Roadmap for Developing an Online Nonperforming Loan Trading Platform

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Outline

1. Background: *Roadmap for Developing an Online Nonperforming Loan Trading Platform*

2. NPL Markets in Asia

3. Practical Considerations in Developing an NPL Platform

4. Key Findings of the Report
BACKGROUND: ROADMAP FOR DEVELOPING AN ONLINE NONPERFORMING LOAN TRADING PLATFORM
Background: Roadmap for Developing an Online NPL Trading Platform

• Previous crisis experiences have illustrated negative and persistent macrofinancial effects NPLs can have on the real economy, underlining the importance of swift resolution measures

• A sharp increase in NPLs could destabilize regional financial systems and compromise post-pandemic economic recovery

• A developed market for NPL trading can contribute toward a swift and effective NPL resolution

• While the development and deepening of NPL markets was on the policy agenda prior to the COVID-19 pandemic, current economic and financial conditions underscore the relevance of swift resolution of banks’ NPLs.

   ➢ Against this backdrop, this report seeks to examine the feasibility of establishing an NPL transaction platform for Asia and the Pacific region
Background: Roadmap for Developing an Online NPL Trading Platform

• IPAF CCM suggested an assessment of the readiness and feasibility of establishing an NPL trading platform in Asia

• ADB, together with Deloitte, prepared feasibility study (to be published in Q3 2022)

• The study benefitted considerably from IPAF members’ support. Interviews and surveys with numerous IPAF members were conducted and insights incorporated into report

• Additional insightful consultations with JVI and EBA, incl. on EU’s Action Plan to reduce NPLs and NPL data templates
NPL MARKETS IN ASIA
# Asia’s Banking Sector NPLs 2011 to 2021

## Movement of banking sector NPLs in Asia over the past decade (as % of gross loan)

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Source: IMF, central banks and prudential authorities

*The table only includes ADB regional members with the latest gross NPL stock over $500m.*
Overview: NPL Levels and Ratios in Asia

NPL stocks held by banks totalled to over $790bn in below economies in 2021 (up from $758bn in 2020) according to official figures published by regulators. Amid phasing out of regulatory forbearance, global monetary tightening, and challenging economic and financial conditions there is a risk of increasing NPLs in 2022.

Note: Original values are denominated in local currencies and converted to $ with exchange rate on relevant dates. The countries highlighted accounted for 99% of NPLs in the region as of 2021.

NPL Resolution is Often Hampered by Multiple Impediments

**Supply Side**
- First mover disadvantage
- Unwillingness to realize losses
- Accounting recognition of cost of recovery
- Bans/restrictions on loan sales
- Lack of expertise in asset management and asset valuation

**Demand Side**
- Information asymmetries
- Barriers to investor entry
- Imperfect excludability: creditors compete with each other

**Structural and Legal Issues**
- Weak and unpredictable insolvency frameworks
- Opaque and lengthy collateral enforcement
- Lack of debt enforcement capacity
## Time and Cost of Resolving Insolvency in Asian Economies

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<tr>
<th>Item</th>
<th>Time (years)</th>
<th>Recovery Rate (cents on the US dollar)</th>
<th>Cost of Recovery (% of estate)</th>
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PRC = People's Republic of China.
Estimated Bid-ask Spreads in Asia Significant

Difference between net book value and the estimated bid price

AFG = Afghanistan; ARM = Armenia; AZE = Azerbaijan; BAN = Bangladesh; BRU = Brunei Darussalam; CAM = Cambodia; HKG = Hong Kong, China; IND = India; INO = Indonesia; IRR = internal rate of return; JPN = Japan; KAZ = Kazakhstan; KOR = Republic of Korea; KGZ = Kyrgyz Republic; MAL = Malaysia; MLD = Maldives; MON = Mongolia; NPV = net present value; PAK = Pakistan; PHI = Philippines; PRC = People’s Republic of China; SIN = Singapore; SRI = Sri Lanka; TAJ = Tajikistan; THA = Thailand; UZB = Uzbekistan; VIE = Viet Nam.

