

Yale University

EliScholar – A Digital Platform for Scholarly Publishing at Yale

YPFS Documents

[Browse by Media Type](#)

9-24-2015

A Strategy for Resolving Europe's Problem Loans

Shekhar Aiyar

Wolfgang Bergthaler

Jose M. Garrido

Anna Ilyina

Andreas Jobst

See next page for additional authors

Follow this and additional works at: <https://elischolar.library.yale.edu/ypfs-documents>

Recommended Citation

Aiyar, Shekhar; Bergthaler, Wolfgang; Garrido, Jose M.; Ilyina, Anna; Jobst, Andreas; Kang, Kenneth; Kovtun, Dmitriy; Liu, Yan; Monaghan, Dermot; and Moretti, Marina, "A Strategy for Resolving Europe's Problem Loans" (2015). *YPFS Documents*. 1291.

<https://elischolar.library.yale.edu/ypfs-documents/1291>

This Document is brought to you for free and open access by the Browse by Media Type at EliScholar – A Digital Platform for Scholarly Publishing at Yale. It has been accepted for inclusion in YPFS Documents by an authorized administrator of EliScholar – A Digital Platform for Scholarly Publishing at Yale. For more information, please contact elischolar@yale.edu.

Author/Creator

Shekhar Aiyar, Wolfgang Bergthaler, Jose M. Garrido, Anna Ilyina, Andreas Jobst, Kenneth Kang, Dmitriy Kovtun, Yan Liu, Dermot Monaghan, and Marina Moretti

IMF STAFF DISCUSSION NOTE

A Strategy for Resolving Europe's Problem Loans

Shekhar Aiyar, Wolfgang Bergthaler, Jose M. Garrido,
Anna Ilyina, Andreas Jobst, Kenneth Kang, Dmitriy Kovtun,
Yan Liu, Dermot Monaghan, and Marina Moretti

DISCLAIMER: Staff Discussion Notes (SDNs) showcase policy-related analysis and research being developed by IMF staff members and are published to elicit comments and to encourage debate. The views expressed in Staff Discussion Notes are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

INTERNATIONAL MONETARY FUND

European Department, Legal Department, and Monetary and Capital Markets Department

A Strategy for Resolving Europe's Problem Loans

Prepared by a team comprising EUR, MCM, and LEG staff¹

Authorized for distribution by Mahmood Pradhan (EUR), Sean Hagan (LEG), and Miguel Savastano (MCM)

DISCLAIMER: Staff Discussion Notes (SDNs) showcase policy-related analysis and research being developed by IMF staff members and are published to elicit comments and to encourage debate. The views expressed in Staff Discussion Notes are those of the author(s) and do not necessarily represent the views of the IMF, its Executive Board, or IMF management.

JEL Classification Numbers: E50, G21

Keywords: Nonperforming loans, debt restructuring, NPL resolution, credit growth

Authors' Email Address: saiyar@imf.org; wbergthaler@imf.org; jgarrido@imf.org; ailyina@imf.org; ajobst@imf.org; kkang@imf.org; dkovtun@imf.org; yliu@imf.org; dmonaghan@imf.org; mmoretti@imf.org

¹ The SDN was drafted by Shekhar Aiyar (EUR), Wolfgang Bergthaler (LEG), Jose M. Garrido (LEG), Anna Ilyina (EUR), Andreas (Andy) Jobst (EUR), Kenneth Kang (EUR), Dmitriy Kovtun (EUR), Yan Liu (LEG), Dermot Monaghan (MCM), and Marina Moretti (MCM); on the basis of analytical contributions from a wider team including Pamela Madrid (EUR), Pablo Lopez-Murphy (EUR), Jiri Podpiera (EUR), Jean Portier (MCM), Yan Sun (EUR), and Oliver Wuensch (MCM). Research assistance was provided by Nouria El Mehdi (LEG), Luca Sanfilippo (MCM), Jesse Siminitz (EUR), and Tiberiu Scutaru (EUR). Administrative assistance was provided by Katherine Cincotta (EUR) and Gilda Ordonez-Baric (EUR). We thank staff from the European Central Bank, the European Commission, and attendees of a July 2015 workshop on NPL resolution at the ECB for their helpful comments and suggestions.

CONTENTS

EXECUTIVE SUMMARY	5
INTRODUCTION	6
HOW SERIOUS IS EUROPE'S NPL PROBLEM?	6
WHAT ARE THE MACRO-FINANCIAL IMPLICATIONS OF HIGH NPLS?.....	9
A. NPLs and bank lending	9
B. NPLs and corporate debt overhang	12
WHAT ARE THE OBSTACLES TO NPL RESOLUTION?.....	13
A. Prudential supervision	16
B. Legal obstacles.....	18
C. Distressed debt markets	21
D. Informational obstacles.....	23
E. Tax and other obstacles.....	23
A COMPREHENSIVE NPL RESOLUTION STRATEGY	25
A. Supervisory policies	26
B. Insolvency and debt enforcement reforms.....	28
C. External NPL management and distressed debt markets	29
D. Support measures	31
CONCLUSION	32
FIGURES	
1. <i>Europe</i> : NPLs after the Global Financial Crisis.....	7
2a. <i>Euro Area</i> : Gross Nonperforming Exposure Ratios by Sector.....	9
2b. <i>Non-Euro Area</i> : Gross Nonperforming Loan Ratios by Sector	9
3. <i>Euro Area</i> : Implications of High NPLs for Bank Performance	10
4. Potential Capital Relief and New Lending from NPL Disposal	12
5. <i>Europe</i> : NPLs and Corporate Debt.....	12
6. IMF Survey-Based Scores on Obstacles to NPL Resolution.....	14
7. IMF Survey-Based Scores on Obstacles to NPL Resolution.....	15
8. Survey-Based Country Obstacles Score vs. NPL Outcomes	15
9. Capitalization and Provisioning.....	16
10. Supervisory Stringency and Coverage Ratios.....	17
11. Use of Restructuring Tools, 2012–14	20

