Provisioning policies for non-performing loans: How to best ensure a “clean balance sheet”?

Banking Union Scrutiny

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Abstract

This note provides an updated picture on NPLs in the European Union, showing that – although the NPL ratio has been steadily decreasing, significant differences remain across Member States.

It then discusses the two main factors driving NPLs in the long term: the macroeconomic cycle and the banks’ lending practices, arguing that policy makers should continue to encourage the development of sound internal credit ratings.

Finally, four main levers are discussed, that can be used to curb high NPL stocks. Internal recovery processes, which should be improved by investing in better IT architectures and specialised professional skills. NPL sales, which may prove attractive (and reduce the supervisors’ own reputational risks), but also to destroy value for bank shareholders, debtholders and the public purse. Asset management companies (AMCs), which may prevent banks from disorderly liquidating NPLs, force badly-managed banks to feel the pain of past mistakes and gradually recover loans while being funded at an acceptable cost. Calendar provisioning regimes like the one recently proposed by the SSM, which may force banks to quickly write down non-performing exposures, but may suffer from several drawbacks and should be enacted through a fully-fledged, accountable political process.

In designing ways to tackle non-performing exposures, one should never forget that NPLs, while being associated with modest profits and poor loan supply, do not cause them but, like them, follow from poor real growth, ineffective management and faulty governance schemes.
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Original: EN

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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AMC</td>
<td>Asset management company</td>
</tr>
<tr>
<td>AMV</td>
<td>Asset management vehicle</td>
</tr>
<tr>
<td>AQR</td>
<td>Asset Quality Review</td>
</tr>
<tr>
<td>CRD4</td>
<td>Directive 2013/36/EU (Capital Requirements Directive #4)</td>
</tr>
<tr>
<td>CRR</td>
<td>Regulation (EU) No 575/2013 (Capital Requirements Regulation)</td>
</tr>
<tr>
<td>DG COMP</td>
<td>Directorate General Competition, European Commission</td>
</tr>
<tr>
<td>EBA</td>
<td>European Banking Authority</td>
</tr>
<tr>
<td>LGD</td>
<td>Loss Given Default</td>
</tr>
<tr>
<td>NPE</td>
<td>Non-performing exposures</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-performing loans</td>
</tr>
<tr>
<td>REV</td>
<td>Real long term economic value</td>
</tr>
<tr>
<td>RWAs</td>
<td>Risk-weighted Assets</td>
</tr>
<tr>
<td>SREP</td>
<td>Supervisory Reporting Evaluation Process</td>
</tr>
<tr>
<td>SSM</td>
<td>Single Supervisory Mechanism</td>
</tr>
<tr>
<td>UTP</td>
<td>Unlikely to pay</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

The NPL to total loans ratio has been steadily decreasing in the EU since 2014, although they remain well above pre-crisis levels. Furthermore, significant differences remain across Member States, with several countries still reporting double-digit ratios. Coverage ratios have increased over the last 30 months, with the average value up by 3% to 45%. Italy stands out as the largest country were NPLs make up for a relatively high portion of total loans, while coverage levels are broadly in line with the EU mean. Among large banking systems, Germany and the UK look somewhat underprovisioned vis-à-vis other Member States.

The long-term dynamics of NPLs is mainly driven by two factors: the macroeconomic cycle and the banks’ lending practices. While any policy aimed at increasing growth and productivity will clearly help lenders reduce their exposure to NPL-related risks, the role of credit origination processes can hardly be overstated. Accordingly, policy makers should continue to encourage the development of sound internal credit ratings.

Four main levers can be used to curb high NPL stocks.

First, banks should improve their internal recovery processes, investing in better IT architectures and specialised professional skills. Separate workout units may be better positioned to identify the weaknesses in the credit files, laying the ground for more credible valuations.

Second, NPL sales are sometimes seen as the silver bullet that enable banks to put non-performing exposures at arm’s length. Although this may prove attractive (and reduce the supervisors’ own reputational risks), there is also a risk of destroying value for bank shareholders, debtholders and the public purse. The market for NPLs is still illiquid, and prices embed a significant discount because buyers require a high risk premium to offset information asymmetries. Furthermore, investors may lack the operating capacity required to effectively process large amounts of non-performing exposures. Whenever NPLs are sold at a price which is lower than their REV, a wealth transfer occurs from the banking system to outside investors, making banks weaker, not stronger, and increasing the risk that public money be used at some stage (while private savers may end up being bailed in, or subjected to burden sharing).

Third, a beneficial role may be played by asset management companies (AMCs). They may prevent banks from disorderly liquidating NPLs and provide a means to gradually recover loans and dispose assets once market conditions have reverted to normal. State-backed AMCs can also issue debt at an acceptable cost, which in turn improves the final net value of recoveries. By performing an independent valuation, AMCs ensure that NPLs are sold by originating banks at a more realistic price, making badly-managed institutions pay for their past mistakes.

AMCs are subject to an increasingly stringent regulation (recovery and resolution rules, as well as to State aid-related requirements), which may give rise to significant social costs. Accordingly, they must be structured in a way that guarantees some desirable outcomes: provide a full, unconditional risk transfer to originating banks, secure long-term funding from private investors at a sustainable cost, have no explicit constraint to carry out asset sales within a pre-determined deadline (which would undermine their bargaining power vis-à-vis prospective buyers and prevent them from perform an orderly internal recovery).

Fourth, provisioning regimes have been proposed, where lenders must write down NPLs based on a pre-defined schedule. This includes the European Council’s action plan on non-performing loans and the proposal recently launched by the SSM. Yet, “calendar provisioning” schemes suffer from several drawbacks. While it is in the public interest to have banks evaluate their non-performing
assets fairly, it is unclear how their stakeholders would benefit from rules that are aimed at generating higher provisions, regardless of the assets’ actual REV. Calendar provisioning would have to be implemented via capital deductions, which are not tax deductible, hence more expensive. Banks would be further incentivised to sell NPLs at a low price, leaving the workout business to specialised, often unregulated and speculative investors looking for double-digit returns. Calendar provisioning may not pass the “proportionality test”, as less drastic measures may achieve similar benefits when it comes to preventing unexpected losses on defaulted exposures.

Calendar provisioning, even when presented as a mere “supervisory expectation” would grant supervisors with the power to impose provisioning/capital requirements across the board. Such “soft rules”, while formally non-binding, may prove extremely hard to challenge. As they would de facto establish a new prudential regime for NPLs (and trigger additional capital constraints for banks, which may negatively affect credit supply), one may argue that such a change should be enacted through a fully-fledged, accountable political process.

Finally, when dealing with NPLs, one should never forget that the link between non-performing exposures, profitability and loan growth is mostly about correlation, not causality. In fact, while NPLs tend to be associated with modest profits and poor loan supply, they are not causing them. Instead, bad loans, operational inefficiency and modest profitability may all follow from adverse macroeconomic conditions, ineffective management and inadequate governance schemes. These are the real culprits, which regulation and supervision should keep targeting in the coming years. Bank profitability and lending capacity cannot be magically restored by forcing lenders to hastily offload, or write off, non-performing exposures.
1. INTRODUCTION

Non-performing loans ("NPLs") in the EU have drawn considerable attention by scholars and policy makers\(^1\), due to the increase occurred after the 2007-2009 financial crisis and the Eurozone crisis, and the difficulties experienced in driving NPL ratios down to pre-crisis levels.

This in-depth analysis provides a concise picture of the current state-of-play, with a special emphasis on cross-country differences in NPL ratios and coverage levels (§2). It then reviews the main causes of the surge in NPLs and the channels that can be used to help banks clean their balance sheets in a reasonably effective way (§3). Finally, it addresses the role of provisioning policies as a tool to avoid the build-up of future NPL bubbles (§4), and concludes by reviewing the main findings and policy implications (§5).

