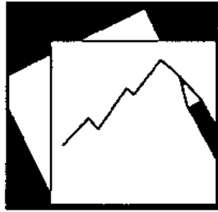

WP/00/33

IMF Working Paper

Two Approaches to Resolving Nonperforming Assets During Financial Crises

David Woo

INTERNATIONAL MONETARY FUND

© 2000 International Monetary Fund WP/00/33

IMF Working Paper

Monetary and Exchange Affairs Department

Two Approaches to Resolving Nonperforming Assets During Financial Crises

Prepared by David Woo[1]

Authorized for distribution by Elizabeth Milne

March 2000

Abstract

The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

The unprecedented rise in nonperforming assets during the recent Asian financial crisis severely tested the limit and capacity of the existing asset management infrastructure, leading policymakers to consider new approaches to resolve them. This paper examines two such approaches—the creation of asset management companies and the development of out-of-court centralized corporate debt workout frameworks—that came to define the core asset management setting in countries most seriously affected by the crisis. In addition to investigating their respective role, and evaluating their strengths and weaknesses, this paper seeks to benchmark some best practices in their design.

JEL Classification Numbers: G28, G38

Keywords: Nonperforming assets, asset management, debt workout

Author's E-Mail Address: Dwoo@imf.org

---

[1] The author is grateful to Michael Andrews, Barbara Baldwin, Charles Enoch, Ed Frydl, Ann-Marie Gulde, Peter Hayward, Seng Chee Ho, Alain Ize, Mats Josefsson, Barry Johnston, Daniela Klingebiel, Bernard Laurens, Carl-Johan Lindgren, Elizabeth Milne, Jun Nagayasu, Charles Siegman, Mark Stone, Jan Willem van der Vossen, and Delisle Worrell for helpful comments.

Contents

Page

2

I. Introduction 3

II. Definitions, Objectives And Prerequisites 5
A. What is Asset Management? 5
B. Objectives of Asset Management Policies 6
C. Some Prerequisites for Effective Asset Management Policies 7

III. Asset Management Companies 9
A. Why AMCs? 9
B. Facilitate the Resolution of Insolvent and Nonviable Financial Institutions 11
C. Facilitate the Restructuring of Distressed But Viable Financial Institutions 15
D. Facilitate the Privatization of Government-owned Banks and Government-intervened Banks 16
E. Optimal Design of AMCs 17

IV. Out-of-court Centralized Corporate Debt Restructuring 23
A. The Workout Intermediary 25
B. General Principles of Government-Led Workout 26
C. Design of the Framework 27
D. Practical Considerations 28

V. Conclusion 31

References 33

Appendix 35

Tables
1. Main Characteristics of Representative AMCs in Asian Crisis Countries 12
2. Summary of Design Aspects of Effective AMCs 24

I. INTRODUCTION

What are nonperforming financial assets? For the purposes of this paper, nonperforming assets are defined as debt instruments whose obligors are unable to discharge their liabilities as they become due. Debt instruments refer to both loans and bonds.

Nonperforming financial assets are typical by-products of financial crises. Rising interest rates (raising the burden of debt service), economic slowdowns (eroding the viability of borrowers) and exchange rate depreciation (increasing the liabilities of borrowers with unhedged positions in their foreign currency borrowing) can all severely undermine the capacity and sometimes the willingness of borrowers to continue servicing and to repay their debt. The financial crises of 1997–99 witnessed a more than three-fold increase in nonperforming assets in most Asian crisis countries. By the end of 1998, nonperforming loans as a percentage of GDP had reached 14, 27, 32 and 51 percent for Korea, Indonesia, Malaysia, and Thailand, respectively.[2]

If left unresolved, nonperforming assets can deepen the severity and duration of financial crises and complicate macroeconomic management. They can do so by tying up resources and impeding the resource allocation process, thereby prolonging the economic stagnation accompanying financial crises.[3] In addition, they can thwart economic recovery by weakening the financial system, whose dynamic financial intermediary role is critical for the resumption of economic activities.[4] Therefore, it is imperative that effective asset management policies, designed both to contain any further deterioration of asset quality and to resolve nonperforming assets, be an integral part of financial crisis stabilization.

---

[2] The discrepancy between these numbers may be due to some extent to different loan classification rules in the four countries.

[3] An example would be a nonperforming loan of which the lender can eventually recover at least a portion of the value by liquidating its underlying collateral. Until liquidation is completed, the lender's funds are tied up by the loan, whereas they could be put to use by a viable borrower in the form of a new credit. The same may also be true for the collateral of a nonperforming loan (a factory, commercial or residential properties) which, until it is sold and reemployed in the economy, may be left idle, thus performing no useful function even as depreciation sets in.

[4] Many countries require banks facing a rise in their nonperforming assets to increase their loan loss provision. When such provision is substantial, it can result in a reduction in bank capital, which can, in turn, limit the ability of banks to make new loans. This phenomenon (which is often exacerbated by flights to quality over concerns about the solvency of the banks in question) is sometimes referred to as a "credit crunch" (Bernanke and Lown, 1991; Woo, 1999).

Two key questions confronting policymakers in the formulation of asset management policies are: (a) *where* should nonperforming assets be managed (physical depository of the assets) and (b) *how* can these assets be best resolved (the means through which the assets are dealt with). Experience shows that answers to these questions depend on the characteristics of the assets in question, the attendant legal environment, the capacity of the market to absorb these assets, as well as the financial strength of the obligors and the holders of these assets.

Against the backdrop of an unprecedented rise in nonperforming assets, together with widespread failures in both the corporate and the financial sector, and given the largely underdeveloped asset markets and often inefficient legal systems, the countries most affected by the Asian crisis (Indonesia, Korea, Malaysia, and Thailand) introduced two emergency measures to address each of the two above questions. In many respects, these measures—the creation of asset management companies (AMCs) and the development of out-of-court centralized corporate debt workout frameworks—have come to define the crisis asset management setting in these countries.

AMCs, public or private entities whose main function is to take over the nonperforming assets of distressed financial institutions, are generally founded on the supposition that they can help facilitate financial restructuring and maximize the recovery of nonperforming assets at the same time. The Asian crisis saw an expansion of the traditional mandates of AMCs, particularly with respect to the types and the number of institutions they are designed to deal with. By April 1999, government-owned AMCs in Indonesia, Malaysia, Korea and Thailand had taken over assets whose face value was equivalent to 20, 17, 10 and 17.5 percent of the GDP of these respective countries (Lindgren, Baliño et al, 1999). This paper provides a survey of the roles of AMCs in different countries (with emphasis on Asian crisis countries), and, drawing on the experience of a wide range of countries, establishes some basic guidelines in their optimal design.

The social and political repercussions of large-scale liquidations of nonperforming assets during financial crises are often of such magnitude that policymakers are reluctant to resort to them. On the other hand, rehabilitation of nonperforming assets may be beneficial not only to obligors and holders of the assets (if the latter indeed recover more than they would otherwise under liquidation)[5] but may also produce welfare gains on a wider social scale. For these reasons, policymakers in Asian crisis countries have increasingly focused their attention on debt restructuring and, to facilitate the process, have implemented out-of-court centralized debt workout frameworks. This paper, in addition to laying out the common operational characteristics of these frameworks, will identify some practical considerations effecting their smooth functioning.

---

[5] This may be the case when debtors fall into arrears over their debt repayment mainly due to the weakness of the general economic environment than to any inherent problem in their viability.

The rest of the paper is organized as follows: Section II defines asset management policies in general, examines their main objectives, and sets out the main prerequisites for their effective implementation. Section III begins with an investigation of the role of AMCs in financial restructuring followed by a discussion of their design aspects. Section IV outlines the corporate debt workout process and identifies important practical considerations. Section V offers some key conclusions.

II. Definitions, Objectives and Prerequisites

This section defines asset management policies, states their main objectives, and sets out some prerequisites for their successful implementation.

A. What is Asset Management?

Broadly defined, asset management is the process whereby nonperforming assets are first identified and organized into one of four categories of action (selling, recovering, restructuring, and writing off of such assets) according to their individual characteristics and then resolved. Asset management policies are any institutional arrangements or techniques that facilitate this process.

- To *sell* a nonperforming asset, the market for such an asset must exist and, if no such market exists, it must be organized. The sale of nonperforming assets facilitates diversification of risks and reallocation of resources.

- To *recover* a nonperforming asset, the holder of the asset initiates a process, often legal, by which a part or the whole of the value of the asset can be recouped through the seizure and the liquidation of its collateral and/or through the sale of other assets in the possession of the asset's obligor. The effective functioning of this process largely depends on the existing legal framework and procedures, the perceived working of which often will have a significant influence on market valuation of the asset and assets in general.

- To *restructure* a nonperforming asset, the holder of the asset enters into negotiation with the asset's obligor with the aim of strengthening the ability of the obligor to service and eventually to repay the principal. This usually involves redefining the terms of the original contract, a process that often entails some concessions on both the part of the holder and the part of the obligor. Successful debt restructuring can benefit both creditors and debtors. However, the process should be initiated only if the economic return from the rehabilitation of the asset exceeds that of its liquidation.

- To *write off* a nonperforming asset, the holder of the asset takes a loss equivalent to its book value[6] and removes it from the balance sheet. The holder will normally only do so when the prospect of recovery is very low and when the cost of recovery or maintenance of the asset exceeds its value.

B. Objectives of Asset Management Policies

Successful asset management policies are guided by well-defined objectives. The following are the most important of these objectives:

- **Facilitation of financial restructuring**. Deterioration in the quality of financial assets can severely weaken the soundness of financial institutions (e.g., by raising questions about their solvency) and distract them from their primary function as financial intermediaries. Asset management policies should aim at restoring liquidity and solvency to financial institutions, restoring confidence in their valuation, enhancing credit discipline (by discouraging opportunistic defaults), and allowing them to resume their normal functions.

- **High rate of recovery**. A high rate of recovery is primarily an equity objective, restoring to holders of assets what is owed to them. In addition, a high rate of recovery performs a signaling function, reassuring lenders at large as to the prospects of any outstanding and new credits. A high recovery rate can thus benefit new borrowers by reducing the risk premium on the interest rates of their borrowing. Finally, where the government is committed to assume the liabilities of intervened financial institutions (e.g., under existing deposit insurance schemes), a high recovery rate of assets reduces the burden on taxpayers.

- **Speedy resolution**. Mainly an efficiency objective, the prompt resolution of nonperforming assets accelerates the resource reallocation process vital to economic recovery. Moreover, to the extent that nonperforming assets create uncertainties over the net worth and the creditworthiness of both the holders and the obligors of these assets, a swift resolution is essential for restoring the market's ability to assess counterparty risk.

