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# *Non-performing loans*

*Leveraging the right strategy  
to optimise your company's  
balance sheet*

*An overview of how you  
can assess and address  
the potential challenges  
relating to NPLs, from  
NPL strategy to opera-  
tions, IT, people and  
change.*

September 2017



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# 1. Executive summary

The market for non-performing loans (NPLs) has been growing continuously over the past decade because credit quality has been deteriorating across the globe. While there have been positive signs in some markets, such as the EU

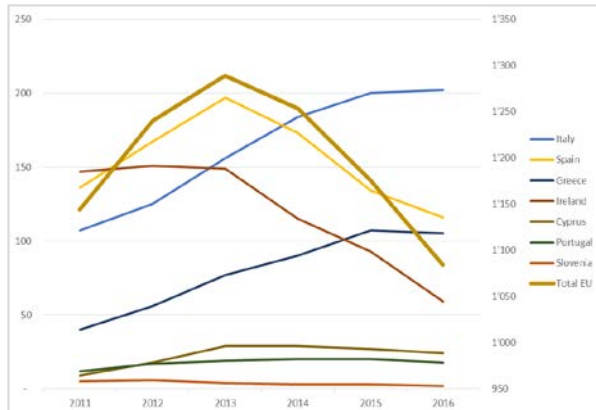


Figure 1: Gross NPL stocks (EUR billions) 2011 to 2016 of high NPL countries in Europe (left axis shows countries' stock of NPLs and right axis shows EU's total NPL stock). Source: PwC analysis<sup>1</sup>

as a whole, there are still some countries, such as Italy, Portugal and Greece, which are increasingly struggling with NPLs (see Figure 1 and Figure 2).

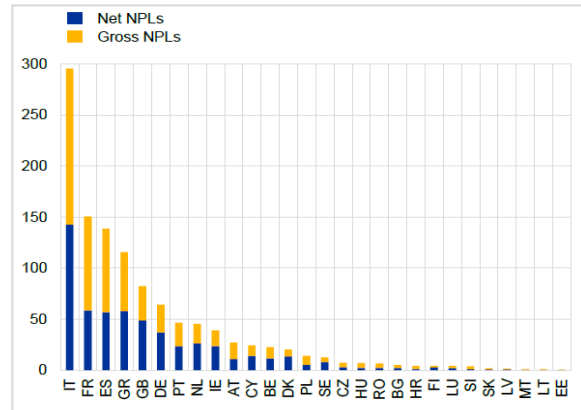


Figure 2: Gross and net NPLs in 2016 in Europe (EUR billions). Source: ESRB<sup>2</sup>

This white paper aims to give you an overview of how you can assess and address your potential challenges relating to NPLs, from NPL strategy to operations, IT, people and change. We summarise our observations, experience and understanding of financial companies' activities to optimise their NPL management. A key point is elaborating approaches to assess your NPL landscape (portfolio processes, KPIs, staff readiness, etc.), the subsequent NPL strategy design and its implementation. We outline our recent experiences with NPL actors in Europe, which have helped us gain a solid understanding of the needs of the NPL market and stakeholders' expectations and how these interact and interdepend as well as how banks, and other market participants should approach NPLs. We extend the view beyond the simple management of NPLs to implications of current regulation (the European Central Bank's guidance and IFRS 9) and how these create opportunities that can help institutions improve their overall business. We present potential solutions to the challenges of NPL, which we have gathered from our work. We lay out how well-defined quantitative and qualitative long-term objectives under appropriate portfolio

segmentation and with specifically developed strategy options and early warning indicators (EWIs) as well as a decision tree for the strategy options and well-trained/experienced staff are all key elements to reduce NPLs successfully.

In this way, we hope to provide you some ideas to help you build expertise in your business to improve NPLs and general loan management. Implementing the suggested options (strategically and operationally) can increase profitability by means of a strategic NPL reduction accompanied by maximum recovery.

We also point out the main risks of selecting the wrong strategy and how they can disadvantage your company. We present two case studies to help you understand what the risks are and how taking the right action can make a substantial difference. Finally, we link the NPL market's and investors' expectations to individual institution's activities. This ties into the wider economic impact of the current NPL situation in Europe and the NPL market situation.

<sup>1</sup> PwC, May 2017, *Market update Q1 2017* ([link](#))

<sup>2</sup> ESRB, July 2017, *Resolving non-performing loans in Europe* ([link](#))

## 2. Introduction

Non-performing loans and, more generally, non-performing exposures (NPEs) have gained attention globally because stocks have become unsustainably capital intensive. They pose an increasing risk to banks in terms of continuing as going concerns and operating normally. This risk will eventually manifest itself through rippling effects beyond the banking sector because of resource misallocation. On the one hand, individual banks with large NPL portfolios are forced to divert resources that are needed elsewhere and they fail to fulfil their

The origin of NPLs is twofold. First, banks finance businesses and consumer activities that eventually become unprofitable. Second, banks fail to enhance their internal setups to deal with market, economic, and customer changes as well as fraudulent activities by banks and customers. It is fair to say that the NPL issue is now a systemic one, although the solution likely has to be implemented by each bank on its own, with guidance from external stakeholders, regulators and banking associations. The European Central Bank (ECB) issued its guidance on NPL strategy in March 2017<sup>3</sup>. The ECB's guidance encompasses all of the aspects that banks with substantial NPL portfolios should revise. It is, however, up to each bank to develop the details in line with its specific situation.

### **What are the main causes of NPLs and why are they still a problem?**

Economic downturns are often seen as one of the main causes of lower debt and collateral quality and higher stocks of NPLs held by banks. The cause are mainly low GDP growth, high unemployment rate, banks' lending practices, low bank covenants, credit culture in the country, interest rates, supervisory and legal frameworks, etc.

In fact, it's a combination of the external factor (changes in the economy) and internal factors (a bank's governance, risk management and overall culture) that expose a bank to risk of

strategic ambitions and economic duty to support viable business financing. Capital that could be used to finance and drive sustainable businesses is tied up in non-performing ones and thus is not productive. On the other hand, NPLs can inhibit banks' lending activities on a larger scale because of the capital they tie up, thus affecting entire economies and their growth.

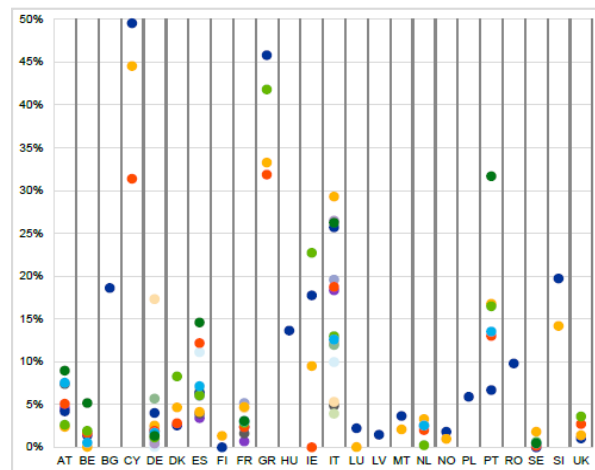


Figure 3: Distribution of NPL ratios in EU countries in 2016 (% of gross debt instruments) (source: ESRB)

lower loan performance because of unforeseen and badly managed changes in its debt-servicing capacity.

NPLs are also a problem for banks that shy away from the difficult but necessary steps to reduce their exposure. Often, hard choices have to be made relating to governance, processes, write-offs and people management. In our experience, banks that have accepted the reality and taken up the challenge by building a forward-looking strategy based on observable market changes and by implementing suitable

<sup>3</sup> ECB, March 2017, *Guidance to banks on non-performing loans* ([link](#))

operational changes (e.g. setting up a strong workout unit staffed with experts) have managed far better their NPLs. They've also shored up their viability as going concerns and their resilience to poorly performing loans in the future (e.g. by upgrading their credit risk and scoring models, upgrading their IT and data

management, and improving the training of their staff – front to back).