2. NPEs IN EUROPEAN BANKS: WHAT DO WE KNOW?

2.1 Data on NPEs in Europe: definition and consistency issues

According to EU supervisory standards\(^2\), non-performing exposures ("NPEs") are defined as material exposures which are more than 90 days past-due and/or exposures where the debtor is "unlikely to pay" ("UTP") its credit obligations in full without realisation of collateral. Such a definition echoes the principles established in 2004 by the Basel 2 Accord, where "defaulted exposures" had to meet an objective criterion (some minimum delay in payments), a subjective criterion (the obligor being unlikely to pay in full) or both.

Although the Basel Committee had agreed on a unified definition, sizeable differences have arisen since 2004 in the local implementations of the Accord. Hence, European supervisors have engaged in a significant effort to promote convergence across Member States and dictate common requirements, in order to improve the clarity and consistency of EU-wide supervisory data. E.g., based on Article 178.6 of the CRR, the European Banking Authority ("EBA") has established common thresholds (both absolute and relative to an obligor’s total exposures) to identify "material" past-due exposures\(^3\). Further progress has been achieved through guidelines on the definition of default\(^4\), where – *inter alia* – a probation period of 90 days has been imposed before past-due exposures can revert to a normal status. The same guidelines, while recognising that the identification of UTP exposures is mainly subjective in nature, list some objective conditions indicating that a debtor is unlikely to pay. The latter (following on Article 178.3 of the CRR) include situations where interest receivable is no longer recorded in the P&L account, and/or specific value adjustments have been made in the lender’s balance sheet because of credit risk impairments\(^5\).

\(^1\) Although the views expressed in this report are only mine, I gratefully acknowledge advice from Santiago Fernández de Lis (BBVA), Marcel Magnus (Economic Governance Support Unit, European Parliament), Marco Onado (Bocconi University), Giovanni Petrella (Catholic University, Milan).

\(^2\) See e.g. (Aiyar et al., 2015a; Avgouleas and Goodhart, 2017; European Banking Authority, 2016a; Fell et al., 2016).

\(^3\) See §145 of Annex V to the EBA Implementation Technical Standard on supervisory reporting (European Banking Authority, 2017a).

\(^4\) See the EBA RTS 2016/06, Articles 2 and 3 (European Banking Authority, 2016b).

\(^5\) EBA-GL-2016-07 (European Banking Authority, 2017b).

\(^5\) It should be borne in mind that, although there are considerable intersections between the three areas, the definition of NPEs provided for supervisory reasons does not fully overlap with that of "defaulted exposures" that banks use to calculate their minimum capital requirements, nor with the notion of "impaired assets" that is adopted for accounting purposes (see Financial Services Committee, 2017, p. 96, for further details). The latter, however, should always be considered as NPEs when the impairment is credit risk-related. Furthermore,
Although the drive towards convergence across national practices has gained momentum in the recent past, some segmentations still need to be fully overcome. One may e.g. mention the fact that, in some Member States, banks hold a considerable amount of assets foreclosed or received in payment of dubious loans. Such assets are not included in non-performing exposures, even though they originate from the lending business and their sale might occur at a price well below the carrying value. Due to such effects, cross-country comparisons may still require some care.

2.2 NPEs in Europe: a snapshot

According to the EBA’s quarterly Risk Dashboard, Europe’s main banks reported a weighted average NPL Ratio (non-performing loans, gross of impairments, divided by total loans) of 4.47% as of June 30, 2017. As shown in Figure 1, the ratio has been steadily decreasing for the last 30 months, with a sharper drop since September 2016. While most of the reduction is due to a long lasting decline in the numerator (non-performing loans), the denominator (total loans) has kept almost unchanged between March 2015 and December 2016. During the first months of 2017, however, the lending activity has picked up, as the macroeconomic recovery has gathered pace in several member States, making it possible for the NPL ratio to shrink further.

**Figure 1: NPL Ratio for a sample of large European Banks: recent history**

*Index, Dec 2014 = 100, right-hand scale*

Source: EBA Risk Dashboard, 2017

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the European Securities and Markets Authority (ESMA), has encouraged financial institutions to use the supervisory definition of NPEs for their financial statement disclosures and to reconcile data on NPLs, defaulted and impaired loans.

6 E.g., in 2016 Banco Popular reported €19.6 bn in NPLs and €10 bn in foreclosed assets.

7 The sum of non-performing exposures and foreclosed assets is sometimes referred to as “non-performing assets” ("NPAs").

8 The EBA Risk Dashboard is a quarterly publication based on a sample of 189 European banks (a list can be found at https://www.eba.europa.eu/riskanalysisanddata). The sample is subject to annual adjustments and has been expanded over time. National data can be censored for countries having less than three reporting institutions. Data definitions are homogeneous across all contributing banks, being based on the EBA implementing technical standards (ITS) on supervisory reporting (Commission Implementing Regulation 680/2014). Data go back to end 2014.
Although the overall evolution of the NPL ratio looks positive, significant differences remain across national figures. Indeed, as shown in Figure 2, a number of countries still show double-digit ratios, including Bulgaria, Cyprus, Greece, Hungary, Ireland, Italy, Portugal and Slovenia. However, most member states have experienced a significant drop in the ratio since September 2014 (-2.2% on average), the only exceptions being Greece and Portugal. Italy deserves a special mention, being the only large banking system in the EU with an NPL ratio above 10%; although this has significantly shrunk in the past 33 months (-4.2%), more than the EU-wide average (-2.2%).

**Figure 2:** NPL Ratios for a sample of large European Banks: national values

<table>
<thead>
<tr>
<th></th>
<th>September 2014</th>
<th>June 2017</th>
<th>Delta</th>
</tr>
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<td>8.1%</td>
<td>4.3%</td>
<td>-3.8%</td>
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<tr>
<td>BE</td>
<td>4.2%</td>
<td>2.8%</td>
<td>-1.4%</td>
</tr>
<tr>
<td>BG</td>
<td>17.3%</td>
<td>12.4%</td>
<td>-4.8%</td>
</tr>
<tr>
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<td>55.3%</td>
<td>42.7%</td>
<td>-12.6%</td>
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<td>4.1%</td>
<td>1.7%</td>
<td>-2.4%</td>
</tr>
<tr>
<td>DE</td>
<td>3.9%</td>
<td>2.2%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>DK</td>
<td>4.3%</td>
<td>2.7%</td>
<td>-1.6%</td>
</tr>
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<td>EE*</td>
<td>1.6%</td>
<td>1.3%</td>
<td>-0.3%</td>
</tr>
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<td>ES</td>
<td>8.8%</td>
<td>5.4%</td>
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<td>FI</td>
<td>2.2%</td>
<td>1.7%</td>
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</tr>
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<td>FR</td>
<td>4.6%</td>
<td>3.4%</td>
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<td>3.6%</td>
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<td>16.3%</td>
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<tr>
<td>EU</td>
<td>6.7%</td>
<td>4.5%</td>
<td>-2.2%</td>
</tr>
</tbody>
</table>

*Starting date is December 2015  
(March 2016 for EE, December 2014 for NO)

Source: EBA Risk Dashboard, 2017

While national NPL ratios seem to have peaked and reverted to lower values, they still remain above pre-crisis levels. Figure 3, based on the ECB’s “consolidated banking data”⁹, compares March 2017⁰ to

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⁹ The “consolidated banking data” database contains quarterly information – aggregated on a national basis – on profitability, main balance sheet items, asset quality, liquidity and solvency of EU banks. While it includes the harmonised figures reported by large banks to the EBA (and used in the Authority’s “Risk Dashboard”), it also comprises information provided by other institutions using national accounting standards. This makes the numbers less easily comparable on a cross-country basis. However, unlike the EBA dataset, the ECB database also includes information on pre-2014 years, which – while being more vulnerable to national specificities and methodological breaks - go back in time to the end of 2008.

⁰ Unlike in the EBA Risk Dashboard, data for June 2017 were still unavailable in the ECB’s Consolidated Bank Data as this brief went to press.
December 2008 (the oldest data point in the series): most countries appear to have recorded an increase, often a significant one.