12. Insolvency Regimes and Recovery Rates 21
13. NPL Disposals and the Role of AMCs 22
A1. Corporate Sector Debt Metrics and NPL Ratios..... 37

BOXES

1. Lessons from the Past International Experiences with NPL Resolutions 33
2. Compatibility of AMCs with EU State Aid Rules..... 34

REFERENCES 35

ANNEX..... 37

EXECUTIVE SUMMARY

European banks face significant challenges from their high levels of impaired assets. The global financial crisis and subsequent recession have left many countries with elevated levels of nonperforming loans (NPLs). NPLs in the European Union (EU) stood at about €1 trillion (or over 9 percent of the region's GDP) at end-2014, more than double the level in 2009. NPL levels are particularly high in the southern part of the euro area, as well as in several eastern and southeastern European countries.

Persistently high NPLs hold down credit growth and economic activity. High NPLs tie up bank capital that could otherwise be used to increase lending, reduce bank profitability, and raise funding costs, thereby dampening credit supply. Reducing NPLs expeditiously will therefore be crucial to spur credit growth, especially to small and medium-sized enterprises (SMEs) that are more reliant on bank financing. Further, "unclogging" the bank lending channel would enhance the transmission of monetary policy to the real economy. Resolving impaired loans would also stimulate demand for new loans, as it would facilitate debt restructuring for viable firms while promoting the winding down of unviable firms.

This discussion note examines the structural obstacles that discourage European banks from addressing their problem loans. Write-off rates for European banks remain much lower than those of U.S. banks, despite a much higher stock of NPLs. Results from a new survey of European country authorities and banks indicate that there are serious and interrelated impediments to NPL resolution in the areas of supervision, legal systems, and distressed debt markets, often compounded by informational and other institutional deficiencies. Insufficiently robust supervision can allow banks to avoid dealing with large NPL stockpiles and carry them on balance sheets for much longer than warranted. Weak debt enforcement and ineffective insolvency frameworks tend to lower the recovery values of problem loans. And markets for distressed debt in Europe—with some notable exceptions—are still underdeveloped, preventing the entry of much needed capital and expertise.

Accelerating NPL resolution in Europe requires a comprehensive approach based on three key pillars:

- Enhanced *prudential oversight* to incentivize banks to write off or restructure impaired loans, including efforts to foster more conservative provisioning and imposing time-bound restructuring targets on banks' NPL portfolios. In EU countries the Single Supervisory Mechanism (SSM) and European Banking Authority (EBA) should spearhead this effort, while national regulators will need to take the lead in other jurisdictions.
- Reforms to enhance *debt enforcement regimes* and *insolvency frameworks*. Effective out-of-court restructuring frameworks and improved access to debtor information should be encouraged.
- Development of *distressed debt markets* by improving market infrastructure and, in some cases, using asset management companies (AMCs) to jump-start the market.

INTRODUCTION

1. **Seven years after the onset of the global financial crisis, much of Europe continues to grapple with large stocks of impaired assets.** The financial crisis and ensuing recessions have left many European countries with high levels of NPLs, and, in some cases, large corporate and household debt overhangs. In several European economies—notably in the southern part of the euro area as well as in eastern and southeastern Europe—NPLs are high and still rising. And write-off rates are too low—less than a quarter of that in the United States—creating a growing backlog of impaired assets. NPLs are generally concentrated in the corporate sector, most notably among SMEs, which contribute almost two-thirds of Europe's output and employment, and tend to be more reliant on bank financing than large firms. Given the urgent need to support Europe's still tentative recovery, resolving NPLs expeditiously to promote new lending is of first-order macroeconomic importance.

2. **This discussion note examines the causes and consequences of persistently high NPLs in Europe and proposes a multifaceted strategy for tackling the problem.** Section II details the scale and distribution—across countries and sectors—of the NPL backlog. Section III examines the macroeconomic consequences of elevated NPLs, particularly their negative impact on credit supply, corporate restructuring, and monetary policy transmission. Section IV looks at the structural obstacles to NPL resolution in Europe, drawing from a new survey of country authorities and banks. On the basis of these survey results, as well as international experience with high NPLs, Section V formulates a comprehensive approach to dealing with the problem. This comprises enhanced prudential oversight, insolvency reforms, and further development of distressed debt markets.

HOW SERIOUS IS EUROPE'S NPL PROBLEM?

3. **NPLs have risen sharply across Europe since the global financial crisis.** The deep and prolonged economic downturn has weakened borrowers' debt service capacity, particularly for those borrowers that were overleveraged, leading to an increase in loan defaults. High NPLs also reflect banks' slow pace of restructuring, disposals, and write-offs, with only a handful of countries showing lower NPL ratios at end-2014 compared with their post-crisis peaks (Figure 1). While economic conditions have gradually stabilized across Europe, NPLs continue to increase in many stressed economies, albeit at a slower pace.

