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Strategies for Developing Asia's NPL Markets and Resolution Mechanisms

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**ADB-ECB Workshop on NPL Resolution in Asia and Europe
10-11 February, 2020 | ADB HQ**

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I. Introduction: Economic Costs of NPLs

- NPLs cast various kinds of burden to the banking sector and eventually slow down overall economic activities.
 - Empirical studies including Lee and Rosenkranz (2019) demonstrate that increase in NPL ratio generates negative responses in economic activities such as output growth, employment, and credit growth.
- NPLs also raise the possibility of a banking crisis. (Kaminsky and Reinhart, 1999)
- Interplay between NPLs and their macro-financial impacts play an important role in cross-border spillover of financial instability across Asia. (ADB, 2018)
 - Cross-border linkage of Asian financial markets have grown both within the region and across the globe.
 - Asian financial markets continue to rely highly on US dollar denominated funding.
 - Asian countries still depend heavily on banks as a source of funding.

I. Introduction: Why Develop NPL Markets?

➤ NPL markets and NPL resolution frameworks

- facilitate resolving NPLs from banks' balance sheets
- help prevent accumulation of large amount of NPLs
- help financial sector restructuring once a crisis erupts
- exert positive macro-financial effects on the economy
- lower the possibility of a financial crisis
- function as an international financial safety net to stop cross-border spillovers of financial crises and to enhance financial stability

I. Introduction: Why Strategies?

➤ Asia needs strategies to develop NPL markets

- In most of the countries in Asia, NPL markets do not exist. Even if they exist, they are not liquid.
- Even in European countries where financial markets and financial industries are well developed, NPL markets have not been very active.
- It is difficult to develop NPL markets because of various kinds of impediments including information asymmetry, unwillingness of banks to sell NPLs at a loss, and inefficient debt and collateral enforcement system.
- Policy supports are needed to develop NPL markets under proper strategies designed to address these impediments.

I. Introduction

II. Overview of NPLs and NPL Markets in Asia

III. Impediments to NPL Market Development

IV. Strategies to Develop NPL Markets

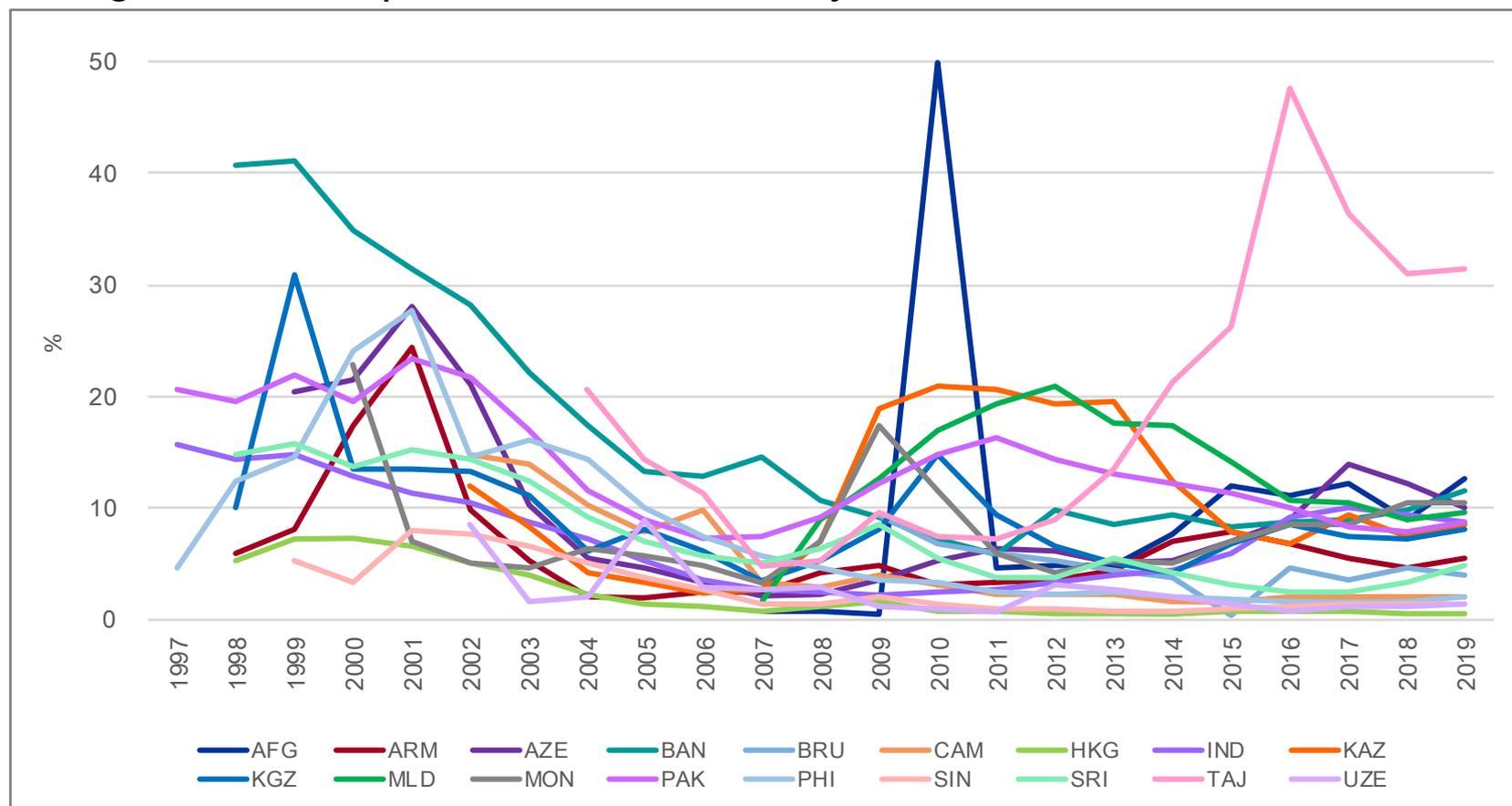
V. Conclusion

A. Size of NPL

Country	NPL Ratio (%)	Year	Country	NPL Ratio (%)	Year
Below 5%			5% to 10%		
New Zealand	0.50	2018Q4	Armenia	5.44	2019Q2
Hong Kong	0.56	2019Q3	Solomon Islands	7.10	2018Q4
Korea, Republic of	0.86	2019Q3	Kyrgyz Republic	8.06	2019Q3
Australia	0.99	2019Q3	Kazakhstan	8.61	2019Q1
Japan	1.10	2019Q1	Pakistan	8.79	2019Q3
Singapore	1.35	2019Q3	India	8.85	2019Q1
Uzbekistan	1.47	2019Q2	Maldives	9.58	2019Q3
Malaysia	1.62	2019Q3	Above 10%		
Vietnam	1.80	2018Q4	Azerbaijan	10.13	2019Q3
PRC	1.81	2019Q2	Bhutan	10.90	2019Q1
Cambodia	2.08	2019Q2	Bangladesh	11.53	2019Q3
Philippines	2.09	2019Q3	Afghanistan	12.70	2019Q3
Georgia	2.64	2019Q3	Tajikistan	31.50	2019Q3
Thailand	3.10	2019Q2			
Fiji	3.49	2019Q2			
Samoa	3.91	2019Q2			
Brunei Darussalam	4.10	2019Q3			
Sri Lanka	4.78	2019Q2			