A recent ECB survey appears to show that the two main external impediments to resolving the NPL problem for banks are currently the lengthy and costly insolvency process and the inefficiency of the NPL market (see Figure 4).

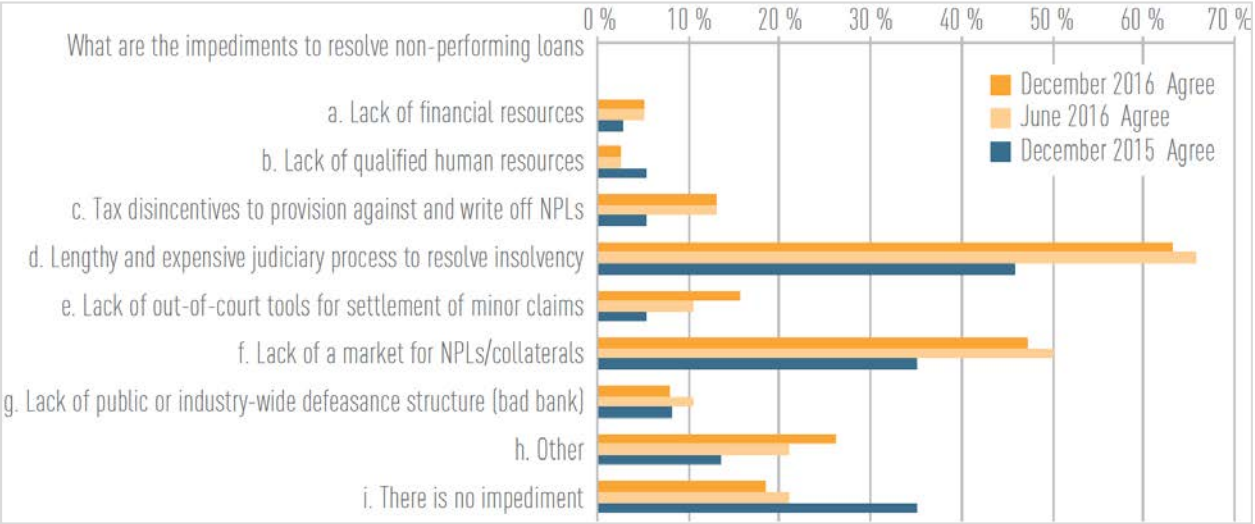


Figure 4: Impediments for non-performing loans resolution are still dominated by lengthy and costly judiciary insolvency process and the inefficiency of the NPL market<sup>4</sup>

Many financial institutions still face data quality issues, which is one of the reasons for the inefficiency of the NPL market. Inadequate data means that banks cannot provide investors with the robust information they need and makes NPL trading pricey.

The main NPL data quality issues that banks currently face are:

- Lack of historical data, track record of exposures.
- Discrepancies between loan documentation and data records.
- No or incomplete documentation.
- Poor collateral data and valuation methodologies.
- Non-compliance with regulatory requirements (e.g. ECB reporting on NPL stock for banks, BCBS 239, etc.).
- Frequent changes in data sourcing procedures, which leads to discrepancies in data quality.

<sup>4</sup> ECB, December 2016, *Risk assessment of the European banking system* ([link](#))

# 3. The right NPL strategy – the key to resolving the NPL issue

Both the ECB's guidance and general good practice based on experience appear to suggest that every bank has to understand its portfolio, operational readiness, client base and market in order to formulate its own optimal strategy for NPL management. While there is a range of options, there is no magic bullet. Hard work is needed from the analysts up to the C-suite to define a strategy and implement it operationally.

It is also important to note that a strategy's operational realisation can change over time and

that parts of it are likely to be diametrically opposed (e.g. incentives and remuneration). On the one hand, an efficient and quick reduction in NPL stocks is demanded. On the other hand, workouts might be more effective, but they take more time and carry operational risks. Workout managers must also be encouraged to reduce their NPL portfolio even though this actually means they are making themselves redundant!

What are the main NPL strategies? The ECB suggests the following general strategies for NPL portfolio management.

Strategy	Description	Advantage	Disadvantage	Applicability
<b>Write-off</b>	The bank writes off the NPLs that are recognised as unrecoverable. The impact is immediate and eliminates future risk and potential losses. The loans are removed from the balance sheet and 100% loss goes to P/L.	Quick; low effort; can be done for individual line items; position is immediately removed from balance sheet.	High loss.	Small items; items that would require disproportionate amount of work; items that are recognised as unrecoverable.
<b>Sale</b>	The bank sells to a bank or another professional investor a sub-portfolio of NPLs that it recognises as unrecoverable. Depending on the arrangement, the exposures are either removed from the balance sheet or go off-balance sheet. The bank accepts a haircut but recovers some part of the exposure essentially immediately.	Quick; low effort; higher recovery than write-off; item is immediately removed from balance sheet.	Needs negotiations with counterparties; significant loss is likely (high discounts).	Portfolio of items with similar or identical parameters; homogeneous groups (e.g. retail real estate, credit card debt).
<b>Hold, Forbearance</b>	The bank holds the exposures, accepting current non-performance under the assumption that conditions will change within a reasonable time and the exposure will become performing again. The exact approach depends on the operating model, the forbearance policy, the borrower assessment, the available operational NPL management capabilities, and available external service providers.	Low effort; potential for improvement.	Risk of greater exposure.	Larger or more complex items; items that have potential for recovery.

Strategy	Description	Advantage	Disadvantage	Applicability
<b>Workout</b>	Workout is an active hold strategy whereby the bank restructures existing loan agreements to optimise recovery. Workout requires a detailed borrower profile, financial analysis, cooperation and a business viability assessment along with sophisticated monitoring processes in the bank.	High recovery.	High effort; needs appropriate processes and people in bank (use of resources, expertise).	Larger or more complex items; items that have potential for recovery
<b>Change of exposure</b>	Foreclosure, debt to equity swap, debt to asset swap, or collateral substitution.	Good potential for recovery.	Medium effort; needs appropriate processes and people in bank; potential for further loss.	Works best for specific exposures; legal process (in court); time consuming and costly.
<b>Legal actions</b>	This includes insolvency proceedings and out-of-court solutions.	Good potential for recovery.	High effort; needs appropriate processes and people in bank; potentially lengthy proceedings and uncertainty about the outcome.	Larger or more complex items; items that have limited potential for recovery; time consuming and costly

Table 1: The potential strategies for NPL management

As the above table shows, there are various general strategy options available to manage a bank's NPL portfolio. Management should consider all of them because it is likely a combination of these options is the best choice, at least for a well segmented portfolio. Clear roles and responsibilities regarding the different related activities must be set up in the organisation. It should also be noted that, on an institutional level, there are further options to create the framework under which the bank operates. The bank can, for instance:

- **Enter a joint venture**, in which it shares the risk and the performance of the NPL portfolio with a third party but keeps the NPLs on its balance sheet. The joint venture partner would have the opportunity to invest in a bank's NPL portfolios without owning them and it will inject capital into the joint venture platform (a special purpose vehicle or SPV).
- **Partner with a servicing provider for NPLs** (workout, restructuring, foreclosure,

etc.), which would allow the bank to free up internal resources and return them to its core business activities. This may also provide advantages in terms of alternative accounting and tax options.

- **Securitize the NPL portfolio** by transferring it to an SPV, which then funds the assets by issuing tranches of securities to external investors. Some EU governments guarantee or co-invest in more senior tranches (e.g. in Italy, the senior tranches of some banks' securitisations of NPLs have been guaranteed by the government).
- **Sell NPL portfolios to a national asset management company (AMC)**. This option is available only in a few countries that currently have a national AMC.
- **Sell NPL portfolios to investors**, hence removing the NPLs from the balance sheet after agreeing on the price of the NPLs. However, efficient pricing (bid/ask spread) remains a problem in most markets.

