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Non-performing Loans: Challenges and Options for Banks and Corporations

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1 Introduction

In the course of a global crisis, companies default on their loans from domestic banks as well as from foreign creditors, rendering a large segment of the corporate sector insolvent.[1] Progress towards a common international understanding of liabilities has been developed under the European Union Directives 2014/59/EU and 806/2014 that introduced specific provisions on recovery and resolution plans (so-called living wills) and bail-in. This regulation has been necessary to establish a hierarchy of debt instruments.[2]

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P. Monokroussos, C. Gortsos (eds.), *Non-Performing Loans and Resolving Private Sector Insolvency*, Palgrave Macmillan Studies in Banking and Financial Institutions,
DOI 10.1007/978-3-319-50313-4_2

According to Goode, a loan of money 'is a payment of money to the debtor, or to a third party at the debtor's request, by way of financial accommodation upon terms that the sum advanced, with any stipulated interest to be repaid by the debtor in due course'.[3] The crucial elements of the definition are (1) the monetary character of the financial accommodation—that is, the loan must be a loan of money—and (2) the obligation of the debtor to repay the sum advanced in due course, with or without interest.

Bank loans are contracts between creditors and debtors, that is, between banks who lend money and other legal persons who borrow it, usually with the promise of repayment of the principal plus interest in the future. As in contracts, general contract law governs loans. In English law, a contract is performed if the legal parties complete all obligations stipulated in the agreement. In the case of bank loan, for example, this might mean that the debtor has repaid the principal and interest in the loan on time and in full. By contrast, a loan, understood as a contract, is not legally performed when one or more of the obligations specified in the contract go unfulfilled.

The masses of non-performing loans (NPLs) have a serious effect on both parties at the end of the deal, that is, lenders (banks) and borrowers (domestic corporations).[4] According to the Basel Committee on Banking Supervision, NPL is defined as a loan that is more than 90 days past due, thus making eligible for termination.[5] Within the NPL category are comprised: (1) bad loans, (2) default loans, and (3) distressed debt. The classification depends on several factors and varies across countries. In some countries, non-performing means that the loan is impaired while in others can mean that payments are past due.[6] This is aggravated by the fact that there are significant differences among countries as to how many days a payment should be in arrears before past due status is triggered.[7] Nevertheless, a rather common feature of non-performing loans appears to be that a payment is 'more than 90 days' past due, especially for retail loans.

It should be noted that the criteria for designating a loan as 'non-performing' are largely discretionary for banks (for instance, individual banks may even change the definition of the term overtime). The early identification of which loans have become NPLs is an important issue for

central banks and regulators and bank equity investors. The time is ripe to develop a common financial language with regard to the way loans are classified according to their credit risk (good, substandard, doubtful, and loss) and, in particular, the definition of NPLs.

Another important element closely related to NPLs is 'forbearance'. Forbearance is defined as 'a concession granted by a bank to a counterparty for reasons of financial difficulties that would not be otherwise considered by the lender'.[8] Specifically, forbearance comprises concessions extended to any exposures in the form of a loan, a debt security or an off-balance-sheet item due to the position of the counterparty. This definition covers exposures of performing and non-performing status before the granting of forbearance measures; the main purpose is to ensure a harmonised approach for the modification or refinancing of loans and debt securities in the case of borrower's financial difficulties.[9]

The quality of the asset portfolio is the key to sound banking. Over the last decades, a common financial language has been developed when it comes to the liability side of banks and other credit institutions. Notwithstanding the limitations of the Basel rules and the adequacy of capital, the definition of capital has been subject to a substantial degree of harmonisation, which permits international comparisons.[10] As well, in the context of recovery and resolution plans and resolvability assessments, a common understanding of the hierarchy of debt instruments, in particular with regard to the concept of 'bail-in', is increasingly being accepted.[11] In contrast, we are still at a very embryonic stage when it comes to the comparability of the asset side, and both loan classification in general and the definition of NPLs in particular vary widely across institutions. The question at stake is the lack of consensus on the meaning of NPLs across countries, firms or even within firms, for example, different data definitions depending on subsidiary and business line. As Tweedie warned, 'global financial stability is at risk because there is no consistency across banks in how they value their assets'.[12]

The lack of commonly agreed standards or norms is hindered by (1) different prudential and accounting agendas, concerns, and terminologies (e.g. delinquent loans, impairments, provisioning, etc.); (2) the associated problems of 'regulatory forbearance' and lack of transparency; and (3) the consideration that risk-taking for private profit-maximising institutions

should be the domain of bank management, not curtailed by regulatory intervention. This international divergence across time, accounting, and regulatory standards complicates meaningful cross-border comparisons when it comes to resolution, stress tests, or consolidated supervision. A high ratio of NPLs to total loans has implications for the stability of the firm and the financial system.[13] Rules on NPLs need to be standardised and properly defined since in extreme circumstances can make the bank insolvent (i.e. when liabilities exceed the value of assets), with potential spill over to other firms, that can trigger systemic instability.

Therefore, this chapter addresses the challenge that NPLs pose to banks as lenders and domestic corporations as debtors. Firstly, the chapter looks into how NPLs can deteriorate a bank's portfolio affecting its financial position and forcing its restructuring. Secondly, the chapter considers the restructuring options for both banks and corporations drawing similarities and highlighting differences. Thirdly, the chapter discusses the main aspects of out-of-court private expedited workouts and formal court-supervised procedures.