A. Size of NPL

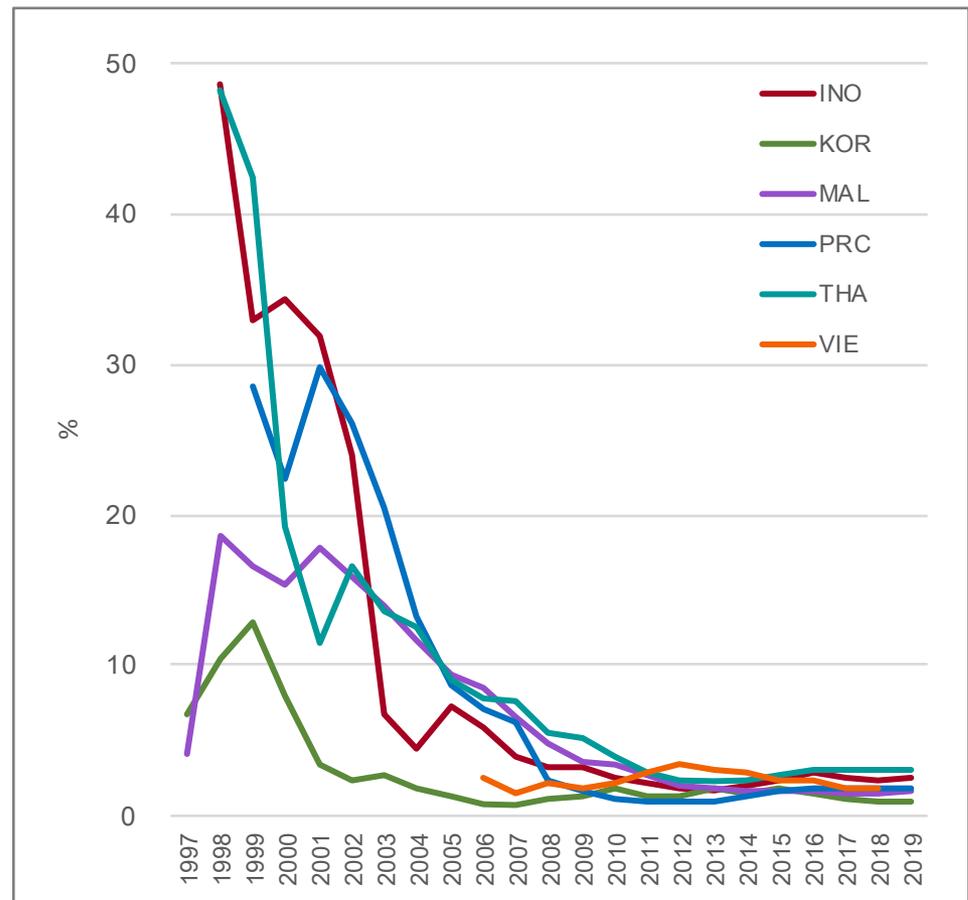
- Since the 1997-98 Asian financial crisis, NPL ratios have come down substantially in most crisis-affected economies.
- But NPL ratios in some Asian economies (esp. in Central and South Asia) began to show upward trends in recent years.



A. NPL Ratios of Asian Economies with AMC

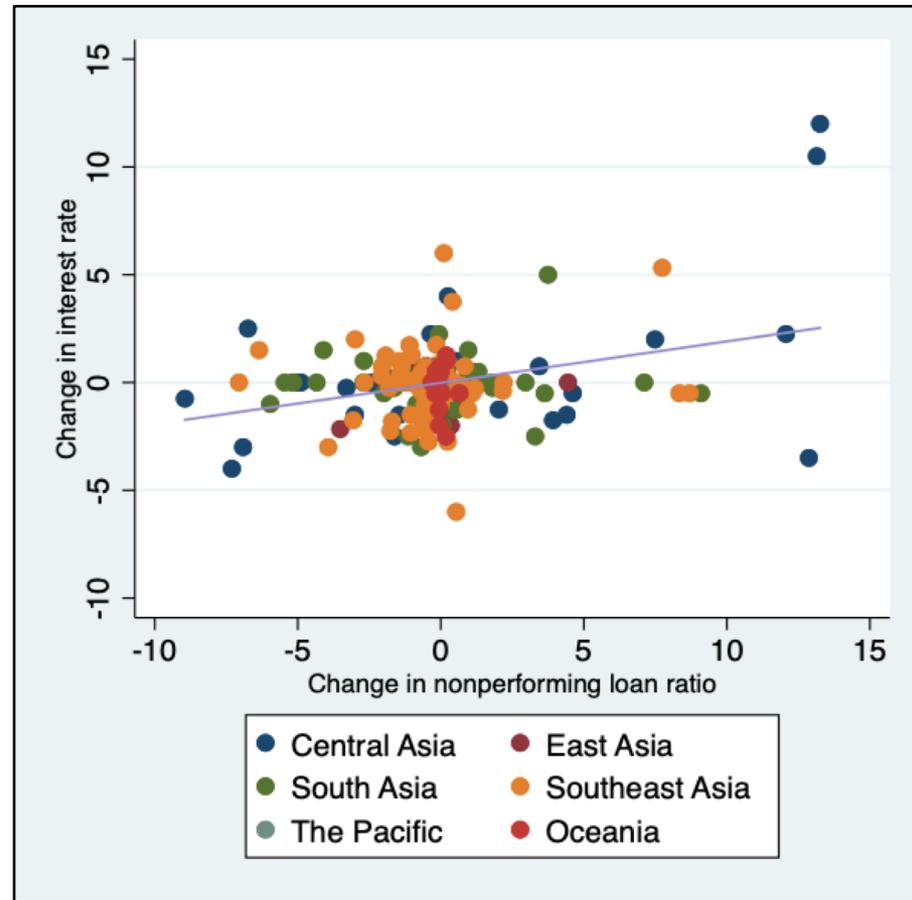
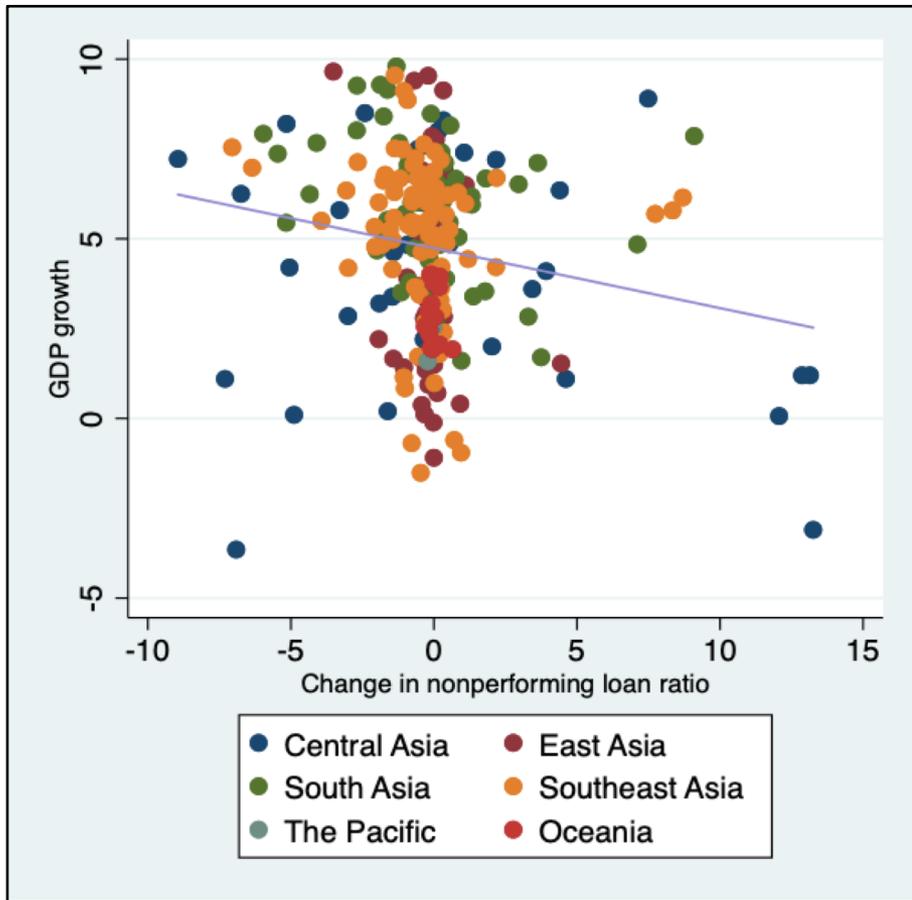
➤ Nevertheless, many Asian countries have maintained a stable level of NPL ratio throughout the GFC and the recent hikes in the U.S. interest rate