## ECB guidance and requirements for NPL management

The ECB guidance<sup>5</sup> provides constructive points for banks to start and to improve NPL management and its operational realisation,

which includes the main components described in Figure 5 below.







	NPL strategy	<ul style="list-style-type: none"> <li>We <b>assess</b> the internal capabilities for the reduction and management of the NPL portfolio, the external factors (macroeconomics, NPL market, investors etc.), NPL impact on capital, relevant NPL portfolios and other relevant factors.</li> <li>We <b>develop a strategy</b> by setting long-term qualitative and quantitative targets for each portfolio segment with specific strategy options to implement an operational plan (organisation of required resources, opportunities).</li> <li>We <b>embed the strategy</b> by instating the framework for KPIs, responsibilities (RACI), people, processes, communication and reporting.</li> </ul>
	NPL Governance	<ul style="list-style-type: none"> <li>The <b>top-level NPL management body</b> annually reviews and approves the NPL strategy, policies, defined objectives, and incentives.</li> <li>The <b>NPL operating model</b> is realized through a dedicated workout unit with respective subunits and relevant NPL expertise, sets control functions covering the three lines of defence, the workflow between the workout unit and all other departments.</li> <li>The workout unit <b>actively monitors</b> the teams' KPIs, and portfolio/position development using early warning indicators per portfolio, counterparty, and position.</li> </ul>
	NPL recognition	<ul style="list-style-type: none"> <li>In order to align with regulator expectations, the bank applies <b>EBA NPE definitions</b> (e.g., "more than 90 days past due" or "unlikely to pay" assessment) and implements triggers.</li> <li>Management sets the bank's <b>forbearance policy</b>, which defines and sets forbearance conditions, processes, responsibilities etc.</li> <li>The bank accounts for <b>contamination and pulling effect</b>: If part of an exposure is non-performing, the entire exposure is set as non-performing. If more than 20% of an exposures of one counterparty are PD 90 days, all other exposures of this counterparty are set NPE.</li> </ul>
	Collateral valuation	<ul style="list-style-type: none"> <li>The bank's <b>valuation approach</b>, which should include a review, at least annually, of the collateral values within their NPEs should encompass back-testing (e.g., as prescribed under IFRS 9).</li> <li><b>Foreclosed assets</b> need proper valuation at fair value less costs of selling, applied discount for illiquid assets etc.</li> <li>Proper <b>Governance</b> requires valuation policies and procedures, approvals, reporting etc.</li> </ul>
	Forbearance policy	<ul style="list-style-type: none"> <li>As part of the forbearance processes, <b>viability assessment</b> should be conducted for borrowers and business, including the analysis of their respective financials.</li> <li>In order to determine optimal <b>forbearance strategy options</b>, a decision tree should be defined and used.</li> <li>The <b>forbearance processes</b> should be in accordance with the forbearance policy, viability/affordability assessment, milestones, and monitoring.</li> </ul>
	Provisioning, write-off policies	<ul style="list-style-type: none"> <li><b>Individual provisions</b> should be set according to criteria and thresholds to calculate individual exposures. A conservative approach to the future cash flows estimation under the "going concern" and "gone concern." scenarios should be taken.</li> <li><b>Collective provisions</b> are determined using criteria for grouping exposures, application, and integration of risk management systems.</li> <li><b>Additional issues</b> arise from treatment of off-balance sheet items (guarantees, loans commitments), impairment losses recognition etc.</li> </ul>

Figure 5: The main components of the ECB guidance on NPLs

The ECB's NPL guidance is non-binding and aims at identifying the best practices banks and financial institutions should incorporate in order to reduce their NPL portfolios. The ECB asks banks to define "realistic and ambitious strategies". A number of individual ('high-NPL') banks received a communication from

the ECB asking them to establish clear targets for the reduction of their high-NPL levels over realistic but sufficiently ambitious time horizons. These banks should lay out, for each relevant portfolio, a clear, credible and feasible NPL reduction plan covering the bank's approach, objectives and action plan.

<sup>5</sup> ECB, March 2017, *Guidance to banks on non-performing loans* ([link](#))



## Six-step approach to address the ECB's guidance

In line with the communication, the key elements for an effective NPL reduction strategy are the following:

Step	Description
1. Define NPL strategy	<ul style="list-style-type: none"> <li>• Set <b>long-term</b> (at least five years) <b>quantitative targets</b> for the global NPL portfolio and each sub-portfolio (the ECB defines seven types of portfolios divided into two main groups: non-financial corporate and households).</li> <li>• Define and <b>implement strategy options for each sub-portfolio</b>; possible to define a top-down/bottom-up strategy for a certain number of high-NPL cases.</li> </ul>
2. Embed strategy	<ul style="list-style-type: none"> <li>• Implement <b>board and risk committee meetings</b> to review objectives and NPL strategy on a monthly/quarterly/annual basis.</li> <li>• <b>Hire specialists</b> and experienced workout officers.</li> <li>• <b>Implement an incentive scheme</b> for the workout unit in order to achieve the NPL reduction plan's objectives.</li> <li>• <b>Enhance data quality</b> of the NPL portfolios and their collaterals to offset potential bid/ask price spreads.</li> </ul>
3. Design TOM	<ul style="list-style-type: none"> <li>• <b>Design a target operating model (TOM)</b> and align it with the workout unit's activities (organisational structure, processes, human resources, etc.).</li> <li>• The definition of the TOM will require analysis of external providers' <b>internal capabilities</b>.</li> </ul>
4. Apply strategy decision tree	<ul style="list-style-type: none"> <li>• Create a <b>decision tree for the strategy options</b> and implement it in the workout unit's day-to-day NPL business decisions (see figure 3).</li> </ul>
5. Develop and apply policies	<ul style="list-style-type: none"> <li>• <b>Tailor the forbearance policy</b> and strategy for maximum recovery.</li> <li>• <b>Follow a provisioning policy</b> in line with the NPL reduction strategy (enhancement of the coverage ratio, IAS 39/IFRS 9).</li> </ul>
6. Measure and refine NPL management	<ul style="list-style-type: none"> <li>• Set <b>monthly KPIs for the workout unit officers</b> (individual reduction of the gross NPL, cash collected, recovery rate, etc.) and <b>for the NPL management efficiency</b> monitoring (e.g. NPL/total loans ratio, NPL coverage ratio, cure and re-default rates, etc.).</li> <li>• <b>Review of the credit analysis and covenants</b> in the loan origination process (lower LTV, higher debt service coverage ratio, collateral requirement, credit score prerequisites etc.) – to solve the NPL issue at one of its sources</li> </ul>

Table 2: The key elements for an effective NPL reduction strategy. Note that step 6 to 1 is a feedback loop.

As explained in the six-step approach (see table 2 above), implementing and applying a strategy options decision tree in the workout unit's day-to-day NPL business decisions is a

key step to address the ECB's guidance on reducing NPL stocks. Figure 2 below is an example of a strategy options decision tree example.