2 The Regulatory Landscape of NPLs

The national regulatory framework may affect the timely enforcement of the terms of loan contracts. At what point the loan is classified as non-performing by the bank, and when does it become 'bad debt', depends on domestic accounting regulations. Also, there are significant divergences regarding the reported level of NPLs, which may not reflect the full extent of the problem (as some banks restructure or extend distressed loans to conceal problems). Countries or individual banks can overstate or understate the reported level of NPLs: this practice may affect banks' ability to lend and increase funding costs.[14]

The following elements determine different interpretations of NPLs: (1) whether restructured loans must be classified as NPLs or not, (2) whether collateral or guarantees are taken into account,[15] (3) whether NPLs are reported in full outstanding value or for the part overdue only,[16] and (4) whether banks are required to downgrade all loans to a given debtor if any of their loans is impaired.[17] One of the most important legal

issues related to NPLs is foreclosure.[18] Foreclosure processes vary from country to country; hence, criteria divergences across jurisdictions may reduce the ability to remove NPLs from banks' books and reduce the flow of credit to the economy (loans in Saudi Arabia will be considered NPLs less than 90 days, 90–100 days, 180–360 days, and over 360 days while in Canada after 90–180 days and in Europe after 90 days).

It is important from a regulatory point of view to analyse the relationship between loan loss provisioning and NPLs. In fact, the spectrum between loan loss provisions,[19] NPLs, and charge offs[20] is important to assess capital adequacy. At an international level, the Bank for International Settlements (BIS), the Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS) and the International Monetary Fund (IMF) have expressed concerns about the lack of international comparability when it comes to assessing the NPLs held by banks and how they affect their balance sheet. However, an international norm or a standard governing body for NPLs is missing. This is due to: (1) the different prudential and accounting agendas; (2) policy agenda and its priorities; (3) technical terminology; (4) the associated problems of 'regulatory forbearance'; and (5) implications for economic growth. A 'lone star' in this process comes in the form of the 2014 'EBA implementing technical standards on NPLs', which have also been used in the recent stress tests conducted by the European Central Bank (ECB) and European Banking Authority (EBA).[21] The objectives of these standards are to (1) harmonise definitions of NPLs[22] and forbearance and (2) complete the supervisory reporting framework by adding new definitions and a template on asset quality issues.

As noted, a common definition of NPLs is absent in the banking and financial sector.[23] Although the regulatory standards consider NPLs as loans which are either 90-plus days past due or non-accrual and held in domestic offices of the institution, divergences in terms of the classification system, scope, and contents exist across countries.[24] Laurin and Majnoni observed that 'where the criteria for designating a loan as non-performing are largely discretionary for banks, the comparability of NPL over time may be affected by changes that individual banks make to their definition of the term'.[25]

In this context, the determinants of NPL are institutional, structural, and macroeconomic. Nkusu argued that 'disparities in financial

regulation and supervision affect banks' behaviour and risk management practices and are important in explaining cross-country differences in NPL'.[26] However, loan loss provisioning is the vehicle for adjusting the value of loans, so as to reflect loan review and classification.[27] Besides certain discrepancies, it can be said that generally, an NPL is defined as a sum of borrowed money upon which the debtor has not made his or her scheduled payments for at least 90 days (an NPL is either in default or close to being in default). Once a loan is non-performing, the odds that it will be repaid in full are considered to be substantially lower. If the debtor starts making payments again on an NPL, it becomes a re-performing loan, even if the debtor has not caught up on all the missed payments.[28]

Krueger suggested that 'impairment and nonperforming status should be determined through a comprehensive examination of the instrument and the debtor's condition, resulting in an informed judgment about the extent of possible impairment, and thus impairment could be recognized more rapidly than 90 days (including instantaneously in the case of fair value instruments), or under exceptional circumstances a period over 90 days could be appropriate'.[29]

In 1999, the BCBS provided the following standard loan classification[30]: (1) 'passed', loans paid back; (2) 'special mention', loans to corporations, which may get some trouble in the repayment due to business cycle losses; (3) 'substandard', loans whose interest or principal payments are longer than three months in arrears of lending conditions are eased; (4) 'doubtful', full liquidation of outstanding debts appears doubtful and the accounts suggest that there will be a loss—the exact amount of which cannot be determined as yet; and (5) 'virtual loss and loss', outstanding debts are regarded as not collectable, usually loans to firms which applied for legal resolution and protection under bankruptcy laws. NPLs comprise the loans in the latter three categories (i.e. substandard, doubtful, and virtual loss and loss) and are further differentiated according to the degree of collection difficulties. However, in 2006 the BCBS revised the classification of loans as follows[31]: (1) 'passed', solvent loans; (2) 'special mention', loans to enterprises which may pose some collection difficulties, for instance, because of continuing business losses; (3) 'substandard', loans whose interest or principal payments are longer than three months in arrears of lending and conditions are eased; (4) 'doubtful',

full liquidation of outstanding debts appears doubtful and the accounts suggest that there will be a loss, the exact amount of which cannot be determined as yet; and (5) 'virtual loss' and loss, outstanding debts are regarded as not collectable, usually loans to firms, which applied for legal resolution and protection under bankruptcy laws.

Recently, the BCBS has been looking into the question of asset quality in banks, including the treatment of non-performing loans.[32] To identify non-performing exposures, the BCBS adopts 'a uniform 90 days past due criterion applied to all types of exposures within the scope, including those secured by real estate and public sector exposures'. This definition applies to all credit exposures from on-balance sheet loans, including debt securities, and off-balance sheet items such as loan commitments and financial guarantees. The BCBS clarifies that collateralisation does not influence the past due status and should not be considered in the categorisation of non-performing exposures.[33]

In the south of the European Continent, the European Bank Coordination 'Vienna Initiative'—a private-public sector platform which brings together key international financial institutions, international organisations, public authorities, and private banks—has called for an action plan to address NPLs in Central, Eastern, and Southeastern Europe (CESEE) countries.[34] The aim is to establish a central forum for dialogue to create the right conditions for Western banks to remain engaged in emerging Europe. This means enhancing enforcement measures, improving consistency in the definition of NPLs, and removing legal obstacles and execution issues in distressed transactions. In particular, the 'Vienna Initiative' is trying to establish an effective coordination mechanism for dealing with distressed assets.[35] Clearly, the 'Vienna Initiative' intends to develop an international legal toolkit for NPLs that comprises bank principles on restructuring, preventive pre-insolvency proceeding, and compulsory settlement (e.g. special rules for systemically important companies). In September 2014, the 'Vienna Initiative' assessed a range of strategies to foster a legal framework for the restructuring and resolution of NPLs. These strategies include (1) better coordination of out-of-court restructuring of viable enterprises; (2) establishing asset management companies and in particular where comprehensive banking sector restructuring is required; (3) setting up other workout vehicles jointly owned

and funded by multiple parent banks, thereby overcoming coordination problems; (4) fostering the sale of distressed assets; (5) pooling of cross-border assets to achieve critical size; and (6) addressing legal, regulatory, and tax treatment impediments to NPL removal.