### Figure 3: NPL Ratios for European Banks: national values

<table>
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<th>March 2017</th>
<th>Delta</th>
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<td>CY</td>
<td>4.2</td>
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<td>28.3</td>
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<tr>
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<td>-</td>
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<tr>
<td>SK</td>
<td>1.7</td>
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</tbody>
</table>

Source: ECB Consolidated Banking Data

NPL ratios are based on gross non-performing exposures, meaning that they do not account for the amount of provisions that banks have already booked against future losses. The ratio between such provisions and gross non-performing loans is usually referred to as the "coverage ratio": a high coverage ratio means that an institution is less vulnerable to future losses, since it has already written down exposures by a large extent (and may indeed experience profits, if final recoveries prove higher than expected).

Coverage ratios do not, per se, provide a complete picture of a bank’s exposure to credit risk on non-performing exposures (as further discussed below). However, low coverage levels are usually a source of concern to supervisors, as they signal a wide scope for unforeseen losses.

Figure 4 shows how coverage levels have evolved across the European Union in the last 33 months. While the weighted average has marked an increase (45% vs. 42.1%), several countries have seen their provisions shrink (or grow less), compared to non-performing loans. Meanwhile, Germany and
Provisioning policies for non-performing loans: How to best ensure a “clean balance sheet”?

Italy, among the EU’s large national banking systems, have achieved significant increases in coverage.

**Figure 4:** Coverage Ratios for a sample of large European Banks: national values

<table>
<thead>
<tr>
<th></th>
<th>September 2014</th>
<th>June 2017</th>
<th>Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>53.5%</td>
<td>54.3%</td>
<td>0.9%</td>
</tr>
<tr>
<td>BE</td>
<td>40.7%</td>
<td>44.9%</td>
<td>4.2%</td>
</tr>
<tr>
<td>BG</td>
<td>52.8%</td>
<td>58.2%</td>
<td>5.4%</td>
</tr>
<tr>
<td>CY</td>
<td>28.7%</td>
<td>45.4%</td>
<td>16.7%</td>
</tr>
<tr>
<td>CZ</td>
<td>59.8%</td>
<td>62.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>DE</td>
<td>28.1%</td>
<td>40.7%</td>
<td>12.6%</td>
</tr>
<tr>
<td>DK</td>
<td>33.4%</td>
<td>29.4%</td>
<td>-4.0%</td>
</tr>
<tr>
<td>EE*</td>
<td>28.8%</td>
<td>26.1%</td>
<td>-2.7%</td>
</tr>
<tr>
<td>ES</td>
<td>45.1%</td>
<td>44.7%</td>
<td>-0.4%</td>
</tr>
<tr>
<td>FI</td>
<td>27.0%</td>
<td>26.4%</td>
<td>-0.7%</td>
</tr>
<tr>
<td>FR</td>
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<td>50.8%</td>
<td>-1.6%</td>
</tr>
<tr>
<td>GB</td>
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</tr>
<tr>
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</tr>
<tr>
<td>HR</td>
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<td>6.5%</td>
</tr>
<tr>
<td>HU</td>
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<td>64.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>IE</td>
<td>43.9%</td>
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<td>-11.4%</td>
</tr>
<tr>
<td>IT</td>
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<td>6.3%</td>
</tr>
<tr>
<td>LT</td>
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</tr>
<tr>
<td>LU</td>
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<td>40.1%</td>
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</tr>
<tr>
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<td>29.1%</td>
<td>-9.6%</td>
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<td>MT*</td>
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<tr>
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<td>60.4%</td>
<td>0.9%</td>
</tr>
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<td>SE</td>
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<td>28.7%</td>
<td>-1.9%</td>
</tr>
<tr>
<td>SI*</td>
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<td>64.8%</td>
<td>2.1%</td>
</tr>
<tr>
<td>SK</td>
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<td>56.8%</td>
<td>2.7%</td>
</tr>
<tr>
<td>EU</td>
<td>42.1%</td>
<td>45.0%</td>
<td>2.9%</td>
</tr>
</tbody>
</table>

*Starting date is December 2015
(March 2016 for EE, December 2014 for NO)

Source: EBA Risk Dashboard, 2017

It should be noticed, however, that cross-country (and cross-bank) differences may originate from factors that do not signal greater risks. One could e.g. mention the following:

- a low coverage level may be adequate if an institution holds a significant amount of high-quality, liquid collateral;
- countries and institutions where non-performing exposures are more narrowly defined may show both a lower NPL ratio and a higher coverage (because NPEs only include “hard” defaults, where higher loss rates are anticipated); the opposite applies to situations where banks or local supervisors adopt a more extensive definition;
- coverage ratios may be lower for banks that have sold large chunks of NPLs to specialised investors in order to achieve a quick reduction in non-performing exposures. In fact, the seller may have chosen to focus on highly-provisioned exposures in order to speed up the disposal
process and minimise the risk of further losses; however, as such highly-provisioned loans are disposed of, the bank’s average coverage ratio is bound to drop, even though no changes have occurred to its provisioning policies.

Having said that, the threat posed to EU banking by non performing exposures is usually measured through three criteria: the size of the banking systems (e.g. in terms of customer loans\(^1\)), their NPL ratio and their coverage levels. Figure 5 provides a “heat map”, as of March 2017\(^12\), based on those three factors: the two ratios are shown on the graph’s axes, while the size of bubbles increases with each country’s loans (data for Greece and Cyprus are only shown in the small box on the right, to avoid squeezing all remaining countries to the left).

**Figure 5:** the “heat map” of NPLs in Europe: national data

Source: ECB Consolidated Banking Data

Italy stands out as the largest country were NPLs make up for a relatively high portion of total loans, while coverage levels are broadly in line with the mean. Among the main banking systems, Germany and the UK look somewhat underprovisioned *vis à vis* other Member States; while this may be justified by a high amount of exposures secured by real estate, it also makes the recovery prospects more vulnerable to property market swings.

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\(^1\) Figure 5 reports data on “loans and advances” on March 31 2017, as defined in the ECB’s “Consolidated bank data” database. Data have not been adjusted, although some national values may request some fine-tuning.

\(^12\) See Footnote 10.
3. HOW TO ACHIEVE A CLEAN BALANCE SHEET

Figure 6 summarises the key drivers of the NPL ratio and the coverage ratio\textsuperscript{13}. The top part shows the main “intrinsic” factors driving those two indicators, while the bottom part portrays some managerial/policy levers that can be used to promote a decrease in NPLs.

**Figure 6**: the key drivers of the NPL and coverage ratios

### 3.1 Factors explaining the build-up of NPLs

#### 3.1.2 Macroeconomic conditions

Economic growth plays a key role when it comes to bank non-performing exposures. First, an upswing in the real cycle improves the obligors’ cash flows, making it less likely for them to default on their debt and keeping new NPLs in check. Second, when the economy grows, the banks’ gross operating income also improves, meaning that additional profits can be used to fund extra provisions and shore up the coverage ratio. Third, economy upswings usually translate into higher real estate and securities prices, improving collateral values and making higher recoveries more likely (which, in turn, makes coverage ratios more sustainable).

#### 3.1.3 Credit origination techniques

Regardless of macroeconomic conditions, banks can reduce their vulnerability to new NPLs by improving loan origination practices. In this regard, internal ratings may prove highly beneficial, due to the fact that lending decisions are constrained through a set of pre-defined criteria, which may be overcome only through an explicit override process, supported by clear and adequate motivations. It is undeniable that internal ratings need further disciplining, due to the fact that some banks have been using them as a channel to achieve capital relief, rather than as a tool to properly screen and monitor risks (Resti, 2016). However, any reform aimed at reducing their role (by cutting regulatory incentives to their adoption and development) would certainly exert a negative effect on

\textsuperscript{13} A detailed discussion of the key drivers of NPL stocks is also provided by (Financial Services Committee, 2017).
bank credit quality in the medium-to-long term, and contribute to exacerbating the NPL issue. Conversely, efforts aimed at improving and further validating risk management models (both in the credit portfolio and elsewhere, including e.g. for Level 3 assets) would help make the banking industry less vulnerable to future losses.