- **Normalization of asset markets**. A large overhang of nonperforming assets can paralyze asset markets by exerting downward price pressure on all assets and by crowding out good assets from the market (adverse selection).[7] Effective asset management

---

[6] When the holder is a financial institution, this amounts to 100 percent provisioning.

[7] For example, a substantial increase in nonperforming loans may cause lending rates to rise for all borrowers if risk-averse banks do not have proper credit assessment capabilities. Worse still, asymmetric information is likely to lead to unsound and risky borrowers (who

(continued...)

policies can help create market benchmarks for previously overvalued assets (e.g., real estate) and, at the same time, prevent excessive downward pressure on assets prices (overshooting resulting from "fire sales").

Conflicts may arise among the competing objectives of asset management. For example, a high rate of recovery and swift resolution are sometimes incompatible.[8] This can also be the case between prompt resolution and normalization of asset markets. Good asset management policies should, therefore, recognize the trade-off between these objectives and prioritize in order to preserve their effectiveness.

C. Some Prerequisites for Effective Asset Management Policies

Critical to the success of asset management policies is the supporting environment whose design should be aimed at strengthening the ability of the market to carry the asset resolution process and reducing dependence on government-led initiatives. The following is an overview of what constitutes such an environment:

- **An effective legal system**. Such a system should clearly define the rights of ownership as well as the legal obligations between debtors and creditors and provide for the orderly resolution of disputed claims, including debt recovery and realization of collateral for unpaid debt. Such a system should also balance the protection of creditors with that of debtors. Overprotection of debtors can lead to protracted resolution and break down in credit discipline while overprotection of creditors can cause social strife and weaken the political support for the resolution process. An orderly and effective insolvency system, by providing a framework for efficient resolution of nonperforming assets, can help enhance credit discipline by reducing the incentive for obligors of assets to default deliberately in order to avoid repayment.

- **A sound financial regulatory and supervisory framework**. Such a framework can help facilitate and rationalize decision making in the management of nonperforming assets. For example, a good loan classification system, which allows policymakers to assess the extent of impaired assets and monitor their migration over time, is important when financial institutions' own credit assessment is unreliable and when it is in the interest of these institutions to hide the true magnitude of their impaired assets. Appropriate provisioning rules, correctly reflecting the underlying value of nonperforming assets, are necessary to prevent financial institutions, often the largest

---

are willing to pay higher interest rates) forcing good borrowers to withdraw from the credit market (Stiglitz and Weiss, 1981).

[8] On the other hand, it is also true that the quality and thus the value of some assets can deteriorate rapidly once they become nonperforming.

holders of nonperforming assets, from holding onto these assets indefinitely, causing the market for these assets to stagnate.[9]

- **A neutral tax framework**. Such a framework can help promote both financial transactions and restructuring. For example, to facilitate the sale of nonperforming assets, financial transaction taxes[10] should be removed, and if necessary, be replaced by taxes based on income generated by financial transactions (capital gains taxes). Tax deductibility of specific loan loss provision, by inducing financial institutions to recognize voluntarily the true value of their nonperforming assets (Dziobek, 1995), can increase their willingness to resolve them more aggressively. Other tax issues are discussed in other relevant sections of the paper.

- **A stable macroeconomic environment**. Such an environment can restore the viability of nonperforming assets and increase their attractiveness by reducing the uncertainties associated with the investment environment. For example, exchange rate stability is often a precondition for the entry of foreign buyers in domestic asset markets. Another important factor is the interest rates which can have a crucial impact on the timing of asset resolution. High interest rates, by increasing the cost of funds, can discourage potential buyers of assets and depress asset prices (which may, in turn, increase the reluctance of sellers to part with them).[11] Low interest rates, on the other hand, by reducing the carrying cost of holding on to nonperforming assets, increases the likelihood that the holders of these assets will sit on these assets indefinitely.[12]

---

[9] An example could be the case of a bank which, due to weak provisioning requirements, appears to be in compliance with the prevailing capital adequacy requirement (the weak provisioning requirements allow the bank to overstate the value of its loans or collateral). Since selling its loans would force the bank to recognize the market value of its portfolio and thus the true value of its capital, the bank may prefer to hold on to the loans.

[10] These taxes are charged—usually irrespective of whether the transaction represents a loss or a gain for the sellers of the transaction—either on a fixed rate basis or as a percentage of the value of the transaction.

[11] At the same time, high interest rates can further erode the quality of these assets by increasing the interest burden on the obligors.

[12] Market observers have suggested that the near zero interest rates in Japan were one of the main factors for the stagnation of the Japanese real estate market in the 1990s.

III. Asset Management Companies

This section examines the roles of asset management companies (AMCs) in financial restructuring, and evaluates their strengths and weaknesses for the management of nonperforming assets. The section will also investigate issues pertaining to the optimal design of AMCs, drawing lessons from, in addition to the Asian crisis countries (Indonesia, Korea, Malaysia, Thailand), France, Mexico, Sweden, and the United States where AMCs have been an important feature in the context of financial restructuring.

A. Why AMCs?

To minimize the fiscal and/or private cost associated with the restructuring of distressed financial institutions, financial restructuring programs should be aimed at maximizing the value of restructured financial institutions and that of the assets of closed financial institutions over time. To achieve these objectives, it has been sometimes suggested that good assets of distressed financial institutions should be separated from their bad assets and that AMCs should be set up as receptacle vehicles to take over the latter.

The typical arguments in favor of separating nonperforming from performing assets of distressed financial institutions are listed below:

- **Division of labor**. The separation of nonperforming loans from distressed banks enables the managers of the banks to focus on rebuilding the banks and new lending, and allows managers of the AMCs to concentrate on the recovery of the nonperforming assets of the banks. This separation can be particularly useful when the magnitude of nonperforming assets is sizable relative to the total assets of the banks.

- **Facilitation of valuation**. Separating bad assets from distressed banks may help the market to more correctly assess the value of the banks. This could be an important consideration when the banks need to raise capital in the market.

- **Strengthening of credit discipline**. Separating bad loans from their original credit officers may lead to more objective (and sometimes more drastic) steps to be taken in the management of these loans. By breaking any unhealthy ties between banks and their corporate borrowers, AMCs may be better able to collect on delinquent loans (e.g. connected loans).

- **Economy of scale**. When there is a scarcity of asset management expertise, centralization of assets from several financial institutions at a single or few AMCs may increase the efficiency of asset recovery and enhance the marketability of assets for sale. By being able to offer relatively larger quantities of assets for sale, centralized AMCs may attract bigger potential buyers, especially investors who prefer to deal with one seller than many sellers in the market. Centralization may also facilitate the securitization of assets.

- **Enhanced bargaining power**. Centralized AMCs, by collecting multiple claims on individual debtors, may be better positioned than single claim holders when negotiating with the debtors. This can be a particularly important consideration when credits are scattered in the system, collateral is pledged to multiple creditors, and the size and the clout of the debtors are large relative to the banks.

There are also several sets of counter-arguments against the separation of good and bad assets and specifically against AMCs:

- **Loss in institutional knowledge**. Separating nonperforming loans from their originating banks, by weakening the knowledge base about these loans, reduces the probability of their recovery. Furthermore, lessons learned by credit officers from loan recovery and collection can strengthen their credit assessment skills and reduce the probability of recurrence of bad and lax lending.[13]

- **Weakening of credit discipline**. Transferring loans out of banks may increase the difficulty of recovery. Borrowers are less likely to repay AMCs with which they do not have an ongoing relationship, on which they cannot rely for new funding.

- **Difficulty in pricing transferred assets**. It is difficult to price nonperforming assets correctly, especially during financial crises. The absence of market benchmarks for assets prices may lead to sellers transferring too many of their assets to the AMCs and the AMCs paying too much for them.

- **Political interference**. It would be difficult to insulate the management of government-owned AMCs from political interference and pressure from borrowers.

- **Lack of competency**. Government-owned AMCs may lack comparative advantage and expertise in the recovery of nonperforming assets. It would be faster and more efficient to build such expertise and infrastructure in banks than in new institutions like AMCs.

The above shows that while AMCs have their advantages, they are not without drawbacks. The challenge for policymakers, therefore, is to balance the pros and cons when considering setting up AMCs, and once a decision has been made to adopt them, to design them in such a way so as to exploit their strengths while curtailing their weaknesses. It is equally important to recognize the limitation of AMCs. Empirical assessment of the effectiveness of AMCs has demonstrated that the most successful AMCs have been those

---

[13] The proponents of this view often favor in-house asset management departments which retain direct access to the existing institutional knowledge base about the assets under their management.

with more narrowly defined mandates (Klingebiel, 1999). In this connection, using AMCs to recapitalize financial institutions (by purchasing nonperforming loans from these institutions at above market value)[14] is inferior to direct recapitalization, which is both more transparent and provides the government with more leverage in the recapitalized institutions (IMFa, 1999).

Before turning to the issue of the optimal design of AMCs, the following three subsections will briefly review the three principal roles of AMCs in practice (Table 1). These roles are the facilitation of (a) the resolution of insolvent and nonviable financial institutions; (b) the restructuring of distressed but viable financial institutions; (c) the privatization of government-owned banks and government-intervened banks.

B. Facilitate the Resolution of Insolvent and Nonviable Financial Institutions

This role is the most narrowly defined of the three principal roles of AMCs. The task of AMCs with this role is to manage and liquidate assets of insolvent financial institutions that have been determined to be nonviable and therefore should be or have been closed. For example, the U.S. Federal Deposit Insurance Corporation (FDIC) is obliged by law to take over the assets (in addition to the liabilities) of failed banks. In its role as the "receiver," the FDIC undertakes the liquidation of the assets of these banks and issues receivership certificates to depositors with uninsured funds and to other creditors of failed institutions, entitling them to a share of the net proceeds from the liquidation.

In some cases, the liquidation of failed institutions is undertaken either by an appointed private liquidator or by a government-funded AMC. An example of the latter is the **U.S. Resolution Trust Corporation** (RTC), which was established by the Financial Institutions Reforms, Recovery, and Enforcement Act (FIRREA) of 1989 to resolve the U.S. savings and loans crisis. The RTC took over the assets of insolvent institutions from the FDIC, which had acted in the place of the Federal Saving and Loan Insurance Corporation

[14] An example of this is the Mexican portfolio purchase program during 1995-96. The program involved the FOBAPROA (Fondo Bancario de Proteccion al Ahorro) purchasing nonperforming loans in an amount equal to twice the private contribution to capital, including subordinated debt, made by existing and new shareholders. The FOBAPROA purchased the loans at book value (net of provisions) with ten-year zero-coupon bonds. Although the responsibility for administering the loan portfolios remained with the selling financial institutions and there is a limited government-bank loss sharing arrangement, the government was exposed, and still is, to potential losses arising from a further deterioration in the quality of the loans. By purchasing the nonperforming loans from banks at book value, the FOBAPROA was essentially offering the banks free capital or a subsidy.

