#### **Key Messages and Overview**

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#### **Key Messages**

High and persistent levels of nonperforming loans (NPLs) have featured prominently in recent financial crises. This book traces NPL trends during and after the Asian financial crisis, the global financial crisis, and the European sovereign debt crisis. It examines the economic impact of high NPLs. And it compares the effectiveness of NPL resolution strategies across countries in the two regions. The book distills important lessons from regional and country experiences using case studies and empirical investigation to identify the best ways to resolve NPLs. These findings can be invaluable in charting a course through the financial and economic fallout of the coronavirus disease (COVID-19) pandemic to recovery and sustained financial stability in Asia, Europe, and beyond.

Persistently high NPLs can significantly undermine bank lending and economic growth. This calls for swift and comprehensive policy action as such distressed assets build up. Past crises have shown that elevated NPLs can have long-lasting effects on financial sectors, still weighing on banks' balance sheets years after the initial turmoil has passed. Preventing such "NPL hysteresis" is particularly relevant for most Asian and European countries, given their mostly bank-dominated financial systems.

Another characteristic of Asian and European financial systems is their deep and increasing interconnectedness. While providing many benefits, such as regional risk diversification, interconnectedness can also amplify propagation of financial shocks across national and regional boundaries. A sharp increase in NPLs in one country can easily spill over to neighboring countries through a range of financial and economic channels. Swift NPL

resolution mechanisms are therefore important for domestic and for regional financial stability and economic growth.

The book identifies a wide range of available NPL resolution options. Yet, it also reveals the numerous supply- and demand-side impediments and structural problems that complicate or even preclude the use of some of these options, thus slowing resolution.

Supply-side challenges stem from banks' reluctance to take the losses that NPL resolution entails. This relates to both the "on-balance-sheet resolution of NPLs" and "off-balance sheet" approaches, i.e., NPL sales. Both of these options can often lead to recovery values that are below NPL net book values. In other words, NPL resolution often implies losses on the loan book, hurting bank profitability in the short term and reducing bank capital levels. Such NPL-related losses are exacerbated if the workout capacity within the originating bank is insufficient and if there is a lack of demand for NPLs on the secondary market. Being reluctant or unable to sustain NPL-related losses, banks often prefer to retain NPLs on their books, hoping that the loans will become "performing" again or that the value of the underlying assets recovers. Asian and European case studies reviewed in the book, however, show that these hopes are often unfounded and that "extend-and-pretend" approaches ultimately result in even more severe balance sheet losses for the banks.

Demand-side impediments are often multifaceted. First, banks tend to have more information about the net present value of NPLs than potential investors, creating information asymmetries between potential buyers and sellers. Second, transaction costs for resolving or selling NPLs are often significant, further reducing NPLs' net present value. Such transaction costs relate, for example, to the costs of valuing underlying collateral, the legal costs of recovery, or the notary and other fees associated with NPL sales on the secondary market. Such demand-side impediments tend to drive down the price that potential investors are willing to pay, widening bid-ask spreads, that is, the price NPL investors offer and the price that originating banks are able or willing to accept. Frequently, the bid-ask spread becomes insurmountably wide, curtailing transactions, as seen on many Asian and European secondary NPL markets.

Insufficient quantity and quality of data about NPLs is one factor impeding NPL supply and demand, resulting in NPL market failures. Although banks typically have more and better information about nonperforming exposures than potential investors, their information is often still

insufficient to clearly establish the best possible resolution strategy. Potential investors face even more severe data constraints, creating additional due diligence costs and uncertainty about the net present value of NPLs. This then drives down bidding prices and discourages potential transactions.

Finally, important structural challenges impede NPL resolution in both Asia and Europe. Poor legal frameworks, insufficient judicial capacity, and opaque and lengthy collateral enforcement and insolvency proceedings delay recoveries in asset values and add to recovery costs. They add to banks' costs to resolve NPLs and widen the bid-ask spreads, reducing NPL transactions on the secondary market. Out-of-court procedures can help to overcome some of these structural challenges and to speed up the NPL resolution process, but their effectiveness across countries in Asia and Europe has varied significantly. Some countries also have legal barriers in place, restricting or even prohibiting potential investors from entering and actively participating in secondary NPL markets.

Given these challenges, the book discusses several policy options and measures to enhance and accelerate NPL resolution in Asia and Europe.