3.2 Key levers available to tackle the NPL issue

While macroeconomic performance and credit origination standards are the key drivers in explaining the build-up of non-performing exposures, a number of factors may help banks dispose of such assets more swiftly and effectively.

3.2.1 The link between NPLs, profitability and growth: correlation, not causality

Before discussing such factors in detail, however, an important caveat is called for. Banks with lower levels of non-performing exposures are often found to be more profitable and willing to lend\(^\text{14}\), as opposed to NPL-burdened institutions where revenues are weak and loan portfolios even shrink in size\(^\text{15}\) (Aiyar et al., 2015a; Mesnard et al., 2016). One should not infer, however, that low revenues and slow loan growth are caused by NPLs\(^\text{16}\), nor conclude that profitability and lending capacity can be restored by forcing lenders to hastily offload, or write off, non-performing exposures. In fact, while NPLs tend to be associated with modest profits and poor loan supply, they are not causing them\(^\text{17}\), although they might make things worse\(^\text{18}\). Instead, bad loans, operational inefficiency and modest profitability may all follow from adverse macroeconomic conditions, ineffective management and inadequate governance schemes. Accordingly, while any unrealistic valuations of NPEs should be quickly aligned to their real economic value, banks should not be unduly induced to write off their NPLs, or to fire-sale non-performing exposures in a relatively thin market. By doing that, one would only exacerbate their weaknesses, as lower NPL values (including sale prices) would translate into additional losses, further threatening capital adequacy, stability and lending capacity\(^\text{19}\).

\(^{14}\) (Bending et al., 2014, Box 5; Bruno and Marino, 2017).

\(^{15}\) Similarly, countries having high NPL ratios show lower economic and credit/investment growth (Berti et al., 2017). However, the causality nexus from slow growth to higher NPLs should not be arbitrarily reversed (although it is true that high NPLs bring about credit losses, which in turn erode capital and constrain the banks’ ability to lend). Additionally, while an increase in NPLs can be found to cause a (further) drop in GDP growth (Diwan and Rodrik, 1992; Klein, 2013), this does not mean that the real economy can be sustained by forcibly removing NPLs from the banks’ balance sheets, e.g. by asking institutions to write off all non-performing loss and take the ensuing losses.

\(^{16}\) The idea that “high NPLs undermine the capacity of banks to lend” (Aiyar et al., 2015a) is deeply rooted in the current policy debate. However, seminal studies on bank crises and tight monetary policy (Kashyap et al., 1994; Kroszner et al., 2007), which are sometimes quoted to corroborate this view, do not address the role of non-performing loans and therefore cannot lend much support to the idea that NPLs cause a contraction in lending. Generally speaking, it should be noted that any descriptive analysis of the link between NPLs and low growth “only shows correlation and not causality” (Financial Services Committee, 2017, p. 23).

\(^{17}\) “NPLs rise in countries and periods where economic activity stagnates and, consequently, creditworthiness is deteriorated and the demand for credit also tends to be weak. This means that a negative correlation between NPLs and credit volumes, in and by itself, means very little” (Accornero et al., 2017, p. 8)

\(^{18}\) E.g. a high amount of NPLs may increase the risk profile of the bank and drive up its funding costs. Administrative expenses may also increase, due to the need to deploy the required skills and to develop adequate IT infrastructures.

\(^{19}\) In this sense, one can hardly agree with Authors (Aiyar et al., 2015a) who have been claiming that, by “removing” NPLs from the bank balance sheet one could “unlock resources” to sustain growth. Since no magic wand is available, one cannot remove NPLs in the short term without accepting lower recoveries, booking additional losses and raising extra capital (the only resource that banks can “unlock” to offset risks, although an expensive one). Capital pressures originated by the need to quickly offload/write-down bad loans (e.g., due
Empirical evidence on the above is provided e.g. by (Accornero et al., 2017) who obtain statistically-robust results from an extensive dataset on borrower-bank lending relationships in 2008-2015, which is not affected by “endogeneity” issues. They find that the banks’ lending behavior is not causally affected by the level of NPL ratios (as the negative correlation between NPL ratios and credit growth is mostly generated by changes in firms’ conditions and by contractions in their demand for credit). Furthermore, they show that the exogenous emergence of new NPLs and the associated increase in provisions (as was the case in 2014, following the SSM’s Asset Quality Review) can cause a negative adjustment in credit supply.

3.2.2 Workout processes: IT infrastructures, skills, strategies

Turning now to the main channels that can be used to drive down NPLs, a key role is played by the lenders’ internal recovery processes, which often show considerable room for improvement.

To begin with, sound IT infrastructures need to deployed, to ensure that relevant documents can be quickly retrieved, collateral can be seized and sold without delay, information flows with third parties (e.g., Courts, external lawyers, credit collection specialists) can be managed efficiently and used to review the outsourcers’ performance standards. Data issues can be especially severe for institutions that engaged in repeated M&A deals, taking problematic loans on board and struggling to achieve a fully consistent internal reporting.

Banks also need highly specialised professionals to master the legal subtleties of the recovery procedures (e.g., based on national regulations, special clauses may be needed when an agreement is reached with a third-party guarantor, in order to preserve the lender’s rights towards the main obligor). This calls for scale economies (including those related to the availability of specialised skills), which smaller institutions may only achieve by promoting consortia and resorting to specialised providers.

Additionally, the workout of defaulted exposures should be entrusted to an independent unit that operates at arm’s length from the lending department. This would ensure that any weaknesses in the credit file (e.g., over-valuation of collateral, lack of key documents, vulnerability to legal claims) be quickly recognised and translated into higher provisions if necessary. At the same time, the workout unit and the credit department should be able to interact whenever non-performing loans can be cured by extending deadlines and providing new finance, in return for a restructuring plan that credibly improves the debtor’s ability to meet future obligations.

Given the relevance of the NPL issue and the size of the benefits that can be extracted from an effective NPL strategy, the adequacy of the processes, IT tools and professional skills put in place in this area should be carefully supervised by the bank’s board of directors.

to supervisory pressures) are also likely to translate into “outward spill-overs”, with banks in one member State cutting back their cross-border lending due to the constraints they face on their home market loan book (Financial Services Committee, 2017).

20 During the crisis, a number of large banks set up restructuring units that were tasked to run down legacy assets, often accounting for a considerable portion of the total balance sheet. The results were mixed, though, as the size of the problem was sometimes initially underestimated.

21 In March 2017 the SSM issued its “Guidance to banks on non-performing loans” (European Central Bank, 2017a), a non-binding document that requires significant institutions to set-up an NPL strategy and carry it out through adequate governance and processes, in a credible and timely manner. Such strategy should include quantitative targets and a detailed implementation plan, and may involve setting up a dedicated workout unit. The SSM Guidance also outlines criteria for classifying exposures as non-performing and assessing collateral values.
3.2.3 NPL sales

NPL sales are sometimes seen as a silver bullet that may help banks shore up their balance sheets, getting rid of recovery risks and freeing up extra lending capacity to originate new performing loans (as opposed to “zombie” exposures that hang on their financial statements). However, several issues should be carefully assessed, before relying on the “healing touch” of NPL sales:

- NPL buyers are still a relatively small group of investors. This might hurt competition and lead to low sale prices; this is especially true as the market for NPLs is an illiquid one, where the “goods” offered by different originators are not fungible, and may embed different risks and profitability margins;

- NPL buyers (and their outsourcers) may lack the operating capacity required to effectively process large amounts of non-performing exposures (something which, in turn, may lead them to offer lower prices). Namely, while it may be relatively easy to expand operations for small, unsecured retail exposures (where collection techniques are unsophisticated and recovery expectations are low), medium-to-large size exposures may prove hard to manage, leading to unsatisfactory outcomes;