Table 1. Main Characteristics of Representative AMCs in Asian Crisis Countries

AMC	Type	Purchase or Take Over Assets From	Funding	Criteria for Asset Purchase or Transfer	Purchase or Transfer Price	Pays With	Asset Disposition
Korea Asset Management Corporation (KAMCO)	Centralized AMC	Banks and non-bank financial institutions	Contribution from financial institutions; borrowing from Korea Development Bank and KAMCO's government guaranteed bond issues.	Ordinary NPL: loans in default for 3 months or longer. Special NPL: loans that have obtained court approval for restructuring as part of corporate reorganization.	Ordinary NPL: 45 percent of appraisal value of collateral minus senior lien amount; Special NPL: present value of discounted projected cash flows. Unsecured loans: 3 percent of face value.	70 percent in KAMCO bonds and 30 percent in cash.	Foreclosure auctions; public sale; outright sale; equity partnership securitization.
Danaharta, Malaysia	Centralized AMC	Bank, finance companies and merchant banks, according to relative strength of institutions	Government contribution; loans from Khazanah; zero coupon government guaranteed Danaharta bonds. For Sime Banking Group, separate government funding.	NPLs over RM 5 million at market value. For Sime Banking Group and BBMB Group, NPLs over RM 1 million.	Secured loans: value of collateral; unsecured loans: 10 percent of principal; Surplus on recovery shared with sellers on a 20/80 basis. Acquired NPLs of Sime Banking Group at book value. 1/	Zero coupon Danaharta bonds.	Private auctions; public tenders; securitization

Note: 1/ Recovery proceeds net of Danaharta's commission accrue to the government.

Continued: Table 1. Main Characteristics of Representative AMCs in Asian Crisis Countries

AMC	Type	Purchase and Take Over Assets From	Funding	Criteria for Asset Purchase or Transfer	Purchase or Transfer Price	Pays With	Asset Disposition
Indonesia Bank Restructuring Agency (IBRA)	Centralized AMC	Recapitalized banks and closed banks. Took over assets from former shareholders of failed banks.	Most of its funding comes from liquidation of its holdings of assets.	Loss loans of recapitalized banks and assets of closed banks.	Buys at zero value.		Cash collection; Initial public offering is being considered for two enterprises
Thai Asset Management Corp. (TAMC)	Centralized AMC	Purchased assets from auctions of closed finance companies.	Initial capital from government. Borrowing from domestic and international sources not exceed 12 time of the capital fund.	All assets that fail to sell in the second round of auction of assets of closed finance companies. Bad assets from institutions taken over by FIDF.	Market value calculated based on collateral appraisal, and evaluation of the financial conditions of the debtors and guarantors.		Auction.
Radanasin	Decentraliz-ed AMC	Radanasin Bank	Financial Institution Development Fund (FIDF)	Assets rejected by United Overseas Bank.	Transfer at book value.	Note issued by the AMC (backed by the FIDF).	
Nakornthon	Covered asset pool	Nakornthon Bank	FIDF.	Assets rejected by Standard Charter.	Transfer at book value.	Assets stay on the balance sheet of the new bank. They are, however, guaranteed by FIDC.	

Sources: KAMCO, Danaharta, TAMC, IMF staff

(FSLIC) as conservator for these institutions. The RTC's main objective was to maximize the return and minimize the loss of the assets it took over from the failed thrifts.[15]

In East Asia, an example of a government-funded AMC involved in the liquidation of assets of closed banks is the **Korea Asset Management Corporation** (KAMCO).[16] In 1998, the Financial Supervisory Commission of Korea engineered the takeover of five insolvent banks by five healthy banks[17] under purchase and assumption arrangements. The acquiring banks only assumed selected assets and liabilities to the exclusion of nonperforming assets of the acquired banks. The deal required KAMCO to take over the nonperforming assets of the acquired banks and, as an additional incentive to the acquiring banks, the nonperforming loans of the latter. The terms of agreement between the government and the acquiring banks also allowed the acquiring banks to sell back to KAMCO any loan from acquired banks' portfolios that became nonperforming within six months of acquisition, with the loss being covered by the Korean Deposit Insurance Corporation.[18]

The **Thai Financial Sector Restructuring Agency** (FRA), a de facto AMC, was set up in 1997 to deal with suspended finance companies. After the closure of 56 finance companies, the FRA took over their assets with the view to preserve their value before their disposition. The FRA subsequently organized and held public auctions of these assets.

Sometimes the scope of this type of AMC goes beyond liquidating closed financial institutions. There may be reasons why the government may choose to keep a financial institution open even after it has been decided that it will eventually be closed. In such situations, these AMCs may take on the role of "conservator." For example, the RTC was given conservatorship power when there were delays in obtaining funding to close the failed thrifts in the1980s. As conservator, the RTC took control of the failed thrifts and operated

---

[15] The RTC's other missions were to (a) minimize the impact of its activities on local real estate and financial markets and (b) maximize the preservation of the availability and affordability of residential property for low- and moderate-income individuals.

[16] As will be discussed later, KAMCO mandate is wider than that of a liquidator of closed banks.

[17] The five insolvent banks are Dongnam, Ching Chong, Dong Hwa, Kyungki and Dae Dong, and the five healthy banks are Kookminm Shinhan, Koram, Housing and Commercial, and Hana Bank.

[18] This put option is useful when the government wants to sell more of the borderline loans of an insolvent financial institution or when the uncertainties of the economy are liable to obscure the prospect of the quality of the bank loan portfolio.

them according to specified guidelines with the goal of preserving their value and preparing them for resolution.

C. Facilitate the Restructuring of Distressed But Viable Financial Institutions

The handling of nonperforming assets sometimes requires skills that distressed banks lack (Berggren, 1996). When this is the case, it may be optimal to separate a distressed bank from the management of its nonperforming loans by creating a "bad bank,"—either a division, or a subsidiary of the bank, or an independent entity outside the bank, to which the nonperforming assets of the bank are transferred. To maximize the operational gains from this separation, the bad bank is usually operationally, financially and legally isolated from the bank. When the bad bank, or AMC, is an independent entity outside the bank, it can be designed to manage exclusively the nonperforming assets of the bank, or those of several banks.

An example of an AMC designed to take over nonperforming assets of a single bank is the **Swedish Securum**. In 1992, after suffering from severe capital deficiency following substantial credit losses, Nordbanken, a major Swedish commercial bank, was bought out by the Swedish government.[19] In addition to its equity contribution to the bank, the government also extended a guarantee to Securum, which was at the time an asset management subsidiary of Nordbanken. Later, with additional funding from the state, Securum took over from Nordbanken about 3000 loans (most of which were collateralized by real estate). The equity invested in Securum allowed it to cover the cost of further write-down of assets taken over from Nordbanken and to manage the divestment of the loans. At end-1992, Securum was formally separated from Nordbanken and became an independent company owned by the State (Securum, 1997).

Examples of centralized AMCs designed to take over nonperforming assets from more than one financial institution include KAMCO and the **Malaysian Danaharta**. Danaharta was created in 1998 in part to allow financial institutions to "focus on their core business of lending" in order to "assist in revitalizing the real economy" (Danaharta, 1999). In principle, all financial institutions are eligible to sell nonperforming assets to Danaharta, although Danaharta focuses its loan purchase program to those institutions with the highest level of nonperforming assets and loans to priority sectors such as the manufacturing and construction sectors. Another important difference between Securum, Danaharta, and KAMCO is that the latter two, in addition to taking over nonperforming loans from government-owned banks, also bought nonperforming loans from operating private banks.

Like Danaharta and KAMCO, the Asset Management Unit (AMU) of the **Indonesian Bank Restructuring Agency** (IBRA) is designed to facilitate both the resolution of closed

---

[19] About 70 percent of Nordbanken was already owned by the government when the problems surfaced.

financial institutions as well as the restructuring of ongoing ones. In this capacity, the AMU took over the entire loan portfolio of closed banks, as well as loss loans from state-owned banks and banks the government helped recapitalized. These loans were transferred to the AMU at zero value. In addition, the Asset Management Investment Division (AMI) of IBRA took over the assets of the former shareholders of closed banks,[20] which it controls through a holding company structure.

Private banks can also set up their own AMCs to help facilitate their restructuring. A number of Thai private banks are current establishing AMC subsidiaries to take over some of their nonperforming assets. For instance, **Thai Farmers Bank** has already created an AMC for the management of the assets from its failed finance company, Phatra Thanakit, and is now in the process of establishing an AMC for the management of selected nonperforming loans from the bank itself (contracts have already been signed with GE Capital and Goldman Sachs to manage the AMC).

Cinda Asset Management Company (Cinda) was established in April 1999 by the Chinese authorities to take over the nonperforming assets of China Construction Bank, one of four distressed state-owned banks whose main activity was and is the financing of state-owned enterprises. Cinda and three more AMCs that are being set up for the four state-owned banks are expected to take the leading role in the restructuring of distressed state-owned enterprises.

D. Facilitate the Privatization of Government-owned Banks and Government-intervened Banks

AMCs have been used to facilitate the privatization of government-owned banks and intervened banks whose liabilities are guaranteed by the government. One example of the former is the **French Consortium de Realization** (CDR), created as a subsidiary of Credit Lyonnais in 1995 to take over nonperforming assets from the bank before its privatization in 1999.

It has been often argued that the most suitable manager for the nonperforming assets of a government-owned or intervened bank is the eventual buyer of the bank. This is because, on the one hand, the new owner will inherit the institutional knowledge about these assets in the former bank and, on the other, the government often lacks expertise to manage these assets. In a recent agreement between the United Overseas Bank (UOB) of Singapore and the Financial Institutions Development Fund (FIDF) of Thailand for the sale of **Radanasin Bank** to UOB, the impaired assets of Radanasin are to be transferred into an AMC owned by the FIDF but managed under contract by UOB. The removal of the nonperforming assets from Radanasin will be financed by a note issued by the AMC (backed by the FIDF) to Radanasin

---

[20] A shareholder settlement agreement was reached in 1998 which requires former owners of failed banks to repay the government Rp110 trillion.

paying 1 percent less than the prevailing weighted average 6-month deposit rate at the four largest banks. The gain/loss sharing arrangement is designed in such a way that 5 percent of any excess recovery over the estimated fair market value of the assets and 15 percent of any loss will go to Radanasin and the remainder to FIDF.