Notes: For Cambodia and Kazakhstan, only the total NPV loss is reported, without being separated into bank perspective and investor perspective. The bank lending rate data is not available in these countries.

Source: Lee, Park, Park, and Rosenkranz (2021)
Features of Underdeveloped Secondary NPL Markets

A number of factors contribute to low prices and transaction volumes notwithstanding potentially good supply and demand. Common features of underdeveloped NPL markets include:

- **Limited numbers of active investors** – including as a result of high transaction costs which act as a barrier to new entrants (due diligence costs only recoverable for successful bidders – limits investors to those that can afford to absorb them and therefore excludes many small potential investors)

- **High bid ask spreads** – as a result of information asymmetries and poor data quality, and/or unrealistic pricing expectations

- **Limited information around market prices and volumes**

- **Predominantly domestic market** – restrictions on repatriation of profits/ownership of assets, etc. will limit foreign investors’ appetite as will any regulatory or legal uncertainties e.g., around enforcement. Investors will require access to a range of different, independent service providers (e.g., servicers, valuers, legal advisers, appraisers, etc.) – the absence of an appropriate independent loan servicing infrastructure could be a further constraint

As a result of the above, such markets typically see low transaction volumes and low prices, notwithstanding strong levels of supply and good investor appetite

NPL transaction volumes in Europe and Asia were significantly lower in 2020 because of the pandemic. The drop is less in PRC (c.17%) than in Europe (c.53%), while this may in large part reflect more effective containment measures and a faster return to business as usual.

NPL = nonperforming loan, PRC = People’s Republic of China.

Source: Transaction announcements (as the second quarter 2021), Debtwire, Zheshang Asset Management Company.
PRACTICAL CONSIDERATIONS IN DEVELOPING AN NPL PLATFORM
Key Elements for a Functioning Market for NPL Sales

There are several factors which need to be present to allow an active NPL market to develop. And no single global solution. Rather, countries have developed their own bespoke frameworks for dealing with rising NPL stock.

**Regulator**
- Clear and supportive frameworks for NPL transfer and investment are crucial to developing an efficient market.
- Some countries in Asia still lack policy guidance around resolution methods and loan sales.

**Legal Enforcement Frameworks**
- A creditor-friendly legal regime for restructuring, enforcement and insolvency would improve recovery from distressed assets from an investor’s perspective.
- Lengthy and complex enforcement processes in some markets create uncertainty, increase collection costs, and ultimately lead to a wider bid-ask spread for NPL sales.

**Servicer**
- Depth of experienced servicing and restructuring skills is a key driver for recovery. Sufficient servicing capabilities are required to effectively rehabilitate debtors.
- Foreign buyers sometimes team up with trusted local servicers to manage NPLs post-transaction.

**Advisor**
- An advisory community with sufficient skills and resources to support transaction activity (e.g., valuations, due diligence, legal, etc.)

**Seller**
- A sizeable supply and a visible pipeline of future deals are critical in attracting investors.
- Sellers should commit to the transaction with realistic price expectations. The reluctance of banks to accept losses/restrictions on banks’ ability to sell below par will discourage NPL transactions.

**Buyer**
- Participation of foreign investors in domestic NPL markets offers banks access to larger capital pools, which can absorb increased levels of bad debts.
- However, restrictions on buyers, especially foreign buyers, (e.g., limited ownership, restricted deal structure) create barriers to new entrants.
## Country Summary for Existing and Possible Legal Requisites and Conditions for NPL Trading

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>PRC</td>
<td>The enforcement process can take up to between 18 and 42 months depending on the status of the security (whether it is seized by the creditor) and the location of the assets. Court systems in NPL hotspots have become more attuned to dealing with recovery cases, especially with RE collateral</td>
</tr>
<tr>
<td>Republic of Korea and Thailand</td>
<td>The Republic of Korea and Thailand are considered to have relatively well established legal frameworks for NPL resolutions and relevant infrastructures which have been refined since the Asian financial crisis.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>While the market has seen several NPL transactions in recent years, further development of the NPL market is hindered by ongoing uncertainty around legal enforcement procedures and portfolio transaction regulations with a lack of guidance from regulators on NPL management and disposition approaches. Strict restrictions imposed on the sale of NPLs by state banks prohibit selling NPLs below par value.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Enforcement proceedings in Viet Nam can be lengthy from several months to several years. Viet Nam Asset Management Company is leading a review of the legal framework for NPLs resolution, and the government is considering other steps necessary for the NPL market development.</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>The Kazak government has commenced a project to develop NPL markets in the country including the development of an online platform for cross border trading and is receiving technical assistance from the European Bank for Reconstruction and Development.</td>
</tr>
</tbody>
</table>
## Nonperforming Servicing Capability