The Eurozone crisis has highlighted the risk of disorderly deleveraging of Western parent banks vis-à-vis their affiliates in CESEE and difficulties in cooperation between home and host country authorities. Against this risk, the 'Vienna Initiative' issued a comprehensive list of recommendations aiming to ensure a well-functioning distressed assets market, avoid potential cross-border financial stability issues, and achieve proactive policy actions in the supervisory area.[36] In this context, harmonised guidelines based on the 'INSOL principles'[37] can help devise country-specific restructuring guidelines in CESEE and facilitate early resolutions of NPLs. Further, the systemic importance of subsidiaries of Eurozone-based banks in the region should be an incentive to intensify the dialogue between banks and investors.

Empirical analysis of the cross-countries determinants of NPLs, the potential impact of supervisory devices, and institutional environment on credit risk exposure showed that higher capital adequacy ratio (CAR) and prudent provisioning policy seems to reduce the level of problematic loans.[38] Assessment and valuation of loan impairment should not be based solely on prescriptive rules but should be enhanced with judgement by the appropriate levels of management.[39] Bushman and Williams explored consequences of discretionary loan loss provisioning for the role of accounting information in supporting discipline of bank risk-taking.[40] They investigate the specific decision context involving the accounting information's role in enhancing outside investors' and regulators' ability to monitor and discipline bank risk-taking. On this view, discretion over bank loan loss provisioning can have beneficial or negative real consequences for the discipline of bank risk-taking, depending specifically on how managers exploit available discretion to shape loan loss provisions. While discretionary smoothing via loan loss provisions (implicit forward-lookingness) dampens discipline over bank risk-taking, explicit forward-lookingness that captures the extent to which current provisions anticipate future deteriorations in the loan portfolio enhances discipline.

3 The Role of EBA

In 2014 the EBA published technical standards for the reporting of non-performing loans and forbearance.[41] The EBA document provides the definition of 'exposure', 'non-performing exposures', and 'forborne exposures'.[42] This is the first time that a hard-law instrument harmonises the definition of NPLs. However, while the EBA document has developed a harmonised definition for NPE for supervisory reporting, it does require further work.[43] These definitions are largely discretionary for domestic laws. In particular, the substantial differences across countries attain the period when unpaid loans become past due, intending to put loans on lenders' timetable sooner and require them to address these loans before losses start to escalate.[44]

The EBA standard centres the definition of non-performing on the notion of either 90 days past due or where the debtor is assessed as unlikely to pay its credit obligations in full without realisation of collateral. Further disaggregated reporting is required for forborne assets and those defined as performing but nonetheless past due by 30 or 60 days. EBA has established a definition of non-performing exposures in order to increase comparability between non-performing exposures in different banks. In particular, a loan is classified as a non-performing exposure where the loan is 90 days past due or if there is a risk of defaulted payments. A loan that has been classified as impaired in the financial statements or that has been classified as defaulted in capital adequacy shall always be classified as a non-performing exposure. While many scholars and policymakers in recent years have focused in creating a standard classification of sources of banks' funding (equity and debt), less thought has been given to creating a common classification for items on the other side of the balance sheet.[45]

The EBA document leaves aside accounting issues and definitions of collateral and has no impact on the legal solvency regime. In addition, the EBA document does not change existing loan classification and does not require full transparency. The focus of the EBA document is on exposures (NPEs), which is broader than NPLs. NPEs according to the EBA document also encompass off-balance sheet items and debt securities.[46] The work that the Basel Committee is currently undertaking on

the prudential treatment of assets focuses on loans and loan classification generally. After all, loans are typically the largest asset class on bank's balance sheets and NPLs constitute one of the most important factors causing reluctance for the banks to provide credit. What is still missing is international comparability on credit classification schemes and NPLs, as well as increased transparency.

4 Assessing the Loan Classification: The CAMELs System

CAMELs is an acronym of the following indicators: (1) capital adequacy, (2) asset quality, (3) management and administration, (4) earnings, (5) liquidity, and (6) sensitivity to market risk. The CAMELs system focuses on the assessment of the banking system by examining its balance sheet, as well as profit and loss statement, thus observing the institution's dynamic aspect. CAMELs ratings mainly indicate the adequacy of the risk-based capital, non-performing loan position, liquidity gap analysis, liquidity ratio, inter-bank dependency, return on assets (ROA), return on equity (ROE), net interest margin (NIM), credit growth, credit concentration, single borrower exposure, foreign exchange exposure, market risk, and management questionnaire.

CAMELs ratings are used to determine decisions such as how high to set insurance premiums on deposit insurance by the Federal Deposit Insurance Corporation (FDIC); whether or not to provide Fed lending to institutions; whether or not to grant licensing, branching, and merger approvals; and whether or not to allow banks to participate in government programmes (such as the Troubled Asset Relief Program).[47] CAMELs indicators are useful in assessing the financial vulnerability of banks. However, there is no clear agreement in the literature on how exactly to combine the various indicators. As noted by Klomp and de Haan, one issue is that some indicators of banking risk are of an *ex ante* nature (loan ratios) while others are *ex post* variables (capital and equity ratios).[48] Whereas *ex ante* variables indicate a possible future risk, *ex post* variables indicate the presence of a risk.