A similar transaction is the sale of the **Thai Nakornthon Bank** to Standard Chartered (SCNB). Although the impaired assets of Nakornthon are to remain on the bank's balance sheet, these assets are guaranteed by the FIDF so that the bank does not need to set aside any capital against them. Standard Chartered will manage the "covered asset pool" under a similar gain/loss sharing arrangement as the Radanasin deal,[21] which seeks to create incentives for the bank to expedite asset resolution.

In order to stabilize the price floor at public auctions of assets seized from closed finance companies (and thus minimize the cost to the government for assuming partial liabilities of these companies), the **Thai Asset Management Corporation** (TAMC) was created to assume the role of "bidder of last resort." Although it does not participate in the first round of bidding, it behaves like a "sweeper" in the second round. Afterwards, TAMC manages the assets with the view to maximize the recovery rate of these assets.

E. Optimal Design of AMCs

This section discusses the optimal design of AMCs. Given that a comprehensive coverage of the subject is beyond the scope of this paper, the focus will be on the most critical aspects of their institutional and operational features.

Legal basis. The legal basis of an AMC is critical to its success. One issue of particular importance concerns the transfer of assets. The legal basis of the AMC should provide for clear transfers of titles and priority in the transactions of assets. For example, the anaharta Act allows Danaharta and the selling bank to effect the acquisition by way of statutory vesting that allows the transfer of priority from the selling bank to Danaharta.[22]

Similarly, legal obstacles for the transfers of assets, such as the requirement that the permission of the debtors be obtained before the transfer of loans can be effected, should be

[21] The difference is that instead of the asymmetric gain/loss sharing arrangement of the Radanasin sale, a symmetric arrangement was agreed. Specifically, Nakornthon will receive 15 percent of any upside and will be responsible for 15 percent of any downside from asset recovery relative to the agreed upon estimated market value of the assets.

[22] On completion of the acquisition, Danaharta issues vesting certificates to evidence the acquisition. The vesting certificates will then be accepted for purpose of registration. For example, upon producing the vesting certificate, the Registrar of Land will record Danaharta's interest as the new chargee in place of the selling bank.

removed. Asset disposition by state-owned AMCs may be retarded by perceived potential political and legal liabilities to the AMC management (they could be, for example, accused for selling the assets too cheaply). When this is a problem, legal protection for the employees of the AMCs in the execution of their responsibility in good faith should be considered.

Regulatory framework. Consolidated supervision is necessary to prevent private financial institutions from using their AMC subsidiaries as a means to artificially boost their capital positions by transferring their assets to the AMCs at too high a price. For this purpose, the Bank of Thailand issued a regulation requiring any financial institution, either directly or indirectly, holding a 50 percent or more equity interest in an AMC, to include the assets and liabilities of their AMC subsidiaries in the calculation of their capital-to-risk weighted assets ratio. The regulation also requires such institutions to prepare consolidated financial statements for each calendar quarter and at the end of each accounting period.

Centralized versus decentralized approach. The Asian crisis saw two distinct approaches to the structure of AMCs. In Indonesia, Korea, Malaysia, and Thailand (FRA), centralized AMCs were set up to serve all or some distressed financial institutions, while China and Thailand established separate AMCs for individual distressed financial institutions. Although there are no clear-cut rules as to the superiority of the centralized versus the decentralized approach and it is too early to evaluate the relative effectiveness of these two approaches, there are advantages and disadvantages associated with each of them. While the economies of scale and enhanced bargaining power arguments favor the centralized approach, the decentralized approach allows AMCs to better tap into the knowledge base associated with the loans and assets transferred to them from the originating institutions. Moreover, the decentralized approach, by allowing more tailoring of the AMCs to the specific characteristics of assets from different financial institutions, may provide more flexibility in the management of the assets. In this connection, there may even be some rationale to group assets by types and to transfer them accordingly to AMCs specializing in the management of a particular type or types of assets.

Governance. Good governance is necessary to safeguard the effective operation of AMCs, especially when they are government-owned. For this purpose, an AMC should have a board of directors, with at least most of its members appointed from outside. Because often the principal characteristic of government-funded AMCs is that they are themselves under liquidation (many such AMCs have a termination point), and that the more successful are such AMCs, the sooner the employees will lose their jobs, the boards need to counterbalance whatever incentives the employees may have to unnecessarily prolong the life of the AMCs (Berggren, 1996). The AMC boards should be also sufficiently independent so as to resist political interference and pressure from borrowers.

Because of the often large sums of public money involved, the operations of government-owned AMCs should be transparent. Transparency promotes accountability of the managers and the boards vis-a-vis the public and reduces the scope for corruption. In particular, the AMCs should be audited regularly to ensure that the prices at which the AMCs purchase assets reflect market prices (auditors can focus on the process used to approximate

the value of these assets). Such audits should be undertaken by independent auditors. The AMCs should also be required to publish regular reports describing their performance in pursuing their objectives. Such reports should contain their balance sheets, income statements, and records of their transactions.

Selection of asset transferred. When government-owned AMCs have some discretion in the choice of assets to purchase or take over, they should apply strict criteria in the selection of the assets. In principle, they should only take on those assets they are likely to manage more effectively. For example, fixed assets such as foreclosed properties and loans that require foreclosure or settlement with debtors are good candidates for transfer to AMCs. On the other hand, loans with potential for restructuring and those whose obligors are customers with which the banks would like to maintain long-term relationships should be kept within the banks. Also, small credits whose recovery can be undertaken more efficiently by the bank branches where the credit originated should also be left with the banks. If possible, AMCs should transfer all the assets that are linked to each other (e.g., loans to the same debtors or loans linked to the same collateral) to achieve economies of scale.

Asset transfer pricing. The transfer of assets to the AMCs, regardless of the methods of transfer, should be executed at fair market value. There are a number of reasons for doing so. First, as pointed out earlier, private AMCs set up as subsidiaries of banks should not serve as a means by which the banks boost their capital by transferring their nonperforming assets at above market value to the AMCs. This consideration can be especially important when the AMCs are established as limited liability companies and are allowed to borrow directly from the market. At least in theory, such AMCs can go bankrupt with the banks only losing their initial equity investment in them.

Second, AMCs should not serve as a means by which the government bails out private financial institutions by buying their nonperforming assets at above market value. When the purchase price is above market value, financial institutions may end up selling to AMCs too large a number of their nonperforming assets.

Third, transferring assets to government-owned AMCs at fair market value provides asset managers of the AMCs with a clear opportunity to realize the goal of returning some of the original equity capital to the government (Ingves and Lind, 1996). This is why, even in the case of a government takeover of nonperforming assets from failed banks or distressed state-owned banks, the transfer of assets to AMCs should be at market value, with the government absorbing losses upfront. This is because the value of financial restructuring should be reflected as soon as possible, and AMCs should not be allowed to become a window dressing operation for the cost of this restructuring.

While it is often difficult to price nonperforming assets (especially in the midst of financial crises), an approximation of their value, based on the probability of recovery, cash flow projection (with appropriate discount rate applied), and appraisal of collateral, should be carried out and used for the purpose of the transfer. When timing is an issue and there is a great number of assets involved, the transfer can take place at an initial price with the explicit

agreement that the final price of the transaction be established after the value of the assets has been estimated or the assets have been sold. The drawback of this approach is that it may reduce the willingness of the sellers to part with the assets since they will still maintain their exposure to the final price of the assets. In this situation, some form of profit-loss sharing arrangement can help partially overcome this problem.

The task of having to price a large number of assets has sometimes led to attempts to simplify and standardize the pricing process. Excess simplification can result in adverse selection. For example, a system in which a uniform price is applied to unsecured loans in the same loan classification categories could cause the sellers to select for sale only the most inferior loans in each such class.

Other aspects of the transfer process. When the purchase of assets by AMCs is designed to support distressed but operating banks, it should be made clear that the purchase is a one-time deal, not to be repeated. An open-ended transfer arrangement could create moral hazard problems, undermining the credit discipline of the banks.

A crucial aspect of the transfer process relates to the relocation of asset files, especially when the number of assets taken over by the AMCs is large. When AMCs have some discretion in the selection of assets they take over, they should reject any assets that are not accompanied by proper documentation. The latter, including specific details about loans and borrowers, internal evaluation of loans, business plans and collateral, is essential to the recovery process. In this connection, the development of an internal information inventory system that will allow asset managers to effectively manage the assets in their possession is a critical part of the initial stages of the transfer process.

Finally, to effect successful sales of the assets, buyers need to be assured that nobody else has a claim on the assets. AMCs should, therefore, undertake due diligence before the transfer of assets to determine any prior claims and contingent claims.

Funding. It is important that public AMCs are sufficiently funded in order to perform their intended functions. At the same time, they should also be subject to hard budget constraints. Striking the right balance is a key consideration of the funding process. To achieve transparency, the operating budget of the AMCs should be separate from its funding for asset takeover.

Funding for government-owned AMCs, especially when it involves a very large sum of money, often cannot come directly from the budget. In such a case, funding could either come from the proceeds of government bond issues or be raised by the AMCs' own bond issues backed by the government, with the proviso that, whenever the AMCs realize losses, the losses be directly absorbed by the budget. Although the latter expedient is sometimes preferred because it is more transparent, it is important, in countries where the government bond market is small, that the bonds issued by the AMCs do not lead to a segmentation in the secondary markets for government and government-backed bonds. To avoid that situation, bonds issued by the AMCs should carry the same characteristics as existing government

bonds and any issues should be closely coordinated with other government bond issues. When the financing needs of the AMC are large, representatives of the AMC could usefully take part in the government debt management committee.

To facilitate the purchase of foreign exchange-denominated assets, government-funded AMCs should be given access to the foreign exchange market. However, to minimize their exposure to foreign exchange risk, the AMCs ideally should finance the purchase of foreign exchange-denominated assets by issuing foreign currency-denominated bonds (or domestic currency-denominated bonds and a currency swap) rather than by purchasing foreign exchange in the market.

Asset management and disposition. Operationally, once AMCs have taken over the transferred assets, the assets should be sorted into different groupings to facilitate resolution. Two teams (an asset team and a credit team) should be set up to specialize in the management of physical assets and credits. The credit team should determine whether to maintain the credit. Once a decision has been made to do so, the team will determine whether to reschedule payments, undertake debt/equity swaps, restructure the loan and sell it back to banks, or to repackage the loan for sale. Otherwise, the credit team will recommend seizing the collateral attached to the credit and turning over the case to the asset team.