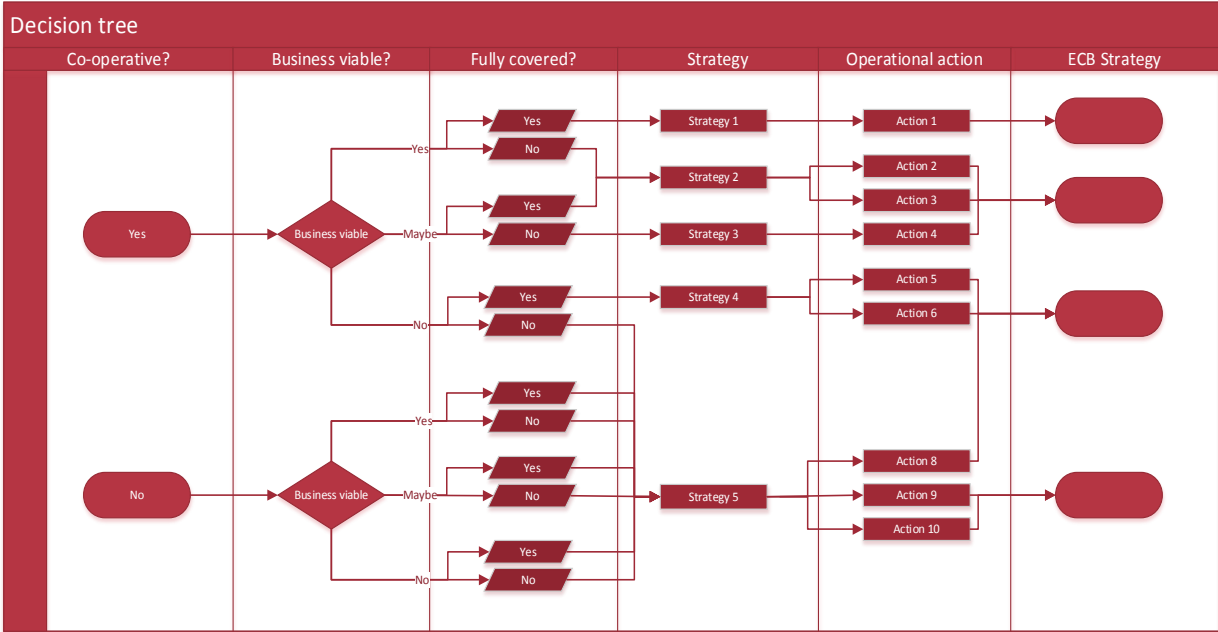


Figure 6: Example NPL strategy options decision tree

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## 4. What are the risks of choosing the wrong strategy?

Choosing the wrong NPL strategy can result in low cash recovery due to the inefficient selling prices and thus a shortfall in overall revenue for the bank. For example, omitting to assess the credit score or business viability of the counterparty of an exposure can result in the wrong strategic choice and in a loss of revenue for the bank. For instance, it might choose to sell (lower price and expected recovery) when a proper assessment would have suggested a hold strategy that yields higher future cash flows. On the other hand, holding an NPL portfolio instead of selling it through divestment/active reduction can increase the capital

and liquidity requirements (e.g. decrease in the CET1 ratio with an increase in the RWA, a potential decrease in the LCR and NSFR liquidity ratios) and unnecessarily tying up internal resources (the workout unit and other departments involved).

When making a strategic NPL decision, banks should take care to follow a clear analysis and decision process with regard to their NPL strategy options (i.e. use of a decision tree, derive the available options and align with the portfolio objectives) and the best practices set out by the ECB's NPL guidance.

### **Case study 1: Greece – a spiral of loss**

Since Greece was hit by the financial crisis in 2010, its banks have been recapitalised three times: the last round in 2015 for a total of EUR 43 billion. However, the balance sheets of Greek banks are still in bad shape, being severely impacted by the high number of NPLs (the ratio of NPLs is about 40%<sup>6</sup>). So why does Greece still have this high NPL burden?

Although Greek banks have agreed to an NPL reduction plan<sup>6</sup>, in the beginning of 2017 the gross NPL stock spiked at almost EUR 1 billion due to the enduring economic recession. Many borrowers refused to repay or agree to restructure their loans in the hope that the government would come to an extrajudicial compromise in the near future that might improve the

contractual terms and debt haircuts. Moreover, the deferred tax credits (DTCs) related to NPLs remain an issue because they can be counted as capital regardless of whether the banks make a profit or a loss, thus reducing Greek banks' capital quality.

Greece liberalised its NPL market in 2015 with the aim of attracting foreign investors but this has not happened yet due to the remaining economic uncertainty. The creation of a national AMC could be another option to attract fresh foreign capital to the Greek NPL market. However, the uncertainty about the economic future of Greece has to be resolved first if this objective is to be achieved.

### **Case study 2: Balkan region – hold out vs. fire sale**

In 2012/2013, the Balkan region was hit by a severe economic downturn, which later affected the banking system by impacting loan quality and increasing the stock of NPLs held on bank balance sheets.

Some banks reacted hastily and sold their NPL portfolios at steeply discounted prices to outside investors (NPL management funds<sup>7,8,9</sup>). Recent ECB risk reports suggest that the overall amount of NPLs on bank balance sheets has decreased. It is likely there are still considerable volumes of NPLs that are now with private

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<sup>6</sup> Bruegel, February 2017, *Should we worry about Greek banks?* ([link](#))

<sup>7</sup> Euromoney, July 2015, *Emerging Europe: NPL sales pick up in CEE* ([link](#))

<sup>8</sup> Reuters, June 2015, *Apollo, EBRD to buy Slovenian bank NKBM* ([link](#))

<sup>9</sup> See News, July 2016, *Slovenia's NLB to sell portion of bad loan portfolio for 396 million euros* ([link](#))

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investors, thus increasing the banking sector's 'safety margin' to some extent. Nevertheless, the total amount is still some 15%, which means that at least some banks are holding onto their NPLs. Why?

Given that most loans are likely securitised by real estate, the 2012 downturn caused real estate prices to fall and, in turn, increased loan to value (LTV) ratios leading to balance sheet impairments.

However, the real estate market has been recovering and it shows strong signs of further recovery. This will lead to decreases in LTV ratios (depending on efficient portfolio management, of course) and, thus, the improvement of loan portfolios. Banks that held their NPLs and companies that bought NPL portfolios early on are likely to benefit from the current economic upturn. Their portfolios have significant potential for recovery, supporting the hold decisions made in 2012 and 2013.

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# *The wider economic impact*

The current situation risks the development and stability of parts of the EU – and the EU as whole – if the resulting problems become contagious (e.g. by affecting investors such as pension funds). The current European stock of NPLs has deep structural causes and is partially a legacy from the last financial and economic crisis, during which asset quality issues have been highlighted (asset quality review). The growth in NPL stocks has revealed the limited capacity of the EU banking system to deal with distressed debt. A number of banks in countries across the euro zone currently hold high levels of NPLs – the so-called ‘high-NPL banks’. The ECB, which is responsible for the stability of the European banking market, has summarised the experiences of banks under its supervision with NPLs in its recently released NPL guidance<sup>10</sup> (March 2017). This guidance was published to help the management of EU banks establish and further develop best practices for their NPL strategies and operations. The ECB requires high NPL banks to establish

and integrate a clear and ambitious NPL reduction strategy that includes:

- specific long-term targets,
- a range of policy options,
- an operational plan, and
- overall governance structures.

The ECB expects a purposeful and sustainable reduction of NPLs on high-NPL banks’ balance sheets to promote the economic stability from a microeconomic and macroeconomic point of view and restore confidence in the banking sector. According to the ECB’s latest Financial Stability Review<sup>11</sup>, the NPL issue is quite heterogeneous throughout the EU. Moreover, Vitor Constâncio, Vice-President of the ECB, still sees the resolution of NPLs as happening only slowly.<sup>12</sup>

In the present paper, we describe the current market, recent observations about the origins and causes of NPLs and, more generally, their various manifestations as well as the different approaches to handling them.

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<sup>10</sup> ECB, March 2017, *Guidance to banks on non-performing loans* ([link](#))

<sup>11</sup> ECB, May 2017, *Financial Stability Review* ([link](#))

<sup>12</sup> Speech at *Tackling Europe’s non-performing loans crisis: restructuring debt, reviving growth* event organised by Bruegel, Brussels, February 2017 ([link](#))

## The current situation in Europe

The present low interest rate environment continues to challenge for banks in terms of generating sustainable profits and, in some European regions, profitability expectations continue to be weakened by the large stock of NPLs that has been built up.

Despite the fact that EU AMCs were set up to transfer the NPLs from banks under restructuring (NAMA in Ireland, SAREB in Spain, and BAMC in Slovenia), 107 significant institutions (SIs) in Europe still held NPLs for a gross amount of around EUR 866 billion at the end of 2016 (the total European NPL burden exceeded EUR 1 trillion for the same period<sup>11,13</sup>).