- The success of these countries in managing NPLs may be attributed to improvements in legal, regulatory, and institutional environment, as well as the public AMCs in some cases.
- Better legal, regulatory, and institutional environment also helped resolution of NPLs acquired by public AMCs.



B. Macroeconomic Conditions and Banking Sector Issues

Change in nonperforming loan ratio, GDP growth, and changes in policy rates, 2000 to 2017 (in %)



Source: ADB calculations using data from S&P Global Market Intelligence, CEIC, and World Bank World Development Indicators. <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators> (accessed September 2018)

Economic Growth and Inflation Outlook

Gross domestic product growth (%)

	2018	2019	2020
Developing Asia	5.9	5.2	5.2
Central Asia	4.3	4.6	4.5
Kazakhstan	4.1	4.1	3.8
East Asia	6.0	5.4	5.2
Hong Kong, China	3.0	-1.2	0.3
PRC	6.6	6.1	5.8
Republic of Korea	2.7	2.0	2.3
Taipei, China	2.6	2.2	2.0
South Asia	6.6	5.1	6.1
India	6.8	5.1	6.5
Southeast Asia	5.0	4.4	4.7
Indonesia	5.2	5.1	5.2
Malaysia	4.7	4.5	4.7
Philippines	6.2	6.0	6.2
Singapore	3.1	0.6	1.2
Thailand	4.1	2.6	3.0
Viet Nam	7.1	6.9	6.8
The Pacific	0.4	4.0	2.5

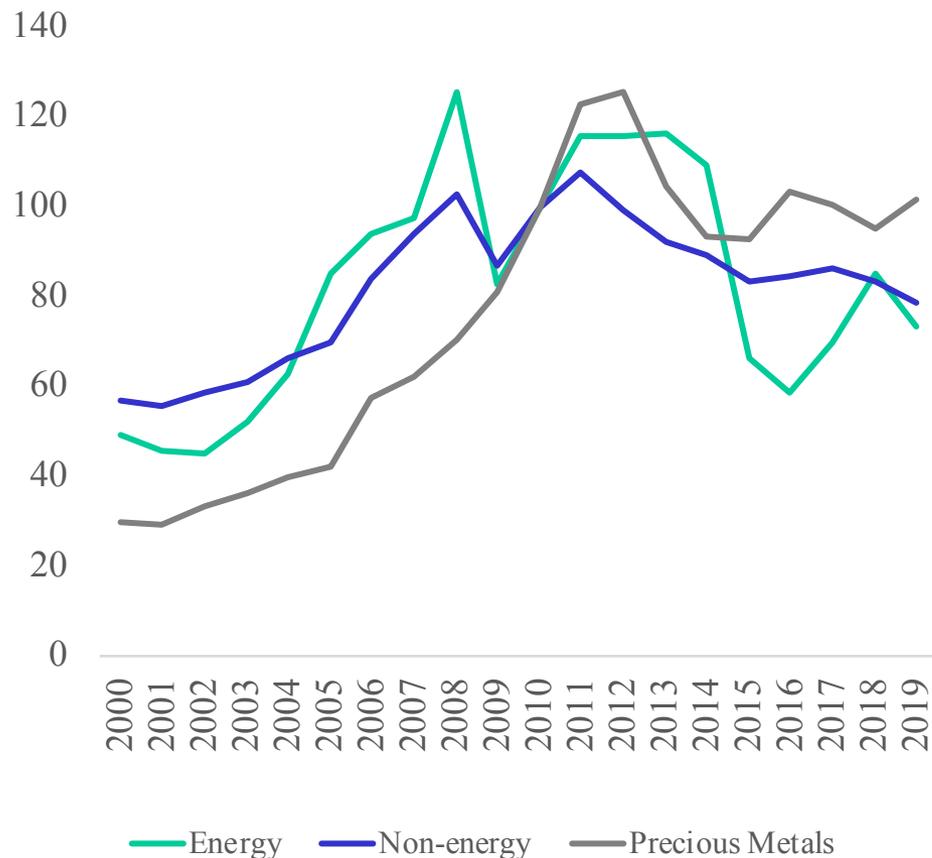
Inflation (%)

	2018	2019	2020
Developing Asia	2.4	2.8	3.1
Central Asia	8.3	7.8	7.3
Kazakhstan	6.0	5.4	5.2
East Asia	2.0	2.5	2.7
Hong Kong, China	2.4	2.9	2.5
PRC	2.1	2.8	3.0
Republic of Korea	1.5	0.5	1.1
Taipei, China	1.3	0.7	1.0
South Asia	3.6	4.4	4.8
India	3.4	4.0	3.8
Southeast Asia	2.7	2.3	2.6
Indonesia	3.2	3.2	3.3
Malaysia	1.0	1.0	2.0
Philippines	5.2	2.6	3.0
Singapore	0.4	0.6	0.9
Thailand	1.1	0.9	1.0
Viet Nam	3.5	3.0	3.5
The Pacific	4.2	3.2	3.3

Source: ADB. 2019. Asian Development Outlook Supplement. December. Manila.