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Comments</th>
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<tbody>
<tr>
<td><strong>PRC</strong></td>
<td>• Very mature NPL servicing landscape with some well-established servicers with multiple offices and staff across the nation.</td>
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<tr>
<td></td>
<td>• At provincial levels, there are also several dedicated NPL servicing firms which work with both domestic and foreign investors.</td>
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<tr>
<td></td>
<td>• Foreign investors such as Oaktree and Bain have been establishing local servicing capabilities by building up their own in-house teams, partnering with local servicer firms, or acquiring larger servicer firms.</td>
</tr>
<tr>
<td><strong>Republic of Korea and Thailand</strong></td>
<td>• In the Republic of Korea, servicing is generally in-house or through collection agencies.</td>
</tr>
<tr>
<td></td>
<td>• Some established local servicers in the market in Thailand.</td>
</tr>
<tr>
<td><strong>Indonesia</strong></td>
<td>• Lack of credible dedicated NPL servicers for larger NPL portfolio investments due to immaturity of the market and the NPL ecosystem, including a lack of guidance around licensing requirements.</td>
</tr>
<tr>
<td></td>
<td>• If the market scales up, larger investors may establish alliances with certain law firms.</td>
</tr>
<tr>
<td><strong>Viet Nam/Kazakhstan</strong></td>
<td>• Few professional services in Viet Nam. Banks typically service NPLs in house or through their own captive AMCs. Foreign investors seeking to enter the market may need to rely on the originator of the loans for servicing, or cooperate with an established AMC.</td>
</tr>
</tbody>
</table>
## Nonperforming Loan Market Activity

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>NPL Market overview</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRC</strong></td>
<td>Volume of NPLs traded is on par with the busiest European markets, but limited international involvement</td>
<td>NPL investors from outside of the People’s Republic of China remain cautious in NPL market activity and pricing, reflecting an unfamiliar legal environment. Officially, commercial banks can only sell NPLs to AMCs, which must be licensed. There are no restrictions on NPL buyers from AMCs; currency and capital control regulations, foreign ownership restrictions act as a deterrent for overseas investors. In recent times, several foreign companies have or are seeking to establish joint ventures or partnership arrangements to operate as private AMCs; this is still developing but offers the prospect of greater involvement in the future.</td>
</tr>
<tr>
<td><strong>Republic of Korea and Thailand</strong></td>
<td>Significant historical foreign involvement</td>
<td>International investors have been less active in recent years, reflecting a relatively stable NPL market and lower NPL levels (compared to during the Asian financial crisis), which banks are generally able to resolve for themselves, and low returns. An increase in NPLs triggered by COVID-19 is likely to revive foreign interest in the Republic of Korea NPL market, which has no restrictions toward NPL buyers from overseas.</td>
</tr>
<tr>
<td><strong>Indonesia</strong></td>
<td>Many Indonesian banks warehouse their NPLs through offshore SPVs without disposing of them</td>
<td>Foreign investors have been actively exploring opportunities in the local NPL markets, and there have been several cross-border deals around distressed asset investments in Indonesia. However, there remain significant limitations which act to deter active investing, including foreign ownership restrictions and uncertainties in the legal and regulatory frameworks.</td>
</tr>
<tr>
<td><strong>Viet Nam/Kazakhstan</strong></td>
<td>No international involvement In Viet Nam, the NPL market is dominated by VAMC. A number of banks have set up their own AMCs</td>
<td>Positive signs of state authorities seeking to attract foreign capital to the local NPL market. In Viet Nam, an electronic NPL trading platform is being developed aimed at both domestic and overseas buyers; however, the country is yet to improve the legal framework around NPL transfers and other policy developments are potentially contradictory. In Kazakhstan, a government-led working group, supported by international development organizations, has been looking to develop a secondary NPL market by introducing appropriate regulations and joining a cross-border NPL trading platform to attract foreign investors.</td>
</tr>
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</table>
Illustrative NPL Transaction – Simplified Process