The definition of NPLs around 'past due more than 90 days' may lend itself to regulatory forbearance if the authorities allow new lending for the purposes of paying the interest on the existing loans to delay the resolution of the problems. The European Securities and Markets Authority (ESMA) noted that disclosures about forbearance practices in the financial statements diverged significantly and were often limited in the amount of information provided and vague as to content.[49]

A generally accepted system of loan classification would do for loans what the ratings given by credit rating agencies according to their credit risk analysis do for debt instruments (while the former need not be publicly available, the latter by definition are). It is considered that the effects of ratings on the instruments being rated have a direct impact on prices because these assessment changes can affect the pool of investors.[50] In this context, the use of a 'rating trigger'—as a particular contractual clause included in private bond indentures that ensures a required credit rating threshold of the borrower's liquidity risk[51]—may determine the borrower's ability to repay the debt on time and full.

Empirical studies evidence that firms that are downgraded from investment grade to speculative grade move from having only senior unsecured debt and equity in their capital structure before the downgrade to an increasing dependence on both secured bank debt and subordinated and convertible bonds after the downgrade.[52] The consequence is that firms lose access to arm's-length short-term sources of liquidity after the downgrade.

The CAMELs rating system used by US financial supervisory authorities provides an interesting example of how to use loan classification in general and, NPLs in particular, as indicators of bank soundness. As argued by DeYoung et al., 'the CAMELs focuses on the evaluation of performance of the financial institutions by examining its balance sheet, as well as, profit and loss statement on the basis of each component, thus observing the institution's dynamic aspect'.[53]

The CAMELs rating system not only helps assess the safety and soundness of banks but also mitigates the potential risks which may lead to bank failures. Empirical studies have verified that using CAMELs as the measure of the 'true' riskiness of the organisation can demonstrate that

'debt spreads did as well or better at predicting the riskiness of the banking organization than did capital ratios'.[54] CAMELs ratings review different aspects of a bank balance sheet based on a variety of information sources such as financial statements, funding sources, macroeconomic data, budget, and cash flow, which can provide a more holistic approach.

The bank's CAMEL rating is highly confidential and only shared with the bank's senior management for the purpose of projecting business strategies. It is also shared with appropriate supervisory staff. Its rating is never made publicly available, even on a lagged basis.[55]

The Capital Adequacy Ratio is considered the ultimate indicator of the resilience of a financial institution to shocks to its balance sheet, while the ratio of NPLs signals the quality of the financial institutions' portfolio and their solvency.[56] In this regard, an aggregated CAMEL index, as a soundness indicator, can combine quantitative and qualitative elements: NPLs and the provisions for loan losses are important asset quality indicators.

5 Insolvency Issues and Bail-in Tool

The broad divergence in the meaning of NPLs across countries and regulatory and private sector agencies creates difficulties to quantify the extent of forbearance and thus to understand the link between NPLs, economic growth, and financial stability but, more importantly, its impact on the balance sheet and its solvency implications.

Any banking crisis has at its root bad lending and investment decisions. As discussed the most important part of a bank's balance sheet is the quality of the asset portfolio. However, such quality remains difficult to assess at any given time. This complicates meaningful cross-border comparisons when it comes to restructuring options, stress tests, or consolidated supervision, which precisely aim at avoiding a banking crisis in the first place.

In the USA, NPLs were originally treated to help eliminate losses from the lenders' balance sheets. The US banking system had significant crises relating to NPLs, a clear example is the collapse of Continental Illinois in 1984.[57] In 2001–2002, the US banking industry suffered a consistent

recession that weakened bank balance sheets and led to an increase in the ratio of non-performing loans to total loans, this is known as the NPL ratio.[58] During the 2007–2009 financial crisis, US banks experienced a rapid rise in loan delinquencies and defaults driven by rising unemployment and falling real estate prices, among other factors.[59] It has been noted that 'in 2009 NPLs increased sharply and credit stagnated, raising worries that the recovery could be slowed down by credit constraints'.[60] The increase in loan defaults in the banking mortgage sector in the USA underlined the links between macroeconomic and financial shocks and the relationship between the friction in the credit market and the risk of financial instability.[61]

In most credit classification systems, sitting between the bright lines of normally performing credit exposures and those that are delinquent are shades of non-performance. Indeed, in some credit classification schemes, such loans like substandard and doubtful are construed alongside loan losses as non-performing.

Debtors who default often lose collateral and blemish their credit rating for years to come. Credit institutions are also impacted. As NPLs rise, so does the cost of borrowing for banks with bad loans on their books. These costs then may be passed on to other obligors directly in terms of higher borrowing costs, with second round effects on economic growth as credit contracts. Creditor-investors also can be impacted, as asset prices decline on the back of the sale of collateral repossessed from defaulted obligors.[62]

Considering the negative consequences flowing from non-performing loans, there is an argument that loan forbearance could be used at a firm or system-wide level during financial crises as a means to stave off their worst depths. On the one hand, forbearance may be inappropriate if the obligor has no real chance of recovery, as this can hamper the reallocation of resources to other sectors of the economy and weigh down long-term productivity.[63] On the other hand, forbearance may be appropriate if an obligor is suffering from just a temporary problem, and restructuring or strategically reclassifying gives them time to recover. Unhelpfully, perhaps, the best conclusion that can be drawn is it all depends on specific circumstances.

If there is a place for forbearance, possibly even as a macro-prudential tool in certain circumstances to prevent the worst of economic

catastrophes, then this suggests that the search for a single, deterministic definition of non-performing loans is misconstrued. There are also other reasons to believe this is so. In most credit classification systems, sitting between the bright lines of normally performing credit exposures and those that are delinquent are several 'shades' of non-performance. Indeed, in some credit classification schemes, such loans like substandard and doubtful are construed alongside loan losses as non-performing.