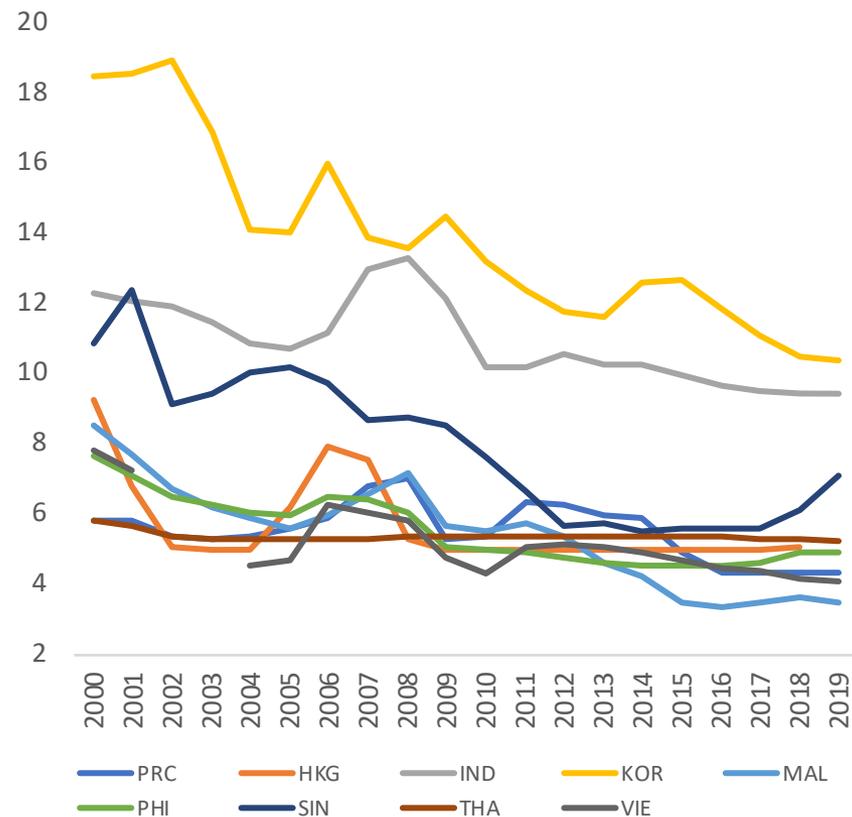
Commodity Prices and Interest Rates

World Commodity Price Indexes
real 2010 USD prices, 2010 = 100



Source: World Bank. Commodity Price Data (The Pink Sheet) (accessed 3 February 2020).

Lending Rate (% per annum)

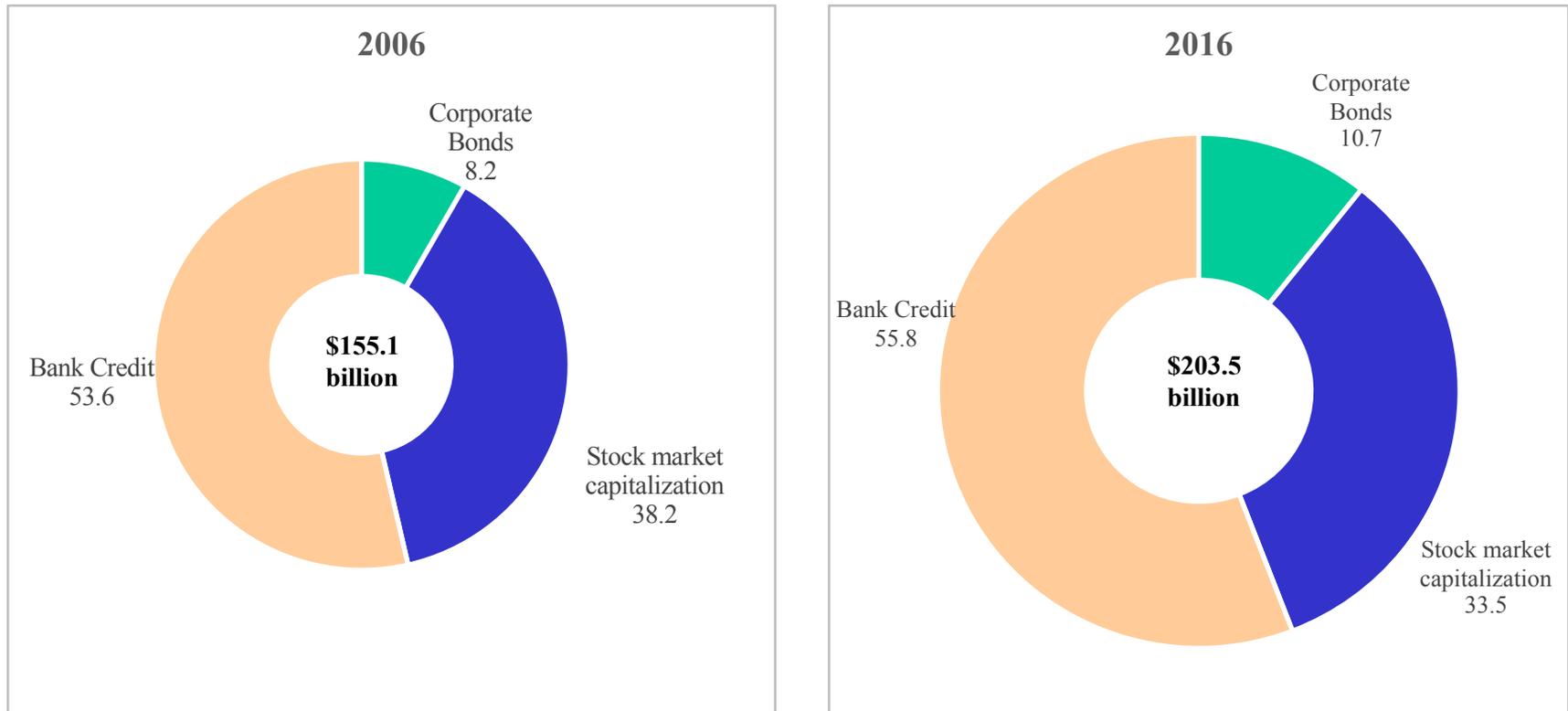


Note: Up to 1 year lending rate.

Source: International Monetary Fund. International Financial Statistics (accessed 4 February 2020).

Banking and Financial Market Landscape

Corporate Financing (% of total)—Emerging Asia (excluding HKG and SIN)



Source: ADB estimates using data from *AsianBondsOnline*, International Monetary Fund, and CEIC (accessed March 2017).

