

GLOBAL CHINA INITIATIVE



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Evaluating the Potential of Asset Management Companies to Relieve Global Debt Distress

THE ROLE OF DEVELOPMENT FINANCE INSTITUTIONS

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ABSTRACT

Asset management companies (AMCS) can be part of the overall distressed debt resolution strategies and practices not only at the national level, which was mostly the case in the past, but also at subregional, regional and global levels. Lessons learned from AMC operations in the past suggested that AMCs can be an integral part of financial market infrastructure and play important roles in today's distressed sovereign and non-sovereign debt situation. Development finance institutions, including domestic, bilateral, and multilateral development banks and the World Bank, which have the capacities and means to take lead in directly engaging in AMC operations and nurturing the development of the AMC markets.

Keywords: asset management company, distressed debt resolution, development finance institutions, the World Bank and multilateral development banks,



INTRODUCTION

The multiple and overlapping crises of the COVID-19 pandemic, massive buildup of debts in emerging economies, global economic slowdown, inflation and monetary tightening of industrial countries have intensified debt vulnerabilities of emerging economies in recent years. Many emerging markets and developing economies are facing serious challenges in continuing their sovereign debt servicing. By 2023, more than 60 countries have been identified by the International Monetary Fund (IMF) and the United Nations Development Programme (UNDP) as being at or near significant debt distress (IMF, 2023). Despite continued efforts by creditors and international communities, significant challenges remain for systematic and efficient resolution of debt distress and non-performing loans in emerging economies.

Business-as-usual on a country-by-country and case-by-case approach will not work during a systemic crisis. Proposals such as Brady-bond-like restructuring require coordination among the majority of creditors and debtors, if not all of them (Qian, 2021). Debt-for-climate and other such swaps require detailed technical assistance for policies and capacity building, as well as grant support, which takes time to implement (Reuters, 2022). Technical challenges remain for proposals such as debt refinancing collateralized by state-owned assets.

Asset Management Companies (AMCs) can be part of the overall distressed debt resolution strategies and practices not only at the national level, which was mostly the case in the past, but also at subregional, regional and global levels. Although they can be privately owned, AMCs are often government entities set up to remove non-performing loans from banks' balance sheets to preserve the viability of financial systems (Fitch Ratings, 2023). Cooperation at subregional, regional and global levels in terms of strategies, policies and regulatory frameworks for distressed debt resolution are critical given the increasingly widespread use of cross-border loans. Subregional, regional and global AMCs can also act as agents of change to help national AMCs adopt proven principles and best practices, in addition to providing financing and technical support. More importantly, subregional, regional and global level AMCs are in the right position to deal with the negative externalities associated with financial crises. As financial interconnectedness among countries in the region deepens, it is more likely that a financial crisis in one country will spill over into another. To deal with such negative externalities, regional and global strategies, frameworks and operational capacity for NPL resolution are needed. Multilateral development banks (MDBs) provide analytical, advisory and operational support, but mostly from the sidelines.

In the quest for innovative solutions to persistent debt distress, this working paper explores the extent to which the formation of AMCs can be a viable option for the current predicament. AMCs can be a vehicle to directly involve MDBs in debt relief operations. Additional involvement of other subregional and national institutions can build a multi-tiered market infrastructure for distressed debt resolution.

This working paper reviews historical and recent developments in the distressed sovereign debt of emerging economies, analyzes the key problems, discusses case studies that had timely resolution, highlights lessons learned from AMC operations in the past and contemplates potential roles AMCs can play in today's distressed sovereign debt situation. When analyzing key problems, this working paper divides issues related to distressed sovereign debt into mitigation and adaptation angles. While mitigation is important, debt crises will continue to arise in the future. This working paper seeks to learn from the past while preparing for the future, arguing that AMCs can play key roles primarily from the adaptation angle, but also from the mitigation angle.



DISTRESSED DEBT RESOLUTION

Experience to Date - Too Little Too Late?

Despite repeated calls to action and numerous analyses, the sovereign debt crisis of emerging economies continues to loom. The year 2023 may prove devastating for the Global South, as more and more countries find themselves engulfed in debt crises. Several, such as Lebanon, Sri Lanka, Russia, Suriname, Zambia and Ghana, are already in default, and scores of others urgently need debt relief to ward off economic collapse and sharp rises in poverty (Rodrik 2023). Africa is facing a potentially serious sovereign debt problem. Currently, 22 low-income African countries are either in debt distress or at high risk of debt distress. Given the difficult international environment, this number may grow (Bradlow 2022).

Debtors and creditors are all calling for leadership. The International Monetary Fund (IMF), the World Bank, other multilateral development banks (MDBs) and specialized agencies at the United Nations (UN) have all engaged in efforts, such as a new allocation of IMF Special Drawing Rights (SDRs) and the establishment and implementation of various funds such as the Poverty Reduction and Growth Trust (PRGT) and the Resilience and Sustainability Trust (RST). However, many of these efforts appear to be ad hoc.

Meanwhile, debtor countries are also concerned about their credit ratings and refinancing capabilities once they enter certain debt-restructuring programs with the IMF and MDBs. It may not be easy for traditional creditor countries such as the United States and the Group of Seven (G7) countries, or the new but significant creditor countries such as China, to assume outright leadership. The main international debt relief offer open to some debt distressed countries is the G20 Common Framework for Debt Treatments. However, only three countries have undergone treatments, and none have concluded a restructuring more than 18 months after signing on. The difficulty in reaching a conclusion at the Group of Twenty (G20) finance ministers and central bank governors meeting for low-income country debt restructuring in February 2022 further highlights difficulties with the Common Framework (*South China Morning Post*, 2022).

More than one-third of developing economies included in the global emerging market bond index now have sovereign bond spreads to the United States Treasury bonds trading at more than ten percentage points, effectively locking them out of international capital markets. Additionally, 26 countries now have debt considered either “substantial risk, extremely speculative or in default” by at least one of the three major rating agencies, up from ten countries at the beginning of 2020. However, this is not surprising given that historically debt relief has come too little too late, with solvency problems often mistaken for liquidity problems leading to protracted debt crises with severe economic consequences (Jensen, 2022).

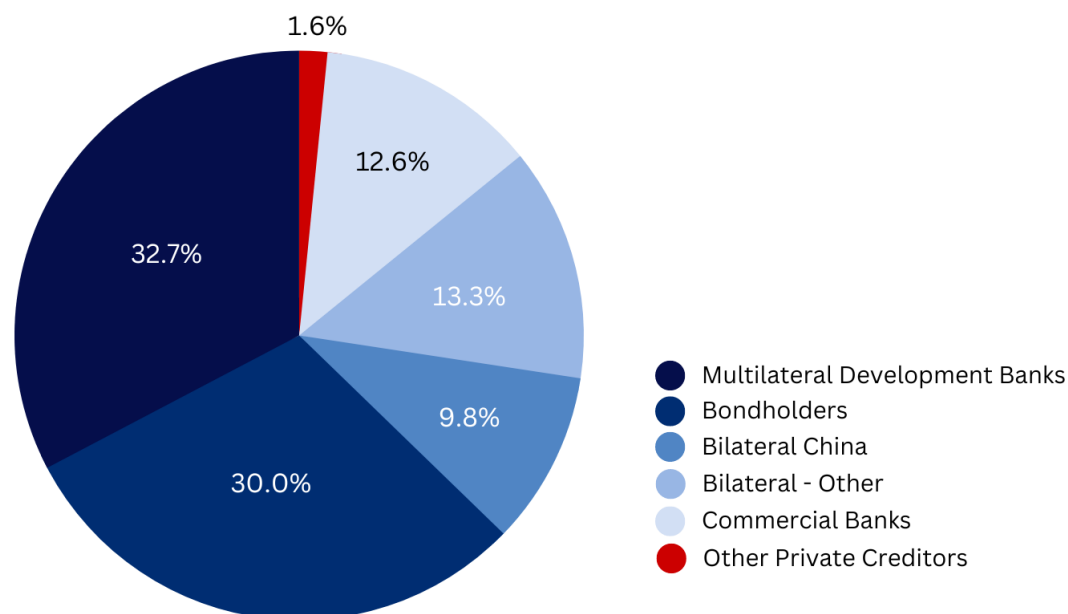
The Chief Economist of the World Bank has called for an urgent overhaul of the system for dealing with unsustainable debts (*Financial Times*, 2023), as efforts to deal with mounting debts have moved too slowly in cases such as Zambia, Sri Lanka and Ghana. It took Zambia almost two years after defaulting to secure an IMF loan. The Chief Economist warned that the long waiting periods between problems arising and resolution can lead to severe consequences.

Today’s emerging market debt crises are different than those of the 20th century. The banks involved in past crises have been replaced by thousands of bondholders. Governments have also increasingly turned to domestic institutions as sources of finance. In both Ghana and Sri Lanka, about half of government debt is owed to domestic lenders. In other troubled debtors such as Egypt and Pakistan



the proportion is much greater. Any default risks causing chaos in domestic banking systems. Private creditors, including the asset managers that represent bondholders, want to be involved earlier in the debt workout talks. A challenge is to bring commercial creditors into the debt relief process to allow debtor countries continued access to foreign capital markets (Wheatley, 2022). Figure 1 shows that the share of private sector creditors, i.e., commercial banks, bondholders and other private creditors, has increased substantially, to the point that in 2021, it constituted nearly half of total external debt for 49 African countries. Multilateral development banks held the second highest amount of external debt at nearly one-third, while China's share was less than 10 percent.

Figure 1: Distribution of Debt for 49 African Countries (2021)



Source: Yan Wang, Boston University Global Development Policy Center, (*Forthcoming*) 2023.

One major obstacle for speedier resolution of distressed debt is ensuring participation and equal treatment of the debt by private creditors and getting the “new” official creditors to participate in the restructuring process. The lack of clear definitions and transparency regarding the contractual terms, constitution and amount of sovereign debt also complicates sustainability assessments and restructuring choices.

Nevertheless, creditors are unlikely to quickly develop a united approach, as they will have different views on what constitutes the best recovery approach. Some prefer haircuts while some prefer restructuring. Given the increasingly broad mixture of creditors, including private ones, there will be persistent holdouts and some creditors engaging in predatory trading of non-performing loans (NPLs). Additionally, not all sovereign debts are the same. Some are for recurrent expenditures under the category of general obligation debts/bonds, while some are for capital expenditures/fixed investments under the category of project loans or revenue bonds. The collectability of those loans and bonds, and desired approaches of collection or restructuring, are clearly different. The requirement of uniformity may not be optimal for both creditors and debtors.

The desire for a uniform approach for distressed sovereign debt is probably based on the belief that money is fungible. However, there are many factors, such as sources of financing, terms and conditions of sovereign loans, grace periods, sources of repayment and cash flow profiles which make the money from these loans different. Ex ante, the general assumption that money is fungible is harmful



for prudent fiscal management and public infrastructure development, as borrower governments are often tempted to use short-term loans originally sourced for recurrent expenditures to fund long-term fixed investments, which risk maturity and interest rate mismatch. Ex post, the uniform work-out measures, such as fiscal austerity in exchange for haircuts, may end up canceling the loans to fixed investment projects that are still viable and block access to international financial markets for a prolonged period.