The NPL reduction has been slow and heterogeneous with double-digit levels in six of the most impacted euro zone countries. In terms of scale and size, banks directly supervised by the ECB still held EUR 921 billion of such troubled loans at the end of September 2016, which represented 6.4% of total loans and nearly 9% of the euro zone's GDP<sup>12</sup>.

In 2016, European banks held EUR 2.3 trillion of loans they no longer wanted, of which around EUR 1 trillion were NPLs and EUR 1.3 trillion were performing. The value of the European non-core assets rose due to the continued restructuring of the banking sector resulting in more assets being designated as non-core.

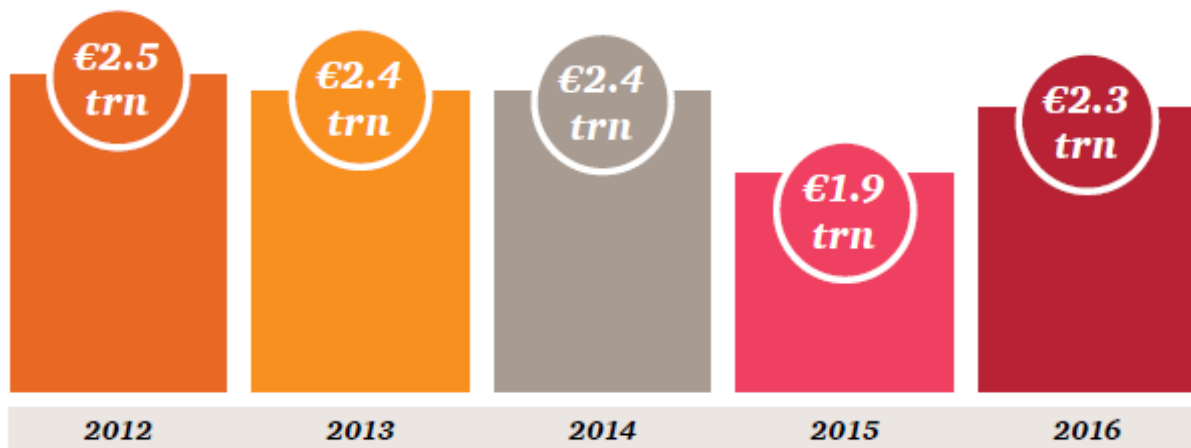


Figure 7: European banks non-core assets evolution (source: PwC analysis<sup>14</sup>)

<sup>13</sup> PwC, May 2017, *Market update Q1 2017* ([link](#))

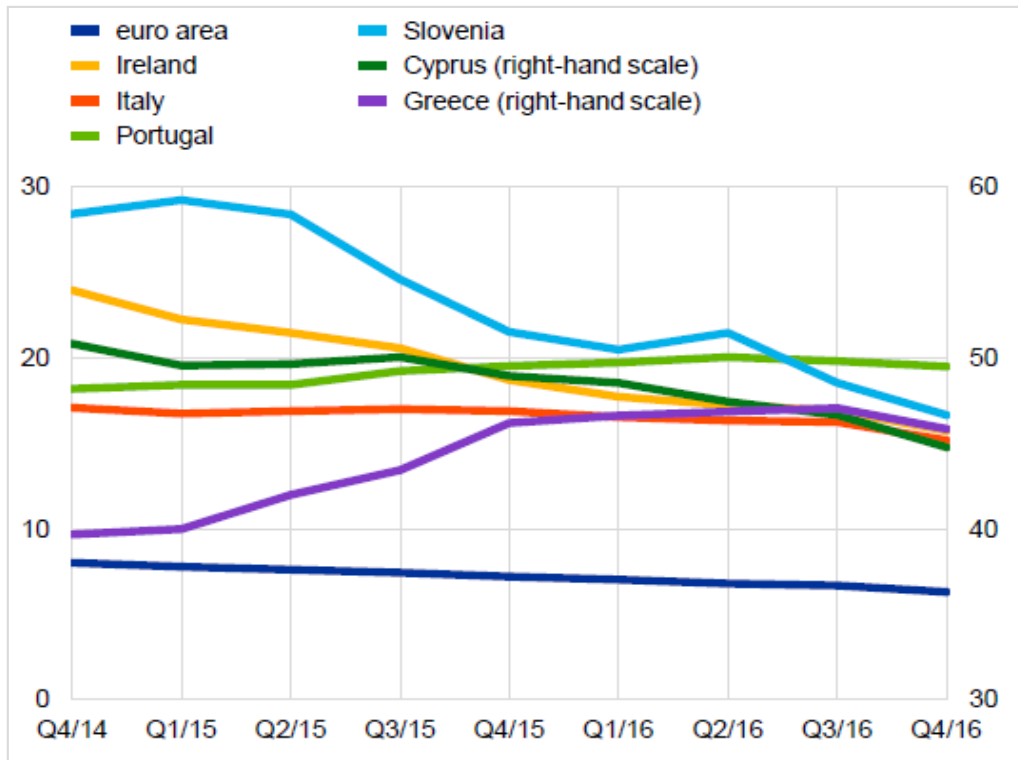


Figure 8: Non-performing exposure ratio in the euro area countries (Q4 2014–Q4 2016; percentages, euro area aggregates)<sup>11</sup>

Despite a decline in the second half of 2016, following an increase in write-offs and portfolio sales, the NPL to total exposure ratio (NPL/total credit exposure) in the high-NPL countries still remains high, whereas the euro area average continuously declined from December 2014 to December 2016 (ca. 6% in Q4 2016) (see Figure 8).

The EU's NPL level remains higher than other major developed regions. For the US and Japan, the World Bank reported NPL ratios of about 1.5% at the end of 2016. In the aftermath of the global financial crisis, the recognition of losses has been slower and more gradual in Europe than in the US (NPL ratios peaked in 2012 in the EU compared with 2009 in the US).

The EU member states that were most affected by the financial crisis experienced major increases in their NPL ratios. The most impacted euro area countries in 2017 are Cyprus, Greece, Ireland, Italy, Portugal and Slovenia.

By the end of December 2016, the two countries that had to implement strict capital controls, Greece and Cyprus, reported NPL ratios of 46% and 45%, respectively. The four other most impacted NPL countries (Ireland, Italy, Portugal and Slovenia) all reported NPL ratios between 15% and 30%, while the other EU countries had NPL ratios below 7% (see Figure 8).

However, the NPL coverage ratio (NPL provisions/gross NPLs) currently stands at 82% on average for the euro area as a whole (Q2 2017, ECB), which is promising.