Effective asset management requires a well-defined strategy for asset disposition. To maximize the rate of recovery, the decision by AMCs to dispose of an asset generally should be based on market conditions, as well as the funding cost of the AMCs. Sometimes it might be in the interest of the AMCs to invest in the improvement of the physical assets in their holdings (for example, finishing an uncompleted building project or securing income for their holdings of fixed assets) in order to maximize the sale price of the assets. The general rule of thumb is to dispose of the assets as soon as they can no longer be improved upon, taking into account the carrying cost of the assets. This would suggest that the first assets to be disposed of should be those with the highest rate of depreciation.

The value maximization strategy of government-owned AMCs may be at times constrained by the need to help stabilize asset markets. For example, to prevent disposition from causing a substantial decline in asset prices that are already depressed (because, for example, the volume of assets is above the capacity of markets to absorb even in normal times) may cause these AMCs to delay disposing of their holdings of assets. At least in theory, however, the warehousing of assets (to avoid "fire sale") may not prevent prices from tumbling, since the future supply of assets will likely be discounted in current prices.

Other times, the need to catalyze activities in stagnant markets may lead government-owned AMCs to dispose some assets quickly even though by postponing the disposition they may obtain better prices. By ensuring an ample supply of assets in the market, setting a price

floor, and stabilizing market expectation, these AMCs can actually set the tone for an orderly sale of assets.[23]

There are many different techniques for the disposition of assets (auctions, bulk sale, securitization of assets and so on). Some of these techniques are more suitable for the disposition of certain types of assets than others. For example, bulk sale is effective for bundling less attractive assets with attractive ones; securitization is useful to dispose large group of assets with similar characteristics where markets for such securities exist. The appendix examines various techniques for the disposition of large groups of assets.

Another issue is whether AMCs should sell their holdings of nonperforming assets to the obligors of the assets. The advantage is that generally debtors are willing to pay more to buy back their loans and the underlying collateral than anyone else (when, for example, the collateral is employed by the debtors). However, the disadvantage is that it may undermine credit discipline and cause obligors of performing assets to default deliberately in order to negotiate better deals with their creditors. In any case, the sale of nonperforming loans to the obligors of the loans often cannot be avoided, even when obligors are not allowed to buy these loans directly from the sellers. In Thailand, for example, several U.S. investment banks bought assets at FRA auctions of the assets of closed finance companies with the intention of reselling these assets to the obligors. To curtail the shortcomings of selling assets to their original owners, transparency to ensure equity and fairness, and mechanisms for creditors to establish all the resources at the disposal of the debtors (e.g., credit bureaus) can be very important.

Incentive structure. A proper incentive system is critical for AMCs (especially government-owned ones) to maximize the recovery of the assets under their management. Such a system may involve bonuses directly tied to the performance of the management or another acquiring institution in the recovery of assets based on an established benchmark. The gain/loss sharing schemes of both the Radanasin and Nakorthon Bank deals are good examples of how such incentive schemes can be designed. The appendix discusses the incentive structure of equity partnership arrangement.

Legal power. Sometimes AMCs can be vested with extraordinary legal power to facilitate the asset resolution process, as when either the existing legal system is not equipped to deal with the magnitude of the nonperforming assets and endeavors to reform the system are overly time consuming or when the authorities want to restrict certain legal powers of creditors to just the AMCs. For example, in Malaysia the Pengurusan Danaharta National Nerhad Act of 1998 confers on Danaharta the power to appoint special administrators to

[23] Asset markets are vulnerable to failure during financial crises because of market participants' uncertainties about the future and the perceived lack of information in asset prices. This may arise from the belief that prices do not reflect the fundamental value of assets (they may, for example, reflect only the liquidity condition of the sellers).

manage the affairs of distressed companies. More precisely, when a corporate borrower is unable to service its debt, Danaharta has the right to appoint such an administrator (with the approval of an oversight committee) who will take over the control and management of the assets and affairs of the borrower. The administrator's role is to prepare a workout proposal which, once approved by the oversight committee (and having obtained the support of the majority of creditors), will then be implemented.[24] This legal power allows Danaharta to take initiative as a catalyzer for the corporate debt restructuring process. It was judged that if the process were left entirely up to negotiations between creditors and debtors, it would be very time consuming due to their lack of expertise in debt restructuring.

Lending capabilities. Given the separation of nonperforming assets from their originating banks is often intended to achieve a division of labor, AMCs, which are not banks, should not engage in normal banking operations, especially in making new loans. In fact, prohibiting AMC subsidiaries of banks from extending new credits will likely lead parent banks to retain those nonperforming assets that can be most effectively managed by themselves (for example, restructurable loans whose obligors are inherently viable).

Tax issues. Tax neutrality should be in place so as not to create any disincentive for financial institutions to transfer their assets to their AMC subsidiaries. For example, there should be no taxation on the sale or transfer of assets between different AMCs or for assets sold back to the parent financial institutions. Also, any tax deductibility for loan loss provisioning should be also extended from the parent institutions to the AMCs. Gains and losses on asset sales between the parents and the subsidiaries should be consolidated for tax purpose.

IV. Out-of-court Centralized Corporate Debt Restructuring

In most countries, when a debtor has failed to meet his liabilities as they become due, the insolvency system provides the creditors (and sometimes the debtor) with the option to initiate either liquidation or rehabilitation procedures. Creditors often opt for rehabilitation when the restructuring of the operations (company reorganization, downsizing and so on) or balance sheets of the debtor will enable the creditors to recover more than they would expect to through liquidation. Rehabilitation may also serve a broader social interest, by, for example, granting the debtor a second chance as well as protecting the jobs of the employees of the debtor (IMF, 1999a).

---

[24] To preserve the assets of the borrowers, a 12-month moratorium takes effect with the appointment of the special administrator. During this time, creditors are not allowed to take actions against the borrower.

Table 2. Summary of Design Aspects of Effective AMCs

Legal basis	Provide for clear transfer of titles and priority in the transactions of assets; remove requirement of permission from debtors before asset transfers. Provide legal protection to employees and management of public AMCs in the exercise of their responsibilities in good faith.
Regulatory framework	Consolidated supervision prevents financial institutions from using their AMC subsidiaries as a means to artificially boost their capital positions.
Governance	AMC boards need to counterbalance the incentives of AMC employees to unnecessarily prolong the life of AMCs, and to resist political interference and pressure from borrowers. Transparency is important to promote accountability.
Selection of assets transferred	Large assets, fixed assets and loans requiring foreclosure are good candidates for transfer to AMCs. Restructurable loans and loans whose obligors banks would like to maintain a long term relationship should be kept with the banks.
Asset transfer pricing	Transfer of assets should reflect market prices. Pricing of assets should be based on probability of recovery, cash flow analysis and appraisal of underlying collateral.
Funding	Sufficient funding but hard budget constraint. Separation of operating budget from take-over funding.
Incentive structure	Incentive structure, including gain/loss sharing arrangements, bonuses tied to recovery rate, rationalize management of nonperforming assets and maximizes recovery.
Asset disposition	Asset disposition decision should be based on market conditions as well as the funding cost of the AMCs, consistent with the objective of achieving maximum recovery rate.
Legal power	AMCs vested with extraordinary legal power can help facilitate the asset resolution process, especially in the corporate debt restructuring process.
Lending	AMCs should not be allowed to engage in lending. Such restriction can help optimize the division of assets between financial institutions and AMCs.
Tax issue	Tax neutrality is important for not creating disincentive for banks to transfer assets to their AMC subsidiaries.

There are generally three different approaches to the rehabilitation of corporate debt: (a) court-supervised company reorganization or liquidation;[25] (b) restructuring based on out-of-court negotiation between individual creditors and debtors; and (c) restructuring based on out-of-court negotiation in a centralized framework with established procedures and

[25] For example, Chapter 11 in the United States.

principles (Kawai, 1998). The last two approaches are also often called "voluntary workout." Given that the first approach is generally considered too time consuming during financial crises (especially when the legal infrastructure is poor and there are large numbers of cases), the second two approaches are often preferred by both creditors and debtors alike under these circumstances.

For the second approach to be effective, lead creditors, usually the banks with the largest outstanding credit to the debtors, must be willing and able to play pivotal roles in leading negotiations and monitoring the agreed restructuring. In Japan, the "main bank" system lends itself to this type of arrangement. However, this may not be the case elsewhere, especially in systems where there are many creditors with competing interests and the larger creditors lack resources and clout with other creditors. In such an event, the third approach, notwithstanding the problems associated with it, may be appropriate, and sometimes in a full blown financial crisis with a substantial increase in delinquent debt, avoidable. The starting point of this approach is a more active involvement of a disinterested third party, an "honest broker," a function that can be assumed by the government or the central bank, whose role is to coordinate among the creditors to help reach a solution beneficial for all parties. The remainder of this section focuses on the design of the centralized debt workout framework.

A. The Workout Intermediary

The most famous of the centralized out-of-court workout methodology is the "London Approach," named after an informal framework[26] developed by the Bank of England during the recession in the early 1990s to help steer corporate workouts in the United Kingdom. This framework has been the basis for the recent development of similar frameworks in Korea, in Thailand (also called the Bangkok Approach), in Indonesia (the Jakarta Initiative) and in Malaysia, despite very important departures in each of these new frameworks from the original London Approach.

The London Approach is a framework that is "flexible and adaptable and rests entirely on a voluntary acceptance by the banking community" (Kent, 1997). This means that the workout intermediary (the Bank of England) tries to keep its intervention to the minimum and restricts its role as one of "suasion." For example, the Bank of England does not comment on its role regarding individual cases, and it expresses its views on the developments of the workout process through speeches rather than formal policy documents.

In East Asia, where the London Approach has been adapted, the role of the government intermediary is more active than in the United Kingdom. The framework is also

[26] Due to the objection of foreign banks involved in workouts in the United Kingdom on the grounds that formalizing such a framework would invite legal challenges, and perhaps scrutiny from their national supervisors, the Bank of England decided against formalizing the workout framework in a written document (Kent).

more formalized. In Korea, under the Corporate Restructuring Accord (CRA),[27] a steering committee, consisting of representatives from participating financial institutions, is responsible for implementing, amending and terminating the CRA. The steering committee appointed the Corporate Restructuring Committee, an arbitration committee responsible for assessing the viability of corporate candidates for restructuring, arbitrating differences among creditors, enforcing the CRA's decisions, and modifying workout plans proposed by participating creditors if necessary (Lieberman and Mako, 1999). In Indonesia, the Jakarta Initiative Task Force (JITF) is involved in the design of restructuring plans and negotiations between creditors and debtors. The JITF is also authorized to recommend that the Public Prosecutor file bankruptcy proceedings against recalcitrant debtors (IMF, 1999b). Similar bodies were set up in Thailand (Corporate Debt Restructuring Advisory Committee) and in Malaysia (Corporate Debt Restructuring Committee) to oversee the voluntary corporate debt workout.