Furthermore, the interplay of domestic credit markets, financial sector stability, fiscal and monetary policies and public and sovereign debt can impact the effectiveness of sovereign debt restructuring. A few countries, for example, Mongolia (*The Banker*, 2016), have been repeatedly renegotiating distressed sovereign debt from one economic boom and bust cycle to another without significant improvement in public financial management and financial market development.

Mitigation and Adaptation

Figure 2 presents the results of a problem tree analysis conducted to identify causes and sub-causes that lead to the core problem of resolutions for distressed sovereign debt in emerging economies that are too little too late. Persistence of the core problem leads to difficulty in access to international markets both by sovereign and private sectors, aggravating the impact of a sovereign debt crisis on the real economy. This persistent and recurring sovereign debt crisis limits the potential economic development of countries in the long term.

Figure 2: Problem Tree - Distressed Debt Resolution



Source: Author's elaboration

The problem tree highlights challenges of mitigating risk of debt distress for many emerging economies. Despite lessons learned from inadequate fiscal policy and debt surveillance capabilities, poor public debt and state asset management practices make matters worse, while economies are not prepared for external shocks. Many have been vulnerable to cycles of boom and bust, as well as spillover from domestic financial sector crises. Governments tend to offer various forms of guarantees to the domestic financial sector and knowingly or unknowingly incur implicit contingent liabilities for the government. In fact, from the political and social point of view, defaults by the public sector



occur rarely or not soon enough, at least in an ex post sense, as politicians prefer to “gamble for redemption” (Panizza, 2009).

When sovereign debt becomes distressed, many emerging economies and their creditors are unable to adapt, despite its frequent occurrence. As discussed earlier, the ad hoc and time-consuming process of building consensus among official and private sector creditors often delays timely action. The cookie cutter and one-shot restructuring approach often stops viable investment projects, leading to loss in asset value, missing legal and market infrastructure and loss of working capital. Additionally, loss of professional skills at national, regional, subregional and global levels means that many resolution deals are half-baked and emerging economies and their creditors are prone to experiencing debt distress again.

Evidence shows that past debt restructuring initiatives did little to prevent a rapid resurgence in debt burdens. When the Heavily Indebted Poor Countries (HIPC) Initiative was first launched in 1996, for example, public and publicly-guaranteed external debt of all HIPC countries dropped dramatically from over 400 percent in the late 1990s to around 65 percent of their exports plus primary income in the early 2010s, but the ratio rose again to over 200 percent in the 2020s (Jensen, 2022).

The boom-and-bust cycles of economic growth and debt management in emerging economies indicate that the goal of distressed debt resolution should not simply be resolving the distressed debt at hand and going back to business-as-usual. The IMF's Debt Sustainability Analysis (DSA) is a useful framework for monitoring, but it does not directly implement sustainable debt and economic growth policies and actions. Consistent day-to-day operations by specialized institutions such as AMCs may improve the situation through incentive-compatible actions for sustainable debt management.

On adaptation, the AMC approach, sometimes called the good bank-bad bank approach, was widely applied in the earlier rounds of national, regional and global financial crises, most notably during the Asian financial crisis in late 1990s. There have also been some successful cases of transformation of AMCs after the financial crisis to be non-banking financial institutions or conglomerates. AMCs were once used by many countries following the good bank-bad bank approach. One of the most successful cases was the Resolution Trust Fund (RTC) of the United States. Many AMCs established during the Asian financial crisis have proven that the business model could work as it offers immediate yet tailor-made solutions both for public and private sector debts, avoiding lengthy delays associated with significant downside impacts and creating better conditions for resolution of debt distress.

Some AMCs later transformed themselves to regular financial intermediaries, offering a wider array of services in addition to their core competence of distressed debt resolution. As part of the development of the AMC market segment of the financial sector, AMCs also helped with the development of supporting legislative and market infrastructure with which emerging economies experienced significant gaps or which they lacked entirely. These include bankruptcy law and associated implementation procedures such as those for the receivership, regulations for non-judicial foreclosure and appraisal and market for NPL trade and exchanges.

Leadership from the IMF, World Bank and MDBs

The world is looking for leadership from the IMF and MDBs for another round of structured debt relief. Such leadership should not only be in the form of policy advice, program conditionalities, additional SDR allocations and new trust funds, which might be seen as ad hoc, time consuming and too little too late. Rather, the IMF and MDBs should take the lead in participating in debt relief, market development, institutional strengthening and innovative and systemic approaches. The latter should



be aimed at offering better mitigation for future debt distress, as well as adaptation for repeated boom-and-bust cycles that have been common for most developing countries.

One additional stumbling block in the market to reach distressed debt resolution is the attitude of multilaterals, particularly the World Bank, towards their own distressed loans. MDBs combined have the largest share in total debt (Figure 1). Perhaps due to the charter requirement, or the attempt to maintain the highest possible triple A credit rating, multilaterals have been resisting the idea of haircuts to their own loan portfolio.

The AMC approach can provide a unique angle for the IMF and MDBs to be systemically involved in distressed debt resolution and asset management businesses, including for their own loans to member countries, without the need to raise sensitive concerns or trigger difficult discussions regarding their required financial prudence, credit rating or the need to amend their charters. MDBs can establish their own subsidiaries of AMCs, such as an AMC within the World Bank Group, at par with the International Bank for Reconstruction and Development (IBRD), International Development Association (IDA), International Finance Corporation (IFC) and the Multilateral Investment Guarantee Agency (MIGA). Through their AMC subsidiaries, MDBs can provide haircuts on their own loans to debt distressed countries, thereby establishing a benchmark for the market to follow in effective resolution of debt while showcasing best practices and supporting regional and national AMCs conducting similar resolutions through financial, policy and technical support.

Embracing the New Model of Growth

Within crisis lies opportunity. The leadership of the IMF and MDBs should also help debt distressed countries adopt a sustainable, green and climate-friendly development path. Debt restructuring by AMCs at different tiers can help debt distressed countries embrace a sustainable, green and carbon-neutral development agenda. The existing debt for climate and nature swap deals resembles a similar AMC approach. The special purpose vehicle (SPV) created for a particular transaction can be seen as an AMC that acquires distressed debt, provides refinancing, continues with debt servicing and works with the debtor to strengthen its policy, management and business operations so it can embark on nature preservation and climate change operations successfully and emerge stronger from the crisis.

Compared to the singular deals of SPVs, AMCs can take a broader sector-wide or country-wide approach in a specific debtor country with a longer-term view. It can also provide more systematic financing solutions on behalf of the debtor company with different loans and equity for capital expenditure and working capital. More importantly, the longer-term engagement by AMCs on climate change and green and sustainable development allows debtor countries and AMCs to build an effective system to manage results and measure real impacts, thus building more credibility for their programs.

AMC EXPERIENCES

The AMC approach, sometimes called the good bank-bad bank approach, was widely applied in earlier rounds of regional and global financial crises, most notably during the Asian financial crisis in the late 1990s and later during the global financial crisis in the later 2000s. Many AMCs were established at the country level under special legal provisions, helping state-owned commercial banks (SCBs) and private financial institutions improve their balance sheets by transferring NPLs at face value or at a discount to AMCs, and allowing banks to write off net losses. AMCs in turn managed NPLs to generate income. Public sector AMCs are entities set up by the governments or financial sector regulators to remove non-performing loans from bank balance sheets to preserve the viability



of national financial systems. The purpose of most AMC's is to wind down legacy assets, but some compete with private debt purchasers or have even been listed on stock exchanges.

Case Studies

Public sector AMC's were set up in China to recapitalize banks in the aftermath of the 1997 Asian financial crisis, and in the eurozone (Spain, Ireland, Belgium, Germany and Italy) after the 2009 financial crisis to limit the risk of utilizing cross-border taxpayer money for bank bailouts. Explicit government guarantees or implicit support enabled AMC's to access capital markets. In the eurozone, the AMC's' intervention was preceded by burden sharing among shareholders and subordinated debt holders of troubled banks.

In Asia, AMC's have been fundamental to NPL resolution in the region since the Asian financial crisis in the late 1990s. AMC's typically hold and manage non-performing assets removed from the balance sheets of credit institutions as a tool to improve the asset quality of the financial system. Most AMC's aim to maximize the recovery value of distressed assets, while some function simply as a warehouse of NPLs with minimal collection activities (ADB, 2022).

One of the successful cases is the Korea Asset Management Company (KAMCO). During the 1997 Asian financial crisis, Korean financial institutions faced high levels of nonperforming loans and liquidity crisis following years of rapid credit growth that had relied on foreign short-term borrowing. The government mandated that KAMCO purchase NPLs from nonviable banks over a five-year period starting in November 1997. By November 2002, the agency had acquired NPLs with a total face value of 110.2 trillion Korean won (\$88.2 billion) for 39.8 trillion Korean won. Using innovative asset resolution methods, KAMCO was able to recover at a profit a large portion of the NPL acquired. When it liquidated the fund in 2013, KAMCO had recovered 48.1 trillion Korean won, or \$44 billion. KAMCO used a variety of resolution methods. These included the issuance of asset-backed securities (ABS) for domestic and international markets, international auctions and joint ventures with Korean and global partners (Ungersboeck, 2020).

Another successful case concerns China's state-owned commercial banks (SCBs) bailout in the early 2000s, when the NPL-laden banks cost approximately \$656 billion, the equivalent of over 40 percent of the country's GDP in 2004. The four largest SCBs dominated the Chinese banking sector, accounting for nearly 70 percent of its total assets (see Table 1). The need to resolve NPLs in the

Table 1: China's Four AMC's and Big Four Banks: NPL Transfers (1999-2000, RMB/\$ billion)

AMC	Matched bank	Assets transferred	Share of bank loans outstanding (% end 1998)
Orient Asset Management	Bank of China	RMB 267.4/\$32.6	20.4%
Great Wall Asset Management	Agricultural Bank of China	RMB 345.8/\$42.2	24.6%
Cinda Asset Management	China Construction Bank	RMB 373.0/\$45.5	21.7%
Huarong Asset Management	Industrial and Commercial Bank of China	RMB 407.7/\$49.7	17.9%
Total		RMB 1393.9/\$170	20.7%

Source: Ma and Fung, 2002.

Note: In calculating the China Construction Bank loan shares, the table takes into account that 100 billion/\$12.2 billion RMB of the assets transferred to Cinda are from China Development Bank and not from any of the big four banks. According to Cinda, the actual book value of the transferred NPLs reaches 395 billion/\$48.2 billion RMB instead of 373 billion RMB. The difference could be due to the nonpolicy transfers on top of the policy carve-outs.



early 2000s triggered ambitious banking reform, initiated by the establishment of four state-owned AMCs in 1999, one for each of the big four banks, to take over and resolve problem assets. The principal legal basis for the four AMCs was an executive order issued by the State Council in 2000, after the actual establishment of the four AMCs (Fung, 2002). In 1999, the Chinese government provided the four AMCs each with paid-in capital of \$1.2 billion, and the four state-owned commercial banks transferred \$170 billion equivalent in renminbi (RMB) in NPLs to their respective AMCs. Purchasing NPLs for 1.4 trillion RMB was financed by China's central bank, the People's Bank of China (PBOC), as well as loans estimated to be 560 billion RMB and AMC bonds of 840 billion RMB issued by the AMCs.