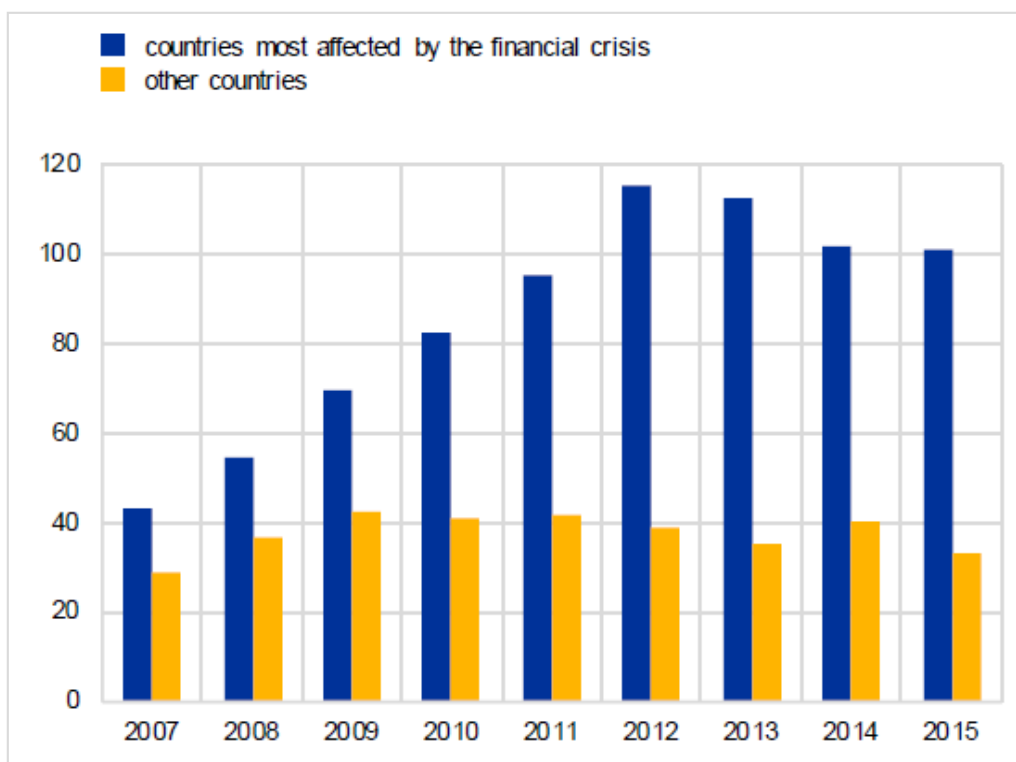


Figure 9: Texas ratio comparison between the high-NPL countries and the other countries in Europe (2007–2015; percentage; median values)<sup>15</sup>

As shown in Figure 9, the Texas ratio (NPLs/tangible common equity) was still above 100% at the end of 2015 for most of the affected European countries. A ratio above 100% means that a bank's tangible equity cannot cover the NPL exposures. Many high-NPL banks in Europe currently still have Texas ratios above 100%. For example, in Italy most of the largest banks have Texas ratios well in excess of 100%. Italian banks made the news in Q2 2017 (Monte dei Paschi di Siena, Banca Popolare di Vicenza and Veneto Banca)<sup>15</sup> because of the increasing unsustainability of their NPLs. Small and medium-sized enterprises ('Non-financial corporations – SME' according to the ECB's classification) are most impacted

by NPLs in the EU, followed by large corporates and households.

NPLs have a negative impact on European economic growth: large NPL portfolios reduce profitability, increase funding costs and tie up banks' capital (liquidity), which negatively impacts the credit supply and, ultimately, growth. The NPL problem is currently affecting European banks' profitability and is one of the main reasons for the low return on equity (ROE) across the EU, which is currently around 5% on average and remains below the cost of equity. The European Banking Authority (EBA) sees high NPL levels and low profitability as the main risks of EU banks both now and in the coming years.

<sup>15</sup> PwC, December 2016, *The Italian NPL market* ([link](#))



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## Market overview

The rise of NPLs has brought about the creation of a secondary market and attracted new market players whose business revolves around buying/selling/trading and the workout of NPLs. Banks are increasingly encouraged by regulators to reduce their NPLs, mainly by increasing the capital requirements for such positions. This has led to the formation of companies specialising in the handling of NPLs. These companies can focus their business activities on the valuation of NPLs and their bundling, processing and monitoring, while this might be financially unattractive for banks. This is even more the case as banks are encouraged to reduce NPLs. Building up effective NPL management departments would be counterproductive for banks in the long run, but beneficial for such NPL specialist institutions. Given the capital intensiveness of NPL trading – banks are usually more interested in offloading large portfolios rather than individual positions – investment funds that provide capital to NPL trading companies have also grown. The illiquid nature of NPLs limits market participants to banks, traditional ‘long-only’ investors, hedge funds and private equity funds. These investors are also investing in the AMC SPVs. For example, NAMA (Ireland) and SAREB (Spain) AMCs are largely privately owned.

In addition to the ECB guidance, a number of policy options to address NPLs have the potential to deal with related market failures and, ultimately, facilitate the workout or sale of NPLs. One of the key preconditions for the success of these policy options is the improvement of legal processes governing debt recovery.

Amongst the options, which include the establishment of national AMCs and asset sales with the assistance of an NPL transaction platform, the ECB highlights the potential role and benefits of several co-investment strategies (between the private sector and the state) to address NPLs. The main advantage of these co-investment strategies is that they may enable sales that might otherwise not occur owing to the currently elevated bid-ask spreads for NPL portfolios.

The interest of international investors in the acquisition of servicing platforms remains high in order to optimise NPL portfolio sales and management.

The top NPL investors in Europe in 2015/2016 included<sup>16</sup>:

- Cerberus
- Lone Star
- Deutsche Bank
- Goldman Sachs
- CarlVal

The top NPL sellers in Europe in 2015/2016 included<sup>16</sup>:

- UKAR
- NAMA (Ireland AMC)
- RBS
- GE Capital
- Permanent TSB

In Q1 2017, over EUR 50 billion of NPL deals are expected to be completed or are in progress (see Figure 10).

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<sup>16</sup> Cushman & Wakefield, 2016–2015, *European real estate loans sales market* ([link 1](#), [link 2](#))

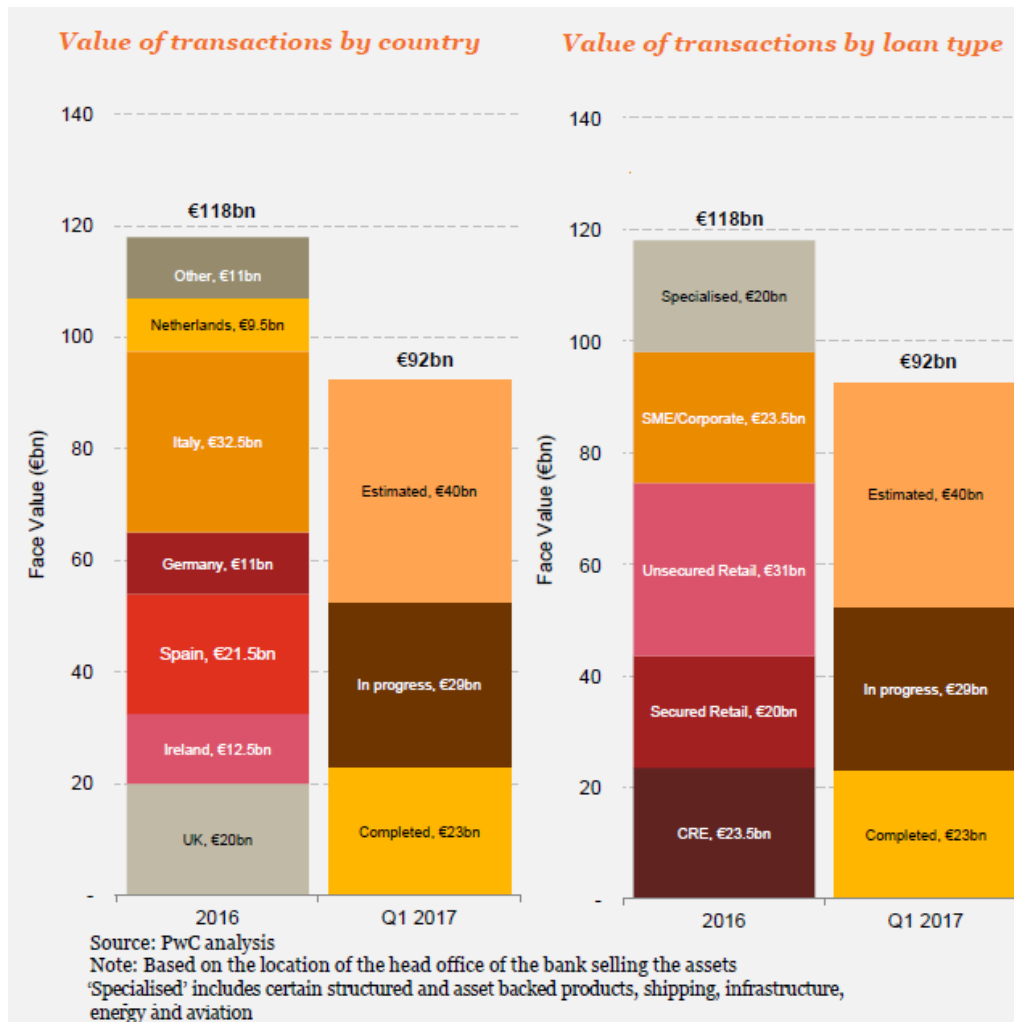


Figure 10: NPL transactions from 2016 to Q1 2017 by country and loan type<sup>13</sup>

Various factors are creating gaps between the book value of NPLs (net of loss provisions) and the market prices. Investors may input a series of discount criteria in their pricing, which include:

- (a) lack of information, data asymmetries – the selling entity has always more information about the NPLs than the buyers, so a lower bid from investors may reflect this uncertainty;
- (b) the estimated potential cost and time to recover the NPL value and its potential collateral, which reduces the NPL price; and
- (c) varying expectations for the macroeconomic outlook – a more optimistic view about the local economy may be held by the seller than the foreign investors.