4. **The increase in NPLs has, on average, been larger for countries outside the euro area, with a few extreme exceptions (Figure 1):**

- *Euro area countries:* The stock of nonperforming assets has more than doubled since 2008, climbing above €932 billion (or 9.2 percent of euro area GDP) at end-2014.² The ECB's

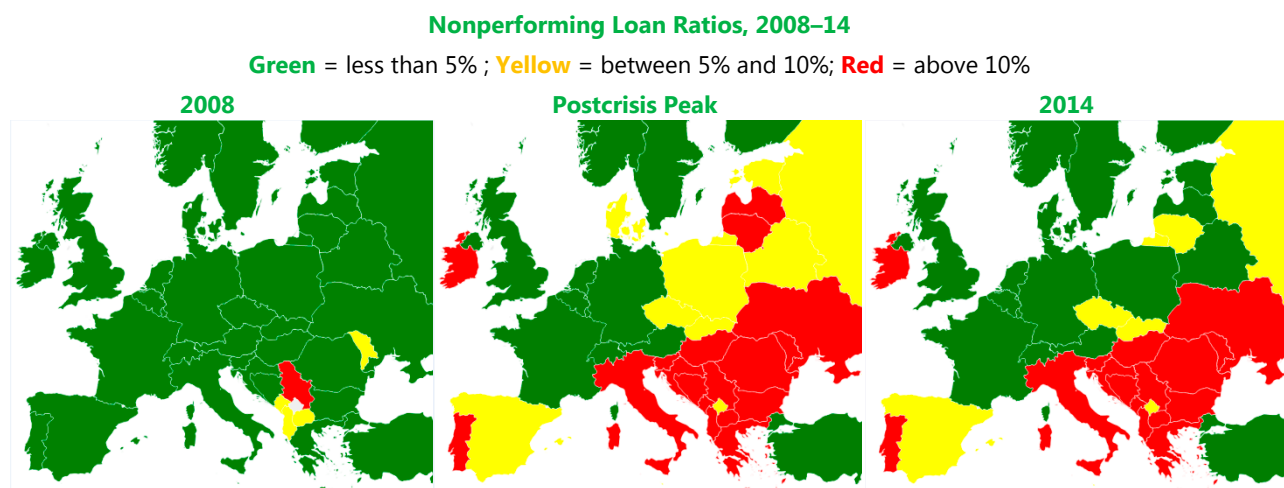
² The data used in this section are mainly from the IMF Financial Soundness Indicators (FSI) database, with benchmark NPL ratios from national sources used in some cases. While IMF FSIs provide the most comprehensive

(continued)

Comprehensive Assessment (CA) of the largest euro area banks in October 2014 revealed a much larger stock of impaired assets than previously disclosed, reaffirming that balance sheet repair is far from complete. Nonperforming exposures (NPEs) of these banks as a share of total loans have increased from 9.2 to 12.4 percent on average.³ By end-2014, gross NPL ratios exceeded 10 percent in several euro area economies, and reached exceptionally high levels in Cyprus (more than 40 percent) and Greece (35 percent).⁴ Sixteen banks in eight countries reported NPEs of 30 percent or higher.

- *Non-euro area countries:* Many non-euro area countries—mainly in central, eastern, and southeastern Europe (CESEE)—experienced substantial increases in NPLs, as their economies plunged into recession after the global financial crisis. Peak NPL ratios were the highest (above 20 percent) in Albania, Montenegro, Romania, and Serbia. In some cases, steep increases in NPLs were triggered by currency depreciation, as many household and corporate loans were denominated in foreign currencies (euros or Swiss francs) while their incomes were in local currencies.

Figure 1. Europe: NPLs after the Global Financial Crisis



Sources: FSIs and country authorities.

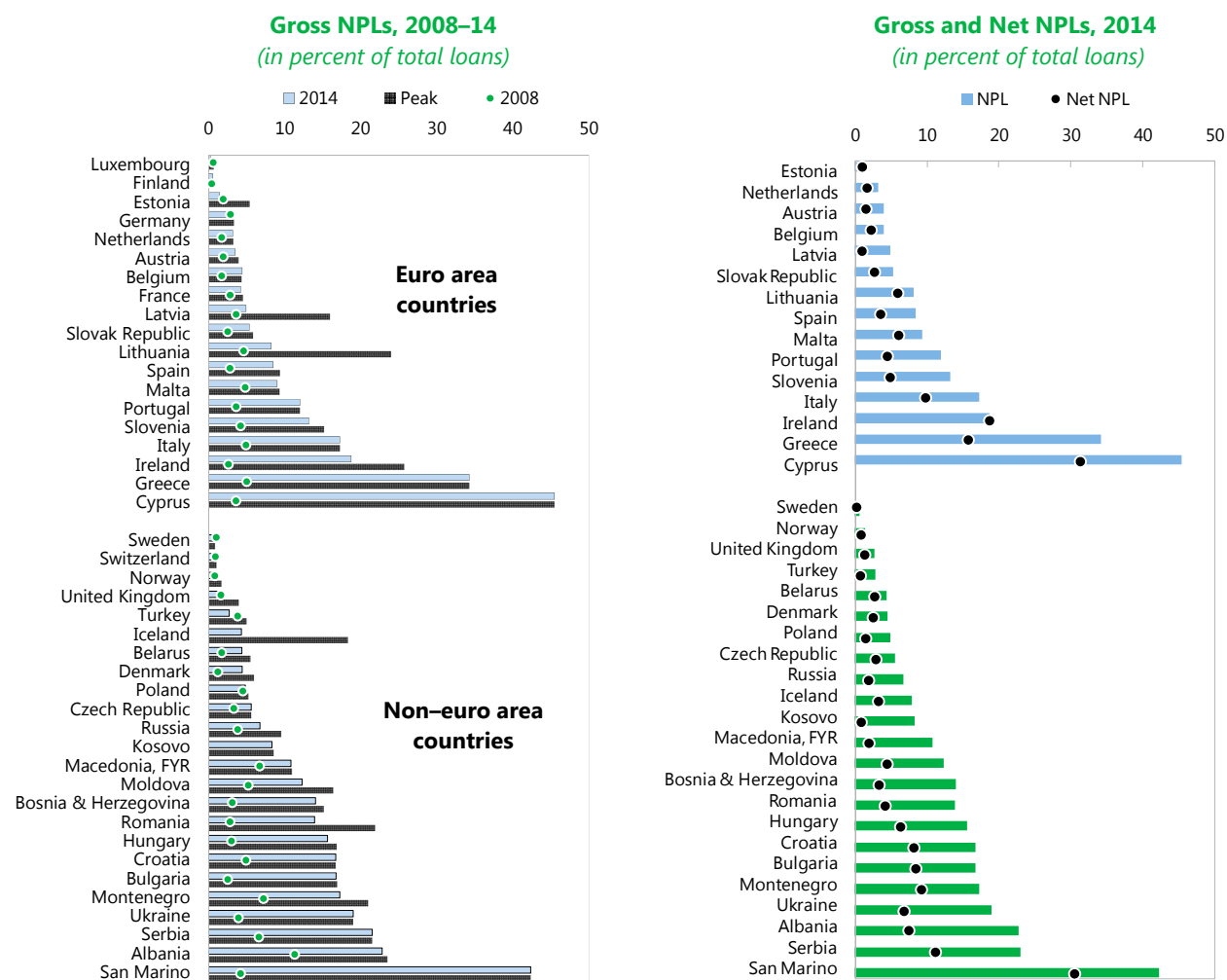
Note: The FSIs are computed using consolidated bank data and therefore do not reflect only domestic NPLs. For example, in Spain the postcrisis peak and 2014 figures based on domestic data only are above 10 percent (13.5 percent and 12.5 percent, respectively).