The issue then may not be about getting a standard definition of NPLs right. Instead it may be about getting the right data to monitor the real-time risks for creditors. *Ex ante*, at origination, lenders collect lots of information about obligors. *Ex post*, in liquidation procedures, courts collect lots of information about defaulted obligors. But in the interval in between, in the absence of market prices for non-traded loans, there is a need for continual monitoring of obligors, the progress of projects the loans are financing, and any other key risks that are evolving that are obligor-specific or macroeconomic.[64] In other words, different firms and regulators have different data and different interpretations of data they use to estimate obligors' ability to repay and whether it has deteriorated.

Bail-in has contributed to provide a common financial language to the understanding of the different types of debt that are held by banks (the liability side of the balance sheet). As pointed out by Huertas resolvability hinges on the structure of liabilities.[65] The bail-in (or 'debt write down') is a tool by which resolution authorities are given powers, exercisable when an institution meets the trigger conditions for entry into resolution, to write off all equity, and either write off subordinated liabilities or convert it into an equity claim. Sufficient instruments (the issue of the sufficiency of bail-inable debt)[66] should be written down or converted to equity to ensure an orderly resolution of the failing institution in all cases.

The purpose of the bail-in regime is to provide a mechanism to return an insufficiently solvent bank to 'balance sheet stability' at the expense of some of its creditors without the necessity for external capital injection and at the same time put an end to taxpayer-funded bank bailouts. Bail-in powers are either contractual or statutory. The legal basis on which the holder of a bail-in power is entitled to exercise it has a bearing on a number of factors. These include (1) the existence of the power, as part of a valid contract or a correctly enacted statute; (2) the

extent of a creditor's right to apply setoff, netting, or counterclaim to reduce the amount of a debt write-down; (3) the remedies available for a contractual or statutory bail-in power's unlawful exercise (contractual remedies may be more extensive than statutory remedies); (4) a creditor's entitlement to statutory compensation (contractual bail-in gives no such right); and (5) the recognition and enforcement of the bail-in power by foreign courts (contractual bail-in powers will be more readily recognised and enforced). The contractual approach relies upon prior issuance of debt instruments that contain contractual terms explicitly recognising that the instruments will be converted into equity, or written down, upon occurrence of a pre-specified point of non-viability trigger event. The statutory approach envisages that once a firm has reached the point of non-viability, the relevant resolution authority will select from the range of debt instruments issued by the firm, such as subordinated debt and senior unsecured debt.

The statutory bail-in power is intended to achieve a prompt recapitalisation and restructuring of the distressed institution. The bail-in capital could be seen as a form of insurance (provided by creditors) against bank insolvency and, hence, bank runs, especially runs on repos and other short-term funding.

In other words, bail-in ensures that the failed bank can continue to operate and provide essential services to its customers, by restoring the bank to viability through recapitalising it. This limits disruption to the bank's customers and maintains public confidence in the banking system. In a liquidation scenario, bail-in would be used to wind down the entity. A bail-in is simply a mechanism for allocating an existing loss. It will only be possible to use it to allocate such losses to the banks creditors if the bank's creditors are sufficiently robust to absorb that loss. If the use of a bail-in power is perceived by the market as a sign of the concerned institution's insolvency, it could trigger a run by short-term creditors and aggravate the institution's liquidity problem.[67] Bail-in also aims to avoid the need for formal insolvency proceedings by restructuring the bank's balance sheet and ensuring the continued survival of the institution without immediate dismemberment. The sufficiency of bail-inable debt (in the light of the liability structure of many banks) remains a contentious subject.[68]

Under EU law, bail-in is a key resolution tool in the Bank Recovery and Resolution Directive (BRRD)[69] and in the Single Resolution Mechanism (SRM) Regulation.[70] In terms of international soft law, a number of documents published by the FSB have given greater clarity to the understanding of the bail-in tool, in particular, the 'Key Attributes of Effective Resolution Regimes for Financial Institutions' recommends greater specificity with regard to the creditors' claims which should be exempted from write-downs.[71]

In summary, when dealing with NPLs, there are ad hoc tools like soft-law principles to deal with debt in distress facilitating a restructuring (e.g. Central Bank principles, INSOL International principles, etc.) which are mainly of a pre-emptive nature and hard-law solutions like bail-ins which can be preventive or resolutory but their main characteristic element is that they are of a statutory nature. However, banks would usually delay facing the problem due to reputational effects which in most occasions has exacerbated the problem.

6 Concluding Remarks

The consequences of NPLs are harmful all around for debtors, creditors, and the wider economy. A 'holistic approach' to balance sheet regulation is needed, one that considers the two sides of the balance sheet in developing common standards that make comparisons across jurisdictions and firms meaningful. The lack of a common financial language when it comes to the classification of bank assets contrasts with the efforts undertaken by policymakers, regulators, and scholars with regard to the sources of bank funding. The most important part of a bank's balance sheet is the quality of the asset portfolio. However, such quality remains difficult to assess at any given time.

As noted, existing empirical literature on NPLs is insensitive to several potentially important explanatory variables. Firstly, the legal definition and treatment of NPLs within a given jurisdiction may change over time. There may also be material differences between the legal definition and treatment of NPLs for prudential regulatory and accounting purposes. Secondly, there may exist important differences in the legal definition

and treatment of NPLs across jurisdictions. Thirdly, the intensity of prudential supervision in relation to NPLs can also change over time and vary across jurisdictions.

Intuitively, undetected changes or differences in these 'legal' variables over time and across jurisdictions could significantly distort the assessment of NPLs. For example, observed changes in the percentage of NPLs may be wholly or partially attributable to changes in the legal definition of a non-performing exposure, the deemed amount for reporting purposes, or the circumstances in which an exposure will be deemed no longer non-performing. Similarly, observed differences in NPLs across jurisdictions may be attributable to differences in the legal definition or treatment of NPLs and the intensity of prudential supervision. In this perspective, the objective of standardising a definition of NPLs and bemoaning its absence misses the mark. Judgement does and arguably should always play a role in deciding whether or not a loan is non-performing, both for creditors and regulators.