The lack of readily available data about NPLs can be addressed in various ways. A comprehensive definition of distressed assets that is comparable across countries helps to create transparency about the magnitude of the problem. Moreover, it helps to enable regional solutions to NPL problems. In Europe, the European Banking Authority published technical standards on NPLs in 2015, going a long way in this direction. In Asia, experience is more heterogeneous. Especially during crises and heightened market uncertainty, asset quality reviews and solvency stress tests can help increase transparency, supporting NPL resolution. NPL disclosure requirements for banks and standardized NPL data templates can reduce information asymmetries and foster secondary market development.

Experience in the Asian and European countries shows that the internal workout of NPLs by the originating bank is usually part of the solution. The efficiency of this "on-balance-sheet" workout depends crucially on regulatory and supervisory rules, guidance, and incentives. Ensuring sufficient provisioning appears particularly important. Sufficient provisioning prevents the supply-side constraint of banks unwilling or unable to take the losses of NPL resolution.

A complementary option to the resolution of NPLs on banks' balance sheets is the development of secondary NPL markets, where the originating

banks can sell nonperforming assets to specialized investors. In most countries in Asia and Europe, various demand, supply, and structural challenges still constrain the secondary NPL market. Authorities in both regions are thus pursuing policy reforms to address NPL market failures and to stimulate supply and demand.

Securitization is one, specific form of secondary NPL market transaction. It usually involves sovereign guarantees for at least some NPL security tranches in order to increase investor confidence and to provide clarity about the recoverable value of the underlying NPLs. To be effective, however, securitization requires a certain market size and level of sophistication. This option may therefore not be viable for smaller European countries and Asian developing economies with less sophisticated financial markets. In addition, government-guaranteed securitization schemes can imply significant contingent risks for public finances.

The book also details the role and experiences with asset management companies (AMCs), often also referred to as "bad banks." Especially during crises, AMCs can effectively support NPL resolution by providing a "bridge to the future." They can prevent NPL fire sales by banks at the trough of the market, reduce financial uncertainty, and stabilize the provision of loans to the economy. In sum, they can offer significant potential benefits for both banks and taxpayers. To realize these benefits, however, AMCs need to be properly designed and managed. Asian and European case studies in the book reveal differences in the design and use of AMCs across the two regions, particularly in the role of government and how to establish them (permanent versus temporary AMCs). While Asia has numerous examples of permanent public AMCs, Europe largely set up temporary AMCs and tried to encourage private sector participation.

A more recent approach to facilitate secondary NPL markets is the establishment of NPL transaction platforms—either nationally or regionally. Such platforms are a low-cost and complementary approach to reduce information asymmetries between originating banks and potential NPL investors, thus supporting NPL market development. Their success appears to depend mainly on market size, framework conditions, and the right incentive structure.

The potential benefits of regional cooperation in Asia and Europe are also discussed in the book. Given that most financial sectors in Asian and European countries are relatively small, regional cooperation can offer

potentially sizable benefits. In Europe, regional financial cooperation works mainly through common rules, the so-called *Acquis Communautaire*, and European institutions such as the European Banking Authority, the European Central Bank, and the European Commission. The European Union (EU) Action Plan for NPLs and its update in December 2020 are good examples of regional cooperation in NPLs.

In Asia, regional financial cooperation gained momentum after the Asian financial crisis, especially in the ASEAN+3 region. The International Public AMC Forum is one example of voluntary private sector-driven cooperation to share knowledge and experience in NPL resolution within member economies, although membership remains limited. Additional regional efforts to promote data and product harmonization, as well as to strengthen financial market infrastructure, could help deepen NPL markets in Asia and in Europe.

The role of the state in NPL resolution, meanwhile, differs markedly across Asia and Europe. State involvement is more limited in Europe (e.g., bail-in requirements, state-aid rules). By contrast, a more flexible approach is taken in Asia, although it is well understood that public involvement should be well targeted and not exacerbate an extend-and-pretend approach to NPLs. It remains to be seen to what extent the COVID-19 pandemic—a crisis in which the financial sector is not the source of the problem but part of the solution—may change these perspectives and approaches.

One of the key findings of the book is that no one-size-fits-all approach is effective in NPL resolution. Context-specific, bespoke combinations of resolution approaches are the best way forward. That said, the NPL resolution experience of the range of Asian and European economies reviewed in this book identifies several important lessons and best practices. Thorough analysis of country-specific situations is needed to identify which of these lessons and best practices can be deployed in a particular context.