cross-country data coverage, they are not strictly comparable across economies due to differences in regulatory and supervisory practices.

³ NPE refers to the notional amount of impaired on- and off-balance-sheet exposures in terms of risk-weighting without considering the loss-mitigating impact of collateral.

⁴ The NPL data in Figure 1 are reported on a consolidated basis for banking groups and include the value of collateral, whereas the NPE data in Figure 2 use locational data on impaired loan exposures. In the case of the latter, the values for the euro area are weighted by total assets and, thus, differ from those reported in the CA (where country values are scaled to risk-weighted assets).

Figure 1. Europe: NPLs after the Global Financial Crisis (concluded)



Sources: FSIs; country authorities; and IMF staff calculations. Note: Net NPLs are defined as gross NPLs less loan loss provisions (reserves).

5. **Because of differences in definitions, comparisons of NPL ratios across countries—or even across banks in the same country—are not straightforward.** The EBA introduced new definitions of NPEs and forbearance in October 2013, but their application beyond the larger euro area banks has been uneven. Reviews of recent practice suggest that a consistent application of new harmonized EBA definitions will likely result in further upward revisions of NPLs and that definitions currently used in countries with high NPLs are not necessarily the most conservative (Background Notes, Section I).⁵

6. **Faced with rising NPLs, European banks have increased loan loss provisions.** As a result, the increase in net NPL ratios has been less dramatic (Figure 1). However, coverage ratios—the ratio

⁵ This is more relevant for non-euro area banks, since the ECB's CA already used the new standards. The EBA NPE definition became legally binding in early 2015 and must now be implemented in all EU countries.

of loan loss reserves to gross NPLs—have declined in many cases (see below). This, together with uncertainties surrounding the classification of loans and collateral valuations, has raised concerns about the adequacy of provisioning in many jurisdictions.

7. **Looking across economic sectors, NPL ratios are generally higher in the corporate than in the retail sector.** In the euro area, the corporate debt problem is particularly acute in the southern European economies. In core euro area economies, median NPE ratios for the corporate sector and retail loans are about 8 percent and 2½ percent, respectively, whereas in southern Europe, those ratios are about 45 percent and 10 percent (Figure 2a). While not directly comparable to the euro area, data for non-euro area countries show a similar pattern (Figure 2b).

Figure 2a. Euro Area: Gross Nonperforming Exposure (NPE) Ratios by Sector
(asset-weighted average; in percent of total assets, 2014)

	Total	Corporate	Retail	Total
	(in percent of GDP)			
Cyprus	39.4	46.3	29.6	48.0
Ireland	32.2	50.2	21.7	40.9
Greece	25.3	23.2	26.9	25.4
Slovenia	20.2	29.9	11.1	14.6
Italy	17.6	21.0	13.7	12.0
Spain	12.2	18.8	6.8	9.1
Latvia	9.7	7.3	12.1	3.7
Lithuania	8.9	9.7	8.1	3.2
Portugal	7.9	11.1	5.7	7.3
Malta	6.3	8.8	4.7	3.0
Luxembourg	5.0	5.3	3.1	7.0
Slovak Republic	5.0	6.0	4.3	4.4
Austria	4.6	5.0	4.0	2.0
Denmark	4.0	5.5	1.9	1.6
Netherlands	3.7	7.7	1.8	5.5
Belgium	3.4	5.1	2.4	2.3
France	3.2	2.9	3.4	2.7
Estonia	2.5	2.3	2.6	1.4
Finland	1.7	1.8	1.6	0.9

Figure 2b. Non-Euro Area: Gross Nonperforming Loan (NPL) Ratios by Sector
(in percent of total loans, 2014)

	Total	Corporate	Retail	Total
	(in percent of GDP)			
San Marino	42.3			17.9
Albania	22.8	25.9	15.7	13.6
Serbia	21.5	26.7	10.3	8.4
Montenegro	17.2			10.4
Bulgaria	16.7	19.2	17.7	11.9
Croatia	16.7	30.5	12.0	8.1
Hungary	15.6	13.8	18.9	8.7
Bosnia & Herzegovina	14.0			6.6
Romania	13.9	18.7	7.8	4.3
Macedonia	11.3	15.3	5.9	11.3
Iceland	7.9	7.2	10.1	147.0

Sources: EBA, ECB Comprehensive Assessment; SNL, European Central Bank 2014 Comprehensive Assessment database; and IMF staff calculations. Note: Red = top 25 percent of distribution; green = bottom 10 percent of distribution; and light green, yellow, and light red = remainder of the distribution. NPEs restricted to local exposures only. For non-euro area countries, Figure 2b presents NPLs, as the NPE data are not consistently available for countries that were not included in the ECB's Comprehensive Assessment.