Therefore, when trying to apply a remedy to cure the problem (i.e. a restructuring tool to avoid reaching a point of no return), it proves quite difficult because it is not clear whether there is a problem in the first place and when it is evident, usually it is too late.

Notes

1. Lex Rieffel, *Restructuring Sovereign Debt: The Case for* Ad-Hoc *Machinery* (Washington: Brookings Institution Press, 2003) 43–44.
2. According to the 'IAS 39—Financial Instruments: Recognition and Measurement' (replaced by 'IFRS 9 Financial Instruments' effective after January 2018), a financial asset is impaired and impairment losses are incurred if and only if there is objective evidence of impairment as a result of one or more events (i.e. loss events) that occurred after the initial recognition of the assets, and that loss event (or events) has an impact on the future cash flows of the financial asset that can be reliably estimated. This approach to provisioning—known as 'incurred loss'-based approach—waits for certain events to happen such as default, delinquency in interest or principal payments,

significant financial difficulty of the borrower, and so on, before losses can be recognised. Provision for losses can only be made after the loss event has been identified, or loss has been incurred, and not in a proactive manner *ex ante* before the event, based on 'expected losses'. However, the 'incurred loss' model came under severe criticism after the 2007–2009 financial crisis for delaying loss recognition.

3. Ewan McKendrick, *Goode on Commercial Law* (4th edn., Penguin Book 2010) 621.
4. Shekhar Aiyar et al., 'A Strategy for Resolving Europe's Problem Loans', International Monetary Fund, Staff Discussion Note SDN/15/19, September 2015, 5.
5. Basel Committee on Banking Supervision, 'Sound Practices for Loan Accounting and Disclosure', Basel Committee on Banking Supervision Paper, July 1999, 35, para 91.
6. Alain Laurin and Giovanni Majnoni, 'Bank Loan Classification and Provisioning Practices in Selected Developed and Emerging Countries', World Bank Working Paper No 01, March 2003, 10.
7. Ibid.
8. Basel Committee on Banking Supervision, 'Guidelines for Prudential treatment of problem assets—definitions of non-performing exposures and forbearance', Consultative Document, 14 April 2016, available at: http://www.bis.org/bcbs/publ/d367.htm, 7.
9. The Basel Committee on Banking Supervision recommends banks not to use forbearance practices to avoid classifying loans as non-performing.
10. The definition of capital and its sufficiency were first harmonised via the so-called Basel I Accord of 1988 (a soft-law instrument: the report by the Basel Committee on 'International Convergence of Capital Measurement and Capital Standards').
11. Progress towards a common international understanding of liabilities has been developed under the European Union Directives 2014/59/EU and 806/2014 that introduced specific provisions on recovery and resolution plans (so-called 'living wills') and bail-in. This regulation has been necessary to establish a hierarchy of debt instruments.

12. David Tweedie, Speech delivered at the International Valuation Standards Council, 4 December 2014.
13. European Central Bank, 'Financial Stability Review', November 2013, 9. It is observed that 'NPLs and the associated provisioning have grown to such an extent that they have been the major contributor to the low return on assets of euro area significant banking groups since 2009'.
14. For example, Russia's NPL definition differs with the international practices as it accounts only for due instalments and interest rather than the total amount of the troubled loan. See Roland Beck, Petr Jakubik, and Anamaria Piloiu, 'Non-performing loans. What matters in addition to the economic cycle?', in European Central Bank Working Paper Series No 1515, February 2013, 11, fn 7.
15. Not all regulatory frameworks recognise the same forms of collateral, and there is no consensus on the evaluation criteria of pledged assets (e.g. according to their marketability).
16. The interpretation of loan quality (in particular, qualitative and quantitative factors related to each loan) differs across countries.
17. European Commission, 'European Financial Stability and Integration Report 2013', Commission Staff Working Document SWD (2014) 170, April 2014, 38.
18. Foreclosure involves the credit risk, the risk that a loan will not be repaid as agreed.
19. The term 'loan loss provision' identifies the amount of money a bank provides to cover potential losses on loans. Loan loss provision may reduce the net income of banks and thereby may affect their capital positions. See Ellen Gaston and In Won Song, 'Supervisory Roles in Loan Loss Provisioning in Countries Implementing IFRS', International Monetary Fund Working Paper WP/14/170, September 2014, 3.
20. Charge off is an accounting term that identifies 'the value of loans removed from the books and deducted from the allowance for loan losses'. See Fred Furlong and Zena Knight, 'Loss Provisions and Bank Charge-offs in the Financial Crisis: Lesson Learned' FRBSF Economic Letter 2010–2016, 24 May 2010, 2. Charge offs reflect capital management and are considered a method to cover realised

losses. See Anne Beatty, Sandra L. Chamberlain and Joseph Magliolo, 'Managing Financial Reports of Commercial Banks: The Influence of Taxes, Regulatory Capital, and Earnings' (1995) 33(2) *Journal of Accounting Research*, 243.