The AMCs' main goal was to maximize recovery of NPLs through asset resolution and collections. The AMCs were given special legal powers to write off and dispose of assets at less than book value. By the close of 2003, the AMCs had resolved over 41 percent of their NPLs by recovering an average 20 percent of the book value. By shifting NPLs to the AMCs, the commercial banks were freed from the burden of the NPLs. AMCs used bulk sales, security and debt to equity swaps in resolving these NPLs (Sprayregen, 2004).

In Japan, the Industrial Revitalization Corporation of Japan (IRCJ), established in 2003, effectively worked as an AMC to help companies with excessive debt reorganize themselves when the company was still considered viable, but conflicts of interests prevented the company and creditors from agreeing on a rehabilitation plan. IRCJ, financed by government-guaranteed loans, purchased the loan obligations from the debtor's banks and drew up a reorganization plan in cooperation with the bank and the debtor company (OECD, 2004).

From the Asian financial crisis, Thailand had a multipronged approach in handling NPLs in which the Thailand Asset Management Corporation (TAMC) and privately-owned AMCs played important roles. The Indonesian Bank Restructuring Authority (IBRA) was created by presidential decree in January 1998, effectively as an AMC and a bank restructuring agency to administer the deposit guarantee and to intervene in and restructure banks declared unsound by the central bank.

The Malaysian economy also experienced turmoil during the Asian financial crisis. The government's response was to establish Danaharta, a national AMC, alongside a recapitalization agency, Danamodal, and a debt restructuring body, the Corporate Debt Restructuring Committee (CDRC). Danaharta was meant to be a preemptive tool to address rapidly growing NPLs in the banking system (Cerruti, 2016). Danaharta was mandated to remove NPLs from the financial system and to maximize recovery. The Danaharta Act granted the agency special legal authority to more efficiently resolve NPLs. Danaharta received funding from the government and issued zero-coupon, government-guaranteed bonds in exchange for assets at market value. To incentivize financial institutions to sell NPLs, Danaharta implemented an incentive and penalty structure, including a profit-sharing arrangement. Danaharta used a variety of methods to deal with acquired assets, depending on whether the borrowers were viable or non-viable. Over its lifetime, Danaharta's portfolio totaled 52.42 billion Malaysian ringgit (RM) or \$5.84 billion in face value of NPLs, and it recovered 30.35 billion RM (\$3.38 billion and 58 percent) (Dreyer, 2021).

In Europe, during the global financial crisis, Ireland (2010), Spain (2012) and Slovenia (2013) created AMCs. One of the common features of these systemic AMCs is that governments have been strongly involved in their creation, by providing capital, facilitating funding and passing legislation governing the design and operations of the AMCs (Fell, 2017). The National Asset Management Agency (NAMA) of Ireland was created in 2009 to acquire impaired assets from the credit institutions and deal expeditiously with the assets (Cerruti, 2016). The Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria (SAREB) of Spain faced opposition from the government and financial sector upon its creation in 2012. Its objective consisted of the acquisition,



management and disposal of assets transferred by credit institutions. SAREB was one pillar of a comprehensive bank-restructuring strategy and its lifespan was defined by market conditions.

In Africa, the Asset Management Corporation of Nigeria (AMCON) of Nigeria was created in 2010 after prolonged financial distress of financial institutions since 2006. AMCON was thinly capitalized and might have overpaid for eligible assets, although it achieved the expected cleanup and stabilization of the banking system.

Issues to Consider

The merits of the AMC approach are (i) quick resolution; (ii) provision of a “bridge” for the intertemporal pricing gaps that emerge when market prices for NPLs and the underlying collateral are temporarily depressed; (iii) policy, legal and regulatory reforms and (iv) niche financial institutions for NPL resolution and distressed asset management. This approach addresses price gaps that may happen because of heightened risk aversion and a drying up of liquidity in the market (Fell, 2017).

“Bridging” opportunities due to intertemporal pricing gaps can emerge when market prices for NPLs and the underlying collateral are temporarily depressed. This may happen because of heightened risk aversion and a drying up of liquidity in the market but, ultimately, market prices recover as economic conditions improve. Bridging this intertemporal pricing gap is accomplished by removing a significant share of NPLs, usually belonging to a specific asset class such as commercial real estate, from bank balance sheets and working them out over a specified time horizon to maximize their recovery value. The transfer price paid to banks by the AMC is usually set at long-term value, thus avoiding the fire sales that would result from NPL disposals into illiquid markets where the risk premia required by outside investors are unusually high. Shielding banks from fire sale conditions can be especially beneficial if several banks are attempting to resolve their NPLs at the same time. AMCs can provide an important coordination role.

There is a delicate balance between the speed of NPL resolution, maintaining viability of the firm and maximizing the value of the loan. First, resources – capital, funding, management attention and human resources – are tied up by assets that are not producing income while the scope for new lending to productive ventures is also curtailed. Second, high stocks of NPLs usually indicate underlying solvency and debt overhang issues affecting the corporate sector. Moreover, keeping over-indebted and ultimately non-viable firms alive by not resolving NPLs in a timely manner generates artificial and unhealthy competition for viable firms. At the same time, caution is needed to avoid resolving NPLs too quickly, as this may create fire sale conditions and put excessive pressure on bank capital levels. Moreover, premature liquidation of firms that might otherwise have remained viable after some restructuring and reorganization may lead to a destruction of economic value. Overall, therefore, it is crucial to find the optimum speed of NPL resolution, which is likely to differ among countries and between asset classes (Fell, 2017).

A comprehensive approach to NPL resolution is necessary. The NPL problem cannot be solved by any single policy measure. Appropriately, robust supervisory guidance is essential to improve banks’ management of the NPL problem, and it must be complemented by structural reforms to enhance recovery and by complementary measures to facilitate the development of NPL markets. This will only be resolved when banks can use the full set of potential NPL resolution tools while minimizing the undesirable side effects of liquidating NPLs.



However, AMCs are not a panacea, and some countries have had less than satisfactory experiences. Effective AMCs require the strong enabling framework of consensus and political backing to support their efforts. A strong credit culture that fosters proper underwriting and documentation of loans, information sharing through credit bureaus regarding borrowers' credit histories, effective bank regulation and supervision to ensure banks are well capitalized, a legal framework for creditor rights and insolvency coupled with a strong legal and judicial framework, well-developed capital markets and fiscal and macroeconomic stability are all prerequisites for effective AMC and bank resolution. The experience of many AMCs clearly demonstrates the importance of strong domestic political consensus and public support. When the Asian financial crisis hit in late 1990s, there was broad political and public consensus regarding the need to use and quickly recover public funds to stabilize the financial system. Effective asset resolution requires a concurrent program of reforms to strengthen both the financial and the corporate sectors. Table 2 shows some successful factors for AMCs drawing from experiences of the past.

Table 2: Successful Factors for AMCs

Issue	Practice	Examples
Preconditions	<ul style="list-style-type: none"> Strong consensus and political will with respect to the approach, and willingness to recognize losses Comprehensive and coordinated reform program to strengthen financial sector regulation and supervision, risk management and workout practices within the banks, corporate restructuring and legal and regulatory reforms to remove impediments to restructuring Critical mass of impaired assets Strong tradition of institutional independence and public accountability Robust legal framework for bank resolution, debt recovery, and creditors' rights 	<ul style="list-style-type: none"> The RTC, KAMCO, NAMA: political consensus Securum: willingness to recognize losses Securum and Danaharta: part of a comprehensive solution to restore financial stability Ireland: strengthened financial supervision and reformed insolvency SAREB: created after a comprehensive evaluation of the assets of the banking system Danaharta: determined the threshold of eligible loans so as to remove a significant portion of NPLs in the banking system (70 percent) Sweden: history of responsible ownership of state-owned enterprises. RTC: benefited from FDIC bank resolution methodology, robust framework for debt recovery Korea: adopted policies and legal reforms to facilitate corporate restructuring, created KAMCO
Legal and institutional framework	<ul style="list-style-type: none"> Clearly focused and narrow mandate with necessary powers to accomplish tasks Use of special powers limited both in time and scope, and subject to enhanced oversight to limit abuse Strong commercial focus reflected in majority of board membership from private sector, chief executive officer (CEO) with demonstrated private sector experience in asset management, and staff with appropriate market-based skills Strong levels of governance, with frequent reporting including annual financial statements Adequate funding provided up front to cover operating expenses until proceeds of asset sales received 	<ul style="list-style-type: none"> Counter-example: IBRA, whose mandate was overly broad Danaharta: oversight committee for its use of special powers Danaharta (board members from private sector and international experts); also NAMA and SAREB The SDIF: institutional strengthening program Danaharta, the SDIF, KAMCO, NAMA, SAREB: frequent public reporting Counter-example: The RTC, where funding delays hampered recovery efforts



Table 2: Successful Factors for AMCs (continued)

Issue	Practice	Examples
Operational issues	<ul style="list-style-type: none"> Transfer price based on market value established through a transparent, market based, due diligence process conducted with the assistance of an independent third party experienced in valuation Ensure adequate safeguard mechanisms through enhanced transparency and reporting standards, use of fixed sunset date, and/or limited period to acquire assets and amount of bonds it can issue Consider use of private contractors whenever possible, with appropriate oversight from the AMC Develop strategic plan as well as detailed business plans, with frequent review and corrective action plans when necessary Ensure strong internal controls and transparency to reduce the possible misuse of funds Move rapidly toward asset disposition Document the history of the AMC in detail and publish on permanent website 	<ul style="list-style-type: none"> NAMA and SAREB: made use of independent third party experts for valuation, in accordance with their transparent methodology SAREB: limit on the bonds it can issue The RTC, IBRA, and SAREB: sunset clause KAMCO: limited period for asset purchase RTC and Danaharta: outsourced extensively Counter-example: IBRA, where the outsourcing of restructuring to banks failed NAMA: various business plans, accessible online RTC: beefed up internal controls after initial failure Securum, RTC, KAMCO, and Danaharta: moved rapidly to dispose assets KAMCO: created a market for distressed assets using international expertise through joint ventures The RTC, KAMCO, Danaharta, IBRA, and the SDIF: documented their experience in detail

Source: Cerruti, 2016.

Notes: AMC = asset management company; FDIC = Federal Deposit Insurance Corporation; IBRA = Indonesian Bank Restructuring Agency (Indonesia); KAMCO = Korea Asset Management Corporation (Korea); NAMA = National Asset Management Agency (Ireland); RTC = Resolution Trust Corporation (United States); SAREB = Sociedad de Gestión de Activos Procedentes de la Reestructuración Bancaria (Spain); SDIF = Savings Deposit Insurance Fund (Turkey).