C. NPL Markets: AMCs

Table: AMCs in Asia

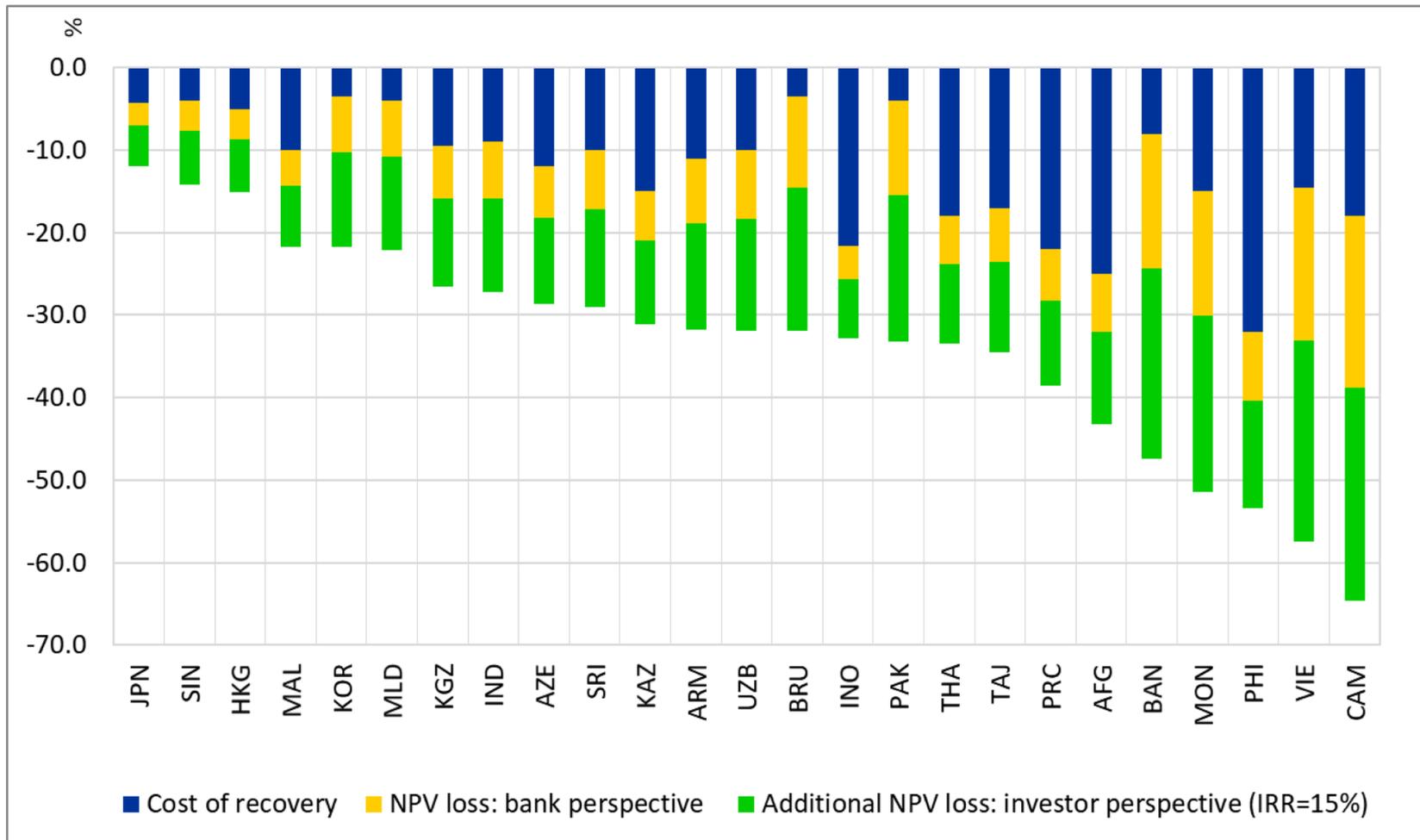
	AMCs
China	4 public AMCs for each of four largest state-owned banks and 47 local and provincial AMCs
Indonesia	After dissolution of IBRA, PERSERO was established as a state-owned AMC in charge of managing the assets of IBRA, restructuring of SOEs, and managing state-owned assets. Indonesian banks rely on private in-house methods. Foreign banks establish Asset Management Units as NPL warehousing entities.
Japan	RCC and IRCJ, public AMCs, were established to purchase NPLs. Private AMCs also participate in the NPL market.
Kazakhstan	FPL (public AMC) and OUSAs (private AMC), no active secondary NPL market
Malaysia	After closure of Danaharta in 2005, private AMCs and debt collection agencies are NPL market players.
Philippines	Privately owned SPVs and global (multinational) AMCs like Collectius are in operation.
Korea, Rep	Private AMCs (UAMCO, Daishin F&I, etc.) are major NPL market players.
Thailand	4 public AMCs removed NPLs from SOCBs and TAMC acquired NPLs from distressed FIs. After TAMC's last acquisition in 2003, BAM and AMC dominate the NPL market with small private AMCs.
Vietnam	VAMC purchases NPLs from banks but its NPL resolution function is limited. DATC was established for SOE restructuring.

C. NPL Markets: Resolving Insolvency

Item	Time (Years)	Recovery Rate (cents on dollar)	Recovery Cost (% of estate)	Item	Time (Years)	Recovery Rate (cents on dollar)	Recovery Cost (% of estate)
Afghanistan	2.0	26.7	25.0	Kyrgyz Republic	1.5	40.6	9.5
Armenia	1.9	39.2	11.0	Malaysia	1.0	81.0	10.0
Azerbaijan	1.5	39.7	12.0	Maldives	1.5	50.2	4.0
Bangladesh	4.0	29.1	8.0	Mongolia	4.0	18.2	15.0
Brunei	2.5	47.2	3.5	Pakistan	2.6	42.8	4.0
Cambodia	6.0	14.6	18.0	Philippines	2.7	21.1	32.0
China	1.7	36.9	22.0	Singapore	0.8	88.7	4.0
Hong Kong	0.8	87.2	5.0	Sri Lanka	1.7	43.0	10.0
India	1.6	71.6	9.0	Tajikistan	1.7	29.6	17.0
Indonesia	1.1	65.5	21.6	Thailand	1.5	70.1	18.0
Japan	0.6	92.1	4.2	Uzbekistan	2.0	34.4	10.0
Kazakhstan	1.5	39.8	15.0	Vietnam	5.0	21.3	14.5
Korea, Rep.	1.5	84.3	3.5				

Source: World Bank Doing Business 2020 database.

Legal Cost of Resolving Insolvency



- This illustrates three key determinants of the total bid-ask spread associated with an NPL sale, using the 2020 World Bank Doing Business database.

C. NPL Markets

Table: Insolvency Resolution Frameworks

	Insolvency Resolution Framework
Brunei	Insolvency Order introduced the Company Voluntary Arrangement which is a debtor rehabilitation scheme.
Cambodia	Insolvency Law is a modern framework but has been hampered by ineffective implementation and under-developed judiciary framework.
China	Enterprise Bankruptcy Law allows two insolvency proceedings – bankruptcy and rehabilitation. Specialized bankruptcy courts allow a sufficiently trained judiciary to resolve insolvency proceedings efficiently.
Indonesia	The Bankruptcy Law provides two procedures, a debt restructuring procedure through suspension of payment and a bankruptcy procedure.
Japan	Court supervised insolvency mechanisms consist of bankruptcy and corporate reorganization. In addition, there are out-of-court workout procedures.
Lao P.D.R.	No separate liquidation or rehabilitation proceeding. Upon the company or creditor's petition, the court will convene the creditor meeting, which will ultimately decide if the company will be rehabilitated, liquidated or sold to prospective investors.
Malaysia	Companies Act introduced Judicial Management, a formal restructuring facility and Corporate Voluntary Arrangement, a pre-insolvency mechanism.
Myanmar	A new insolvency law is in the process of consultation. Myanmar's average insolvency recovery ratio is 4.7%, second lowest next to Cambodia in the ASEAN+3 region.
Korea,Rep	Two corporate rehabilitation programs are available, the DRBA rehabilitation proceeding and the CRPA workout program, an out-of-court proceedings.
Thailand	In the early days of reform, due to inexperience and inefficiency of the judiciary, most creditors relied on debt restructuring frameworks formed through CDRAC. The Bankruptcy Act has two court insolvency proceedings: business reorganization and business liquidation.
Vietnam	Unlike other Asian insolvency laws, the Law on Bankruptcy has only one general procedure that can branch out to either restructuring or liquidation.

D. Case Studies: Countries directly hit by the AFC

Indonesia, Korea, Malaysia, and Thailand

➤ Overview

- The four Asian countries directly hit by the AFC, namely Indonesia, Malaysia, South Korea, and Thailand introduced and strengthened NPL resolution frameworks as part of the restructuring effort of the banking sector which was suffering from massive amount of NPLs and foreign exchange liquidity shortage during the AFC.
- The framework for bank restructuring in these countries comprised of three main pillars:
 - Deposit insurance
 - Asset management companies
 - Out-of-court corporate restructuring mechanisms.