21. EBA FINAL draft Implementing Technical Standards on Supervisory reporting on forbearance and non-performing exposures under article 99(4) of Regulation (EU) No 575/2013, EBA/ITS/2013/03/rev1, 24 July 2014.
22. Referred in the text as NPEs or non-performing exposures. The concept of NPEs is broader than that of NPLs since the latter only relates to loan exposures while the former includes other types of exposure.
23. Sarawan Angklomkliew, Jason George, and Frank Packer, 'Issues and developments in loan loss provisioning: the case of Asia', BIS Quarterly Review, December 2009, 70. The authors argue that in some countries, any loan that is delinquent more than 30 days would be considered an NPL, while in other systems the designation may only apply to loans that are 90 days past due. Other jurisdictions, for example, Hong Kong SAR, the adoption of IAS 39 and its use of an 'impairment' test has led to the NPL designation being abandoned.
24. Ana-Cristina Grohnert, René Hallenberger, and Daniel Mair, 'Performing and non-performing loan market overview' in Simon Gottlieb Grieser and Jörg Wulfken (eds), *Performing and Non-Performing Loan Transactions Across the World* (Euromoney Institutional Investor PLC, 2009) 4.
25. Alain Laurin and Giovanni Majnoni, 'Bank Loan Classification and Provisioning Practices in Selected Developed and Emerging Countries', World Bank Working Paper No 01, March 2003, 10.
26. Mwanza Nkusu, 'Nonperforming Loans and Macrofinancial Vulnerabilities in Advanced Economies', IMF Working Paper, July 2011, 4. It is argued that 'cross-country differences in regulation and supervisory practices and differences in accounting procedures pose serious constraints to comparability of NPL across countries. For instance, NPL levels may not reflect the extent of impaired loans as some banks may pre-emptively restructure or roll over bad loans while others may write off their bad loans relatively quickly. In addition, peak levels of impaired loans are generally much higher in

developing countries compared with advanced ones. Accordingly, the same NPL ratio can have different implications in different countries'.

27. Luis Cortavarria, Claudia Dziobek, Akihiro Kanaya, and Inwon Song, 'Loan Review, Provisioning, and Macroeconomic Linkages' (2000) IMF Working Paper No 00/195, 14.
28. Irum Saba, Rehana Kouser, and Muhammad Azeem, 'Determinants of Non Performing Loans: Case of US Banking Sector' (2012) 15(44) *The Romanian Economic Journal*, 143. The author attempted to ascertain the determinants of NPLs in the US banking sector. The empirical results support the view that macro-factors, such as, interest rate and real GDP per capita have association with the NPLs rate.
29. Russell Krueger, 'International Standards for Impairment and Provisions and their Implications for Financial Soundness Indicators (FSIs)', IMF Working Paper, July 2002, 18.
30. Basel Committee on Banking Supervision, 'Sound Practices for Loan Accounting and Disclosure' (note 5) 19–21.
31. Basel Committee on Banking Supervision, 'Sound credit risk assessment and valuation for loans' (June 2006).
32. See supra 8.
33. Ibid., 6. The BCBS notes that non-performing status should be applied at the level of the counterparty in the case of exposures to a non-retail counterparty; and, at the level of each exposure in the case of exposures to a retail counterparty.
34. The Vienna Initiative was set up in 2009, successfully working initially to maintain the presence of Western banks in the region and subsequently to oversee an orderly process of deleveraging and a balanced restructuring of the region's banking sectors.
35. James Roaf, 'Non-Performing Loans in CESEE', paper presented at the Workshop convened under the Vienna Initiative 2.0, Vienna, 23 September 2014.
36. European Banking Coordination 'Vienna' Initiative, Working Group on NPLs in Central, Eastern and Southeastern Europe, March 2012.
37. INSOL International is an *international association of restructuring, insolvency & bankruptcy professionals*. INSOL International published a *Statement of Principles for a Global Approach to Multi-Creditor*

Workouts, London in October 2000. The principles are available at https://www.insol.org.

38. Abdelkader Boudriga, Neila Boulila Taktak, and Sana Jellouli, 'Banking supervision and nonperforming loans: a cross-country analysis' (2009) 1(4) *Journal of Financial Economic Policy*, 286. The authors show that the effective way to reduce bad loans is through strengthening the legal system and increasing transparency and democracy, rather than focusing on regulatory and supervisory issues.
39. Basel Committee on Banking Supervision 'Sound credit risk assessment and valuation for loans' (June 2006) 8.
40. Robert M. Bushman and Christopher D. Williams, 'Accounting discretion, loan loss provisioning, and discipline of Banks' risk-taking' (2012) 54 *Journal of Accounting and Economics*, 2.
41. See EBA supra 25.
42. The focus of the EBA document is on non-performing exposures (NPEs) broader than NPLs.
43. Piers Haben, 'Standardizing the definition of non-performing loans', Speech at the conference 'Setting Global Standards for Granular Data Bank of England, European Central Bank and US Office of Financial Research Agenda', Bank of England, London, 16 January 2015.
44. The prompt identification of impairment or non-performance is crucial for the identification of vulnerabilities.
45. Yet the opposite is true in finance, where valuation tends to focus on assets, less so on liabilities.
46. Paragraph 149 of the EBA document states that for the purpose of template 18, 'exposures' include all debt instruments (loans, advances, and debt securities) and off-balance sheet exposures (loan commitments, financial guarantees, and other revocable and irrevocable commitments) excluding trading exposures and off-balance sheet exposures except held for trading exposures.
47. Sumit Agarwal, David Lucca, Amit Seru, and Francesco Trebbi, 'Inconsistent Regulators: Evidence from Banking' (2012) NBER Working Paper Series No 17736, 8. The authors discuss on US practice and US law, in particular the difference between federal regulators and state regulators of commercial banks. It is concluded that

federal regulators are significantly less lenient than state regulators, downgrading supervisory ratings (CAMELs) twice as frequently as state supervisors, and that under federal regulators banks report higher NPLs, more delinquent loans, higher regulatory capital ratios and lower ROA. The lessons are instructive for banking union where independent ECB supervisors are expected to be tougher than national supervisors were.