WHAT ARE THE MACRO-FINANCIAL IMPLICATIONS OF HIGH NPLS?

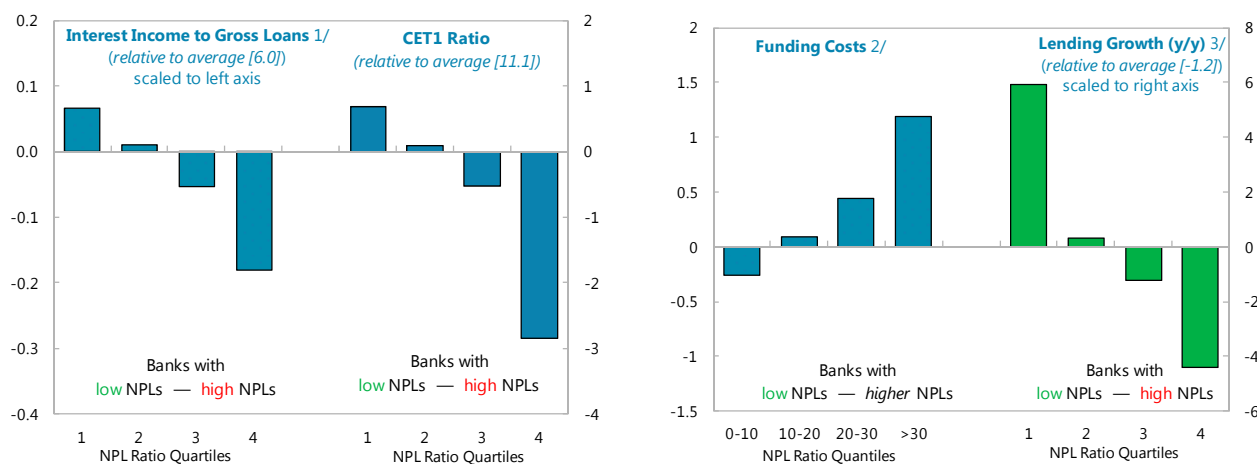
A. NPLs and bank lending

8. **NPLs influence bank lending through three interrelated key channels—profitability, capital, and funding.** Bank profitability suffers because high NPLs require banks to raise provisions, which lowers net income, while NPLs carried on banks' books do not usually generate income streams comparable to performing assets. NPLs, net of provisions, may also tie up substantial amounts of capital due to higher risk weights on impaired assets. And a deteriorating balance sheet

raises a bank's funding costs because of lower expected revenue streams and, hence, heightened risk perceptions on the part of investors. Together, these factors result in some combination of higher lending rates, reduced lending volumes, and increased risk aversion.

9. **Banks that have weaker balance sheets tend to lend less.** Data for euro area banks over the past five years confirm that banks with higher NPLs tend to be less profitable, have relatively weaker capital buffers, and face higher funding costs (Figure 3). They also tend to lend less. An empirical analysis using a panel regression approach, which controls for local macroeconomic conditions, generates similar findings for a sample of CESEE banks (Background Notes, Section II).⁶ A growing literature on the macro-financial effects of NPLs finds a robust relation between higher NPLs and weaker credit and GDP growth, with causality going both ways (see Background Notes, Section III, for a review of recent studies). Banks' reduced lending capacity undermines the growth prospects of viable firms, and it is also likely to disproportionately affect SMEs that are more dependent on bank financing. This is of particular concern because in many European countries with high NPL ratios, SMEs account for significant shares of total output and employment. In general, given the dominance of bank lending in corporate sector finance in Europe, high NPLs also impair monetary transmission, as credit supply remains heavily influenced by the lending behavior of banks.

Figure 3. Euro Area: Implications of High NPLs for Bank Performance
(percent)



Sources: Bloomberg L.P.; European Banking Authority; SNL Financial; Amadeus database; national central banks; Haver Analytics; Bankscope; and IMF staff calculations. CET1= common equity tier 1 capital ratio.

1/ The graph shows the annual interest income to gross loans, for over 100 euro area banks, relative to the annual average for banks with the same nationality, over the period 2009–13.

2/ The graph shows the average funding cost for each bank, which was defined as [interest expenses/(financial liabilities-retail deposits)]-sovereign bond yield (5-year average).

3/ The graph shows annualized lending growth relative to average lending growth in the same country, using data from the European Banking Authority for a sample of more than 60 banks over the period 2010–13. Outliers have been excluded, based on extreme values for lending growth, NPLs, and interest margins.

⁶ CESEE bank data are particularly well suited to exploring the relationship between local macroeconomic conditions and local lending, due to the relatively low prevalence of cross-border operations (unlike, for example, euro area banks).

10. **Staff analysis suggests that NPL reduction could free up a sizable amount of loanable funds** (Figure 4). As an illustrative example, consider what would happen if NPLs for a representative sample of European banks were to be sold off under different pricing assumptions:

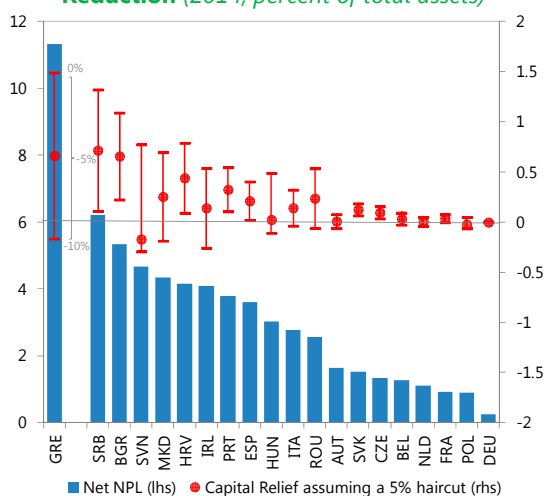
- *NPLs sold at their net book value* (that is, the value at which the loan is booked minus provisioning). Following the sale, the amount of capital that would be freed up (assuming that NPL levels are reduced to their historical average of 3–4 percent) could be as much as €54 billion, or 0.5 percent of total GDP of the countries in the sample at end-2014.⁷ This freed-up capital could then support new lending of up to €553 billion (5.3 percent of GDP), assuming that the capital adequacy ratio remains at 16 percent. Due to the uneven distribution of NPLs and their capital intensity (that is, their average level of credit risk weights), the increase in capital would vary significantly across countries, with Portugal, Italy, Spain, and Ireland as well as Bulgaria, Croatia, and, to a lesser extent, Hungary and Romania benefiting the most.⁸
- *NPLs sold at a uniform haircut of 5 percent on net book values.* Under this assumption, the freed-up capital would be only €24 billion, amounting to 0.2 percent of the combined GDP, and a corresponding new lending capacity of up to €247 billion (2.4 percent of GDP).
- *With larger haircuts, the capital "relief" could be negative in some cases.* In general, the haircut required on the net book value of distressed assets is likely to be influenced by several factors including the effectiveness of the debt enforcement and insolvency regime (with larger haircuts required the longer the average time to foreclosure) and the rate of return demanded by distressed debt investors (see Background Notes, Section V, for a description of such an exercise). This underscores the importance of structural reforms to reduce the cost of NPL resolution (discussed below), without which the haircuts on NPL sales may outweigh the potential benefit from capital relief.

⁷ By construction, fully provisioned loans are simply written off, since the net book value of a fully provisioned loan is zero. Hence, capital relief would be generated only for partially provisioned NPLs. This example therefore abstracts from benefits that may accrue to banks writing off fully provisioned NPLs (including any recoveries, potentially lower funding costs due to a reduction in gross NPLs, as well as a reduction in certain types of collateral exposure). It also abstracts from possible benefits accruing to the corporate sector from related debt reduction or debt restructuring.

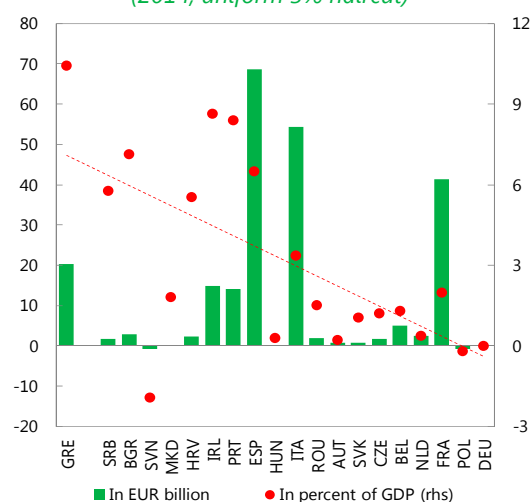
⁸ The impact of NPL reduction on lending could be lower than in our stylized exercise if banks (1) face larger haircuts on NPL sales, as is likely in several countries; (2) do not use all of their freed-up capital for new lending (which also depends on demand for loans); and (3) do not keep their capital buffers unchanged.

Figure 4. Potential Capital Relief and New Lending from NPL Disposal

Europe: Net NPLs and Capital Relief from NPL Reduction (2014, percent of total assets)



Europe: New Lending Capacity from NPL Reduction (2014, uniform 5% haircut)



Sources: EBA; ECB; Haver Analytics; national central banks; and IMF staff calculations. Calculations are based on bank-by-bank data from the EBA Transparency Exercise (2013). No capital relief is assumed for Germany, since net NPLs are below their historical average. Note: The sample comprises 22 European countries (14 euro area, six non-euro EU, and two non-EU countries). Results for Cyprus are not shown for formatting reasons. The whiskers indicate the results for capital relief for a +/-5 percentage point deviation from the 5 percent haircut assumption.

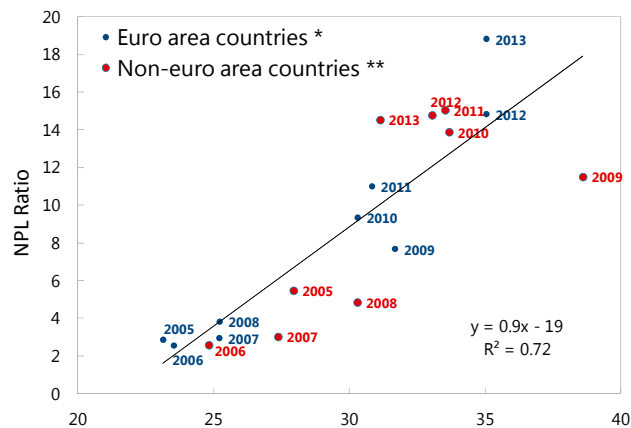
B. NPLs and corporate debt overhang

11. **Persistent NPLs are linked to unresolved private debt overhangs.** On average, the corporate NPL ratio and the level of corporate debt overhang are positively correlated (Figure 5). A closer look at individual countries suggests that improvements in NPL ratios may lag improvements in corporate balance sheets.⁹ An examination of corporate NPL ratios together with other debt metrics such as leverage or debt servicing capacity indicates that European countries with high NPLs fall into two broad groups (Annex):

- Countries where both NPL ratios and other corporate debt metrics improve steadily either (1) because growth picks

Figure 5. Europe: NPLs and Corporate Debt

(Country-group average; annual data in percent)



Share of debt owed by weak firms in total corporate debt

Sources: Orbis; IMF's FSI; and IMF staff calculations.