Financial sector reform efforts traditionally have focused on improving prudential regulations and supervision, restructuring banks and strengthening creditors' rights. Experience from some countries clearly shows that the corporate restructuring process has been accelerated by a concurrent program to improve corporate sector transparency and governance, facilitate mergers and acquisitions, create a distressed-asset market and strengthen the development of a domestic capital market for both equity and bonds.

However, in most distressed debt resolution situations, the factors of success and failure are intertwined and the AMC can be an agent for change. AMCs not only play an important role in the creation of a market for distressed assets, but also assume multifaceted roles to help develop domestic financial markets and support legal and market infrastructures. Legal foundations for these new measures were established and tax benefits were introduced to provide tools with tax neutrality. AMCs need to act independently and transparently, not necessarily relying on previous market arrangements in collecting debts. The measures to provide AMCs with an enabling environment for NPL resolution include introducing legal and regulatory frameworks to strengthen bank supervision, introducing and revising legislation on insolvency, embarking on judicial reforms to improve the efficiency of court-driven debt enforcement processes and introducing out-of-court corporate restructuring mechanisms (ADB, 2021).

For example, in the case of Malaysia, Danaharta was granted special powers to expedite the management of NPLs, and the national land code was amended to reflect such powers. Another good example was that NAMA was able to professionalize the real estate market in Ireland, where it developed transparent processes and large package deals to attract more professional investors, such as private equity groups. To facilitate the rapid disposal of NPLs, the Republic of Korea government



adopted diverse NPL resolution measures, namely asset-backed securities and corporate restructuring vehicles.

Operations of the AMCs evidently contributed to developing the NPL market ecosystem by creating business opportunities for NPL market service agencies, such as debt servicing agencies, asset appraisers, credit rating agencies, lawyers and brokers. Diverse NPL investors, including domestic private AMCs, private equity funds and foreign investors, appeared and participated in their NPL markets, utilizing diverse tools of NPL resolution. SAREB's initial servicing agreements with commercial banks were not successful, as they were not incentivized. As a result, SAREB launched a competitive process to consolidate its servicing agreements and four professional servicers were awarded five- to seven-year contracts, which included detailed key performance indicators (KPIs) (Cerruti, 2016). The NPL markets and the ecosystems developed in these countries not only contributed to financial development but may also have helped these countries avoid massive NPL accumulation during periods of financial market turbulence. Indonesia, Malaysia, the Republic of Korea and Thailand, unlike other Asian countries, did not experience a hike in the NPL ratio during the 2008 global financial crisis and its aftermath (ADB, 2021).

Legal and institutional frameworks are important for AMCs to outline their mandate, powers, responsibilities, funding and lifespan. The elaboration of the legislation also helps the authorities and the public form a consensus on the role of the AMC. The choice of legal entity depends on the country's legal system and, in most common-law jurisdictions, a statutory body established under an AMC law is preferred due to the special powers given to the AMC. The special powers needed depend on available level provisions for debt collection, insolvency, creditors' rights and asset management and securitization. A statutory body is also preferred in countries where the judicial system is stymied by delays and inefficiencies. Specific legislation protects AMCs against legal challenges where their debt resolution decisions should not be subject to being overturned by courts. In countries where foreclosure and bankruptcy processes are weak, AMC related legislature processes may also lead to legal reforms in bankruptcy laws, bankruptcy court and non-judicial foreclosure processes.

The total capital level of an AMC should be calibrated to ensure that the equity layer is sufficient to absorb unexpected losses of the AMC's assets, so that the majority of risks and rewards from the resolution of the assets do not rest with the government. The funding structure of the AMC should minimize costs and liquidity risk. This can be achieved by issuing government-guaranteed senior bonds which can be used as payment-in-kind to purchase NPLs from banks. Appropriate controls should be put in place to ensure that the AMC redeems senior debt according to schedule, rather than building cash reserves or diverting resources to other interests (Fell, 2017).

AMCs, as part of the effort to establish a market for distressed assets, also benefit from a robust governance, ethics and transparency framework. Good governance is not only required by provisions in an AMC's law but also in daily practices. Decisions concerning the board composition, key management staff, relevant experience and declarations of interest and possible conflicts of interest are all important. Transparency requirements and external oversight help strengthen governance as well. The funding options differ depending on an AMC's scope of operations. Asset-purchasing AMCs have the option to issue government-guaranteed bonds in exchange for NPLs, and such bonds should be discountable to provide banks with liquidity to restart credit intermediation (Cerruti, 2016).

NPL resolution needs a well-functioning secondary market for financial institutions facing high stocks of NPLs to engage in NPL portfolio sales or securitizations to clean up their balance sheets. Given that public AMCs are significant buyers of NPLs from banks, they can also contribute to developing the NPL secondary markets and the independent loan servicing industry. In recent years, many Asian countries, particularly China, Thailand, Korea, Indonesia and Kazakhstan, have embarked on efforts



to develop online NPL trading platforms that add to the existing financial market infrastructure. The basic functions of the online platform include bundling smaller NPL portfolios, data sharing and a high degree of data standardization, electronic (virtual) data room for detailed loan files and every supporting documents, credit services such as valuation and due diligence as well as real estate and collateral appraisal. The online platforms help address information asymmetries, increase creditor coordination and broaden the investor base. This can lead to more developed and liquid NPL markets, with better pricing mechanisms (ADB, 2022).

AMCs as Part of the Permanent Financial Market Infrastructure

After successfully carrying out the original mandates, many AMCs in Asia have been transformed to regular non-bank financial institutions, offering a wide array of financial market intermediary services.

China's big four AMCs — Cinda, Huarong, China Orient and Great Wall — all managed to continue operation after their first ten years of NPL operation prescribed by the regulations and have become full-fledged financial conglomerates listed on the Hong Kong Stock Exchange. Many of their subsidiaries were developed from their NPL resolution processes, such as equity investment and trust funds, venture capital firms, real estate appraisers and management companies including even hotels and shopping malls, financing and leasing companies and security companies. These came in handy in the 2010s when China's economy went into a period of explosive growth with demand for all kinds of financial and management services. At the same time, the policy toward NPL resolution changed from the previous government's bailout approach to the multipronged market-based approach. New measures were adopted to create and improve the NPL market environment. More provincial and local AMCs were established. As of October 2018, 174 AMCs including 53 local AMCs were in operation, serving as conduits between banks and NPL markets. NPL transfers from financial institutions to AMCs changed from acquisition at book value to auctions, allowing AMCs to acquire NPLs at market prices rather than at book values. Nevertheless, after years of diversifying into a broader array of financial services, the Chinese government required large state-owned AMCs to reorient their priorities back toward NPLs. The banking regulator issued regulations which promised greater oversight of AMCs and instructed them to focus more upon NPLs as their core business. All substantially increased NPL acquisition in the tens of billions of dollars represented an increase of more than 50 percent in 2018 (McMahon, 2018).

Unlike many AMCs established during the Asian financial crisis, KAMCO had no sunset period and the recovery of its NPL portfolio was relatively slow. By 2013, KAMCO was able to achieve collection of 122.70 percent of its NPL acquisition amount, or 43.18 percent of the face value of acquired NPLs. Moreover, KAMCO's disposal methods paved the way for the creation of a distressed debt market, which proved instrumental during the 2008 global financial crisis. KAMCO's resolution experience showed how a centralized AMC could play a role in the market of making and promoting distressed assets (ADB, 2021).

Vietnam also turned its NPL resolution infrastructure from temporary to permanent. The Debt and Asset Trading Corporation and Vietnam Asset Management Company were the first major public AMCs for the banking sector and now about 20 additional private AMCs are in operation. The Vietnamese government started to take a market-based approach to NPL resolution in 2015, including allowing AMCs to purchase NPLs at market prices, facilitating the sale of NPLs to foreign investors and activating secondary NPL markets.

In addition to NPL resolution, AMCs also willingly or unwillingly became management companies for state-owned assets partly from resolution processes, as some NPLs needed to be converted to equities, and partly from the normal business process in which AMCs run venture capital and



investment funds. As part of this process, they can help governments to improve state-owned asset (SOA) management. There is need for better SOA management (Wang and Lin, 2022) and AMCs can contribute from their unique angle.

In addition to the national level AMCs, there are also regionally and globally targeted funds either directly acquiring NPLs or operating through national AMCs. International Finance Corporation's (IFC) Distressed Assets Recovery Program (DARP) is such an example. DARP is a global platform that supports the creation of strong distressed assets markets in emerging economies. It operates on two fronts, including (i) building the essential servicing infrastructure required across markets and (ii) deploying capital, including mobilized capital from third-party investors, to stimulate the market through the acquisition and resolution of distressed assets. Geographically, it covers Latin America, Eastern Europe, Asia and Africa. DARP has committed \$8.2 billion globally, including investor mobilization of \$5.3 billion, to enable banks to offload over \$40 billion of NPLs, while helping over 20 million debtors resolve their obligations. Similar to some national AMCs, DARP has evolved from its beginnings in 2007 as a crisis response initiative to today's programmatic and strategic approach to creating strong distressed assets markets across emerging economies (IFC, 2022).

One case study of DARP is its engagement with Nimble, a regional NPL investor and servicer operating in South Africa, Botswana and Namibia. Nimble required new capital to develop the business further, expand its team at their servicing centers and access competitive long-term financing to allow for sustainable growth through the acquisition of diversified NPL portfolios from multiple banks and countries in sub-Saharan Africa. DARP invested in Nimble and became its shareholder, providing long-term financing through an NPL platform for efficient acquisition of portfolios, and helping Nimble access global distressed asset expertise and best collection practices in the industry by incorporating Nimble into DARP's unique global network of investors and servicers across emerging markets. Understandably, many of DARP's clients are private sector entities focusing on national, regional or subregional markets. However, their experiences can be applied to public sector and sovereign debt markets as well.

One critical agenda in recent years has been embracing environment, social and governance (ESG) principles and approach to NPL resolution and AMC operations. One angle is from the NPL financing side where interest in ESG is growing and the securitization market is evolving quickly across products, such as where the underlying collateral positively impacts housing infrastructure and the environment and meets energy- and water-saving standards. Increasingly, many deals refer to the International Capital Market Association's green, social and sustainable principles or the 2030 United Nations Sustainable Development Goals (SDGs). Investors are also looking more closely into the 'S' as well. In some respects, ESG is becoming part of the risk management process as stakeholders and investors have identified a growing number of ESG-related risks, asking how such ESG risks may be measured and how exposure can be reduced.