- NPL investors face greater uncertainty than originating banks, as the former do not have access to all information required to estimate the expected recovery rate. In return for that additional risk, they ask for double-digit rates of return on their investment, which in turn brings down the purchase price (Ciavoliello et al., 2016). Such an effect may be lower for banks having a robust IT infrastructure in place, where the most significant drivers of the expected recovery are reliably traced and documented; even so, however, outside buyers may be unable to factor in the “soft” information that originators hold on the defaulted borrowers;

- whenever NPLs are sold at a price which is lower than their real underlying long-term economic value (“REV”), a wealth transfer occurs from the banking system to outside investors (possibly unregulated/speculative institutions). This means that, when approving this kind of sales, bank board members may act against their shareholders’interests, and hence face ensuing legal liabilities. Furthermore, as banks are weakened by such a wealth transfer, public money is more likely be used to rescue them (while private savers face a greater risk of being bailed in or subjected to burden sharing);

- as NPLs are priced below the REV (which, in principle, should be aligned with the loans’ book value), this triggers additional losses which hit the originating bank’s regulatory capital, constraining its lending capacity, making it more likely that it has to tap the market for additional equity capital, exposing shareholders to dilution risks. Additionally, the gap between the prices offered by outside investors and the banks’ carrying values (the so-called “bid/ask spread”23) may “freeze” the market, causing actual deals to be a small portion of the potential tradeable assets;

- the losses embedded in a low sale price translate into the originating bank’s recovery history, depressing its statistical estimates of future recovery rates24. For institutions relying on internal

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22 Empirical studies (Ciocchetta et al., 2017) show that recoveries for in-house recovered exposures are significantly higher than the prices obtained for NPLs sold to outside investors.

23 (Fell et al., 2016) argue that the bid/ask spread may also be due to the fact that many banks do not fully incorporate the costs of working out impaired assets into their provisioning levels.

24 “The sale of part of an NPL portfolio at a low price may lead to upward pressure on coverage ratios for the remaining portfolio, if supervisory measures or market discipline require that the remaining NPL portfolio be marked down to the achieved sales price, even though the residual asset quality has in fact improved on aggregate as a result of the sale.” (Fell et al., 2016, p. 5).
ratings (namely, on the so-called “advanced IRB approach”), this causes an increase in the amount of regulatory capital to be held against both non-performing and performing loans. Again, this hits the lending capacity and may call for new equity capital to be issued at dilutive conditions\(^{25}\).

Because of the above, NPL sales require a careful balancing act: they may prove attractive (by cutting the potential for further bank losses and reducing the supervisors’ own reputational risks), but may also end up destroying value for bank shareholders, debtholders and the public purse. Hence, although any regulatory efforts to increase market liquidity are certainly welcome\(^{26}\), the free interplay of demand and supply should not be biased by outside constraints, e.g. due to supervisors letting it be known that some banks have to sell their NPEs in the near future.

### 3.2.4 Regulatory innovations

Both internal recoveries and NPL sales may benefit from regulatory innovations. As for the former, reforms aimed at cutting the average length of the recovery process (e.g., through incentives to out-of-court settlements) would translate into lower losses for banks, as the opportunity cost of keeping money invested into non-performing assets would decrease\(^{27}\). Concerning the latter, new transaction platforms\(^{28}\) and rules on NPL securitisations (together with public guarantees, when needed) may help the development of the market, including a market for investment-grade NPL-linked securities, which may prove attractive for risk-averse investors (e.g. pension funds).

### 3.2.5 Asset management companies

Another tool that can be used to offload NPLs from the banks' balance sheet (see again Figure 6) is the so-called “bad bank”, also known as “asset management company” (“AMC”) or “asset management vehicle” (“AMV”). This refers to a specialised entity (not necessarily a financial institution\(^{29}\)) buying non-performing exposures at a higher price than private-sector investors, but in line with (or below) the bad loans’ “real economic value”. While in principle a bad bank may rely entirely on private money (e.g. when promoted by the banking industry to trigger scale economies),

\(^{25}\) It has been argued that, to avoid such unwanted consequences, banks should be allowed to ignore extraordinary sales when compiling their databases of past recoveries (Gangeri et al., 2017). In our view, such an exemption should be confined to specific situations (e.g., banks selling NPLs that relate to products/markets where they are no longer active). Other than that, if loan sales occur at a market price that has been freely agreed by two independent parties, such a price must be thought to provide a reasonable estimate of future recovery flows; hence, it cannot be ignored when the bank looks back at its historical recoveries. There might be situations, however, where a bank is forced to sell loans at a price that is below the REV that could be achieved via an in-house recovery process. This could be the case of institutions experiencing supervisory pressures and/or severe capital constraints.

\(^{26}\) (Council of the European Union, 2017; European Commission, 2017a).

\(^{27}\) See (Mesnard et al., 2016) for a brief review of some regulatory innovations concerning national insolvency procedures.

\(^{28}\) The Council’s Action Plan on NPLs (Council of the European Union, 2017) requires the EBA, the ECB and the Commission, to propose initiatives to promote uniform and standardised data for NPLs and the possible creation of NPL transaction platforms.

\(^{29}\) An AMC that is incorporated as a financial institution may prove beneficial, e.g. because it is subject to closer scrutiny by bank supervisors. However, like ordinary banks, it must comply with minimum capital requirements based on “risk-weighted assets”. As the AMC’s NPLs are usually purchased at a price that is well below their face value, one may argue that they are largely covered by “implicit provisions” (the difference between the face value and the purchase price) and therefore qualify for a 100% risk weight under Article 127.1 of the CRR. However, no clear guidance on this has been issued yet by the European Banking Authority, meaning that an AMC may have to weigh NPLs at 150%, driving up capital requirements and making it harder to raise an adequate equity cushion.
some degree of public support\textsuperscript{30} is often required to ease funding constraints and enhance the vehicle’s loss-bearing capacity.

An AMC may prove beneficial in several ways\textsuperscript{31}. First, it prevents banks from disorderly liquidating NPLs (e.g., by selling them and/or their collateral at a price lower than the fair value\textsuperscript{32}) and provides a means to gradually recover loans and dispose assets once market conditions have reverted to normal\textsuperscript{33}. Second, when assisted by some kind of public guarantee, an AMC makes it possible to issue debt at an acceptable cost, which in turn improves the final net value of recoveries\textsuperscript{34}. Third, it may benefit from scale economies and specific professional skills that increase the efficiency of the workout process, while improving coordination among multiple banks involved in complex recovery procedures. Fourth, it may force banks to update and revise their estimates of the transferred assets’ REV, since an independent valuation is usually required before NPLs can be moved to the bad bank.

The use of AMCs as a tool to manage bank crises (or to support institutions that are still viable, but need to strengthen their resiliency) must take into account the provisions dictated by the Bank Recovery and Resolution Directive (“BRRD”) and by various communications issued by the European Commission’s Directorate General Competition (“DG COMP”).

Under Article 42 of the BRRD, the Resolution Authority may set up an AMV to which some assets and liabilities of a resolved bank can be transferred if this is needed to ensure the proper functioning of the latter, to avoid adverse market effects or to maximise liquidation proceeds. However, AMVs can only be used in conjunction with another “resolution tool” (as per Article 37) including sale of business, bridge institutions and bail in. Furthermore, a bail in (a mechanism that cancels/reduces the failing bank’s liabilities or converts them to equity) should always be applied before a bank can benefit from the financial intervention of the Resolution Fund or from public funds.

As concerns DG COMP, the so-called “Impaired assets communication\textsuperscript{35} states that any transfer of assets that takes place, as part of an asset-relief scheme, at a valuation above the market price constitutes State aid. However (as market prices may not exist, or may be biased by market exaggerations fuelled by crisis conditions), a transfer value reflecting the REV of the assets (as certified by an independent expert) is deemed acceptable in the assessment of the compatibility of

\textsuperscript{30} Public support can be granted via equity capital (and/or junior debt), as well as through public guarantees on funding or State-backed insurance on the assets’ recovery values (meaning that losses above some maximum threshold will be borne by the public sector). In the last case, the impaired assets may remain on the originating bank’s balance sheet, which is nevertheless shielded from the risk of unexpected/extreme losses. This is sometimes referred to as the distinction between “asset removal schemes” and “asset insurance or asset protection schemes” (O’Brien and Wezel, 2013), also known as “off-balance sheet” and “on-balance sheet” approaches (Grodzicki et al., 2015).