Notes: (*) Cyprus, Greece, Iceland, Italy, Portugal, and Spain; (**) Bulgaria, Croatia, Hungary, Latvia, Lithuania, Serbia, and Slovenia. The x-axis is defined as the sum of debt owed by firms reporting a negative debt-to-EBIT ratio, divided by total debt owed by sample firms in each country and each year.

⁹ See also Aiyar and others 2015b and IMF 2013 for country-specific discussions of the relation between debt overhang and NPL levels.

up (for example, on the back of external demand) or (2) because of concerted efforts to clean up banks and repair corporate balance sheets (for example, through debt restructuring). This is the case in Latvia, Lithuania, and Iceland. Slovenia, Hungary, and Bulgaria also exhibit some flattening in NPL ratios and some progress in corporate balance sheet repair in recent years; and

- *Countries where NPL ratios continue to rise* and other corporate debt metrics either (1) improve, as in Ireland, Portugal, Spain and Croatia, with rising NPL ratios reflecting delayed recognition of impaired loans or slow NPL write-offs or disposals;¹⁰ or (2) remain flat or deteriorate, as in Italy, Greece, Serbia, and Cyprus, suggesting slow or no progress in corporate and bank balance sheet repair.

12. **Corporate debt overhangs are associated with weaker investment and delayed recoveries.** Based on aggregate firm-level data for euro area countries with high borrowing spreads in 2000–11, Goretto and Souto (2013) show that there is a negative effect of a debt overhang on firm investment, with asymmetric effects beyond a certain threshold (a debt-to-equity ratio of 125 percent). Further analysis using firm-level data shows that firms' employment and investment decisions in response to positive or negative shocks depend on their level of indebtedness. For instance, high-leverage firms increase investment by less than low-leverage firms in response to a positive sales shock (Background Notes, Section IV).

13. **Mutually reinforcing feedback loops exist between bank NPLs and excessive corporate debt.** Overextended companies have little incentive to invest because any return has to be allocated to service their debt. This also implies that their demand for credit is weak, which further weighs on banks' profitability and makes it more difficult for them to dispose of impaired assets. Thus, when NPLs are large and persistent, they are unlikely to be worked off through a normal cyclical economic recovery. Concerted efforts are therefore needed to address both NPLs and private sector debt overhang to ensure that a large stock of distressed debt does not hold back growth.

WHAT ARE THE OBSTACLES TO NPL RESOLUTION?

14. **The past seven years of experience in dealing with NPLs in Europe have yielded mixed results.** Persistently high NPLs are, in part, explained by the weak economic recovery. But some of the persistence is due to structural obstacles, such as deficiencies in supervisory and legal frameworks and lack of developed distressed debt markets. Because these obstacles are interlinked, a comprehensive approach to remedy the situation is necessary.

¹⁰ In the case of Ireland, the blue chip corporate sector is dominated by multinational corporations that tend to inflate the overall corporate sector debt statistics and NPLs. In some cases (for example, in Ireland after 2013), improving NPL ratios also reflect policy actions including public support for moving NPLs off bank balance sheets.

15. Results from a survey on the recent experience of European countries with high NPLs reveal some common themes on structural obstacles to NPL resolution.

The focus is on those countries where the aggregate NPL ratio during 2008–14 exceeded 10 percent. The analysis is based on surveys, including the one that will henceforth be referred to as the *IMF survey*, as well as other studies (see Background Notes, Section VI, for details). The *IMF survey* reflects the views of the country authorities (“country survey”) as well as banks operating in these countries (“bank survey”).¹¹ In the survey, institutional obstacles were grouped into five broad areas relating to (1) the supervisory framework, (2) the legal system, (3) distressed debt markets, (4) informational shortcomings, and (5) the tax regime.

Figure 6. IMF Survey-Based Scores on Obstacles to NPL Resolution, by Country and Area

		Institutional Obstacles Scores					
		Information	Supervisory framework	Tax regime	Legal framework	Distressed debt market	Composite score
EA		2.6	2.5	3.0	3.0	3.0	2.8
NEA		2.0	2.3	1.6	2.5	3.0	2.3
NEA		1.8	2.0	2.8	2.1	2.7	2.3
EA		2.4	1.8	2.0	2.4	2.7	2.3
NEA		1.7	2.3	2.0	2.0	3.0	2.2
NEA		1.8	1.8	2.0	2.3	3.0	2.2
NEA		1.8	1.8	2.0	2.1	3.0	2.1
NEA		2.0	1.5	1.8	3.0	2.0	2.1
NEA		1.3	1.5	2.0	2.0	3.0	2.0
EA		2.2	2.0	1.0	2.5	2.0	1.9
NEA		1.8	1.3	2.0	2.0	2.5	1.9
NEA		1.8	1.5	2.3	2.0	2.0	1.9
EA		1.4	1.8	1.0	2.3	3.0	1.9
NEA		2.0	2.0	1.2	1.7	2.0	1.8
EA		1.8	2.0	1.3	1.4	2.0	1.7
NEA		1.8	1.5	2.0	1.7	1.0	1.6
EA		1.8	1.5	2.0	1.7	1.0	1.6
EA		1.0	1.3	2.0	2.0	1.0	1.5
EA		1.2	2.0	1.0	1.0	2.0	1.4
EA		1.0	1.0	1.0	1.0	1.0	1.0
Avg		1.8	1.8	1.8	2.0	2.2	

Source: IMF surveys of country authorities and banks.
 Notes: EA = euro area country; NEA = non-euro area country. “Country survey” refers to the survey of country authorities and “bank survey” refers to the survey of banking groups with operation in the countries included in the country survey; 3 = high degree of concern, 2 = medium degree of concern; 1 = no concern; “gray” = unknown or missing responses. The scores shown in the figure are Max (country, bank), that is, max score from country and bank survey. For each country, composite score is a simple average of obstacle scores in each of the five areas (information, supervisory framework, tax regime, legal framework, and distressed debt market). See Background Notes, Section VI, for details.