There are no clear-cut rules as to which government agencies should take on the role of the workout intermediary. However, often the central bank comes across as being a more disinterested party and therefore commands more credibility in the market. There may be, however, potential conflicts of interest if the central bank (or other workout intermediary) is also the bank supervisor. For this reason, the department of the Bank of England involved in the corporate workout was completely separate from the banking supervision department.

B. General Principles of Government-Led Workout

The main elements of the London Approach (Kent, 1997) are:

- Banks should remain supportive on hearing that a company with which they have a lending arrangement is in financial difficulty. In practice, this means that banks keep their facilities in place and do not appoint receivers.

- Decisions about a company's longer-term future should only be made on the basis of comprehensive information, which is shared among all the banks and other parties to a workout.

- Banks should work together to reach a collective view on whether and on what terms a company should be given a financial lifeline.

- The seniority of claims continues to be recognized, but there has to be an element of "shared-pain"—equal treatment for all creditors of a single category.

[27] The steering committee is backed by the Financial Supervisory Commission, which is in charge of financial restructuring and supervision.

C. Design of the Framework

Stage 1: Consensus on rules and procedures

A successful workout requires endorsement of the basic rules and procedures from all creditors. This is because the actions of creditors who refuse to participate in the workout can derail the entire workout process. For example, the workout of distressed firms typically requires creditors of the firms to suspend temporarily their demand for repayment—a so-called debt "standstill"—but if some creditors refuse to abide by the decision of the workout group and initiate foreclosure procedures, this will greatly undermine the willingness of the other creditors to continue the workout. Once consensus on the "rules of the game" has been reached, compliance with the agreed-upon rules and procedures becomes important. Since workouts generally do not have a legal basis, the enforcement of compliance with the rules of the workout will require clout and moral suasion on the part of the intermediary and the lead banks.

The most important workout rule is the voting power of minority creditors. While unanimity protects their interests, it allots them disproportionate power. Country experience on this practice differs widely. In the United Kingdom, for example, unanimity is the prevailing practice—allowing all creditors equal voting rights—while in Indonesia and Korea workout decisions require approval by financial institution creditors holding at least 75 percent of the credits of the debtors. In Korea, penalties regarding compliance are also explicitly built into the workout rules. For example, if a CRA signatory fails to comply with an approved workout agreement or CRCC arbitration decision, the CRCC may fine this signatory up to 30 percent of the credit amount in question or up to 50 percent of the cost of non-compliance (Lieberman and Mako, 1999).

Stage 2.: Identification of workout candidates and appointment of lead banks

Stage 2 begins with the identification of workout candidates by the banks. This requires the banks to perform an evaluation of the viability of their distressed debtors, at which point they rank these debtors according to their conditions and their ability to return to profitability. The banks then select the workout candidates from these debtors. Ideal candidates should be companies whose difficulties are temporary in nature and whose problems are related to liquidity rather than solvency. In fact, the banks should be discouraged to go into workout with companies that are insolvent.

Once the workout candidates have been identified and agreed upon by the banks, a lead bank for each candidate, which is usually the largest creditor for the candidate, needs to be identified and appointed. This bank (or another large nonbank creditor) will assume responsibility to actively manage and coordinate the workout process according to the objectives and deadlines set out by the workout committee. The lead bank will also take a leading role in negotiating with the debtors. Once the choice of workout candidates has been agreed upon by all parties concerned, the debt standstill will go into effect. It is important

that new credit extended to the debtors during the standstill (to allow continuing operations of the debtors) receive senior status.

Stage 3: Negotiations

The next stage of the workout process involves negotiations among the creditors and subsequently between the creditors and the debtors. The object of these negotiations is to arrive at an agreed upon workout plan (a memorandum of understanding) that specifies the terms of the workout. Generally speaking, the terms that directly affect the creditors may include a debt/equity swap, the reduction of loan principal and/or interest, an extension of the term of the loan, or provision of new credits. Terms that require actions on the part of the debtors may include sales of noncore business, new equity issues, downsizing/layoffs, and any other restructuring steps.

At this stage of the process, the role of the workout intermediary should be more passive than active—allowing the ground rules established at the outset (stage 1) to guide the negotiations and only acting in an advisory capacity. The workout intermediary should encourage the creditors and the debtors to reach mutually beneficial solutions, and only when required should it arbitrate over their differences—and in a fair manner. The object of the workout is *not* financial engineering or an effort intended to bail out the debtors.

The time it takes to reach a debt restructuring settlement can vary from case to case. To accelerate the process, countries may provide tax relief for settlements completed by a certain deadline. Alternatively, penalties can be imposed on creditors and debtors for failing to reach settlement by the deadline. Another way to accelerate the process is by imposing an deadline for individual cases. For example, in Thailand creditors and debtors are required to complete their negotiation in 90 days. Precaution should be taken, however, to ensure that the deadline is not too tight. When it is, it can backfire and lead to suboptimal decisions.

Stage 4: Implementation

The fourth stage of the workout process involves creditors and the debtors implementing their agreements. An important aspect of this stage is the monitoring of the implementation of the plans, especially the progress in company restructuring. For this purpose, the banks may choose to install their own staff at the firms subject to restructuring since the concessions made by the banks are contingent on the firms' reaching the benchmarks set forth in memoranda of understanding. When these benchmarks are missed, the banks need to reevaluate their options. The results of the revaluation may cause them to suspend the workout process and initiate liquidation or to return to the negotiation stage.

D. Practical Considerations

Bank restructuring. To reach meaningful and credible corporate debt restructuring settlements, creditors must be able to negotiate from a position of strength. When banks are undercapitalized and weak (and therefore do not want to recognize the true value of their

nonperforming loans), they are generally reluctant to go into restructuring negotiations, especially when the final settlement agreement might require them to absorb losses for which they do not have the capacity. Even when weak banks do take part in workouts, they may only do so to buy time, often with the results of the restructuring being mostly cosmetic (e.g., rescheduling of payments). To spur corporate restructuring, some policymakers have recently called for an enhanced approach to bank restructuring, including "greater capital infusion from the public and private sector to weak banks" (Financial Markets Development Committee of the Pacific Cooperation Council, 1999).

Provisioning and loan classification rules. Lax loan classification and provisioning rules can discourage banks from entering into loan workouts. This can arise when a bank's required provisioning at the outset of the workout is less than the loss it will have to absorb during the workout through debt forgiveness and loan reduction. Likewise, when provisioning rules are too stringent, they can also distort a bank's incentive to engage in workouts. To illustrate this point, take as an example a bank that has decided it is in its best interest to restructure a loan to a distressed but ultimately viable borrower. However, if the provisioning requirements for restructured loans do not allow for improved prospects of the eventual loan recovery, the bank may not be willing to enter into the loan workout with the borrower, especially if the workout may entail additional lending from the bank to the creditor (which may also be subject to provisioning).

Corporate governance. Improvements in shareholder protection for minority investors are important to promote debt/equity swaps. A lack of protection against self-dealing by owners and controlling shareholders serves as a "strong deterrent for creditors that might otherwise consider conversion of debt to equity stake" (IMF, 1999b). In countries like Indonesia, where reportedly 10 families accounted for more than 50 percent of market capitalization of the country's largest corporations (Iskander, Meyerman, Gray, and Hagan, 1999), this can be an important consideration for the debt restructuring process. The strengthening of corporate governance involves the strengthening of stock listing requirements and disclosure requirements and the expansion of the role of independent board members and external auditors.

Corporate restructuring vehicles. Workout often entails debt/equity swaps. This means banks sometimes become substantial shareholders or majority shareholders in the firms with which they enter into a workout. This new role requires banks to become actively involved in the management of the firms, a task that in many cases banks have neither the expertise nor the resources to undertake. These considerations may be important enough to discourage the banks from entering into workouts. A unique feature of the Korean workout program is the creation of government-funded corporate restructuring vehicles that take over acquired equity from banks and, for a fee, also manage it in their stead. Professionals, many of whom with international experience, staff these vehicles. So far, there is not enough evidence to evaluate their performance so as to ascertain whether they have helped move along the workout process.

Workout and nonperforming loan purchase program. Often banks are reluctant to go into a voluntary workout. This may be due to lack of experience or to the uncertainties surrounding the outcomes of a possibly lengthy process. Banks' reluctance is often further increased by any government nonperforming loan purchase program that provides them with an easy way out of selecting the workout route. In such a case, the government may want to link the workout with the purchase of nonperforming loans by conditioning the latter on the banks' participation in the workout process. There are obvious technical difficulties associated with this approach. Although no satisfactory design has yet been developed, the approach would require close coordination between the AMC (which purchases the assets from the financial institutions) and the workout intermediary. One proposal is for the workout intermediary to certify the eligible banks for the sale of nonperforming loans to the AMCs.

The role of AMCs. Under certain circumstances, the AMCs can play a crucial role in corporate debt restructuring. Successful debt restructuring requires negotiation between equals. In situations where most of the debtors are large corporations and the creditor banks are small, AMCs that centralize the claims on the debtors can sometimes negotiate more meaningful and balanced restructuring settlements than a group of small (and possibly) divided banks. As discussed in Section III, when necessary, AMCs can also be given special legal power to facilitate the corporate debt restructuring process.

Legal support. Effective bankruptcy and foreclosure procedures are a crucial aspect of corporate debt restructuring. When the threat of such procedures is credible, it increases the incentives for defaulted debtors to reach out-of-court settlements with their creditors.

Legal limits on foreign ownership of domestic assets (enterprises or properties) can discourage the participation of foreign banks and other foreign creditors in the workout process by limiting the options available to them for concluding the workout (such as a debt/equity swap). In countries where foreign banks are important creditors (for example, in Indonesia, foreign banks hold about two-thirds of all corporate debt), this can paralyze the workout process. In these cases, lifting the legal limits of foreign ownership must be a pre-condition for the workout process.