The diagram below shows the typical NPL transaction process, from portfolio selection and process design, to information preparation, notification, due diligence, the auction process and completion. Some aspects of the process lend themselves more readily to being managed through an online platform (e.g., notification and bidding).
### Selected Examples of Existing NPL Transaction Platforms

In Asia, while collateral auction platforms for foreclosed assets already exist, the use of these for NPL secondary trading is less prevalent.

<table>
<thead>
<tr>
<th>Europe</th>
<th>People’s Republic of China</th>
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</table>
| • Debitos is one example of private online market for cross-border NPL transactions in Europe  
  • Originally catering to the German market, it had over 1,400 registered investors from 16 countries and total of over 640,000 loans transacted (as of 2021) | • 7 online platforms in PRC, including Taobao and JD  
  • Taobao’s Ali Auction, the leading online auction platform, with 3,638 auctions of NPL portfolios/single names transacted on Taobao in 2020  
  • Top Banks, central, and provincial AMCs are registered at Taobao  
  • As of February 2021, over 3,400 courts at different levels have registered with Taobao to conduct online judicial auctions, which covers most of the courts in the PRC  
  • PRC has many non-performing assets trading platforms; no uniform national NPL trading platform |
Typical Online Trading Platform Process

Below diagram is an example of the process of Taobao trading platform.

**Step 1:** The seller publishes notice on the auction.

**Step 2 (offline):** Bidders conduct site visit and due diligence.

**Step 3:** Bidders pay deposits.

**Step 4:** Bidders submit the bids.

**Step 5:** Confirm the winning bidder.

**Step 6 (offline):** Close the transfer offline.

Source: Based on Taobao process.

- **Step 1** – The online notice typically includes: a basic description of the asset, any defects, key documentation, seller’s reserve price, eligibility of the bidders, auction process, timeline, contact details of the seller, etc.
- **Step 2** – Based on the (non-confidential) information provided in the public notice, interested buyers proceed with due diligence which may be managed offline. All the information provided on the main auction page will be fully public and will not require a non-disclosure agreement (“NDA”).
- **Step 3** – To participate in the auction, bidders may need to pay a deposit through the platform’s online payment system which will be frozen until the end of the bidding process.
- **Step 4** – Once the deposit is paid, a bidder can submit their bid on the auction page. All bids submitted are live, anonymized and visible to other participants.
- **Step 5** – The bidder with the highest bid wins the auction, and the system automatically generates a confirmation letter stating the winning bidder. Where the sale is by way of judicial auction (e.g., in PRC), the confirmation letter is published on the auction page, stating the name of the vendor, the buyer, and the transacted price thus, providing full transparency. For other (non-judicial) auctions, including NPL sales by banks or AMCs, details will not be made fully public.
- **Step 6** – The buyer contacts the seller offline to execute the transaction documentation and complete the transfer.
## Fully Suite Online Trading Platform Functionalities

Below diagram is an example of what may be offered through an online trading platform.

<table>
<thead>
<tr>
<th>Functionalities</th>
<th>Description</th>
</tr>
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</table>
| **Transaction facilitation** | Matching buyers and sellers and online auction • Acts as a marketplace for sellers looking to sell NPL stocks and for investors looking to buy as well as facilitating portfolio trades, the platform would allow the bundling of smaller portfolios together which might be of interest to specific buyers • Offers standardized, ready to use documentation (NDAs, sales and purchase agreements, etc.) to avoid lengthy contract negotiations • Existing in use platforms already include:   
  ✓ Q&A functionality and real-time updates for answers/documents uploaded  
  ✓ An auction platform (English Auction with binding public bids) with the ability to solicit non-binding bids (market soundings), set reserve prices, etc. |
| **Data review and validation** | Automated checks to provide a level of assurance on data quality/analytics • In order to reduce transaction and search costs, the NPL platform would ensure data sharing and a high degree of data standardization. Completeness and other checks could be built in to enhance data quality as well as a range of data analytics tools. • Unlikely to fully remove the need for additional due diligence but nevertheless fundamental to success |
| **Data warehousing** | Hosting of detailed loan portfolio information – financial and non-financial data • Electronic database, regularly updated with detailed loan level data, including both financial information and other qualitative information (e.g., legal documentation, security documents, payment history, collateral appraisals, borrower correspondence, etc.) |
| **Ancillary services** | Intermediation for other value accretive services • Credit servicing – including in terms of data provision • Valuation and due diligence • Real estate and collateral appraisal |