High ESG standards are increasingly critical to a financial institution's reputation and its license to operate. Banks are facing increasing public scrutiny over the impact of their lending practices on human rights, social cohesion, gender equality, carbon dioxide emissions, biodiversity and other ESG topics. A lack of ESG consideration can cause damage to a bank's reputation, and a thoughtful ESG strategy can give rise to new revenue streams. The combination of NPLs and ESG is a relatively new issue, but the traditional distressed asset investors are on a path to start thinking about ESG across all asset classes as a large portion of distressed loans can be turned into performing loans if the ESG strategy is applied in the right way. For example, there is social good in offering the borrower debt relief and allowing the borrower to work together with the buyer of NPLs to transform distressed loans into assets with good ESG credentials. An example is real estate assets, a very good hedge



against inflation in the current economic environment, which could be turned into energy-efficient green buildings with solar panels and other green features (Petersen, 2022).

AMCS FOR TODAY'S DISTRESSED DEBT

AMCs vs. Existing and Proposed Approaches

The experience of AMCs as financial market intermediaries and service providers can be applied to today's distressed debt resolution and for SOA management, in particular through tiers of national, regional, subregional and global AMCs established or associated with regional development banks, the World Bank and other MDBs, and in pursuing new development agendas that are sustainable, green, low carbon and inclusive.

An objective tree can be derived from the previously presented problem tree by linking issues to the desired outcome of a program or approach. This must be supported by outputs and activities that address the core problems.

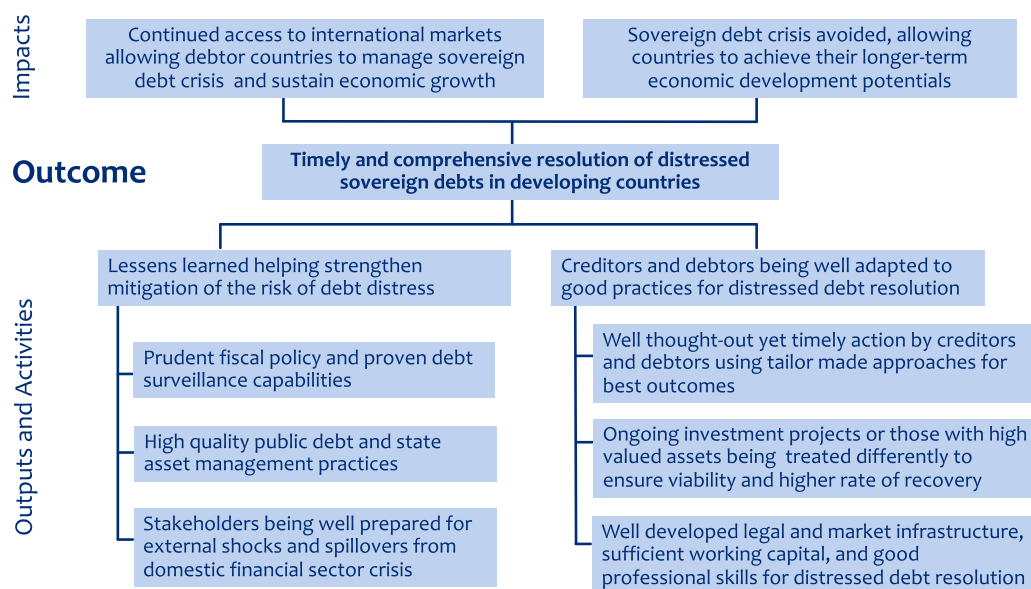
For resolving sovereign debt distress, the ideal outcome or objective would be timely and comprehensive resolution of distressed sovereign debts in developing countries. Such an outcome should (i) allow debtor countries with continued access to international markets to manage sovereign debt crisis and sustain economic growth and (ii) avoid sovereign debt crisis and allow countries to achieve their longer-term economic development potential. Such objectives can be supported from the mitigation side by (i) learning from lessons of past distressed sovereign debt resolution and helping strengthen mitigation measures, such as ensuring prudent fiscal policy and proven debt surveillance capabilities, (ii) implementing good quality public debt and state asset management practices and (iii) ensuring all stakeholders are well prepared for external shocks and spillovers from domestic financial sector crisis. Many of these measures need consistent and long-term efforts to improve public administration and governance. Of course, international development partners such as the IMF and the World Bank can also help by improving debt sustainability analyses and helping countries better mitigate the risk of external shocks.

From the adaptation side, the objective can be supported by creditors and debtors being well adapted to good practices for distressed debt resolution, including (i) well thought-out yet timely action by creditors and debtors using tailor-made approaches for best outcomes, (ii) different treatment for investment projects or those with high valued assets to ensure viability and higher rate of recovery and (iii) well-developed legal and market infrastructure, sufficient working capital and good professional skills for distressed debt resolution. AMCs can play a major role in all these areas given their comparative advantage as a financial and operational intermediary working closely with debtors, creditors and other market participants to create tailor-made solutions matching clients' needs.

Compared to the common ad hoc and "one shot" resolution practices for distressed sovereign debt, the AMC approach, particularly through those at the regional and global levels, has a number of advantages, including (i) utilizing "bridging" opportunities from intertemporal pricing gaps given that a high percentage of sovereign debt crises were due to fluctuating primary commodity prices and resulting boom-and-bust cycles of economic development at the national level; (ii) applying tailor-made approaches to meet individual creditor and debtor's needs, rather than wasting valuable time waiting for uniform action; (iii) offering continued or even long-term assistance for rehabilitation and recovery of debtor's finances and economy; (iv) developing the overall policy, legal framework and market infrastructure for distressed debt resolution in the country and in the region; (v) strengthening ESG standards and practices in the state-owned enterprises the AMCs are helping



Figure 3: Objective Tree



Source: Author's elaboration.

and (vi) assisting the public sector of the debtor countries to embrace green development and climate change agendas.

Contrary to the “ice cream” theory that the value of NPLs would rapidly deplete if NPLs were not disposed of in a timely fashion, NPL values in emerging economies can swing quite a lot given the frequent boom-and-bust cycles that they experience. Time can sometimes be on the AMCs’ side if they hold assets for a lengthy period. Services provided by AMCs also fill in an important gap in the day-to-day operations of financial markets in low-income countries, as there is often a lack of creditable bankruptcy legal framework and related services, such as receivership. Furthermore, as the world is facing increasing challenges of climate change, AMCs can be active agents of change and introduce green, climate-friendly and low carbon approaches for project refinance and implementation as part of their day-to-day work, to fill in the existing gaps due to weak capacity in emerging economies to carry out new tasks related to the growth model.

The AMC approach does not limit itself to sovereign public debt and can apply equally well to public sector debts held by private creditors, as well as private sector debts. Often the sovereign debt crisis is part of overall debt distress across the board, due to the boom-and-bust economic development cycle, external shocks and mismanagement of the economy. Sometimes, the mounting unsustainable public debt could also be a result of the government using public resources to support distressed private credit markets.

AMCs can be part of the overall distressed debt resolution strategies and practices not only at the national level, which was mostly the case in the past, but also at subregional, regional and global levels. Cooperation at the subregional, regional and global levels in terms of strategies, policies and regulatory frameworks for distressed debt resolution among AMCs are critical given the increasingly widespread use of cross-border loans. Subregional, regional and global level AMCs can be a main force in dealing with distressed sovereign debt of a country or a group of countries when situations require. This approach can avoid prolonged waits which may damage the debtor’s economy, impair



loans and assets and increase difficulty for debtors to gain access to international financial markets. Subregional, regional and global level AMCs can also act as agents of change to help national AMCs adopt proven principles and best practices, along with providing financing and technical support.

Subregional, regional and global AMCs can work together with national level AMCs in developing NPL servicing infrastructure which tends to be scarce in emerging markets, with a limited number of active players and resolution practices that are often inconsistent with international best practices. They can mobilize and deploy subregional, regional and global capital for the acquisition and resolution of distressed assets. In addition to offering the potential for attractive returns, the countercyclical nature of distressed assets as an asset class offers investors important diversification benefits as an “alternative investment” that correlates weakly with the more liquid assets typically traded in financial markets.

Also, importantly, subregional, regional and global level AMCs are in the right position to deal with the negative externalities associated with financial crises. As financial interconnectedness among countries in the region deepens, it is more likely that the financial crisis in one country will spill over into another. To deal with such negative externalities, regional strategies and frameworks for NPL resolution are needed. Regional frameworks for NPL resolution thus serve as regional public goods. As regional investors may have an informational advantage over global investors concerning NPLs in the region, NPLs can be disposed of at more favorable terms if regional frameworks for NPL markets are well developed.

Role of Development Finance Institutions

Multilateral organizations, particularly the regional and MDBs, such as African Development Bank (AfDB), Asian Development Bank (AsDB) and the World Bank can play a leading role in adding AMC operations to their internal departments or establishing AMCs as their subsidiaries. Through these AMC departments and subsidiaries, MDBs can partly demonstrate how to deal with their own loans that become problematic as creditors, partly to provide more decisive leadership for the efforts of international communities to resolve distressed debt. MDBs generally enjoy a “supranational” status and have more favorable credit ratings and legal protections than individual member countries, which an AMC department or separate business unit can take advantage of in its operations and funding.

MDBs should take part in regional efforts to build regional NPL markets and regional NPL resolution frameworks. They, together with international financial institutions, have been providing technical assistance and program loans to member economies to promote financial stability. In addition, they can serve as focal points for soliciting regional knowledge and experience. The International Public AMC Forum can also contribute to regional efforts to build up NPL resolution frameworks by sharing knowledge and expertise of member AMCs.

Some regional groups, such as Common Market for Eastern and Southern Africa (COMESA), the Economic Community of West African States (ECOWAS) and the South Asian Association for Regional Cooperation (SAARC) can also be the founding platforms for subregional and regional AMCs. Some subregional and regional groups have their own financing arm, such as the Trade and Development Bank of COMESA, and it may not be too difficult for them to set up an AMC specifically to serve their member countries. Subregional and regional groups with a smaller membership generally have closer ties among member countries for economic policy coordination. For example, the Network of Central Bank Governors and Finance Secretaries of the SAARC Region (SAARCFINANCE) has been utilized to engage countries in the group in dialogues on macroeconomic policies.



National level institutions that operate abroad as bilateral development finance institutions (DFIs), such as Japan Bank for International Cooperation (JBIC), China Development Bank (CDB) and Export-Import Bank of China (CHEXIM), may also participate in the public AMCs in their home countries or establish their own to resolve sovereign or non-sovereign NPLs in borrowing countries. In the past, CDB worked with the CINDA AMC in China to resolve its own NPLs. Given the potential legal restrictions on foreign domiciled financial institutions engaging in asset management business, national level DFIs may also invest in or cooperate with host country AMCs to resolve non-sovereign NPLs in the host country.

Table 3 shows the tiered structure of AMCs at subregional, regional, national and global levels and how they should work together institutionally with the supporting market infrastructure for distressed debt resolution and asset management.