\textsuperscript{31} According to (Financial Services Committee, 2017, p. 79), “AMCs have five possible benefits: time, pooled expertise, scale, coordination as well as providing capital which is likely to be scarce in banks facing NPL challenges”. See also Avgouleas and Goodhart, 2017; Fell et al., 2017) on the merits and weaknesses of AMCs.

\textsuperscript{32} In times of crisis, the market prices for impaired assets may be negatively affected by several temporary factors. One could e.g. mention the increase in the investors’ risk aversion, the drop in collateral values due to the bad performance of financial and real estate markets, the bottlenecks in the judiciary system following a sudden rise in bankruptcy procedures, the imbalance between (increased) supply and (steady) demand for non-performing assets.

\textsuperscript{33} In this sense, AMCs can be seen as a “reservoir, which can soak up excess NPL stocks while impediments to NPL resolution are being addressed, releasing them back into the market later” (Fell et al., 2016).

\textsuperscript{34} Bruno et al., 2017) argues that an AMC could be replaced by a “nation-wide securitisation SPV” raising funds from private investors at acceptable costs, thanks to a public guarantee on senior tranches.

the aid, as it would indicate that the latter complies with the so-called “minimum necessary amount” principle\textsuperscript{36}.

In fact, based on various DG COMP communications (including the “2013 Banking Communication”\textsuperscript{37}), an asset-relief scheme should only be authorised if it has been demonstrated that all measures to limit State aid to the \textit{minimum necessary} have been exploited to the \textit{maximum} extent. To that end, Member States must submit a capital raising plan and a restructuring plan, outlining measures aimed at restoring the long-term viability of the institution(s) accessing the asset relief scheme. Additionally, State support should always be granted in a way that guarantees an adequate burden-sharing by private investors; since 2013, it is required that hybrid capital and subordinated debt holders contribute to reducing the bank’s capital shortfall to the maximum extent, unless such a measure would “endanger financial stability or lead to disproportionate results”\textsuperscript{38}.

Based on the above, the creation of an AMC may entail some non-trivial political costs, as bail-in/burden-sharing rules require that investors be subjected to material losses. Furthermore, AMCs funded by the public sector\textsuperscript{39} (or benefiting from a State guarantee\textsuperscript{40}) can be expected to trigger an increase in public debt, on the basis of Eurostat rules. It is therefore important that such a tool be deployed in a way that maximises its effectiveness and ability to relieve pressure on the banking system\textsuperscript{41}. To that end, an AMC should\textsuperscript{42}:

- provide a full, unconditional transfer of risks from the originating bank(s) to the asset management vehicle. While it sounds fair, in principle, to leave the originating bank exposed to the risk of lower-than-expected recoveries\textsuperscript{43}, such a mechanism may undermine the AMC’s ability

\textsuperscript{36} Even so, however, the price of the transferred assets must include remuneration for the State that takes account of future unexpected losses. Such remuneration may be provided e.g. by setting the transfer price at below the REV (Impaired assets communication, Annex 4).
\textsuperscript{37} “Communication from the Commission on the application, from 1 August 2013, of State aid rules to support measures in favour of banks in the context of the financial crisis”, Official Journal of the European Union, C216/1, 30 July 2013.
\textsuperscript{38} (Aiyar et al., 2015a) note that “in several countries, uncertainty about EU State aid rules have delayed the resolution of NPLs, such as in the case of Slovenia, or hampered the return of banks to financial health (Portugal and Spain)” and conclude that “greater flexibility under these conditions would allow earlier and more proactive steps to address potential risks to financial stability”.
\textsuperscript{39} A comprehensive introduction to Eurostat rules on AMCs is provided by (Gandrud and Hallerberg, 2014), who also argue that ownership choices are not simply ‘window dressing’ but alter the way AMCs operate (with private AMCs usually imposing larger haircuts on the prices paid for impaired assets, thereby improving overall profitability).
\textsuperscript{40} As explained by (O’Brien and Wezel, 2013), an AMC which is majority privately-owned may be classified as outside the government sector, even if its liabilities have received a government guarantee (subject to various conditions regarding the AMC’s duration, purpose, and expected losses).
\textsuperscript{41} In a statement issued on July 11, 2017 (“Council conclusions on Action plan to tackle nonperforming loans in Europe”, the EU Council has asked the Commission to develop, by end-2017, a “blueprint” for the potential set-up of national asset management companies.
\textsuperscript{42} Note that the proposed criteria may not fully overlap with recent proposals issued by European authorities and policy makers. E.g., the EBA’s model for a European AMC (Enria, 2017; Enria et al., 2017) involves “a timeline (e.g. three years) to sell the assets” and a recapitalisation under State aid rules (i.e., wiping out existing shareholders and subordinated debtholders) if NPLs are sold by the AMC at a price below the REV.
\textsuperscript{43} This could be achieved, e.g., by having the originating bank underwrite securities, issued by the AMC, that would involve losses if actual recoveries fall significantly below the REV; alternatively, the originating bank may have to assign the AMC some equity warrants, that the latter may be entitled to sell on the market if minimum recovery targets are not met. See (Avgouleas and Goodhart, 2017; European Central Bank, 2009;
to convince bank stakeholders that an actual “without-recourse” sale has taken place (Bruno et al., 2017, p. 101). This, in turn, would jeopardise the bad bank’s ability to reassure (prospective) shareholders, bondholders and depositors, leaving it prone to undercapitalisation and liquidity shortages;

- secure long-term funding, at a sustainable cost, from the public and private sectors (with the latter possibly assisted by public guarantees, in order to avoid the risk that recovery proceedings be used to pay interest to private investors, and no upside is left for the taxpayer);

- have no explicit constraint to carry out asset sales within a pre-determined deadline and be assigned an operating horizon that is long enough to allow for the orderly completion of the AMC’s mandate. In fact, while time limits may be consistent with the idea that State aid must be temporary in nature and should not indefinitely interfere with market forces, they also undermine the AMC’s bargaining power vis à vis the specialised investors that may bid for its assets. The latter could e.g. postpone their offers until the bad bank is close to its final deadline, in order to profit from the AMC’s need to quickly sell its non-performing loans. Additionally, a tight deadline may make it impossible for the AMC to pursue “in house” recovery strategies, even when these look more profitable than outright sales (O’Brien and Wezel, 2013).

4. PROVISIONING POLICIES

Figure 6 also indicates one last channel through which one could reduce the banks’ exposure to NPL risks: by establishing a regime that requires lenders to step up provisions based on a set of predefined parameters (including the time elapsed since exposures were first identified as non-performing). Although in this case the NPLs would still sit on the balance sheet, most (or all) of them would be already written down, leaving little or no room for further losses.

Such “calendar provisioning” regimes have sometimes been advocated for by policy experts, and have already been adopted, under specific circumstances, in some countries.

In the United States, regulatory guidance entails some time limits on NPL write-offs. Namely, after being past due for 180 days, mortgage loans must be valued exclusively on the basis of the underlying collateral (market value less the cost to sell): if the carrying value is higher, the difference must be written down. This rule, however, only holds for mortgage loans (which in the US are non-recourse exposures, where collateral represents the only source of repayment); it does not apply, inter alia, to corporate lending, where insolvency procedures may take time before the bank receives a payment. In Spain, Circular 3/2010 has amended the accounting standards to speed up

O’Brien and Wezel, 2013) on the merits of setting up an AMC where originating banks maintain some form of risk sharing.

44 This is the case, e.g. of Ireland’s NAMA (“National Asset Management Agency”) set up in 2009 and backed by public funds and a public debt guarantee. NAMA was allowed a 10-year time horizon to work out the assets, in order to “avoid fire sales and strike the best balance between a “warehouse” and a “workout” vehicle” (Financial Services Committee, 2017).