The high NPL supply volume and some very illiquid assets will tend to move the market prices against the sellers. Hence, these bid/ask

spreads could prevent some banks from selling their NPL portfolios.

Another potential problem in the NPL market is that various structural impediments may exist in some countries that constrain the development of an active NPL market. This could lead to an increase in cost and time for the sale and collateral execution, and increase the bid/ask spreads (as explained above). Such impediments are not in the banks' control. They include, for example:

- National insolvency regimes that 'overprotect' some types of creditor from legal foreclosure enforcement actions and collateral appropriation (e.g. retail mortgage borrowers).
- No out-of-court restructuring arrangements.
- Pressure from government on lenders and the legal system to avoid foreclosures.

- Legislative limitations on collateral sales of some types of collateral (e.g. residential property).
- Non-bank entities are legally prohibited from purchasing and managing NPL portfolios, thus making it difficult for non-bank companies to enter this market (e.g. in 2015, Greece passed law 4354/2015 to facilitate the sale of NPLs to non-bank companies).

- Lack of overall skills in the legal system to process enforcement actions against non-performing borrowers.

The global NPL market is still maturing and has significant potential for improvement in order to increase market efficiencies for buyers and sellers.

### ***What do the market and investors expect?***

In general, the market expects that banks follow the ECB's best-practice guidance on NPLs. However, an efficient NPL market and a balanced insolvency regime (quicker and less costly legal processes) are also anticipated. The market expects more help from the state and central banks in order to deleverage and reduce the NPL stocks by relaxing the bank resolution regime (Bank Recovery and Resolution Directive, BRRD). There are many legal constraints on government ability to create NPL AMCs, including the BRRD resolution framework and the EU state-aid rules.

Expectations are high for the easing of some national NPL regulations to allow, for example, investors that are not banks to enter the local NPL markets. Investors expect less economic uncertainty in the high-NPL countries they invest in, more transparency (i.e. improvements

in data quality, fraud, valuation, etc.) and more power to take decisions regarding their NPL portfolios (e.g., as the major shareholder of the bank, partner in a joint venture, etc.).

Banks' lending practices are also expected to improve. Replacing NPLs with new loans that then become non-performing is not a viable solution. Robust and sustainable changes need to be made to the banks' structures. Hence, the market expects a reduction in the NPL stocks, which can be achieved, for example, by applying the ECB's guidance, creating an efficient NPL market and increasing the support provided by AMCs, regulators and central banks. This would allow investors better returns on their investments and increase their likeliness to invest, thus supporting the overall ambitions concerning the management and reduction of NPLs.

# 5. PwC Switzerland service offering

Given our first-hand experience, we believe that the solution to the EU's and other markets' NPL portfolios must come from considerable structural reforms of the afflicted individual banks. Central banks and regulators should support the process by providing the banks under their supervision with guidance and support by means of appropriate legal frameworks and facilities.

PwC helps banks that take up the challenge to implement the needed structural reforms and obtain a long-term view to strike a good bal-

ance between costs, capabilities, market options and the need for action. We support banks' transformations in regard to their governance, policies, reporting, financial models and people.

On the basis of our experience, we help banks to:

- Develop, implement and review their NPL strategies;
- Realise operationally their NPL strategies;
- Arrange third-party support (e.g. vendor selection).

## ***NPL strategy development, implementation, and review***

When you develop your NPL strategy, we facilitate your assessment of the external and internal environment, as it is today and developments in the foreseeable future. We help you gather all relevant information from the operating units involved and form a decision that accounts for NPL reductions as expected by the regulator as well as your operational capacities, viable options, economic scenarios and portfolio composition (including the underlying debtor structure).

Throughout the implementation of the strategy (the operational realisation), we support management in continuously monitoring any unexpected developments or unjustified assumptions. This is very much appreciated by our clients because a large part of the implementation hinges on the readiness of the bank's staff (e.g. negotiating skills in the event of restructuring), who we help to train.

Since well-balanced remuneration and performance monitoring are key for the successful operational realisation of the NPL strategy, we help you in its design and implementation at a high level and in detail. A regular review of the

### **Example: NPL strategy development**

In supporting a bank with its strategy formulation, we assisted it by assessing the state of the environment (real-estate market, economic landscape, NPL buyers, etc.), its staff capabilities as well as its process and IT landscape. On the basis of our analysis, we drafted a strategy to support staff training and reorganise functions and loan processing, with a focus on IT to facilitate monitoring, reporting and scenario analysis.

fulfilment of strategic ambitions and goals, adjusted to fit the time frame defined by management and the regulator, supports the NPL strategy's successful implementation. We deliver value not only by providing support for the review, but also in training the stakeholders. We assess the adequacy and appropriateness (not least in terms of proportionality) of your current NPL strategy against your own and the regulator's expectations (e.g. ECB guidance). Depending on your level of readiness, we further develop your NPL strategy to meet all stakeholders' expectations and review its success after implementation.



#### ***Immediate action you can take:***

*Review whether your bank has an NPL strategy in place and its underlying assumptions, how up-to-date they are and how well the strategy is embedded in your bank's operations.*

## Operational realisation of the NPL strategy

In implementing the NPL strategy through operational actions, we go through the business elements that need to be reviewed and adjusted for its successful realisation. To provide the maximum value, we provide support in the review and adjustment process and we train the stakeholders as needed (e.g. credit officers, workout specialists and risk managers). In doing so, we address the issue of how to prevent NPLs as well as how to handle existing NPLs. In particular, we help with:

- Review and optimisation of loan lifecycles
- Valuation/assessment
- Securitisation and SPV (review/optimisation)
- Governance and process improvements (e.g. credit approval automation and quality control)

- Policies
- Monitoring and reporting
- IT
- People and change

As with the NPL strategy, it is important to keep in mind proportionality. We help you to understand regulators' expectations, which might differ from those of management and depend on the bank's risk exposure to the economic area under supervision. We assist you in addressing these expectations appropriately while realising synergies, where possible (e.g. with respect to reporting). Our support can be particularly useful when you want to make sure that governance and policies properly account for the size and complexity of your bank.



### **Immediate action you can take:**

*Assess how well prepared are the different areas to support a new NPL strategy and what is needed to get them to support the change!*

## Review and optimisation of loan lifecycles

To provide a solid foundation for your NPL management, we support your assessment of the current loan lifecycle, how processes are setup, how IT is used and how the roles and responsibilities are structured. Based on this assessment, which helps you understand the root causes of your NPLs, you can derive a plan to improve your loan management and prevent

future NPLs as well as better understand what has to be done to reduce your current NPLs with maximum recovery. A loan lifecycle analysis and adjustment is also important because several operating units that are responsible for loan management are involved in NPL management. Getting loan lifecycles right will mean getting your NPL management right.