Table 3: Multilevel AMC Institutional Setup

AMCs	Institutional Setup and Supporting Market Infrastructure	Distressed Debt Resolution and Asset Management Services
National level	State- and private-owned AMCs, specialized investors and NPL service providers, trading platform for NPLs	Acquisition, financing, resolution and trade of NPLs held by public and private sector creditors, and turning impaired assets to productive ones through various asset management measures, including enhancing ESG practices and adopting green and low carbon development principles
Bilateral DFIs	State-owned AMCs in donor countries, specialized in NPL resolution, owned or associated with bilateral DFIs	Direct acquisition and workout of NPLs of host countries, including distressed sovereign debts; direct investment in, or indirect support for national level AMCs in resolving their own NPLs and making host country AMCs stronger
Subregional and regional level	Publicly owned and sponsored by subregional and regional groups or subregional and regional development banks such as African Development Bank (AfDB), specialized publicly and privately owned investment vehicles targeting the region	Direct acquisition and resolution of NPLs, including distressed sovereign debts, and indirect support for national level AMCs through financial and technical assistance services, including establishing good practice benchmark markets, and leading price discovery particularly on sovereign debt haircuts
Global level	Publicly owned and sponsored by global finance groups or DFIs, such as multilateral development banks such as the World Bank, specialized publicly and privately owned investment vehicles such as DARP	Direct acquisition and workout of NPLs including distressed sovereign debts, and indirect support for national, regional and subregional level AMCs through financial and technical assistance services, including establishing good practice principles and benchmark markets, and leading the policy dialogue on distressed debt resolution globally

Source: Author's elaboration.

Notes: AfDB = African Development Bank; AMC = Asset Management Company; ESG = Environment, Social and Governance; NPL = non-performing loan.

The aforementioned approach with tiered AMCs is consistent with some of the new proposals. For example, the Debts of Vulnerable Economies (DOVE) Fund proposes that the fund's proceeds can be used to purchase bonds issued by African sovereign debtors in distress and commit to restructuring them in accordance with the DOVE Fund Principles. These principles promote a debt-restructuring process that is transparent and fair to all stakeholders and results in an agreement that supports economically, financially, socially and environmentally sustainable and inclusive development in the debtor country (Bradlow, 2022). In effect the regional, subregional and global AMCs can raise finance from the international market and purchase bonds of African sovereign debtors, following the same set of principles as proposed in the DOVE Fund.



Another proposal is applying a micro-finance concept – the borrower’s club – at the macro level to make country-level debt cheaper and more easily funded by group collateralization. A borrower’s club would see African and other countries whose sovereign debt is in distress as parallel to the low-income people who consolidated to obtain loans from the Grameen bank and apply for finance as a group, using as collateral each other’s growth prospects alongside accountability to each other and their citizens (Ryder, 2022). A subregional, regional or global level AMC is anchored in the legal structure of the MDBs or subregional and regional cooperation platforms, which are essentially a credit cooperative in nature. This similarity to the borrower’s club provides favorable terms and conditions, as well as collective wisdom through organizing member countries together.

AMC Institutional Potential

It is important to avoid mistakes of the past in order to better utilize the advantages of the AMC approach for current market considerations. Lack of consensus and policy commitment, misplaced incentives and poor legal and market infrastructure are something to consider. Incentive compatible policy and legal and regulatory frameworks need to be introduced, and suitable market infrastructure needs to be developed. The multi-tiered AMC structure at country, subregional, regional and global levels provides a better chance to mitigate potential risks and problems associated with AMCs, particularly publicly owned AMCs, and to create better market conditions for distressed debt resolution management processes for emerging economies.

Country-level AMCs in debtor countries can start to take preemptive and corrective actions when individual public and private sector debts show signs of distress, hopefully preventing a systematic crisis and a drain on public resources leading to distress in sovereign debts. In the event of a banking sector crisis, country level AMCs can consolidate distressed debts while allowing domestic financial institutions to operate as normally as possible and conduct NPL resolution and asset management services in a professional manner. In addition to direct acquisition and restructuring of sovereign debt, as well as supporting country level AMCs, subregional, regional and global level AMCs, particularly those sponsored by MDBs, can provide technical support for valuation to national AMCs. Many AMC financial sector specialists have had direct experience over the past decades in supporting, engaging in direct operation and studying AMCs in distressed debt resolution. This knowledge and experience, particularly regarding what to do and what not to do, can be applied in many debt-distressed countries.

An AMC can also be established at the global level, for example as an additional business unit/subsidiary or organization within the World Bank Group. This AMC would be able to pull best practices and experiences from the world and implement consistent programs in debt distressed low-income countries. This AMC could also be the most effective answer to the requests by many, including the G20, for the IMF and World Bank to offer better leadership for low-income country debt resolution. The World Bank can lump various existing programs and funds into the AMC and utilize its preferred creditor status for financing.

Table 4 shows simple calculations of how much three MDBs, namely the African Development Bank (AfDB), the Asian Development Bank (AsDB) and the World Bank and its subsidiaries, can leverage from their existing equity positions to engage in distressed debt resolution if they decide to offer AMC services. Depending on if the soft loan window can be leveraged as capital or not, the range can be from \$315 billion to \$790 billion, or broadly from \$300 billion to \$800 billion. In terms of the individual continent of Africa, however, the AfDB’s range by itself is relatively small, from \$20 billion to \$80 billion, and it will need to count on the World Bank’s support. Since most AMC operations at regional and global levels are intermediation, such as investment and financing in lower-level AMCs, the multiplier effect at NPL level would be much higher. In addition, the charge to own capital



would not be high as a large portion of such financing can be securitized or sold to other investors on the market. In fact, the G20's Expert Panel on the capital adequacy framework of MDBs in 2022 concluded that their shareholders can make the necessary decisions and begin implementation on a series of reforms, so that MDBs can start increasing their lending capacity over the next 12-24 months. The expected scale of the increase is substantial and likely to be several hundreds of billions of dollars over the medium term (G20, 2022).

Table 4: Financial Account of Selected MDBs (2021)

	Capital Account	Outstanding Loans and Assets	Credit Rating ¹	Potential for AMC
AfDB	Equity of \$8.7 billion as of December 31, 2021; ADF-15 \$8.9 billion	Outstanding loans of \$20.1 billion and other assets of \$16.2 billion	The rating agencies reaffirmed their AAA and AA+ rating of the AfDB's senior and subordinated debt respectively, with a stable outlook in 2022	If the capital to asset ratio is lowered from about 25 percent to 15 percent, AfDB can book for about \$20 billion of NPL operations, and if ADF is capitalized like in the case of AsDF, AfDB can engage in further \$80 billion of NPL operations
AsDB	Total Equity of \$52.8 billion ²	Outstanding loans of \$137.2 billion and other assets of \$145 billion	AAA in 2022	If the capital to asset ratio is lowered from about 20 percent to 15 percent, AsDB can book for about \$70 billion of NPL operations
World Bank (June 2022)	Consolidated usable equity of \$268.4 billion	Total assets of \$644 billion	AAA in March 2022 by S&P	If the capital to asset ratio is lowered from about 40 percent to 20 percent, The World Bank can book for about \$700 billion of NPL operations (under assumption that IDA equity is utilized)
	IBRD: usable equity of \$55.3 billion	Net outstanding loans of \$227.1 billion, investment portfolio of \$90.45 billion		If the capital to asset ratio is lowered from about 17.5 percent to 15 percent, IBRD can add about \$50 billion of NPL operations
	IDA: usable equity of \$178.6 billion	Net loans outstanding \$174.5 billion, investment portfolio of \$45.5 billion		
	IFC: Total Capital of \$32.8 billion	Net loans outstanding \$27.6 billion, investment and other asset of \$75.9 billion		If the capital to asset ratio is lowered from about 30 percent to 15 percent, IFC can book for additionally \$115 billion of NPL operations
	MIGA: Total equity of \$1.5 billion	Total asset \$2.95 billion		No specific needs to increase equity but can offer credit products to support AMC issued securities

¹Standard & Poor's, Moody's, Fitch Ratings, and the Japan Credit Rating Agency, 2022.² Includes the one-time income from ADF asset transfer on January 1, 2017.

Source: African Development Bank, 2021; Asian Development Bank, 2021; World Bank, 2021.

Notes: AfDB = African Development Bank; AsDB = Asian Development Bank, IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency

Organizationally, all three MDBs are well versed in financial market development issues, particularly issues of distressed assets and NPL resolution. These MDBs also have vast experiences in fiscal and monetary policy and issues related to operation, as well as broader macroeconomic, legal and regulatory, governance, financial management, state-asset management, various industrial and social sectors, regional and subregional cooperation, climate change and green growth-related issues. Such multifaceted knowledge and operational capability give these MDBs a good advantage to enter



into AMC operations. These MDBs also have private sector operations either as a separate entity such as the International Finance Corporation (IFC), in the case of the World Bank Group, or fully integrated under the same balance sheets, as in the case of AfDB and AsDB. Staff in private sector operations units are familiar with non-sovereign operations and lead commercial transactions if AMC engagement is required.

In the AfDB, there is a department of financial sector development under the vice presidency of private sector, infrastructure and industrialization. They could be the anchor to launch AMC-related operations. They would work with colleagues from non-sovereign operations (NSO) and private sector support, relevant hard sectors (e.g., transport, energy, urban, industrial development and information and communication technology or ICT) and soft sectors (agriculture, rural development, water and sanitation, gender, education, public health, human development, etc.), as well as country offices, on various country-specific, transaction-specific and sector-specific issues as far as AMC operations are concerned.

The AsDB has a relatively decentralized organizational structure and each subregion of the East, Southeast, South, Central Asia and the Pacific, has a specific financial sector unit, which also covers fiscal, public financial management and governance issues. In the center, there is a financial sector group, providing knowledge and cross-cutting support across the bank. Interestingly, this financial sector group also serves as the secretariat for the International Public Asset Management Company Forum, where AMCs in Asia and elsewhere meet regularly to exchange information and share best practices. Similar to the AfDB, the AsDB also has a separate private sector operations department and an office of public-private partnership (PPP) focusing on non-sovereign operations and PPP advisory services. Hence, the financial sector group can take the lead in coordinating other business units and country offices to map out a strategy and plan to set up the AMC operation for the AsDB.

The World Bank has a much more elaborate organizational structure in which the International Bank for Reconstruction and Development (IBRD) and the International Development Association (IDA) share one organization and staff, similar to the AfDB and the AsDB for the World Bank's sovereign operations. Meanwhile, the IFC and Multilateral Investment Guarantee Agency (MIGA) have separate organizations and staff. Within IBRD/IDA, the World Bank is organized by regions, covering Eastern and Southern Africa, Western and Central Africa, East Asia and Pacific, South Asia, Europe and Central Asia, Latin American and Caribbean and Middle East and North Africa. Similar to the AsDB, within each region there are specialized units focused on financial sector operations. Meanwhile, in the center there are units of global practices and themes, acting as the centers of excellence in various sectors and thematic areas, including finance, competitiveness, innovation and governance. Meanwhile, the IFC also has its specialized financial institutions group. All these business units related to the financial sector, together with the World Bank's country teams and staff from other sector and thematic areas, form a strong basis for AMC operations. Leaders from the Finance Global Practice can take the initiative to start the process of setting up a delegated business unit either fully integrated within IBRD/IDA or separate, similar to the IFC within the World Bank Group for AMC operations.