COVID-19 and its aftermath will likely result in a substantial increase in NPLs in both Asia and Europe. This may destabilize financial systems, compromise swift post-pandemic economic recovery, and threaten financial stability. Large-scale fiscal stimulus packages have thus far helped prevent corporate defaults amid COVID-19, while regulatory forbearance has relieved pressure on banks in addressing NPLs. However, once temporary relief is lifted, corporate defaults are likely to materialize, and banks could become exposed to rising NPLs. Consequently, countries in both Europe

and Asia should prepare for the likely increase in NPLs by tackling existing weaknesses in their NPL management and resolution frameworks.

Sound macrofinancial positions can help mitigate the stress on banking sectors and credit markets when entering a crisis. Banks should be encouraged to identify distressed assets early on, adopt realistic assumptions in provisioning, and ramp up capacity to offer adequate workout solutions. In addition, remaining obstacles for the further development of secondary NPL markets need to be tackled. In some jurisdictions, this may require major reforms of legal frameworks, which may prove impossible to complete ahead of the likely increase in NPLs. Nevertheless, authorities should continue to pursue and even accelerate such reforms. They should also identify and implement the remaining "quick wins" that can help streamline NPL resolution and develop markets for distressed assets.

#### Overview

This book is divided into four parts. Part 1, Summary of NPL Trends and Lessons from Three Decades of Crisis Resolution in Asia and Europe (Chapters 1–2), investigates the main trends in NPLs in Asia and Europe over the last 30 years and distills the key lessons. Part 2, Empirical Analyses of the Macrofinancial Implications of NPLs in Asia and Europe (Chapters 3–4), examines the main determinants of NPLs and their macrofinancial impact. It also empirically analyzes the effectiveness of resolution approaches. Part 3, Country Case Studies on NPL Resolution in Asia and Europe (Chapters 5–6), looks in more detail at country-specific NPL resolution practices across Asia and Europe to draw insights on effective responses to rising distressed assets. Finally, Chapters 7–8 in Part 4, Policy Strategies for Nonperforming Loan Resolution and Market Development in Asia and Europe, examine the policy implications of NPL resolution strategies in Europe and Asia. They suggest promising ways forward for NPL resolution in Asia, Europe, and beyond.

### Part 1: Summary of Nonperforming Loan Trends and Lessons from Three Decades of Crisis Resolution in Asia and Europe

In **Chapter 1**, *Maciej Grodzicki*, *Reiner Martin*, *Cyn-Young Park*, and *Peter Rosenkranz* summarize NPL trends in Asia and Europe over the last 3 decades. While a certain amount of distressed assets is a normal feature of any banking sector, elevated levels of NPLs can pose major problems

for financial sectors, threatening instability for the economy as a whole. Rapid credit growth and persistently high NPL levels often precipitate financial crises. During and after the Asian financial crisis in the late 1990s, NPL levels rose sharply across several East and Southeast Asian countries. A decade later, the euro area saw a significant elevation in NPLs, prompted by the global financial crisis and later the European sovereign debt crisis. This chapter highlights the main features of NPL developments in the two regions, flagging commonalities and considerable heterogeneity in NPL developments between and within the regions.

In **Chapter 2**, Douglas Arner, Evan Gibson, and Emilios Avgouleas draw lessons from 3 decades of banking crisis resolution. In the aftermath of three major crises, a broad array of approaches were adopted to combat the increase in distressed assets. The responses ranged from outright bailouts of troubled banks to bank closures and liquidation. By analyzing the NPL resolution responses to the three major crises, the chapter provides additional insight into the commonly held belief that bank bailouts constitute an inefficient use of public funds or that they give rise to moral hazard concerns. The analysis suggests that, when properly set up, AMCs can facilitate banking sector recapitalization. The conditions of the bailout, mode of bank restructuring, conditions accompanying fiscal subsidies, and the proper setup of AMCs are important in enhancing the effectiveness of bailouts. The chapter argues that during systemic financial crises or crises caused by exogenous factors where moral hazard concerns are minimized, a combination of balance sheet restructuring and set up of AMCs comprises an optimal response. This is particularly relevant for the present pandemic.

# Part 2: Empirical Analyses of the Macrofinancial Implications of Nonperforming Loans in Asia and Europe

In **Chapter 3**, *Daekeun Park*, *Junkyu Lee*, and *Peter Rosenkranz* review the macrofinancial linkages of NPLs and investigate the effectiveness of resolution policies. Utilizing a novel NPL dataset constructed from banklevel S&P Global data, the authors examine episodes of sharp reductions in NPL ratios and find that these can be accounted for by faster growth and less volatility in financial markets. Additionally, a probit framework reveals that the establishment of public AMCs can sharply reduce NPL ratios and is consequently a key element in NPL resolution. Estimated average treatment effects, moreover, show that episodes of sharp reductions in NPL ratios are associated with favorable macroeconomic conditions, highlighting the macrofinancial implications and feedback effects of NPLs.