48. Jeroen Klomp and Jacob de Haan, 'Banking risk and regulation: Does one size fit all?' (2012) 36 *Journal of Banking and Finance*, 3197.
49. ESMA, 'Treatment of Forbearance Practices in IFRS Financial Statements of Financial Institutions', Public Statement ESMA/2012/853, 20 December 2012, 2. ESMA observes that forbearance measures occur in situations in which the borrower is considered to be unable to meet the terms and conditions of the contract due to financial difficulties.
50. Graciela Kaminsky and Sergio L. Schmukler, 'Emerging Market Instability: Do Sovereign Ratings Affect Country Risk and Stock Returns?' (2002) 16 *The World Bank Economic Review* 2, 172.
51. SEC, 'Report on the Role and Function of Credit Rating Agencies in the Operation of the Securities Market' (January 2003) 30. See also Federico Parmeggiani, 'Rating Triggers, Market Risk and the Need for More Regulation' (2013) 14 *European Business Organization Law Review* 3, 428. The author provides an analysis of rating triggers by identifying some basic types of clauses: (1) 'rating-based collateral and bonding provisions', (2) 'rating step-up triggers' (or 'rating-based pricing grids'), (3) 'acceleration trigger', (4) 'rating-based put provision', and (5) 'rating-based default trigger'.
52. Joshua D. Rauh and Amir Sufi, 'Capital Structure and Debt Structure' (2010) 23(12) *The Review of Financial Studies*, 4245.
53. Robert DeYoung, Mark Flannery, William Lang, and Sorin Sorescu, 'Could Publication of CAMELS Ratings Improve Market Discipline?' in 'Proceedings of the Federal Reserve Bank of Chicago 34th Annual Conference on Bank Structure and Competition', May 1998.
54. Douglas D. Evanoff and Larry D. Wall, 'Measures of the riskiness of banking organizations: Subordinated debt yields, risk-based capital,

and examination ratings' (2002) 26 *Journal of Banking and Finance*, 989. See also Douglas D. Evanoff and Larry D. Wall, 'Sub-debt yield spreads as bank risk measures' (2001) 20 *Journal of Financial Services Research*, 121.

55. On this discussion Sandhya Ch. V.L, 'Camel Framework in Banks—Indian Scenario' (2014) 4(6) *Indian Journal of Applied Research*, 1.
56. Udaibir Das, Marc Quintyn, and Kina Chenard, 'Does Regulatory Governance Matter for Financial System Stability? An Empirical Analysis' IMF Working Paper, May 2004, 10.
57. Andrew Campbell, 'Bank insolvency and the problem of nonperforming loans' (2007) 9(1) *Journal of Banking Regulation*, 28. The author noted that 'the problems associated with NPLs in the 1980s were the result of mismanagement in relation to lending policies, which led to an excessively high-risk profile developing'. Basically, he underlines the importance of building an effective system to reduce the problem of NPLs through a prudent internal control system combined with enforcement power.
58. Kevin J. Stiroh and Christopher Metli, 'Now and Then: The Evolution of Loan Quality for U.S. Banks' (2003) 9(4) *Federal Reserve Bank of New York Current Issues in Economics and Finance*, 1. The NPL ratio is defined as non-performing loans—non-accrual loans plus loans 90 days or more past due—as percentage of total loans.
59. Tara Sullivan and James Vickery, 'A Look at Bank Loan Performance', Federal Reserve Bank of New York, 16 October 2013. According to the authors, 'at the start of 2007, only about 1% of bank loan balances were "nonperforming", meaning that the loan was at least ninety days past due or in nonaccrual status. By late 2009, however, the fraction of nonperforming loans had increased to more than 5%'.
60. Raphael Espinoza and Ananthakrishnan Prasad, 'Nonperforming Loans in the GCC Banking System and their Macroeconomic Effects', IMF Working Paper, October 2010, 4.
61. Ahlem Selma Messai and Fathi Jouini, 'Micro and Macro Determinants of Non-performing Loans' (2013) 3(4) *International Journal of Economics and Financial Issues*, 852.

62. USAID, 'High Levels of Problem Loans in Southeast Europe and Eurasia: The Silent Killer of Economic Growth', Technical Brief, September 2011.
63. Martin Arrowsmith, Martin Griffiths, Jeremy Franklin, Evan Wohlmann, Garry Young, and David Gregory, 'SME forbearance and its implications for monetary and financial stability' (2013) 53(4) *Bank of England Quarterly Bulletin*, 296–303.
64. David Bholat et al., 'Non-performing loans: regulatory and accounting treatment of assets', Bank of England Staff Working Paper No. 594, April 2016, 24.
65. Thomas F. Huertas, *Safe to Fail: How Resolution Will Revolutionise Banking* (London: Palgrave Macmillan 2014) 113–114.
66. Charles Goodhart, 'Ratio controls need reconsideration' (2013) 9 *Journal of Financial Stability*, 449, where it is provided a definition of bail-inable bond as 'one which specifies in the contract how, and under what conditions, the holder shall be required to bear the costs of bank failure and/or to put up additional money to recapitalise the bank'. In essence, bail-inable debt is a form of pre-paid insurance for bank failure. See also Emilios Avgouleas and Charles A Goodhart, 'A Critical Evaluation of Bail-in as a Bank Recapitalisation Mechanism', Centre for Economic Policy Research, Discussion Paper No. 10065, July 2014, 7.
67. Bail-in usually needs to be accompanied by changes in the firm's senior management and the adoption of a new business plan that addresses the causes of the firm's failure.
68. As has been pointed out by the IMF, holders of claims targeted for bail-in must be able to absorb potential losses without generating systemic risk themselves as a consequence of their financial losses IMF, 'Cross-Border Bank Resolution: Recent Developments', IMF Policy Papers, 2 June 2014, 12.
69. See Directive 2014/59/EU establishing a framework for the recovery and resolution of credit institutions and investment firms.
70. Regulation (EU) No 806/2014 of the European Parliament and of the Council of 15 July 2014 establishing uniform rules and a uniform procedure for the resolution of credit institutions and certain

investment firms in the framework of a Single Resolution Mechanism and a Single Resolution Fund.

71. FSB, 'Key Attributes of Effective Resolution Regimes for Financial Institutions', 15 October 2014, 9.

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