Tax issues. Corporate debt workouts sometimes entail some form of corporate reorganization such as mergers, consolidation, and stock acquisition (in addition to business restructuring) to improve the prospect of the company. For example, during the recent crisis in Korea a number of chaebols had to take over some of their subsidiaries or to swap businesses. In most tax systems, capital gains are not taxable until they are actually realized, that is when the instruments that generate the capital gains are sold or transferred. The potential tax liabilities of companies that wish to enter into a corporate reorganization can sometimes be so substantial as to discourage the reorganization initiatives. To avoid obstructing necessary corporate restructuring, many countries have introduced the concept of tax neutral company reorganization. This exempts companies from capital gain taxes when the reorganization takes place, provided that the stockholders and property are substantially the same before and after restructuring and that the restructuring "have some bona fide

business purpose and are not principally designed to secure the tax neutral treatment." For this reason, Indonesia began to recognize mergers as tax neutral since 1998.

Governments sometimes also introduce specific tax deductions or subsidies to create explicit incentives for debt restructuring. In Thailand, the government provided temporary tax relief on asset sales and on debt restructuring by financial institution creditors.[28] In Korea, the government provided tax breaks for the restructuring of firms, including exemption of small and medium-size enterprises from capital gains on the sale of real estate used to repay debt to financial institutions. While the effects of tax deduction or subsidies are similar, subsidies have the advantage of being both self-terminating (to the extent that they need to be approved by the budgetary process every year) and of a finite sum in nature (with specific budgetary allocation).

V. Conclusion

Nonperforming assets are generally a manifestation of weakness in the corporate sector (obligor of the assets) and the immediate source of problems in the financial sector (holder of the assets). Effective asset management policies need to recognize these linkages and the interdependence between the two sectors. In this sense, asset management policies cannot be independently formulated and must be conceived in the context of a comprehensive framework for the restructuring of the financial and the corporate sector. For a survey of the literature on the subjects of financial restructuring and corporate restructuring, see Enoch, Garcia,Sundararajan (1999), Bank of International Settlements (1999) and Stone (2000).

This paper has examined two asset management approaches which have been used extensively during the recent Asian crises to help facilitate the restructuring of the financial and the corporate sector: AMCs serving primarily as a vehicle for financial restructuring and the out-of-court centralized corporate debt workout framework for corporate restructuring. The evolution of these approaches reflect very much the circumstances of these countries during their recent crises.

It should be remembered that despite the advantages associated with these two approaches, they are emergency measures. This means that while they may be considered the first best instruments during financial crises, they may not be such under ordinary conditions. As already discussed in the paper, there are many inherent weaknesses in both of these

[28] These include deduction of written-off debt from taxable income for the creditor; elimination or deferral of corporate income tax on written-off debt for the debtor; elimination of all taxes on asset transfer from debtor to creditor (income tax, special business tax, stamp duties, and VAT); elimination of taxes on accrued but unpaid interest, and the limitation of taxes on restructuring involving interest rate reductions by creditors.

approaches. In particular, their dependence on government involvement is likely to lead to outcomes, which are neither the most efficient nor the most optimal in normal times.

References

Bank For International Settlements 1999, "Bank Restructuring in Practice," Policy Paper No. 6, August.

Berggren, Arne, 1996, "Establishing Asset Management Companies," paper prepared for Workshop on Systemic Bank Restructuring, Monetary and Exchange Affairs Department (Washington: International Monetary Fund).

Bernanke, Ben and Cara Lown (1991). "The Credit Crunch" Brookings Papers on Economic Activity 2," 204-248.

Chammah, Walid, 1991, "An Overview of Securitization," in *Asset Securitization,* edited by Joseph Norton and Paul Spellman (London: Blackwell).

Dziobek, Claudia, 1995, "Regulatory and Tax Treatment of Loan Loss Provision", MAE Operational Paper (Washington: International Monetary Fund).

Enoch, Charles, Gillian Garcia, and V. Sundararajan, 1999, "Recapitalizing Banks with Public Funds: Selected Issues," IMF Working Paper (Washington: International Monetary Fund).

Federal Deposit Insurance Corporation, 1998, "Managing the Crisis: The FDIC and RTC Experience 1980–1994," (Washington: FDIC).

Financial Markets Development Committee of the Pacific Economic Cooperation Council (PECC), "Corporate and Bank Restructuring in East Asia," summary of a Joint PECC and World Bank conference held in Singapore, April 9–10, 1999.

Ingves, Stefan and Goran Lind, 1996, "Loan Loss Recoveries and Debt Resolution Agencies: The Swedish Experience," in *Banking Soundness and Monetary Policy* edited by Charles Enoch and John Green (Washington: International Monetary Fund).

IMF, 1999 a, "Orderly and Effective Insolvency Procedures: Key Issues", Legal Department (Washington: International Monetary Fund).

IMF, 1999 b, "Indonesia—Corporate Restructuring—World Bank Brief", IMF, EBD/99/46 (Washington: International Monetary Fund).

Iskander, Magdi, Gerald Meyerman, Dale Gray and Sean Hagan, 1999, "Corporate Restructuring and Governance in East Asia," *Finance and Development,* March 1999.

Kawai, Masahiro, 1998, "Financial and Corporate Sector Restructuring in the East Asian Countries: Policy Development and Assessments," (Washington: World Bank).

Kent, Peter, 1997, "Corporate Workouts: A U.K. Perspective," Terzo Rapporto sul Sistema Finanziario Italiano, Fondazione Rosselli.

Klingebiel, Daniela, 2000 "The Use of Asset Management Companies in the Resolution of Banking Crises: Cross-Country Experiences," World Bank Working Paper (Washington: World Bank).

Korea Asset Management Corporation, 1999, "Framework for Disposition of Nonperforming Assets," Korea Asset Management Corporation.

Larsson, Mats and Hans Sjogren, "Securum AB: 1992-1997," (Stockholm, Securum).

Liberman, Ira and William Mako, 1999, "Korea's Corporate Crisis: Its Origins and a Strategy for Financial Restructuring," (Washington: World Bank).

Lindgren, Carl-Johan, Tomas Balino, Charles Enoch, Anne-Marie Gulde, Marc Quintyn, and Leslie Teo, 1999, "Financial Sector Crisis and Restructuring: Lessons from Asia", IMF Occasional Paper No. 188 (Washington: International Monetary Fund).

Schwarcz, Steven, 1991, "Structuring and Legal Issues in the United States," in *Asset Securitzation*, edited by Joseph Norton and Paul Spellman, (London: Blackwell).

Stiglitz, Joseph and Andrew Weiss, 1981, "Credit Rating in Markets with Imperfect Competition," *American Economic Review*, Vol. 69–2, pp. 339–345.

Stone, Mark, 2000, "Large-Scale Corporate Sector Restructuring," mimeo.

Woo, David, 1999, "In Search of "Capital Crunch": Supply Factors Behind the Credit Slowdown in Japan," IMF Working Paper, (Washington: International Monetary Fund).

TECHNIQUES OF ASSET DISPOSITION

Asset sales, by facilitating resource and risk reallocation, are often at the core of the nonperforming asset resolution process. Many techniques, traditional and more sophisticated, have been developed for this purpose. Although so far little empirical work has been done to evaluate their relative effectiveness, it is generally accepted that it depends in large part on the types of assets for sale, the state of market infrastructure, and the objectives of asset sales. This section discusses some of the asset sale techniques for large groups of assets (asset-backed securities issues, equity partnership, and the Swedish approach).

Securitization of Assets

Traditional asset markets are often unable to digest the large stock of nonperforming assets emerging from financial crises. When this is the case, policymakers have the option of creating new markets, with the view to improving market efficiency, simplifying transaction procedures, and allowing transactions of large quantities of assets to take place at the same time. One of these markets is the asset-backed securities (ABS) market.

Securitization is the repackaging of assets with generally predictable cash flows into interest-bearing securities with marketable investment characteristics. Beginning with residential mortgages in the United States from the end of the 1970s, securitization has come to encompass pools of less homogeneous assets with uneven cash-flow characteristics and more types of collateral. The securitization of commercial mortgages is one such development.

Securitization of assets usually arises from a structured financing deal, when a company or a bank, in order to raise cash, sells some of its assets to a trust or to a special purpose vehicle (SPV), which subsequently offers asset-backed securities to investors through an underwritten public offering or a private placement. The marketability of an ABS issue is largely a function of its creditworthiness that, in turn, relies on its structure and the quality of the underlying collateral. These characteristics determine the yields to investors (commonly known as the "pass-through rate"). During the lifetime of an ABS issue, the cash flows of the underlying assets are remitted to a trustee, who pays scheduled interest and principal payments to the investors.

Generally, the assets that are more suitable for securitization are those with predictable cash flows, low delinquency rates, and whose underlying collateral have high liquidation value. Nonperforming assets usually do not have any of these characteristics, a fact that places greater demand on the design of their securitization. Below is a summary of the key issues involving asset securitization, with emphasis on nonperforming assets.

Legal issues. In order to obtain a high credit rating for an ABS issue, it is necessary to insulate the sold assets and the SPV from the bankruptcy of the sellers. This is where the concept of "true sale" enters. This is the removal of transferred assets from the originator for bankruptcy purposes. To effect a true sale, the amount of recourse on the originator or

limited guarantee provided by the originator should be curtailed. So should the originator's retained rights regarding the SPV and its surplus. For a more extended treatment of this subject, see Schwarcz (1991).

Asset composition. To foster market acceptability, the structure of ABS issues must take into account the need for their tradability in the secondary markets. Standardization of securities, especially in a thin market, is therefore of extreme importance. To achieve standardization, assets to be securitized should be grouped into different classes, by type, maturity, and status. Generally, residential loans are more homogeneous than commercial mortgages (in terms of maturity and interest), which makes them better candidates for securitization. When nonperforming loans are included in the assets to be securitized, there should be detailed and regular reporting on their performance.

Credit enhancement. Credit enhancement can assist the securitization of nonperforming assets by raising the quality of the asset pool. There are two categories of credit enhancement: internal credit enhancements (reserve funds, overcollateralization, and senior-subordinated structures) and external credit enhancements (pool insurance, bond insurance, and bank letters of credit) that involve a third party assuming some of the risks in case the portfolio should under-perform. Internal credit enhancements are generally favored over external ones because of the latter often being more costly and difficult to obtain. Cash reserves, funded by the proceeds from the sales of the securities, can protect investors against shortfalls and losses arising from delinquent principal and interest, and realized losses on liquidation of assets. Subordination provides some credit enhancement to the senior certificate holders by requiring that junior certificate holders (who are often the sellers themselves) to absorb any shortfalls and losses. Overcollateralization can ensure steady payments in the event of some defaults. Often, sellers of assets use a combination of a reserve fund, subordination, excess interest, and overcollateralization to improve the creditworthiness of the securitized assets.