Indonesia, Korea, Malaysia, and Thailand

➤ Centralized public AMCs

- Public AMCs were newly established with the mandate of rapid and efficient resolution of NPLs.
- These countries were under pressure to promptly resolve NPLs with limited availability of public funds.
- Establishment of public AMCs was accompanied by multi-pronged efforts to facilitate operations of these AMCs including disposal of acquired NPLs.
- These efforts included improving the legal and institutional environment for court-driven debt enforcement process, diversifying the tools of NPL disposal to include securitization, international auctions, and corporate restructuring vehicles, and introducing out-of-court corporate restructuring process.
- In addition, legal and institutional arrangement was made to attract foreign NPL investors to domestic NPL markets.

Indonesia, Korea, Malaysia, and Thailand

➤ Out-of-court Corporate Restructuring Mechanism

- Reform measures were taken to improve the court-driven insolvency procedure with a view to enhancing efficiency in debt enforcement and debt restructuring.
- All of these countries introduced out-of-court corporate restructuring (workout) mechanism for the following reasons.
 - The courts were not able to handle the number of insolvency cases.
 - Insolvency proceeding for so many large and strategic companies was hardly an option in these countries due to the systemic risks they posed to the financial system.
 - Furthermore, many of these companies were suffering from a liquidity crisis and not from financial insolvency as these were financially sound just before the crisis,
- In Malaysia, Danaharta was given the authority to engage in corporate restructuring. .
- In Korea, a majority rule that binds all creditors was adopted by law.

Out-of-Court Corporate Restructuring Scheme

Country	Indonesia	Korea	Malaysia	Thailand
Initiative / Coordinator	Jakarta Initiative Task Force (JITF)	Corporate Restructuring Coordination Committee (CRCC)	Corporate Debt Restructuring Committee (CDRC)	Corporate Debt Restructuring Advisory Committee (CDRAC)
Basic approach	Forum for negotiations, time-bound mediation Procedures	Forum for Negotiations	Forum for Negotiations	Forum for facilitation, superseded by contractual approach (debt or creditor agreements)
Resolution of inter-creditor disputes	No special procedure	Possibility to have loan of opposing creditor purchased; arbitration committee consisting of private experts	Nothing special, apart from persuasion by central bank	Three-person panel to attribute differences, but any concerned creditor can opt out
Default structure for failure to reach agreements	Refer uncooperative debtor to government for bankruptcy petition	Foreclosure, liquidation through court receivership	Foreclosure, liquidation or referral to asset management company with super-administrative powers	If less than 50 percent support the proposed workout, debtor-creditor agreement obliges creditors to petition court for collection of debts

Indonesia, Korea, Malaysia, and Thailand

➤ Development of NPL Markets

- Not only the NPL resolution measures taken by these countries were helpful in resolving NPLs, but they contributed to development NPL markets that did not exist prior to the AFC.
- The legal and regulatory environment created to facilitate operations of the AMC's were helpful in fostering private AMC's and NPL investors. The AMC's also created demand for the NPL market infrastructure.
- For example, domestic private AMC's such as UAMCO, Daishin F&I, and Hana F&I have emerged and actively participated in the Korean NPL market and Korean banks have utilized diverse means of NPL resolution.

D. Case Studies: PRC

PRC

➤ Government bailout approach

- In 1999, four AMCs were established to resolve the NPLs of each of the four state-owned commercial banks.
- After having been in operation for four years, some RMB 300 billion of the RMB 1.4 trillion distressed assets acquired had been resolved.
- Resolution of NPLs acquired by these AMCs was slow due to political and social constraints in resolving NPLs of large SOEs, absence of efficient legal system, low quality of legacy NPLs, illiquid market conditions, and inadequate laws regarding transfer of NPLs, resolution of equities of SOEs, and employment adjustment system.
- The PRC has dual NPL markets. AMCs only can acquire NPLs from banks and investors must purchase NPLs through AMCs.
- AMCs had to acquire NPLs from their partner SOCBs at book values, making it difficult to recover NPLs through sale to other investors.

D. Case Studies: PRC (cont.)

➤ Market based approach

- The policy toward NPL resolution in the PRC has changed from the government bailout approach of 2002-2004 to a multi-pronged market-based approach.
- New measures have been adopted with a view to create and improve NPL market infrastructure.
- These measure include reserve pricing in NPL provisioning, enhancing the role of AMC's, conducive legal system, and strengthening regulation on NPL recognition.
- The role as well as the number of AMC's have been expanded. More provincial and local AMC's have been established. There are now 174 AMC's including 53 local AMC's.
- Restrictions on the operation of AMC's have been removed.
- The legal process to enforce NPL's now takes approximately 2 years, much short than 5 years a decade ago.
- Circular 46 (April 2017) listed over 50 prohibited accounting practices to warehouse problem loans.

D. Case Studies: Vietnam

Vietnam

- **The old framework for NPL resolution before 2015**
 - DATC was established to help restructure and equitize SOEs. (Most of NPLs originated from SOEs were held by SOCBs.)
 - Bank AMCs were allowed to deal with the NPL problem of the banking sector caused by the AFC.
 - VAMC was established in 2013 to deal with NPLs caused by economic downturn and decline in real estate prices after the GFC.
 - NPL markets were not active because AMCs were not allowed to sell NPLs at a discount and as a result were not able to trade the NPLs.
 - The legal system for debt enforcement was not favorable to NPL market development. Enforcement of debt used to demand a lengthy and costly court process.

D. Case Studies: Vietnam (cont.)

➤ Market based approach since 2015

- Since 2017, measures to remove difficulties and obstacles in dealing with NPLs were introduced by Resolution No. 42 and a number of guiding documents, creating a favorable environment for the development of secondary NPL market.
- These measures include allowing banks and VAMC to foreclose collaterals to enforce debt, simplifying the procedure to resolve disputes related to collaterals, allowing banks and VAMC to sell bad debts to organizations and individuals that have no business function (debt trading companies), and allowing VAMC to sell bad debts at a market price, higher or lower than the principal value of the debt.
- Private investors including individuals and organizations are allowed to engage in debt trading business, leading to establishment of about 30 debt trading companies.
- Despite Resolution No. 42, NPL market is still not active because specific guidance to support Resolution No. 42 is missing and because Resolution No. 42 is in conflict with other laws and resolutions.

D. Case Studies: Europe after the GFC

- NPL resolution and bank restructuring have been slow in Europe, weighing on banks' profitability and their lending capacity.
 - Unlike Asian economies that deployed measures of bank restructuring and NPL resolution during the AFC, European countries counted on quantitative easing and mostly left NPL resolution to banks and financial markets in the aftermath of the GFC.
 - Ireland, Spain, and Germany introduced (public) AMCs to resolve NPLs while Greece and Italy created the legal environment for NPL transfer and operation of AMCs.
 - Recognizing the burden of NPLs on the banking sector, EU has been actively searching for measures to speed up resolution of NPLs and activate markets for distressed assets.
 - The EU Action Plan to tackle NPLs in Europe includes public AMCs, NPL trading platforms, and securitization.