As of November 30, 2022, and based on the most recently published data, ten countries are in debt distress, 27 countries are at high risk, 25 countries are at moderate risk and only seven countries are at low risk of debt distress. In Africa, at present, 22 countries are either already in debt distress or at high risk of debt distress (IMF, 2023). If one takes the overall \$1.4 trillion as the number of total outstanding debts in emerging economies globally (Figure 1), the three MDBs discussed would be able to handle a major bulk of the distressed debt (up to \$800 billion) if they decide to establish AMCs and work separately or together amongst themselves and with other public and private sector AMCs and similar financial institutions.



AMC Operations

Although it is well understood that AMCs are not a panacea, from the lessons learned it seems that AMCs can play important roles in the market for distressed debt resolution, borrower rehabilitation and asset management. AMCs should find their place in activities related to distressed debt mitigation and market infrastructure, as debt distress is a norm rather than an exception for many countries, particularly for those emerging economies where institutions are weak and economic structures are vulnerable. Mitigation measures including prudent fiscal policies and debt sustainability analysis, legal frameworks and market infrastructure and adaptation measures including AMCs should be a norm rather than exception. AMCs at national, regional, subregional and global levels can work together, leveraging each other's strengths and amending shortcomings.

As discussed earlier, proper preconditions and legal and institutional frameworks are critical for success of AMCs. Operationally, ensuring AMCs' proper function and having a solid basis for evaluating AMCs' performance requires clear, comprehensible and well-prescribed terms of reference (TOR). For national level AMCs, their sample TOR will need to include the following:

- Promptly resolving massive amounts of NPLs from the banking system during a systemic banking crisis.
- Resolving legacy NPLs accumulated on the balance sheet of banks through an extended period of lackluster growth.
- Purchasing NPLs from banks at long-term economic values rather than current market prices, enabling banks to remove NPLs from their balance sheets without taking huge losses.
- Ensuring banks with much-needed liquidity during times of distress.
- Improving efficiency of AMC operational modalities such as debt collection, debt sales, debt-equity swaps and step-by-step debt resolution with borrowers and project sponsors.
- Engaging in debtor's corporate restructuring addressing difficulties stemming from a lack of financing, reduced demand or pronounced market volatility by preserving employment and strengthening debtor's competitive position.
- Attracting, recruiting and developing talents to be more productive in management, resolution and sale of nonperforming assets.
- Extracting the full value of NPLs transferred from banks at a reasonable cost to minimize the burden to taxpayers.
- Instituting proper governance structure and sheltering the AMC from political influence.
- Working together with legal and regulatory authority to developing an enabling legal and judicial environment for debt enforcement to promptly resolve NPLs.
- Helping establish NPL information and validation standards, thereby reducing information asymmetry.
- Helping foster NPL markets by creating demand for NPL market services and supporting development of market infrastructure and ecosystems.
- Establishing transfer prices based on market value established through a transparent, market-based, due diligence process conducted with the assistance of an independent third party experienced in valuation.



- Ensuring adequate safeguard mechanisms through enhanced transparency and reporting standards.
- Developing strategic plans as well as detailed business plans, with frequent reviews and corrective action plans when necessary.
- Ensuring strong internal controls and transparency to reduce the possible misuse of funds.
- Specifying periodic operational targets, conducting thorough evaluations and adjusting the strategy and operations based on evaluation results.
- Looking for opportunities to introduce climate change and green growth financing approaches as part of the NPL resolution process.

For regional and global level AMCs, in addition to the items in the TOR of national level AMCs, their sample TOR will also need to include the following:

- Collecting best practices on NPL resolution, sharing knowledge among peers and with national level AMCs, establishing benchmarks in terms of operational parameters and performance indicators for various classes of assets and distress situations and assisting in capacity development for national and regional AMCs.
- Organizing and participating in subregional, regional and global forums for decision-making and coordination to safeguard the financial stability of emerging economies by bringing together all relevant public and private sector stakeholders, including cross-border banks active in emerging economies.
- Cooperating with regional and subregional financial sector bodies in formulating regional and subregional strategies, policies and regulatory frameworks for distressed debt resolution given the increasingly widespread use of cross-border loans.
- Engaging with partners in developing subregional, regional and global market infrastructures linking to subregional, regional and global NPL investors. Such market infrastructure should provide efficient resolution solutions for NPLs held by regional financial institutions in different countries.
- Working together with national AMCs in developing NPL servicing infrastructure in emerging markets which tend to be scarce with a limited number of active players and resolution practices that are often inconsistent with international best practices.
- Investing or providing wholesale finance to national level AMCs to support their operations and building a coherent and tiered AMC market infrastructure.
- Mobilizing and deploying subregional, regional and global capital for the acquisition and resolution of distressed assets either directly or through national level AMCs.
- Expanding sources and means of financing for distressed debt operations both at national and regional levels, potentially including capital injections and using the IMF's SDR allocation, issuance of AMC bonds, issuance of asset-backed securities (ABSs) backed by future collection proceeds from NPLs, other sources of grants and loans for long- and short-term funding needs and special programs such as projects related to climate change.
- Looking for opportunities to adopt innovative climate change and green growth initiatives, such as debt-for-nature swaps, along the whole cycle of NPL acquisition, financing and resolution, debtor rehabilitation and asset management cases.



Looking Forward

In most countries, governments are now unwinding their COVID-19 programs and a wave of problem assets arising from COVID-19 are likely to besiege banks and flood the capital markets in Asia and the Pacific region (KPMG, 2022). Banks will need to monitor their asset portfolios closely as it is highly likely that NPL ratios will surge exponentially over the coming year and contagion effect will impact sovereign debt, as well as the debt of neighboring countries.

Most countries have yet to see a full-fledged economic recovery in terms of either output or growth momentum. The pace of recovery will continue to be slow and uneven. Trade tensions between the United States, China and Europe have placed pressure on financially indebted companies in industries such as oil and gas, airlines and tourism-related sectors and almost everything in the global supply chain (KPMG, 2022). The overall NPL ratio in domestic financial markets and distressed sovereign debts is likely to rise across most countries in coming years. Existing national public AMCs and those to be established can be tasked with resolving NPLs and avoiding a large-scale failure of financial institutions (World Bank, 2020) as subregional, regional and global AMCs from both public and private sector are expected to emerge with specialized knowledge in financing, managing and resolution of NPLs (KPMG, 2022).

CONCLUSION

AMCs may offer an alternative approach for current distressed debt resolution tasks. They can be an efficient form of financial intermediary to bring in effective services to emerging economies that are generally lacking capacities to deal with related issues. Additionally, they can provide market-based solutions at country, subregional, regional and global levels, with specialized professionals to leverage their technical know-how and carry out best practices which are critically needed. AMCs can also be conduits to help emerging economies embrace new economic development models and contribute to green and climate development goals.

Business-as-usual with a country-by-country and case-by-case approach may not work during a systemic crisis. Despite continued efforts by creditors and international communities, sovereign debt crisis in emerging economies continues to loom. Debtors and creditors are calling for leadership. The IMF, the World Bank, other MDBs and specialized UN agencies can show strong leadership by recognizing the changed conditions of today's markets and looking at different approaches. Changed market conditions such as a new mix of sovereign creditors and larger share of private creditors make it more difficult to reach a unified position among creditors. Furthermore, there is increased interplay between the domestic credit market crisis with the sovereign debt and spillovers across countries given the common boom-and-bust cycles and more economic interlinkages among countries.

Sovereign debt crises can be analyzed from mitigation and adaptation angles. Future crises are inevitable. AMCs can play significant roles in adaptation and mitigation by establishing distressed debt resolution policies, legal environments and market infrastructure, developing specialized agencies and players and leveraging financial resources. AMCs can also help manage state-owned assets and help various sectors to embrace climate change and a sustainable growth agenda.

There were many lessons learned from the previous financial crises in which AMCs played key roles in different countries. While not all were successful, there is a general recognition of the preconditions and key factors for AMCs to be successful, and researchers continue to study and analyze this issue.



An ideal world of distressed sovereign debt mitigation would have tiered structures of AMC's at country, regional, subregional and global levels, with all tiers working together and supporting each other. At regional and global levels, MDBs and the World Bank can play significant roles, if they consider adding AMC operations to their lines of operations, thus leveraging their professional expertise, operational efficiency and financial resources and playing an appropriate leadership role among all creditors and players. Financially, it is possible for the AfDB, the AsDB and the World Bank to leverage their existing capital resources and add up to \$800 billion of the NPL workout portfolio to their balance sheets. This number is already a large portion of the over \$1.4 trillion total sovereign debt of developing countries.

REFERENCES

ADB, "Nonperforming Loans in Asia and Europe—Causes, Impacts, and Resolution Strategies," December 2021.

ADB, "Road Map for Developing an Online Platform to Trade Nonperforming Loans in Asia and the Pacific," October 2022.

Africa CEO Forum, "Pumping life into African nonperforming loan market," <https://www.theafricaceoforum.com/en/ressources/pumping-life-into-african-nonperforming-loan-market/>, 17 Feb 2021, accessed on 2 October 2022.

African Development Bank (AfDB), <https://www.afdb.org/en/about/corporate-information>, accessed on 24 December 2022.

Baudino, Patrizia and Hyuncheol Yun, Financial Stability Institute (FIS) of the Bank for International Settlements (BIS), FSI Insights on policy implementation No 3, "Resolution of Non-Performing Loans – Policy Options", October 2017.

Bhandary, Rishikesh Ram, Sara Jane Ahmed, "Why Multilateral Development Banks Must Step Up on Debt Relief", https://oecd-development-matters.org/2022/10/13/why-multilateral-development-banks-must-step-up-on-debt-relief/?utm_content=224674834&utm_medium=social&utm_source=twitter&hss_channel=tw-905477617775771654&s=09, accessed on 18 October 2022.

Boston University Global Development Policy Center, Vulnerable Twenty (V20) Group of Finance Ministers, "V20 Debt Review: An Account of Debt in the Vulnerable Group of Twenty", 2022.

Bradlow, Daniel, "A Proposal for a New Approach to Restructuring African Eurobonds: The DOVE Fund and Principles", Southviews NO. 242, 4 November 2022.

Cerruti, Caroline and Ruth Neyens, "Public Asset Management Companies – A Toolkit", A World Bank Study, 2016.

Cerruti, Caroline, "Public Asset Management Companies, power point presentation," The World Bank Group, May 2018.

Smok, Franc, "Non-Performing Loans: Addressing Legal and Regulatory Impediments", EBRD, Law in Transition, 2016.

Committee on the Global Financial System (CGFS) Papers No 60, Bank for International Settlements, "Structural Changes in Banking after the Crisis," January 2018.



Dreyer, Mallory (2021) "Malaysia: Pengurusan Danaharta Nasional Berhad," *Journal of Financial Crises*: Vol. 3 : Iss. 2, 450-484. Available at: <https://elischolar.library.yale.edu/journal-of-financial-crises/vol3/iss2/22>, 2021.

