued to fund KAMCO's operations were government guaranteed thus carrying a 0% risk weighting for regulatory capital purposes (Cerruti and Neyens 2016). See Figure 4 for further details.

Figure 4: KAMCO Government-Guaranteed Bond Issuance

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.

Source: He 2004.

13. Acquisition pricing: KAMCO used a pricing formula based on the type of loan to assess the value of NPLs, and initially allowed for ex post adjustments and put/calls on purchased assets.

Before a purchase, sellers and their loans were divided into four categories (He 2004):

(i) *ordinary* loans: loans of companies currently operating;

(ii) *special* loans: loans of companies under court-supervised receivership whose loans have been restructured;

(iii) *work-out* loans: loans of companies in the out-of-court work-out programs;

(iv) *Daewoo* loans: loans of the Daewoo conglomerate.

These categories helped determine how KAMCO priced NPLs.

Figure 5: Overview of KAMCO's Pricing Framework

Table A4.1

KAMCO's NPA purchase and pricing methods

(A) Restructured corporate NPAs

Period	Price Criteria		Purchasing method
	Secured Loan	Unsecured Loan	
Nov 97 – Jul 98	70% - 75% of face value	20% - 60% of face value	Bulk purchase and settlement
Sep 98 – Jun 99	45% of collateral value **		
Jul 99	*Assets authorized by court* 46.53% of valid collateral price* *Assets unauthorized by court* 45.95% of valid collateral price*	*Assets authorized by court* 13.41% of principal face value *Assets unauthorized by court* 8.63% of principal face value	Purchase at fixed rate
Sep 99	*Assets authorized by court* 54.93% of valid collateral price* *Assets unauthorised by court* 52.60% of valid collateral price*	*Assets authorized by court* 13.91% of principal face value *Assets unauthorized by court* 9.03% of principal face value	

(B) Ordinary NPAs

Period	Price Criteria		Purchasing method
	Secured	Unsecured	
Nov 97 – Jul 98	70%-75% of valid collateral price*	***Doubtful*** 10%-20% of face value ***Assumed loss*** 1%-3% of face value	Bulk purchase and settlement
Since Sep 98	45% of collateral value**	3% of principal face value	Purchase at fixed rate

Note: 1. * Appraisal value – (senior lien, loan amount, mortgage amount). ** Appraisal value – senior lien. 2. Discount rate = Base rate + Credit risk + Maturity risk.

Sources: Legal and Research Department, and Corporate Policy and Strategic Management Office, KAMCO.

Source: Fung et al. 2004.[8]

[8] NPA is an acronym for nonperforming asset.

Figure 5 presents an overview of the pricing process for NPL purchases. KAMCO's approach to loan purchases evolved during the first years of its operations as is reflected in the tightening of the pricing framework in September 1998 (He 2004). Early acquisitions were made under considerable pressure to rapidly absorb a large share of NPLs to achieve financial stability. Under these circumstances, KAMCO resorted to bulk purchases to guarantee a swift transfer of NPLs (Cerruti and Neyens 2016). However, this method prevented KAMCO from conducting a complete evaluation of the loans and establishing an appropriate purchase price. To protect KAMCO from the risk of a large discrepancy between the purchase price and the value emerging from an evaluation of the loans, the purchases were subject to ex post adjustments (Fung et al. 2004). Another feature of these agreements was a put/call option allowing "either KAMCO to return (put) or the seller to request (call) the return of the loans" (Cerruti and Neyens 2016). Loans resolved through the exercise of an option account for approximately 30% of loan resolutions by face value (Fung et al. 2004).

As major market turmoil was overcome and because of often protracted negotiations, option-enhanced purchases were abandoned in favor of fixed-rate agreements after September 1998 (Fung et al. 2004; He 2004). This resulted in an increased discount rate on loan purchases. Figure 6 details the evolution of the amount paid on face value during the purchasing window.

Figure 6: Average Loan Purchase Price by Year

Table 4.1

NPA acquisition via the NPA Fund (in trillions of KRW)

Year	Face Value	Purchase Price	Ratio (%)
1997	11.06	7.14	64.6
1998	32.83	12.26	37.3
1999	18.29	4.46	24.4
2000	32.97	12.92	39.2
2001	6.00	1.95	32.5
2002	8.96	1.06	11.9
Cumulative	110.11	39.79	36.1

Sources: Corporate Planning Department and Corporate Policy and Strategic Management Office, KAMCO.

Source: Fung et al. 2004.

In addition to *ordinary* and *special* loans KAMCO distinguished between *work-out* and *Daewoo* loans. *Work-out* loans represent a very small fraction of acquired assets (2.5%) and were generally acquired at a high discount (76.9% on average). *Daewoo* loans represent 32% of assets acquired. The loans were acquired as part of a government effort to "facilitate a speedier out-of-court restructuring process for these loans" after the collapse of Daewoo (Cerruti and Neyens 2016). They were priced more generously than other loans. The acquisition of Daewoo debt at a premium “reflected the deficiency of the corporate insolvency framework.” Thus, “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” (Cerruti and Neyens 2016; He 2004).

14. Disposal: KAMCO relied on a broad set of resolution methods to ensure a swift resolution of NPLs and promote a domestic market for distressed assets.

KAMCO resolved the majority of its NPLs through traditional channels including “competitive auctions, collection of rescheduled repayments, and recourse and cancellation” (Cerruti and Neyens 2016). However, another critical component of the agency’s exit strategy was to foster the development of a domestic market for distressed assets. Since “such a market is typically missing in less developed countries because [of] information asymmetries and a lack of creditor coordination,” KAMCO stepped in to promote liquidity in the distressed asset market by issuing ABS for the domestic market while gaining attention with large sales to globally important institutions through its international auctions (He 2004). International interest in turn encouraged participation of domestic institutions (He 2004).