45 (Aiyar et al., 2015a) argues that “capital surcharges on long-held NPLs and time limits on NPL disposal could provide incentives for timely write-off”.

46 Furthermore, it is sometimes reported (Aiyar et al., 2015a; Magnus et al., 2017) that Irish supervisors have imposed quantitative targets on the resolution of non-performing mortgage loans; it is unclear, however, whether such targets involved uniform time-bound provisioning regimes (no explicit calendar provisioning rules can be found, e.g., in (Central Bank of Ireland, 2013)). As concerns Ireland, (European Central Bank, 2017b) notes that “there are no specific national guidelines or rules for NPL write-offs”.

47 (Aiyar et al., 2015b, p. 25; Financial Services Committee, 2017, p. 54).

48 (Moore, 2014).
and standardise the recognition of impairment losses for real estate collateral. One year after the default date\(^{49}\), the unsecured portion of mortgage loans must be fully provisioned, while the collateral cannot exceed the value indicated on the deed of sale and may be subject to haircuts depending on property type and expected difficulty to seize (Castilla, 2010; Moore, 2014).

Against this backdrop, the European Council’s action plan on non-performing loans (Council of the European Union, 2017) has invited the Commission to consider, within the framework of the ongoing review of the CRR/CRD IV, “prudential backstops” to NPLs based on compulsory deductions from own funds, which would apply to newly-originated loans.

Subsequently, the SSM has issued a draft addendum to its 2017 Guidance on NPLs (European Central Bank, 2017c), which specifies minimum levels of prudential provisions effective since January 2018. According to the draft, banks will be “expected to” provide full coverage for the unsecured portion of new NPLs\(^{50}\) within 2 years (7 years for the secured portion) and will have to “explain” any deviation from these parameters to supervisors, who may then impose additional prudential measures\(^{51}\).

Although “calendar provisioning” may look appealing from the supervisors’ perspective, it suffers from several drawbacks, including the following:

- while it is in the public interest to have banks evaluate their non-performing assets in a fair, scrupulous and even conservative manner, it is unclear how bank stakeholders and financial statement users would benefit from rules that are deliberately biased towards generating higher provisions, regardless of the assets’ actual REV\(^{52}\);

- in fact, any write-down criteria that override the NPLs’ fair value would not comply with the relevant EU accounting standards (IAS 39 and, since 2018, IFRS 9), where “impaired” (“Stage 3”) exposures have to be valued on the basis of their expected discounted cash flows. This means that calendar provisioning may have to be implemented through an increase in the required regulatory capital, equal to the difference between “supervisory” and “accounting” provisions. Such an extra capital cushion (to be achieved, e.g., through retained profits) would not be tax-deductible, further increasing the overall cost for banks;

- by forcing banks to fully write off NPLs on which they have positive recovery expectations, the new rule would (further) encourage lenders to sell non-performing exposures at a price that is below the REV, which would tilt the playing field to the advantage of buyers\(^{53}\). While such a behaviour would put NPLs at arm’s length from the banks’ balance sheets, neutralising downside risks for future income statements and adverse reputational risks for supervisors, it would also force banks to forgo a potentially profitable area of business (as prices paid by specialised investors often embed a two-digit rate of return). Similarly, calendar provisioning may push

\(^{49}\) Since January 2018 new rules will enter into force, requesting a 100% write-down 21 months (instead of 12) after the default date, but asking for a higher coverage in the early stages (e.g. 40% after 90 days).

\(^{50}\) Unlike the Council’s action plan, this would also include loans originated before January 2018, as long as they become non-performing after that date.

\(^{51}\) See Footnote 58 below regarding the “non-binding” nature of the SSM addendum.

\(^{52}\) It might be argued that long-term investors may actually benefit from deliberate over-provisioning, as they would earn extraordinary gains at some later stage. However, this would lead to an improper wealth transfer between old shareholders selling on the bad news (the high write-downs) and new investors betting on future extra profits. Financial statements should in fact report asset values as carefully as possible, rather than understating them and create the potential for a subsequent upside.

\(^{53}\) This may not be entirely consistent with the Council’s recommendation that “incentives for all EU credit institutions to deal with NPLs pro-actively should be enhanced while at the same avoiding the disruptive effects of fire sales” (Council of the European Union, 2017).
banks to seek an agreement with borrowers, to restructure defaulted loans and move them back to a performing status. Although this may have positive effects – provided that borrowers can return to adequate profitability levels and restructured exposures are not going to default again in the future – it is unclear why this kind of arrangements should not be left to market forces;

• by requesting banks to use simplified prudential backstops instead of their own internal estimates, one would weaken the incentives towards the development of adequate internal models (including models for estimating LGDs on performing and non-performing exposures);

• by replacing the bank’s managerial assessments with outside constraints imposed by supervisors, calendar provisioning may pose a threat to the free conduct of business. While it is universally agreed that banks are heavily regulated and must be managed in accordance with prudential regulations and supervisory practices, such limitations to free enterprise should be supported by a strong legal basis;

• it should also be noted that the current regulatory framework already includes a capital requirements regime for non-performing exposures, which was approved by the co-legislators in 2013 through a fully-fledged, accountable political process. Namely, Article 127.1 of the CRR assigns a 150% risk weight to the unsecured part of a defaulted exposure when specific credit risk adjustments are less than 20% of its gross book value. Furthermore, Article 181.1.(h) mandates institutions to estimate the increase of the loss rate on defaulted exposures that may be caused by unexpected losses during the recovery period. Finally, Articles 74, 79 and 88 of CRD4 require supervisors to validate the adequacy and effectiveness of the models and processes used by banks to measure credit risk on problem credits (rather than superimposing external criteria based on simplified rules-of-thumb). One may certainly call for a revision of these provisions, which by the way are consistent with the standards set out by the Basel Committee, and therefore do not put European institutions at a disadvantage vis à vis their non-European counterparts. It would look fair, however, that such a revision be enacted through the same rule-making process that has lead to the current regulatory framework;

• furthermore, a “one-size-fits-all” approach would hardly be consistent with Article 104 of CRD (as well as with Article 16.2.(d) of the SSM Regulation), whereby supervisors are vested with the power to “require institutions to apply a specific provisioning policy or treatment of assets in terms of own funds requirements”. This points to a tailor-made approach to addressing under-provisioning on a bank by bank basis, as further explained by the EBA SREP Guidelines (European Banking Authority, 2014) whereby “competent authorities may require the institution to apply a specific provisioning policy, and – where permitted by accounting rules and regulations – require it to increase provisions”;

• finally, it is unclear whether such rules would pass the so-called “proportionality test”, according to which any action by the European Union should not involve measures that exceed what is necessary to achieve a legitimate policy objective. In fact, the risk of unexpected losses on NPLs

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54 Interestingly, a “one-size-fits-all” approach would not ensure a level playing field across banks operating in different EU jurisdictions. In fact, institutions based in Member States where legal proceedings are slower would end up being forced to write off non-performing exposures even though empirical experience shows that they can reasonably expect further recoveries. Such an adverse effect would not occur for lenders domiciled in countries where judicial procedures are faster.
56 The “principle of proportionality” was first developed by the European Court of Justice as a basis for review of EU measures. It was then recalled by the Treaty of the European Union (Article 5) to govern the exercise by the Union of its legislative competence. See (EBA Banking Stakeholder Group, 2015) for further details.
can be managed by ensuring that individual banks evaluate defaulted exposures in a careful, realistic and conservative manner. Calendar provisioning rules that are meant to be applied across the board would go much further.

As concerns the SSM’s proposal, it should also be noted that on October 11 2017 the European Commission, as per the Council’s request, released an interpretation of some related European regulations (European Commission, 2017b). The interpretation states that the existing legislation provides the SSM with the power to influence a bank’s provisioning levels (within the limits set by the applicable accounting rules) and to impose specific capital adjustments if accounting provisions are not deemed sufficient57. However, together with a jointly-released Commission’s communication on the Banking union (European Commission, 2017c), the interpretation also clarifies that the introduction of minimum provisioning levels on new NPLs would require ad hoc legislative proposals to amend the CRR.