Elliott, Larry, "Time may be running out': global debt crisis reaches critical point", Mimeo, 13 October 2022.

European Banking Coordination "Vienna" Initiative, Working Group on NPLs in Central, Eastern and Southeastern Europe, March 2012.

European Investment Bank, "Banking in sub-Saharan Africa - Challenges and Opportunities", January 2013.

European Parliament, Briefing: "Thematic digest: Non-performing loans and asset management companies, Directorate-General for Internal Policies, PE 659.631, March 2021.

European Parliament, Directorate-General for Internal Policies, Economic Governance Support Unit, Thematic Digest: Non-Performing Loans and Asset Management Companies.

Fell, John, Maciej Grodzicki, Reiner Martin, and Edward O'Brien, "A Role for Systemic Asset Management Companies in Solving Europe's Non-Performing Loan Problems," *European Economy*, January 2017.

Financial Times, "World Bank chief economist calls for overhaul of government bailouts", Jonathan Wheatley in London DECEMBER 21 2022, <https://www.ft.com/content/044b7e7d-84c7-4b9d-90e9-8b2449ae36f5>, accessed on 5 March 2023.

Fitch Ratings, "Asset Management Companies: Between Distressed Finances and Government Support", <https://www.fitchratings.com/research/non-bank-financial-institutions/asset-management-companies-between-distressed-finances-government-support-23-05-2022>, accessed on 5 March 2023.

Fitch Ratings, "Zambia's Creditor Committee Agreement Eases Path Out of Default", 10 August, 2022, <https://www.fitchratings.com/research/sovereigns/zambias-creditor-committee-agreement-eases-path-out-of-default-10-08-2022>, accessed on 18 October 2022.

Fitch, "Asset Management Companies: Between Distressed Finances and Government Support", Special Report 23 May, 2022 <https://www.fitchratings.com/research/non-bank-financial-institutions/asset-management-companies-between-distressed-finances-government-support-23-05-2022>

Fung, Ben, Jason George, Stefan Hohl and Guonan Ma, "Public Asset Management Companies In East Asia – Case Studies", BIS, FSI papers 03.

G20, Boosting MDBs' investing capacity – An Independent Review of Multilateral Development Banks' Capital Adequacy Frameworks", 2022.

Grünewald, Seraina N. & Marije L. Louisse Read, "How asset management companies can help tackle the NPL crisis – A State aid perspective within the resolution framework," *European Banking Institute (EBI) Working Paper Series*, 2022 – no. 109, March 1, 2022.

Grünewald, Seraina N., & Marije L. Louisse Read, "How Asset Management Companies Can Help Tackle the NPL Crisis – a State Aid Perspective within the Resolution Framework," *EBI Working Paper Series*, 2022 – No.109, the European Banking Institute, 1 March 2022.

He, Dong, "The Role of KAMCO in Resolving Nonperforming Loans in the Republic of Korea", *IMF Working Paper*, WP/04/172, September 2004.

<https://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/16/11/Debt-Relief-Under-the-Heavily-Indebted-Poor-Countries-Initiative>, Accessed on 20 October 2022.



IFC, “DARP—Creating Distressed Assets Markets – Lessons Learned Since The Global Financial Crisis and Opportunities For Investors in Emerging Markets Today”, 2019.

IFC, “Distressed Assets Recovery Program (DARP) – Overview”, March 2022.

IFC, “Distressed Assets Recovery Program (DARP),” March 2022.

IMF, “Debt Relief Under the Heavily Indebted Poor Countries (HIPC) Initiative”, March 23, 2021.

IMF, “Global Financial Stability Report: Navigating Monetary Policy Challenges and Managing Risks – the Asset Management Industry and Financial Stability”, April 2015.

IMF, “List of LIC DSAs for PRGT-Eligible Countries as of February 28, 2023” .<https://www.imf.org/external/pubs/ft/dsa/dsalist.pdf>, accessed on 5 March 2023.

IMF, “Resolving Nonperforming Loans in Sub-Saharan Africa in the Aftermath of the COVID-19 Crisis”, The Departmental Paper Series, African Department, DP/2021/014.

Ingves. Stefan, Steven A. Seelig, and Dong He “Issues in the Establishment of Asset Management Companies,” IMF Policy Discussion Paper, Monetary and Financial Systems Department, May 2004

Isa, Fatima & Isa Rehanet, “Resolving the Non-Performing Loans in the Nigerian Banking Industry: An Asset Management Corporation Approach”, African Scholar Journal of Mgt. Science and Entrepreneurship, VOL. 20 NO. 7, ISSN: 2276-0732, March 2021.

Jensen, Lars, “Avoiding ‘Too Little Too Late’ on International Debt Relief”, Development Futures Series Working Papers, October 2022, UNDP Global Policy Network.

Klingebiel, Daniela, “The Use of Asset Management Companies in the Resolution of Banking Crises: Cross-Country Experience”, World Bank Policy Research Working Papers, 21 June 2013 -<https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-2284>.

KPMG International, “Non-performing loans in ASPAC – Is the region prepared for what lies ahead?” October 2021.

Lee, Junkyu, and Peter Rosenkranz, “Chapter 3: Nonperforming Loans in Asia: Determinants and Macro-financial Linkage - Emerging Market Finance: New Challenges and Opportunities”, International Finance Review, by Emerald Publishing Limited, 2020.

Lee, Junkyu, Cyn-Young Park, Daekeun Park, and Peter Rosenkranz, “Strategies for Developing Asia’s Non-performing Loan Markets and Resolution Mechanisms”, 2021.

Matsumoto, Riki. “Ghana Non-P Ghana Non-Performing Asset Reco forming Asset Recovery Trust (NPART),” Yale Program on Financial Stability, Journal of Financial Crises. 2021, Vol. 3 : Iss. 2, 176-200. Available at: <https://elischolar.library.yale.edu/journal-of-financial-crises/vol3/iss2/7>.

Mckinsey&Company, “Aiming High and Strongly Footed – The Surprising Way To Win for Local Asset Managers, July 2017.

McMahon, Dinny, “The Big Four AMCs: Changing Priorities – and Rankings – In a New Era”, MacroPolo (in-house think tank of the Paulson Institute), September 2018.

Ministry of Finance, the China Banking Regulatory Commission, “Circular on Regulating the Work of Asset Appraisal in the Non-Performing Assets Disposal in Asset Management Companies”, June 15,2005.

OECD, “Maximizing Value of Non-Performing Assets - Proceedings from the Third Forum for Asian Insolvency Reform” November 2003.



Ohuocha, Chijioke, “Nigerian Bank Suitors Seek Clarity on Bad Loans”, *Reuters*, <https://www.reuters.com/article/nigeria-banks/nigerian-bank-suitors-seek-clarity-on-bad-loans-idUSLDE66S1GO20100803>, August 3, 2010, Accessed on 30 September 2022.

Palma, S. (2016, March 10). Can Mongolia break out of its boom and bust cycle? *The Banker*. Retrieved April 4, 2023, from <https://www.thebanker.com/World/Asia-Pacific/Mongolia/Can-Mongolia-break-out-of-its-boom-and-bust-cycle>.

Panizza, Ugo, Federico Sturzenegger, and Jeromin Zettelmeyer, “The Economics and Law of Sovereign Debt and Default”, *Journal of Economic Literature* 2009, 47:3, 651–698.

Petersen, Andrew and Anna Nolan, “Non-performing Loans Through the ESG Looking Glass: Applying ESG Considerations to the Creation of a New Type of Investment Opportunity for Creative Investors” Alston & Bird, 2022.

Plekhanov, Alexander and Marta Skrzypińska, “Cross-Border Spillovers from Reducing Non-Performing Loans”, European Bank for Reconstruction and Development, Working Paper No. 265, January 2022.

Price Waterhouse, White Paper on Reform and Development of China’s Non-performing Asset Management Industry: Transformation, August 2021.

Qian, Ying, “Brady Bonds and the Potential for Debt Restructuring in the Post-Pandemic Era”, Global China Initiative Working Paper 018, Boston University Global Development Policy Center, September 2021.

Rodrik, Dani, Reza Baqir, and Ishac Diwan, “Rescuing Economic Growth in Highly Indebted Developing Countries”, *Project Syndicate*, <https://www.project-syndicate.org/commentary/realizing-new-growth-opportunities-in-developing-countries-by-dani-rodrik-et-al-2023-01?>, Jan 11, 2023.

Ryder, Hannah, “African debt isn’t the problem – the global financial system is”, *African Business*, <https://african.business/2020/11/finance-services/african-debt-isnt-the-problem-the-global-financial-system-is/>, Accessed on 22 December 2022.

Shalal, Andrea, “IMF struggling over long-awaited ‘green debt swap’ push as COP26 nears”, *Reuters*, <https://www.reuters.com/business/sustainable-business/imf-struggling-over-long-awaited-green-debt-swap-push-cop26-nears-2021-10-29/>, October 29, 2021.

South China Morning Post, Why is China being blamed for the stalled G20 debt relief plan for distressed countries? <https://finance.yahoo.com/news/why-china-being-blamed-stalled-093000617.html>, February 27, 2022.

Sprayregen, James H.M., P.C., Jonathan P. Friedland, Nicole S. Miller And Chuan Li, “Non-performing loans in China: a potential win-win opportunity for foreign investors and China’s economy”, *Global Restructuring & Insolvency Review* 2004 FW 39, www.financierworldwide.com.

Terada-Hagiwara, Akiko and Gloria Pasadilla, “Experience of Asian Asset Management Companies: Do They Increase Moral Hazard? — Evidence from Thailand”, Asian Development Bank, ERD Working Paper No. 55, September 2004.

Ungersboeck, Pascal, “Korea Asset Management Corporation (KAMCO): Resolution of Nonperforming Loans in South Korea”, Preliminary Yale Program on Financial Stability Discussion Draft, March 2020

Wang, Yan and Yinyin Xu, “Debt Restructuring in Africa,” Boston University Global Development Policy Center, forthcoming in 2023.

Wang, Yan, Yinyin Xu. “Debt Restructuring in Africa – Building Public Assets and Addressing Bottlenecks for Low Carbon Economic Transformation,” Boston University Global Development Policy Center Global China Initiative Working Paper 020, March 2022.





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Wheatley, Jonathan, "World Bank Chief Economist Calls for Overhaul of Government Bailouts" *Financial Times*, 21 December 2022.

Woo, David, "Two Approaches to Resolving Nonperforming Assets During Financial Crises", IMF Working Paper, WP/OO/33, Monetary and Exchange Affairs Department.

Working Group on NPLs in Central, Eastern and Southeastern Europe, "European Banking Coordination "Vienna" Initiative," March 2012.

World Bank's Finance, Competitiveness and Innovation (FCI) Global Practice, "COVID-19 and Non-Performing Loan Resolution in the Europe and Central Asia region", Policy Note - December 2020, www.worldbank.org/finsac.