KAMCO appears to have shifted its resolution strategy from “speedy recovery” to “return maximization” over the course of its operations. Observers have noted that “the trade-off between speedy recovery and maximization of asset value shaped the evolution of the resolution methods chosen by KAMCO” (He 2004). This is apparent in the abundant use of the recourse option during the early years of operations. Later KAMCO “[diversified] its sales methods” in pursuit of higher returns (Oh 2002).

KAMCO recovered assets with face value KRW 64.6 trillion over the first five years of its operations (see Figure 7). On average, assets were sold for 14% more than the acquisition price. However, if one excludes the 19.3 trillion of assets for which the put/call option was exercised, the average return on assets increases to 23%. This reflects the fact that all resolution methods yielded recovery values well above the purchase price, apart from ABS which broke even.

Unlike other AMCs, KAMCO did not directly engage in restructuring or recapitalization of banks (Cerruti and Neyens 2016), but policymakers saw KAMCO’s NPL purchases as a “mechanism” that supported bank restructuring (Chopra et. al 2001). Though the government created the Structural Reform Committee, housed within the FSC, to plan and implement corporate and financial restructuring reforms (Lee 2011), KAMCO assumed a smaller role in corporate restructuring (starting in 2000) by farming out longer-term management of nonperforming assets to joint-venture companies with expertise in asset management and corporate restructuring (Chopra et. al 2001).

Figure 7: NPL Resolution by Exit Strategy (Nov. 1997–Dec. 2002)

Table 8. NPL Resolution by Exit Strategy

Resolution method	Face Value	Purchase Price	Amount Retrieved	Recovery Rate	Rate of Return
International bidding	6.1	1.3	1.6	26.4	23.1
ABS Issuance	8.0	4.2	4.2	52.0	0.0
Foreclosure & public auctions	8.3	2.6	3.2	38.9	23.1
Collection	12.7	4.3	5.9	46.9	37.2
Individual loan sale	2.6	0.6	0.9	35.0	50.0
JV – Sale to AMC	2.6	0.7	0.9	35.6	28.6
JV – Sale to CRC	1.8	0.4	0.7	36.5	75.0
Daewoo	3.3	2.2	2.7	81.3	22.7
Subtotal	45.4	16.3	20.1	44.3	23.3
Recourse and cancellation	19.3	10.2	10.2	52.8	0.0
Total	64.6	26.5	30.3	46.8	14.3

Source: KAMCO

Source: He 2004.

15. Timeframe: KAMCO was initially established without a sunset date but a later amendment required it to cease operations by November 2012.

When KAMCO's window of operations for NPL purchases ended in November 2002, the fund maintained assets with purchase value of KRW 12.8 trillion on its balance sheet (He 2004). With loans acquired from Daewoo affiliates constituting a large majority of the unresolved assets, KAMCO remained actively involved in the resolution of these assets and oversaw work-out programs for several Daewoo affiliates (KAMCO's Experience 2002; He 2004). Eventually, a sunset date was set in a December 2006 amendment to the KAMCO Act, specifying that "the operation of the fund may be executed no later than November 2012" (KAMCO Act 1997).

III. Evaluation

KAMCO's operations were characterized by strong recovery efforts and innovative resolution methods resulting in a positive return on public funds invested (Cerruti and Neyens 2016). However, observers have criticized KAMCO's modest financial performance during its early operations and governance issues related to the purchase of Daewoo loans (He 2004).

KAMCO played an important role in the creation of a market for distressed assets in South Korea (He 2004). Using nontraditional resolution methods, KAMCO was able to attract investors and bring much needed liquidity into the distressed asset market. International players were attracted through a series of successful international auctions. This in turn encouraged domestic investors to participate (Cerruti and Neyens 2016). The issuance of ABS further facilitated the emergence of a domestic market for distressed assets (He 2004). KAMCO's joint ventures also contributed to these developments, serving as knowledge-transfer vehicles bringing in international expertise in corporate restructuring (Cerruti and Neyens 2016).

While early observers noted that the agency's performance is "best described as mixed," this assessment should be considered in view of KAMCO's successful loan resolution during the later stages of its operations. After the five-year purchase window ended, KAMCO maintained a balance of KRW 12.8 trillion in unresolved assets (He 2004). To cover the negative equity accumulated due to high operating costs during the purchase window, "the government converted KAMCO's short-term debt into treasury bonds while the remainder of the long-term debt would be serviced by increases in the deposit insurance and future recoveries" (Cerruti and Neyens 2016). KAMCO was eventually able to lift the public burden by recovering additional funds. In 2013, KAMCO reported total recoveries exceeding the public funds dedicated to its operations. With KRW 48.1 trillion recovered on assets purchased for KRW 39.2 trillion, the agency achieved a net profit of KRW 8.9 trillion by the time of the fund's liquidation in February 2013 (KAMCO 2013).

On the governance side, KAMCO suffered from its public agency status (He 2004). Specifically, KAMCO's operational autonomy with respect to purchasing decisions was compromised by broader policy considerations in the case of the Daewoo loan purchases for which the fund paid a premium as a result of a government decision to "facilitate a speedier out-of-court restructuring process for these loans" (Cerruti and Neyens 2016). The decision followed from the fact that Korea didn't have an efficient out-of-court restructuring process at the time (He 2004). Thus, KAMCO was chosen to step in and facilitate the process for Daewoo affiliated firms. This contextualizes criticism regarding the fund's modest financial performance during its first five years when considering that Daewoo acquisitions alone represented more than 80% of the NPLs remaining on KAMCO's balance sheet by the end of the purchasing window.

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