When the assets to be securitized are government owned, governments have sometimes chosen to enhance the creditworthiness of the securities by providing some explicit guarantees. For example, the U.S. FDIC on a number of occasions provided a limited guarantee in the form of an interest-free demand note through the Bank Insurance Fund in order to obtain investment-grade rating for the securities offered (FDIC, 1998). Although such guarantees may have a role once all other credit enhancement options have been exhausted, the case against such guarantees is that (i) they undermine the notion of real asset sales (by forcing the government to retain some risk associated with the assets); and (ii) a new security with full faith backing by the government will compete with other government securities. Thus the appropriateness of this approach has to be determined on a case-by-case basis.

Market acceptability improvements. Regarding the determination of interest rates on ABS issues, a cross-index structure is sometimes used to make the securities more attractive to a wider base of investors. A cross-index structure is one in which the interest rate paid by the securities is not tied to the income of their underlying assets. The Resolution

Trust Corporation (RTC) frequently issued securities bearing an interest rate tied to the London Interbank Offered Rate (LIBOR), when the interest rates on the underlying mortgage loans were tied to U.S. Treasury indexes or cost of funds indexes (FDIC, 1998). The use of the LIBOR index could increase the international secondary market acceptance of these securities. Of course, a cross-index structure gives rise to basis risk, which occurs when interest income of the underlying assets falls short of the interest to be paid on the securities.[29]

To broaden the investor base in developing countries, it may be necessary to issue the asset-backed securities in international currencies like the U.S. dollar, so that investors do not need to take on foreign exchange risks. In such a case, the sellers need to have access to a forward or swap market in foreign exchange in order to hedge foreign exchange risks. In many developing countries, this option may be constrained by the absence of such market.

The role of credit-rating agencies. The role of credit-rating agencies is crucial for the launching of an asset-backed securities market. This is because most investors will depend on ratings issued by credit-rating agencies to determine the securities' attractiveness. Generally, rating agencies are actively involved in deciding the structure of an ABS issue (e.g., how many credit enhancements are needed) for these securities to obtain the sought-after rating category. The rating agencies also monitor the performance of the securities over their lifetime and adjust their credit ratings as appropriate. In countries where local credit-rating agencies lack expertise and domestic and international credibility, there may be a need to bring in international credit-rating agencies either in the context of joint ventures with local firms or directly on a particular transaction or transactions.

The role of servicers. Servicers are parties who are responsible for the management and collection of the underlying assets of ABS deals. In theory, the servicers can be the sellers themselves, the buyers or appointed by the sellers or the buyers. It is critical to ensure that incentives are in place for the servicers to maximize the value of the assets under their management. To do so, the issuers of the ABS can set the servicers' fees as a percentage of each loan that is worked out or rehabilitated.

Strengths and weaknesses of ABS. The main weakness of an ABS is that they require a sophisticated market infrastructure whose development may take time. For this reason, they cannot be the primary vehicle of asset disposition during a financial crisis in most developing and emerging market economies. Another drawback if that ABS can only deal with a narrow group of nonperforming assets, such as those with at least positive cash-flows. Despite these considerations, in Japan, Korea and Malaysia, efforts are currently under way to develop an ABS market. In November 1999, Morgan Stanley Dean Witter priced the

---

[29] The RTC sometimes covered these risks by adding additional funds to the cash reserves or by using excess interest payments to accelerate the paydown of the classes that were subject to basis risk (FDIC, 1998).

first set of bonds linked to nonperforming Japanese real estate loans.[30] The following is a list of the advantages associated with ABS:

- The pooling nature of an ABS makes them ideal for the sale of large chunk of assets with *irregular cash flow* characteristics. In fact, a successful issue of ABS should be large enough to ensure predictability of payment streams and dilution of default risks.

- ABS issues allow impaired assets (with appropriate credit enhancements) to be transformed into *highly rated securities*, the main consequence being that investors can purchase them without detailed knowledge of the underlying assets. This greatly accelerates the sale process.

- ABS issues allow the sellers of the assets to gain access to an entirely *new group of investors*. These same investors, however, might not be interested in a conventional debt obligation of the same sellers.

- ABS issues, by removing assets from bank balance sheets (provided the sale is final), increase the *lending capacity* of banks without their having to find additional deposits or capital infusion (Chammah, 1991).

Equity Partnership

Government-owned AMCs often lack the experience in asset management of private firms. For this reason, they sometimes engage the expertise of private firms by entering into incentive-based contracts with them. In order to retain upside potential for the government-owned AMCs and to subject the capital of private firms to downside risk according to the performance of private firms, the RTC developed the concept of "equity partnership." An equity partnership chiefly differs from conventional incentive-based contracts by preserving for the sellers the profit from "improvement in inefficient markets or unpredictable returns."

Under the equity partnership program, joint ventures were created between the RTC as a limited partner (LP) and private sector investors (usually consisting of equity investors and AMCs) acting as general partners (GPs). These deals were structured in such a way that the GPs invested equity capital and asset management services, while the RTC contributed asset pools and arranged for the financing of the partnership. The terms of these deals required that proceeds from the liquidation of assets must first retire any outstanding debt. After the debt was paid in full, the partners divided the remaining proceeds according to the percentage of ownership of each partner. Thus, unlike a direct sale, the RTC retained a residual interest that gave it some upside potential should the asset recovery rate end up being higher than initially anticipated.

---

[30] The real estate properties are occupied and producing positive cash flows.

Main characteristics of equity partnership programs. The RTC entered into seven different types of equity partnership arrangements between 1992 and 1995. Although many of these types had different structures, they also had very similar characteristics (FDIC, 1998):

- Proceeds from the disposition of the underlying equity partnership assets were distributed pro rata to both partners. Neither party held a senior or a subordinate position.
- All deals required the GP to acquire its interest in the partnership with cash. The RTC's capital contribution was the value of its share of assets conveyed to the partnership.
- The RTC provided the partnership with funding for interim financing or working capital.
- As seller in the equity transactions, the RTC provided limited warranties.
- Each agreement prohibited the GP from certain actions, including self-dealing, unless approved by the RTC.
- The GP had full responsibility for conducting the partnership's day-to-day business affairs such as managing, servicing, and disposing of the assets in the portfolio. The partnership agreement allowed for subcontracting management, disposition, and support functions when necessary.
- The GP was required to contract an external accounting firm to perform an annual audit and to certify the partnership's financial statements.
- Each partnership reimbursed certain GP expenses specified in the agreement. Reimbursement was contingent upon the GP's compliance with the partnership's policies.
- The GP had the right to transfer its interest in the partnership upon approval of the LP. The LP, however, had the right to transfer its interest without the GP's consent.
- The LP had the right to remove the GP upon breach of certain covenants and upon occurrence of certain events, and following such a removal, the right to appoint a new GP.

Strengths and weaknesses of equity partnership programs. In addition to providing the sellers an upside potential of the recovery of the assets, an equity partnership allows the sellers to partially transfer the due diligence and collection expenses. The seller financing aspect of equity partnership accelerates the bidding process, since the bidders do not have to acquire third-party financing. It also allows more investors to qualify and

compete, thereby increasing demand and, as a result, prices. Like an ABS, equity partnerships can handle a large quantity of assets in a short period of time. But unlike ABS issues, which are mainly suitable for homogeneous assets, an equity partnership in theory can be used for all types of assets.

The drawback of equity partnership arrangements is that they do not constitute a clean sale, and, to the extent that some of the assets transferred to the trust are still owned by the sellers and that the seller provides partial financing, the financial conditions of the seller are dependent largely on the ability of the GP to manage the assets. While an equity partnership entitles the sellers to any upside potential of the partnership, it also exposes it to downside risks. The experience of the RTC was that the recovery rate based both on book value and on estimated value showed that equity partnership yielded the highest recovery rate compared with other disposition strategies. This, of course, can be a reflection of the risk premium associated with the RTC taking on some of the risks.

Examples of equity partnership. In 1995, the RTC launched the SN Series of equity partnership. The SN Series transactions were legally structured as trusts, which issued bonds that were held by a trustee on behalf of the RTC. The bond debt typically represented 60 percent of the value of the trusts. The GP owned a 40 percent interest in the trust and was a Class A certificate holder. The RTC, acting as LP, held Class B certificates and owned a 51 percent interest in the trust. As assets were liquidated, the trust first used the proceeds to pay off the bonds until they were retired. For the remaining 40 percent value, the trust distributed proceeds with 51 percent going to the LP (Class B holder) and 49 percent to the GP (Class A holder) until all assets were liquidated. A total of $135 million in bonds were issued for the five SB Series transactions and held by the RTC.

The Korean Asset Management Company (KAMCO) has recently been experimenting with the equity partnership concept. In 1999, KAMCO sold W 565 billion (at face value) of nonperforming loans to an SPV in exchange for 70 percent cash and a 30 percent equity stake. The SPV, in turn, raised cash by selling the remaining 70 percent equity to the U.S. based Lone Star Fund. The assets of the SPV are managed by an AMC with any residue value arising from the asset sale distributed to KAMCO and Lone Star Fund by a 40/60 percent split.

The Swedish Model

Once the owner of a nonperforming asset succeeds in seizing the underlying collateral of the asset, he may sell the collateral immediately. However, because of market conditions and the possible lack of marketability of the asset, the owner may hold onto it and actively manage the collateral in order to maximize the price at which it can be sold later. In some cases, the seller in the holding period may try to improve the attractiveness of the asset by turning it into an income-generating asset (for example, a rented property). Moreover, by combining the asset with other assets, the seller may be able to spin them off into a company with a steady stream of income. The seller can then sell the company, either by listing it on the stock exchange or by selling it in a bid process.

The strength and weakness of equitization. The weakness of this approach is that it cannot deal with a very large quantity of assets like an ABS and an equity partnership can. It also requires certain homogeneity of assets, specifically real estate properties. Its strength is that it may lead to higher returns on the sale of the assets.

Example. In 1993, Securum established four Swedish regional real estate companies in which seized real estate collateral was placed and managed. The objective of these companies was to improve their assets through active management (e.g., by lowering the vacancy rate and improving the conditions of their properties) and, once the value of the assets could not be further improved, to sell the assets. In 1994, Securum listed Fastighets AB Norrporten, formerly Securum Fastigheter Norra AB, on the Stockholm Stock Exchange. Securum made an initial public offering of 60 percent of the company to both institutional investors as well as to the general public. To raise the price of the sale by reducing the public's uncertainties about the company, Securum guaranteed to buy back the shares at a predetermined price during the summer of that year. This guarantee helped generate interest in the sale and the shares were substantially oversubscribed. The remaining shares in Norrporten was later sold in two stages in October and December 1996. In 1997, Securum also made another successful initial public offering of another company (Castellum).