### **Immediate action you can take:**

*Review your current loan lifecycle from the perspectives of IT, operational, people and effectiveness.*

## Valuation

Valuation is key to your processes for new loan approvals, current loan monitoring and NPL management. We support institutions primarily in valuation, which encompasses economic views as well as accounting. This translates further into helping you optimise your system and process landscape to avoid late or incorrect valuations. These often cause unexpected costs and write-offs, which can be avoided with proper data management, the right valuation model and technical implementations.

We bring our tax, IT, risk modelling and valuation expertise as well as regulatory insights that will help you gain a holistic view. This supports your business steering and capital management and reduces the number of unwanted revaluations. The valuation and assessment of NPLs, debtors and collateral, as well as the applicability of NPL strategies are crucial for the NPL management decision process, investor relations and portfolio pricing for sales. However, they can be challenging because they depend on many variables that may lie outside your bank's normal operating scope. Given the

special nature of NPLs and the potential conflicts of interest of staff, independent valuations and assessments might be needed to sustain a successful NPL resolution process. We work out valuation models, debtor assessment

processes and collateral valuation approaches that are appropriate to your bank and its environment. We then ensure that the NPL strategy and processes are properly aligned.



**Immediate action you can take:**

*Assess how holistic your current valuation models and approaches is, including IT, processes and people. Back-test your NPL strategy with a focus on client/debtor assessments, collateral valuation and loan performance to understand the performance of your NPL strategy.*

### **Securitisation and SPV (review/optimisation)**

Many effective strategies rely on setting up or interacting with an SPV that will facilitate NPL management either through purchases or raising funds to restructure the financing. We can support you in arranging or transacting with SPV by applying our experience in transactions and deals. Securitisation (with an SPV or with-

out an SPV for resale) needs sophisticated processes relating to valuation/pricing, monitoring, the transaction desk and other parts of the bank. We help set up, review, and optimise these, as needed. We can also assist in finding suitable partners for the securitisation and sales process.



**Immediate action you can take:**

*Review your need for and implementation of securitisation and SPV interaction, and establish whether you are making the best use of both.*

### **Governance and process improvements**

As part of the improvement of NPL management, you will likely want to review your bank's governance and process landscape – not least because the current one has contributed to part of the bank's portfolio now being non-performing. We help review and improve the areas of the bank responsible for loan origination and performance (front, internal audit, risk management, etc.) so that the emergence of more bad loans is prevented.

In addition, we establish new operating functions that can handle the existing NPL portfolio (workout, monitoring, reporting, etc.). How extensive these new functions have to be depends on the bank's overall NPL strategy and operational capacity (people, IT, data, etc.). For example, we develop action plans to be prepared for discussion with regulator supervisory teams and for the next Supervisory Review and Evaluation Process (SREP).



**Immediate action you can take:**

*Review your current organisational set-up and IT readiness to support the operational actions needed to execute your NPL strategy.*

## Policies

We help you draft policies for the elements relevant to NPL management elements. These support the governance changes by providing clear guidance for the existing and new operational functions as well as clarity for the regulator. The policies might cover the following:

- NPL strategy
- KPIs/remuneration
- Monitoring
- Reporting
- Valuation (including collateral)
- Assessment

- Decision tree

It is key that the policies are aligned and updated with the overarching NPL strategy and amongst each other. We will also ensure that accounting rules such as IFRS 9, which require proper provisioning of NPLs, are appropriately considered when drafting the respective policies. We help you to focus on measures that reduce the flow of NPLs, including pricing and underwriting processes because this is likely to become of increasing importance for supervisors and investors going forward.



### **Immediate action you can take:**

*Assess how well aligned and comprehensive your current policies are to ensure that they actually support your NPL strategy!*

## Monitoring and reporting

As with any loan portfolio, NPLs should be well monitored. Nevertheless, our experience shows that NPLs are more critical and thus need more attention to detail. For performing loans, you want simply to ensure that cash flows occur as scheduled. For NPLs, restructuring can bring in new variables, such as special conditions for the sale of securities, collateral liquidation and exposure changes. NPLs can also be more sensitive (positively and negatively) to external factors, such as economic changes.

The value we bring is our understanding of the variables and working with you on your cases to assess the specific impact they have on your

NPL portfolio management. NPLs can also become reclassified as 'performing' if certain (accounting) conditions are met. These considerations – and the fact that the bank's regulator likely expects frequent reporting on the development of the NPL portfolio – require a higher attention to detail from the reporting and monitoring functions.

As part of solving these issues, we support you in setting up appropriate IT solutions that improve your risk and NPL management through the use of early warning indicators/triggers. Accordingly, we design the monitoring, triggers and reporting around the NPL strategy and management's expectations.



### **Immediate action you can take:**

*Test your NPL monitoring performance and data management to understand how well they match your expectations of your NPL strategy.*

## IT

To improve NPL operations, it is crucial to have a well-functioning IT unit to support them, if only for the simple reason that inadequate IT will cost time and resources that could be used in negotiating and restructuring NPLs. Moreover, it addresses the operational risks of not recognising loan problems, incorrect valuations and the ineffective handling of items.

On the basis of our IT implementation experience, we help you set up efficient and effective NPL monitoring, including the key elements, like data aggregation, quality management and reporting. Together with you, we design and implement robust IT and data management that reduces your operational risks and their impact on NPL recovery, which can be heavier

than for normal loans. We implement specific IT support relating to NPL assessment, valuation and decision making. This support is crucial to help the NPL workout function and guarantee compliance with the regulatory expectations (audit trail, scenario analysis, proper approval process, etc.). Of course, reporting and monitoring benefit significantly from an IT landscape founded on a data warehouse with underlying risk and accounting models and strong reporting engines. We also partner with companies that supply well-tested software solutions designed for NPL management and that often support the wider loan-management IT landscape through centralised platforms.



### **Immediate action you can take:**

*Test your bank's IT capabilities and resilience with respect to scenario analysis, the appropriateness of the approval process and ease of auditing.*

## People and change

NPL management requires special skills in negotiation, recovery analysis, collateral and market assessment, drafting legal documents and regulatory/accounting reporting. We have in-depth understanding of the challenges banks face in building up these resources from scratch. Adding to the difficulties is the need for related governance and the paradox that the activity of the NPL workout unit decreases with its success as a major objective of NPL management is to reduce the NPL portfolio! We work closely with you to understand and change your working environment to make it

'fit' for NPL management and prevention. In our opinion, the best way to support banks in improving their NPL management is to train or hire people and build the appropriate structures, always bearing in mind considerations of proportionality. The balancing act of getting the right skills and setting up the respective teams requires experience which we have gained from helping banks on these issues. We also partner with very experienced trainers who have decades of NPL management and training experience.



### **Immediate action you can take:**

*Survey your staff's competence and experience with regard to NPL management and their readiness for change to support your NPL strategy.*



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## ***Additional capabilities***

Given our extensive experience in deals, we often support banks in NPL-related transactions (i.e. portfolio sales). We work globally and locally, which provides you with a comprehensive view of the local and/or national specifics pertaining to NPLs (e.g. market liquidity, buyer interests, tax regimes, accounting rules, etc.). This allows us to help you comprehensively when engaging in NPL transactions, which can be complex with respect to legal and tax questions.

More generally, we help identify interdependencies with other objectives you might have (e.g. IFRS 9, definitions of default as well as risk data aggregation and reporting) and align these with the actions needed to ensure the

compliance and success of your NPL portfolio management.

Data quality is another common concern that impacts NPL management and reporting. Our Data Analytics teams can help you assess the causes of your data management issues and find solutions relating to facilitate your NPL management and organisational change. It is also not uncommon to come across data manipulation (e.g. to mask bad loans that should actually be NPLs) and we have helped numerous institutions in the discovery of various forms of loan fraud. We partner with third parties in order to complement our service offering (i.e. software solutions and training).

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## 6. Contact

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*We wish to thank Pe dram Rostami for his valuable contribution to this white paper.*

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