The Commission’s view looks consistent with the fact that supervisors can hardly establish a new regime of “expected” provisions (that would amount to a “parallel regime” of capital requirements58) without an explicit legal basis. In fact, as calendar provisioning may trigger additional capital constraints, which in turn would impair the banks’ ability to provide credit to the real economy, such a wide-ranging innovation should be backed through a political initiative, and not be left to a purely technical process.

57 The nature of such adjustments, however, is unclear. On one hand, as they would be prompted by supervisors to offset risks other than those specifically covered by Pillar 1, they could be seen as Pillar 2 capital requirements following from the Supervisory Reporting Evaluation Process, as per Articles 97 et seq. of CRD4. However, and less intuitively, (European Central Bank, 2017c) has argued that capital deductions “expected” by supervisors, above the levels requested by accounting rules, should be seen as own funds that institutions hold in excess of regulatory and supervisory requirements, as per Article 3 of the CRR.

58 The fact that a new rule is presented as a mere “supervisory expectation” does not, in our view, make a tangible difference. In fact, even an expectations-based regime would grant the supervisors with the power to impose provisioning/capital requirements across the board, without having to demonstrate that such requests are in line with the characteristics and past performance of individual banks, and leaving it to the banks to prove that supervisory “expectations” are not adequate to their specificities. That would amount to a “soft rule” that, while being presented as a mere non-binding guideline, would prove extremely hard to challenge in practice.

59 The Commission’s stance also looks consistent with the FSC’s Report on NPLs, requesting that any capital deduction based on the vintage of the NPLs be enacted as a Pillar 1 measure through an amendment to the CRR (Financial Services Committee, 2017, p. 57).
5. CONCLUSIONS

This note has briefly reviewed the latest empirical data on NPLs in the European Union. The main causes of the surge in NPLs have then been discussed, together with some tools that may help clean bank balance sheets. The last paragraph has focused on the role of provisioning regimes, including calendar provisioning.

The empirical data show that the NPL to total loans ratio has been steadily decreasing in the EU since 2014; in fact, in early 2017, the increase in lending spurred by the macroeconomic recovery has made it possible for the ratio to shrink further. However, significant differences remain across Member States, with several countries still reporting double-digit ratios. Furthermore, while national NPL ratios are reverting to lower values, they remain well above pre-crisis levels. Coverage ratios (which do not, per se, provide a complete picture of NPL-related risks) have increased over the last 30 months, with the average value up by 3% to 45%. Italy stands out as the largest country where NPLs make up for a relatively high portion of total loans, while coverage levels are broadly in line with the EU mean. Among large banking systems, Germany and the UK look somewhat underprovisioned vis-à-vis other Member States.

The long-term dynamics of NPLs is mainly driven by two factors: the macroeconomic cycle and the banks’ lending practices. While any policy aimed at increasing growth and productivity will clearly help lenders reduce their exposure to NPL-related risks, the role of credit origination processes can hardly be overstated. Accordingly, policy makers should keep incentivising the development of sound internal credit ratings, while stepping up efforts to prevent banks from opportunistically using risk management systems as mere capital-relief tool.

The main levers that can be employed to tackle high stocks of non-performing loans are the following: improving internal workout processes; selling NPLs to non-bank investors; setting up an asset management company backed by public support; introducing new provisioning rules that require banks to write off NPLs based on vintage-related criteria.

Internal recovery processes may benefit from better IT architectures, specialised professional skills and a clear underlying strategy. Separate workout units may prove more effective in identifying the weaknesses in the credit files (e.g. in terms of missing documents or outdated collateral estimates), laying the ground for more credible valuations.

NPL sales require a careful balancing act: they may prove attractive (by cutting the potential for further bank losses and reducing the supervisors’ own reputational risks), but also may end up destroying value for bank shareholders, debtholders and the public purse. The market for NPLs is still illiquid, and prices embed a significant discount because buyers require a high risk premium to offset information asymmetries. Furthermore, non-bank investors may lack the operating capacity required to effectively process large amounts of non-performing exposures (especially for complex corporate loans, which may prove comparatively hard to manage). Whenever NPLs are sold at a price which is lower than their REV, a wealth transfer occurs from the banking system to outside investors, making the sale hardly compatible with the directors’ duty of care. As a result, banks may grow weaker, not stronger, increasing the risk that public money be used at some stage, and private savers end up being bailed in, or subjected to burden sharing.

AMCs entail a number of potential benefits. They may prevent banks from disorderly liquidating NPLs and provide a means to gradually recover loans and dispose assets once market conditions have reverted to normal. Additionally, a state-backed AMC can issue debt at an acceptable cost, which in turn improves the final net value of recoveries. Finally, since an independent valuation is
required when NPLs are transferred to the “bad bank”, the latter may force banks to update their REV estimates, revising any unrealistic assumptions and ensuring that badly-managed institutions pay a price for their mistakes.

AMCs are subject to an increasingly stringent regulation, due to recovery and resolution rules, as well as to State aid-related requirements. As the European Commission works on a blueprint for European AMCs, ways should be sought to ensure that state-backed bad banks achieve some desirable outcomes: allow originating banks to enjoy a full, unconditional risk transfer; secure long-term funding from private investors at a sustainable cost; have no explicit constraint to carry out asset sales within a pre-determined deadline.

Compulsory provisioning regimes may require lenders to write down, and possibly write off, NPLs based on a pre-defined schedule (“calendar provisioning”). They have been used in a number of countries, usually for specific portfolios (e.g., residential mortgages).

Such “prudential backstops” are mentioned in the European Council’s action plan on non-performing loans. Additionally, the SSM has recently issued a proposal whereby, since January 2018, banks would be “expected to” provide full coverage for the unsecured portion of new NPLs within 2 years (7 years for the secured portion) and will have to “explain” any deviation from these parameters to supervisors, who may then impose additional prudential measures.

Calendar provisioning suffers from several drawbacks. In fact, while it is in the public interest to have banks evaluate their non-performing assets fairly, it is unclear how their stakeholders would benefit from rules that are aimed at generating higher provisions, regardless of the assets’ actual REV. Furthermore, as provisioning criteria in most EU countries are dictated by IFRS accounting standards, calendar provisioning may have to be implemented via capital deductions, which are not tax deductible, hence more expensive. Additionally, in order to avoid recording high write-offs in their income statement, banks would be further incentivised to sell NPLs at a low price, leaving the workout business to specialised investors looking for double-digit returns. Finally, calendar provisioning may not pass the “proportionality test”, as less drastic measures may achieve similar benefits when it comes to preventing unexpected losses on defaulted exposures.

As calendar provisioning entails a new prudential regime for NPLs, which would replace the current one and trigger additional capital constraints for banks (which may negatively affect credit supply), one may argue that such a change should be enacted through a fully-fledged, accountable political process. Even “soft rules” presented as a mere “supervisory expectations” would still grant supervisors with the power to impose provisioning/capital requirements across the board, without having to demonstrate that such requests are in line with the characteristics and past performance of individual banks. While formally non-binding, they may prove extremely hard to challenge in practice. Unsurprisingly, then, the European Commission has recently clarified that the introduction of minimum provisioning targets for new NPLs would require ad hoc legislative proposals to amend the CRR.

Finally, in dealing with NPLs one should never forget that the link between non-performing exposures, profitability and loan growth is mostly about correlation, not causality. In fact, while NPLs tend to be associated with modest profits and poor loan supply, they are not causing them. Instead, bad loans, operational inefficiency and modest profitability may all follow from adverse macroeconomic conditions, ineffective management and inadequate governance schemes. These are the real culprits, which regulation and supervision should keep targeting in the coming years. Bank profitability and lending capacity cannot be magically restored by forcing lenders to hastily offload, or write off, non-performing exposures.
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