- Portfolios visible to more potential investors and greater transparency
- Reduced bid ask spread, higher prices, faster resolution
NPL Transaction Platforms: Practical Issues

We identified nine practical issues that require consideration when rolling out an online NPL transaction platform.

- Ownership of the platform and governance framework
- Fee structures
- NPL data templates
- Data quality and validation checks
- Asset perimeter and geography
- Tax and currency exposures
- Incentives for investors and creditors
- Banking secrecy and data protection
- Scope of ancillary services

Source: Deloitte [2021].
Ownership of the Platform and Governance Framework

Who should own the platform and what governance model should apply? How would that differ for a regional model? How would the differing stages of development of NPL trading ecosystems affect the choice?

State ownership
The platform is jointly owned by the governments of participating nations either in equal shares to minimize potential conflicts around the leadership or undue influence, or according to the respective NPL market size in each country, or the level of investment. State involvement brings with it a risk of political interference.

Private ownership
A single or a group of independent private operators, experienced in running similar platforms (e.g., Alibaba and JD in PRC, DEBITOS in Europe) and without any state involvement.
Guidelines could be introduced to cover best practice execution.

Public-private partnership
A balanced cooperation between the private sector and government in each participating country. An option to consider may be an evolution of PPP, where the state plays a greater role during the initial stages of the platform development and exits the project once it is fully functioning.

Asset management companies
Considering their vast experience and that they may already have their own platforms, AMCs could also be an option for 3rd party disposals; as owners of NPLs, this could be perceived as creating a conflict of interest if transacting assets other than their own.

International development organizations
The platform is established and owned by an international or regional development organization. This ownership type could help minimize both political and commercial conflicts of interests.

How heavily should the platform be regulated? Contrast where the platform does not represent financial market infrastructure (and hence, may not need to be regulated) with the situation whereby the platform becomes a quasi monopoly. Also depends what services are offered.
Key benefits and considerations:

- **Harmonized data requirement** speeds up process for data preparation and due diligence and valuation process.
  - **Cost savings** could be achieved through more efficient and smooth transaction.

- Creates a **level playing field** between different platforms, fostering fairer competition/sets a minimum standard.

- **Enhances granularity, quality, and comparability** of NPL data while increasing transparency,
  - Supports the development secondary NPL markets.

- Could form basis of centralized NPL (post-trade) data depository for analyzing/monitoring overall NPL lifecycle evolution,
  - Useful/relevant information for central banks and regulators.

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**Considerations**

- Voluntary vs. mandatory usage?
- Need to take into consideration experience from Europe/EBA NPL data template
### Asset Focus and Key Considerations