In **Chapter 4**, *Ivan Huljak*, *Reiner Martin*, *Diego Moccero*, and *Cosimo Pancaro* utilize a panel Bayesian vector autoregression (VAR) model to examine the impact of NPLs on bank lending and macroeconomic conditions in the euro area. The paper has three main findings. First, an exogenous increase in the change in NPL ratios in the euro area tends to depress bank lending volumes, widen bank lending spreads, and prompt a fall in real gross domestic product (GDP) growth and residential real estate prices. A corollary to this is that an exogenous change in real GDP growth constrains bank lending and real estate prices, widens lending spreads, and leads to an increase in NPL ratios. Second, shocks to the change in NPL ratios explain a relatively large share of the variance of the variables in the VAR, particularly for euro area countries that experienced a large increase in NPL ratios during the recent crises. Finally, a reduction in banks' NPL ratios can improve macroeconomic and financial conditions. Research underpins the relevance of effective policy measures to hasten NPL resolution.

## Part 3: Country Case Studies on Nonperforming Loan Resolution in Asia and Europe

In **Chapter 5**, *Junkyu Lee*, *Peter Rosenkranz*, and *Edimon Ginting* review case studies of NPL reduction policies implemented by selected ASEAN+3 economies, focusing on the (i) operation of AMCs; (ii) financial sector restructuring and bailouts; (iii) insolvency reforms and resolution frameworks; and (iv) prudential tightening, including loan classification and provisioning stringency during and after the Asian financial crisis. The case studies provide the basis for constructing a novel dataset of NPL reduction variables for the empirical part of this chapter. The empirical analysis of the effectiveness of reduction policies using a dynamic panel dataset of 78 banks from 6 Asian countries during 2002–2017 suggests that among the range of possible NPL resolution policies, the establishment of public AMCs has proved most effective.

In **Chapter 6**, Alexander Lehmann presents European country case studies on NPL resolution and NPL market development. Immediately after the European sovereign debt crisis, NPL resolution was hampered by slow economic recovery and prolonged recessions in several economies in the euro area periphery. Slow and belated national reforms further delayed recovery. Between 2014 and 2019, more assertive euro area bank supervision and EU-wide bank regulation helped set the stage for a regional framework that became more conducive to NPL resolution. When combined with national reforms, this strengthened EU framework helped significantly

reduce NPL ratios in euro area countries. The case studies highlight lessons, including the importance of comprehensive definition of distressed assets, provisioning guidelines, and supervisory guidance to banks on NPL management as preconditions for effective resolution.

### Part 4: Policy Strategies for Nonperforming Loan Resolution and Market Development in Asia and Europe

In **Chapter 7**, John Fell, Maciej Grodzicki, Reiner Martin, and Edward O'Brien examine why NPL resolution in Europe after the European sovereign debt crisis was initially very slow. They take stock of the key elements of a comprehensive NPL resolution approach and elaborate on the benefits of European regional cooperation. The authors highlight the regional dimension of NPLs in Europe even if not all countries are affected to the same extent and stress the need for a comprehensive approach to ensure a speedy resolution of distressed assets. This encompasses supervisory, macroprudential, and structural measures and coordination across European countries. They also make the case that system-wide national AMCs can help to meaningfully reduce large, systemic NPL stocks in the region. Resolution strategies require well-developed legal and administrative frameworks, sound lending standards, and strong macrofinancial policies to promote post-crisis recovery. The importance of these frameworks and interventions is expected to mount as the present pandemic persists.

In **Chapter 8**, Junkyu Lee, Cyn-Young Park, Daekeun Park, and Peter Rosenkranz propose frameworks and strategies for developing NPL markets nationally and regionally in Asia and the Pacific to strengthen financial resilience and promote financial development. The chapter discusses the demand-side, supply-side, and structural impediments to NPL market development and draws on lessons from country case studies on developing NPL markets in Asia. This policy chapter presents elements of a forward-looking strategy to develop NPL markets and NPL resolution frameworks in Asia and the Pacific, including the need for an enabling legal and judicial environment, strengthened supervision, and the role of out-of-court corporate workouts. It also discusses options for establishing public AMCs and/or NPL trading platforms, utilizing securitization schemes, while also highlighting the role of regional cooperation as part of a holistic strategy for the development of distressed asset markets in Asia.