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A. Demand Factors

➤ Information asymmetry

- Banks have advantage over investors regarding the quality of NPLs leading to an outcome where only low-quality assets are traded in the market.
- Banks also have Information advantage over investors regarding the quality of collaterals.
- Investors with limited information would use a much higher discount rate in evaluating the value of NPLs, creating wide bid-ask spreads.
- Low market liquidity

A. Demand Factors

- Market Structure
 - NPL market dominated by a few large investors
 - Barriers to entry due to established capacity to value impaired assets and conduct the necessary due diligence
 - Licensing requirements

- Insufficient control: imperfect excludability and controllability
 - Multiple creditors to the same debtor
 - Cross-collateralization
 - A potential investor in an impaired asset must face the prospect of competing with other creditors for the same debtor's resources

B. Supply Factors

- Unwillingness to realize losses
 - Banks are reluctant to dispose of NPLs and take a loss.
 - First-mover disadvantage, stigma effect
 - High cost of debt recovery not allowed to be recognized in NPL book values by accounting standards

- Concerns about the impact of losses on provisions and capital
 - The sale of part of an NPL portfolio at a low price may put upward pressure on coverage ratios for the remaining portfolio if supervisory measures or market discipline require that the remaining NPL portfolio be marked down to achieved sales price.
 - Banks may also be adversely affected by the recalibration of prudential models based on the data generated by the asset sales.

C. Structural Factors

- Inefficiency in debt and collateral enforcement
 - Legal procedures needed to enforce debt and collateral may take too long and cost too much increasing the debt recovery cost.
 - Inefficiency in debt and collateral enforcement also deters AMCs as these like other investors will face long time and high cost in resolving NPLs.

- Restrictions on transferability of loans and collaterals
 - Licensing requirements or consumer protection codes of conduct
 - May limit acquisition of NPLs or collaterals attached to NPLs

- Accounting standards and tax rules
 - Accounting standards do not allow some of these costs to be recognized in the values of NPL creating a large discrepancy between economic and book values of NPLs, which in turn discourages sale of NPLs by banks

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A. NPL Resolution Strategies

➤ Bank-focused approach

- Bank focused approach involves debt write-offs, direct sales of NPLs, securitization, asset protection schemes, and asset management companies.
- Well developed NPL markets can facilitate direct sale of NPLs and contribute to prevention of accumulation of massive amount of NPLs in the banking system.
- The discussion in chapter II and III demonstrate that fostering NPL markets require designing and implementing strategies to deal with various impediments.

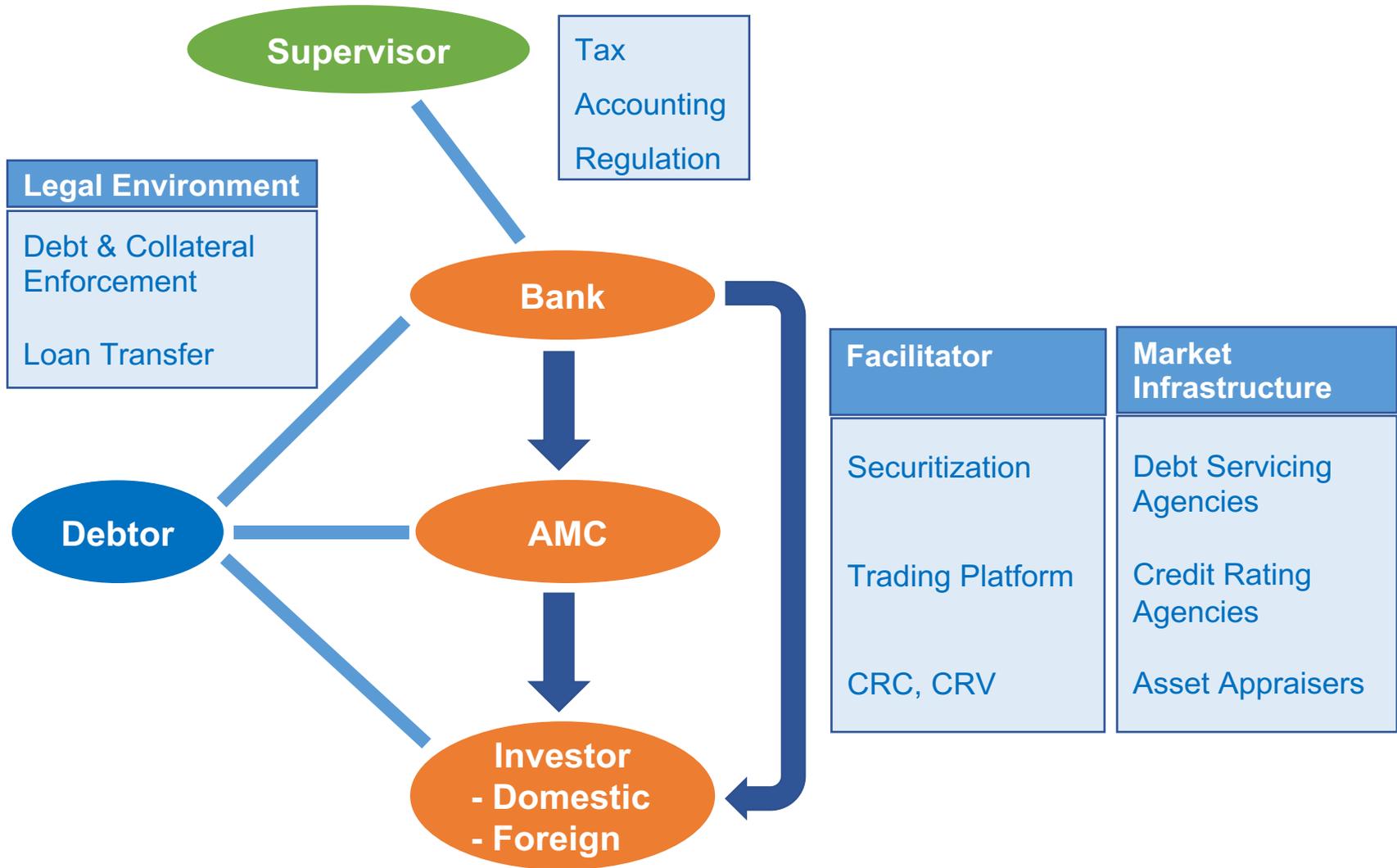
➤ Debtor-focused approach

- Debt-focused approach facilitates NPL resolution by enhancing the repayment capacity of debtors and by preserving the value of the debtors' business.
- Debt restructuring by banks, court-driven insolvency framework, and out-of-court corporate workout mechanism belong to the debtor-focused approach.

A. NPL Resolution Strategies

- Country specific resolution framework
 - When an NPL problem reaches systemic levels, choice of the right NPL resolution tools based on the characteristics of the country and the NPL problem is crucial in achieving NPL resolution with minimum cost. (Baudino and Yun, 2017)
 - Macroeconomic conditions, fiscal space, types of underlying assets, and legal and judicial constraints, financial market development should be taken into consideration in the choice of resolution tools.

B. Strategic Framework for Developing NPL Markets



B.1. Supervisory Efforts to Motivate NPL Resolution

- Introduce and strengthen prudential regulations to prevent NPLs
 - Prudential regulations enhances soundness of banks.
 - Macroprudential regulations not only help prevent NPLs but reduce the risk of a financial crisis.

- Strengthen incentives of banks to resolve NPLs
 - One of the impediments to NPL market development is limited supply of NPLs arising from reluctance of banks to take a loss by disposing of NPLs at a discount.
 - Steady supply of NPLs to the market is needed to build up domestic NPL investor base.
 - Supervisory efforts to strengthen guidelines on loan classification and to enforce strict provisioning and write-off rules are needed to motivate banks to resolve NPLs.
 - Adequate provisioning and capital buffer make it easier for banks to write off NPLs.