#### Key considerations

<table>
<thead>
<tr>
<th>Secured / Unsecured</th>
<th>Retail / Corporate</th>
<th>Narrow / Broad</th>
<th>Regional / National</th>
</tr>
</thead>
</table>
| • Secured loans are relatively easier to roll out on the online platform as:  
  ➢ The documentation and data availability/requirements are relatively well understood by both buyers and sellers.  
  ➢ There is enough supply held by the banks to sustain the pipeline.  
  ➢ It would also be easier to price a collateralized NPL than an unsecured one in secondary markets as the value of the collateral sets the minimum value of an NPL. |
| • Retail portfolios would benefit from the homogeneity of underlying loan products and borrowers. The loan files are usually standardized with limited customized terms for each individual loan.  
• However, in some countries, banks already work with DCAs to dispose of their unsecured retail loans on a regular basis, and an online trading platform may add little value to the process.  
• Corporate loans (including special lending) could have multiple lender relationships where a single borrower may be indebted to several banks. Lack of coordination between banks may add to the difficulty in the transaction and resolution of such loans.  
• In addition, documentation requirements are usually more complex for corporate loans and special lending compared to retail loans. Buyers may expect to see evidence on the operation and solvency status of the company and/or the assets/projects.  
• Banking secrecy/GDPR challenges around consumer loans. |
| • NPL platforms look to benefit from realizing economies of scale and scope, and as such may best be achieved by considering a broad range of asset classes to the extent practical. The scope may also be extended to include performing loans to attract different types of investors. It may be appropriate to start with a narrower focus and then gradually open up as the platform develops. |
| Investors can enjoy the benefits of diversification on a cross-border regional trading platform which pool assets from several jurisdictions. However, specific national data needs, regulations, and different legal enforcement frameworks across countries would need to be taken into account. |

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DCA = debt collection agency, GDPR = general data protection regulation, NPL = nonperforming loan.  
Source: Deloitte.
• Some of these services already exist on trading platforms in Europe.
• Platform can automate portfolio data mapping and validation against the data template.
• Pre-populated scenario analysis and valuation model for indicative pricing of loan portfolio.
• The platform can connect investors with servicers and other due diligence service providers.

• Due diligence can become more affordable compared to directly engaging with servicers (attracting small banks and investors to participate).
• The platform can act as a touchpoint for prospective investors and debt financiers – debt raising would be dealt with off-platform.
• Lawyers can register on the platform so that investors can look up and identify suitable ones for their cases (e.g., the 360PAI trading platform in PRC).

Source: Deloitte (2021).
Incentives for Investors and Creditors

Should users be offered incentives to use the platform?

**Key questions:**

- Should use of the platform be **voluntary** or made **mandatory**?

- Would incentives work in markets where the NPL trading is in an **early stage of development** or simply **inactive**?

- How to build **trust and credibility** in the newly created NPL trading platform?

**Options to consider:**

- **Commercial incentives** – e.g., fee structures at less than cost. How would this be funded?

- **Regulatory incentives** – Tax incentives. However, this might be seen as a **bail out** of private commercial banks, AMCs, or other sellers. There is also a risk of **moral hazard**: lending institutions may underwrite loans without sufficient credit checks or collateral assessment, knowing that they can subsequently sell NPLs via the platform and receive certain tax benefits.

- **Legal requirement** – State bodies may legally oblige NPL sellers to use online NPL platforms to offload bad loans and assets. However, this may reduce incentives on the platform to innovate or to drive efficiencies. Equally, what if the platform does not deliver the promised benefits?
KEY FINDINGS OF THE REPORT
Key Principles for the Development of NPL Markets and an Online Trading Platform

- **Harmonization**— adoption of agreed international standards for NPL recognition and valuation methodologies.

- **Level playing field**— NPL markets and platforms should be regulated on a non-discriminatory basis, with the same standards and regulatory requirements applying to both foreign and domestic NPL investors.

- A level of **minimum standards** should be developed both in terms of NPL markets generally and online NPL platforms.

- **Balanced protections for consumers**— sustainable collection practices which protect consumers and borrowers and industry standards that do not restrict lenders’ ability to efficiently work out NPLs.

- NPL markets and ecosystems are at different stages of readiness. As such, **development of a regional platform may best be attempted by way of a phased approach**.

- **A network of platforms** could be an option, with common standards in terms of best practice operation and information disclosure, cooperating with each other to maximize reach and the number of transactions.
Thank you for your attention!

**ADB-ECB Edited Volume**
Nonperforming Loans in Asia and Europe—Causes, Impacts, and Resolution Strategies

**ADB Economics Working Paper**
Nonperforming Loans in Asia: Determinants and Macrofinancial Linkages

**ADB Briefs**
The Impact of Nonperforming Loans on Cross-Border Bank Lending: Implications for Emerging Market Economies

**Deloitte Report**
Deleveraging Asia 2021

Questions?

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