B.2 Create Enabling Environment for NPL Market

- Conduct legal and judicial reforms for efficient collateral and debt enforcement
 - In many jurisdictions, enforcing debt and collateral through the legal system takes several years, adding to the cost of NPL resolution.
 - Enhancement of the capacity of the judicial system as well as reform of the legal system are needed to strengthen creditor rights of financial institutions and to improve efficiency in debt enforcement.
 - Not only improvement in laws and regulations but improvement in judicial systems is needed.
 - Speed up collateral and debt enforcement process with a view to reducing the legal burden and cost of NPL resolution by banks and NPL investors
 - Establish a bankruptcy court that specializes in bankruptcy procedure and collateral and debt enforcement and staff the court with personnel with specialty.
- Improve taxation and accounting rules to create a favorable environment for NPL resolution and debt restructuring.

B.3 Asset Management Companies

- Utilize centralized public AMCs to deal with NPLs during a systemic banking crisis.
 - AMCs are entities that remove, manage, and dispose of distressed assets from financial institutions.
 - AMCs can be publicly or privately owned, centralized or bank-specific.
 - While single-bank AMCs have been utilized to resolve NPL problems confined to a few individual banks, centralized public AMCs have proven to be useful in promptly resolving massive amount of NPLs from the financial system during a systemic banking crisis.
 - The four East Asian countries directly hit by the AFC relied on centralized public AMCs to resolve NPLs and to achieve restructuring of their banking sectors.
 - AMCs have also been used by a few European countries including Ireland, Spain, and Slovenia to deal with NPLs created by the GFC.
 - The EU Action Plan for NPL resolution includes the AMC Blueprint as an important element.

B.3 Asset Management Companies

- Create an enabling environment for the operation of AMCs
 - Case studies reveal that AMCs cannot resolve NPLs they acquired from banks efficiently when their pricing decisions and operations are under restriction. In this case, AMCs may become NPL warehouses.
 - Remove restrictions on public AMCs so that these can dispose of acquired NPLs thru sales to other AMCs or NPL investors.
 - Create an enabling legal and judicial environment for AMCs.

- Utilize AMCs to create and foster NPL markets
 - AMCs are also inductive to developing NPL markets as they create business demand for NPL market service agencies and thereby help create the NPL market ecosystem.
 - Creation of enabling legal and institutional environment also contributes to developing NPL markets.

AMCs

Country	AMC	Year	Legal Basis	Official Mandate	Ownership
Indonesia	IBRA	1998	Presidential Decree in 1998 and revision of Banking Law	Restructuring	State
Japan	RCC	1999	A merger of HLAC and RCC following the revision of two laws	NPL resolution Restructuring	State (subsidiary of DICJ)
Korea	KAMCO	1998	NPL Resolution and KAMCO Law	NPL resolution Restructuring	State (subsidiary of KDB)
Malaysia	Danaharta	1998	Danaharta Law of 1998	Restructuring/NPL Disposition	Government
Taiwan, China	FRF	2001	The Law for the Establishment and Management of the FRF in 2001	NPL disposition	Government (MOF)
Thailand	TAMC	2001	Emergency Decree in 2001 later ratified by Parliament	Restructuring	Government
Turkey	SDIF	1999	Central Bank Law and Commercial Bank law	Resolving banks and administering deposit guarantees	Government
Ireland	NAMA	2009	Law on NAMA	NPL disposition	Government

B.4 Securitization and Other Tools

➤ Securitization

- Both financial institutions and AMCs can dispose of NPLs through securitization.
- KAMCO, for example, issued ABS with NPLs as underlying assets 17 times since it first issued the NPL based ABS in June 1999.
- Securitization requires enabling legal infrastructure.
- The true sale nature of the underlying assets should be guaranteed by the legal system and recognized by the accounting principle.
- Special purpose vehicles where underlying assets are transferred to and grouped together should be available without much extra cost.
- In addition to legal infrastructure, securitization also requires financial market infrastructure and diverse investor base, which are not available in countries whose financial markets are at a nascent stage of development.

B.5. NPL Trading Platform

➤ NPL Trading Platform

- An NPL trading platform is an electronic transaction platform combined with a data warehouse and a trade repository, easily accessible by buyers and sellers alike.
- By providing transparent and validated information about the credit quality of NPLs to potential investors, it is expected to resolve market failure arising from information asymmetry and coordination failure. (Fell et al, 2017)
- NPL trading platforms have been proposed as a part of the action plan formulated by the Economic and Financial Affairs Council designed to resolve the massive amount of NPLs held by European banks.

➤ Measures to Reduce Information Asymmetry

- Standardization of NPL data templates allows banks to supply comparable and standardized data on NPLs to investors and other stakeholders.
- Disclosure requirement on asset quality review and report should be strengthened.

B.6. Out-of-Court Corporate Restructuring

- Prepare measures for out-of-court corporate restructuring
 - Debt structuring with multiple creditors is a challenge especially when creditors do not agree with each other, necessitating the court-driven restructuring process. .
 - Court-driven workout, however, could involve be a lengthy legal process if the legal and judicial system for debt enforcement is inefficient or if courts have to deal with a large number of bankruptcy cases.
 - Reform of the legal and judicial system for debt enforcement and enhancing the capacity of courts may be difficult or take a long time.
 - In this case, out-of-court corporate restructuring (workout) process may be needed.
 - The four East Asian countries introduced out-of-court corporate restructuring mechanism during the AFC.
 - Some countries introduced a workout process in which all creditors are bound by majority rules.
 - In addition, creating the legal environment for private equity funds and corporate restructuring vehicles such as CRCs and CRVs is useful.

B.7 Regional Strategy

- Develop a regional framework to resolve NPLs and foster a regional market for regional NPLs
 - Regional NPL market is useful in dealing with NPLs held by regional SIFIs in different countries and NPLs of regional multinational companies
 - Regional initiative to develop regional NPL markets is needed.
 - Utilize NPL securitization to overcome immature legal framework and underdeveloped financial market in some countries (Choi, 2019)
 - Utilize online NPL transaction platform to facilitate trading of regional NPLs between regional banks and NPL investors (Choi, 2019)

- Utilize existing regional initiatives for financial safety net
 - Utilize the ABMI for cross-border securitization of NPLs.
 - Create settlement linkage to utilize securities as collaterals against borrowing from central banks.

B.7 Regional Strategy

- MDBs should take part in the regional efforts to resolve NPLs
 - Provide technical assistance on establishing and executing strategies for NPL resolution
 - Serve as the focal point for soliciting regional knowledge and experience in deploying macroprudential regulatory measures and in developing NPL markets.
 - Extend program loans needed to build up NPL market infrastructure

- AMCs in the regional should take part in regional cooperation.
 - AMCs can support national and regional efforts to resolve NPLs through knowledge sharing and capital participation in AMCs.
 - IPAF should serve as a focal point for sharing knowledge and experience and for building national and regional NPL markets.

I. Introduction

II. Overview of NPLs and NPL Markets in Asia

III. Impediments to NPL Market Development

IV. Strategies to Develop NPL Markets

V. Conclusion

V. Conclusion

- Potential benefits of active NPL markets are huge; but NPL markets are not well developed in most of the Asian countries.
- There are challenges to the development of NPL markets: major impediments include information asymmetry, inadequate tax and accounting rules, inefficient debt and collateral enforcement system, and other structural impediments.
- Carefully designed policy strategies and action plans are a must to address these impediments.
- There is no one-size-fits-all strategy for every country in the region. Each country should design and adopt strategies that are appropriate for the individual economic conditions and the nature of the NPL problem as well as subject to its legal and institutional environment and fiscal space.