16. What are the broad takeaways from the IMF survey?

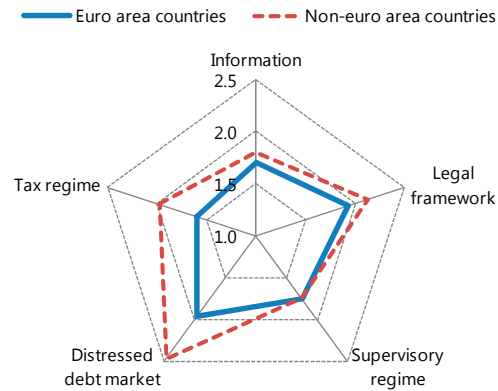
- *Relative severity of different types of obstacles:* Deficiencies in the legal framework and underdeveloped distressed debt markets are, on average, seen as the most severe obstacles (Figure 6). That said, the obstacle scores in the three other areas—information, supervision, and taxation—are not significantly lower. Indeed, different types of obstacles are interlinked, with difficulties in one area compounding challenges in other areas. Figure 6 shows that countries that have relatively high obstacle scores in one of the areas (for example, information) also tend to have relatively high scores in other areas (for example, supervision or distressed debt market).

¹¹ The “country survey” was completed by 19 countries (Albania, Bosnia and Herzegovina, Croatia, Cyprus, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Macedonia, Montenegro, Portugal, Romania, San Marino, Serbia, Slovenia, and Spain). In the case of Bosnia and Herzegovina, separate responses were provided by the two jurisdictions. The “bank survey” was completed by 10 banks (Alpha Bank, Intesa, NBG, Piraeus, Pro Credit, Raiffeisen, Societe Generale, Unicredit, Eurobank, and Erste Group). Both surveys were completed by June 2015. The country names are not shown at the request of the country authorities. See Background Notes, Section VI, for details.

As one would expect, greater severity of structural obstacles tends to be associated with worse NPL outcomes (Figure 8).

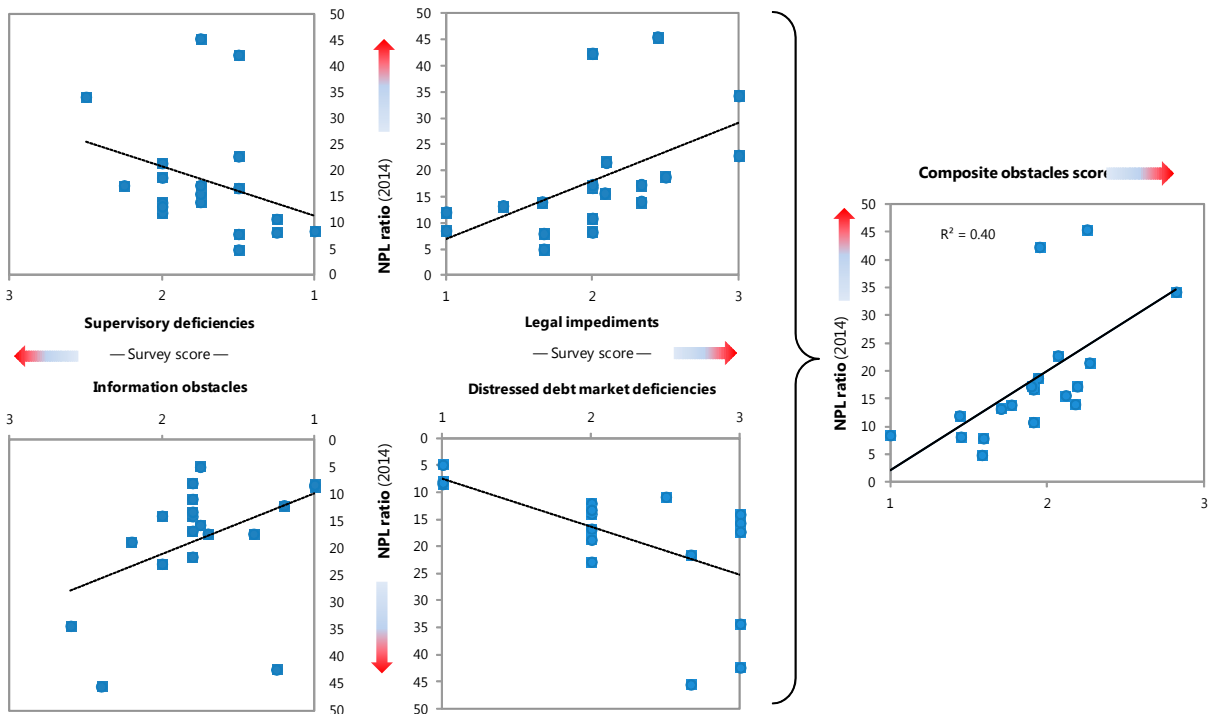
- Euro area vs. non-euro area countries:* On average, the perceived severity of structural obstacles is lower for the euro area than for non-euro area countries. In the areas of distressed debt markets, the tax regime, and the legal framework, the non-euro area countries appear to be facing greater challenges than euro area countries (Figure 7).

Figure 7. IMF Survey-Based Scores on Obstacles to NPL Resolution: Euro Area vs. Non-Euro Area



Source: IMF surveys of country authorities and banks.
 Note: The chart shows average values of composite obstacle scores for euro area and non-euro area sample countries. For each country, the composite score is a simple average of the five scores shown in Figure 6.

Figure 8. Survey-Based Country Obstacles Score vs. NPL Outcomes



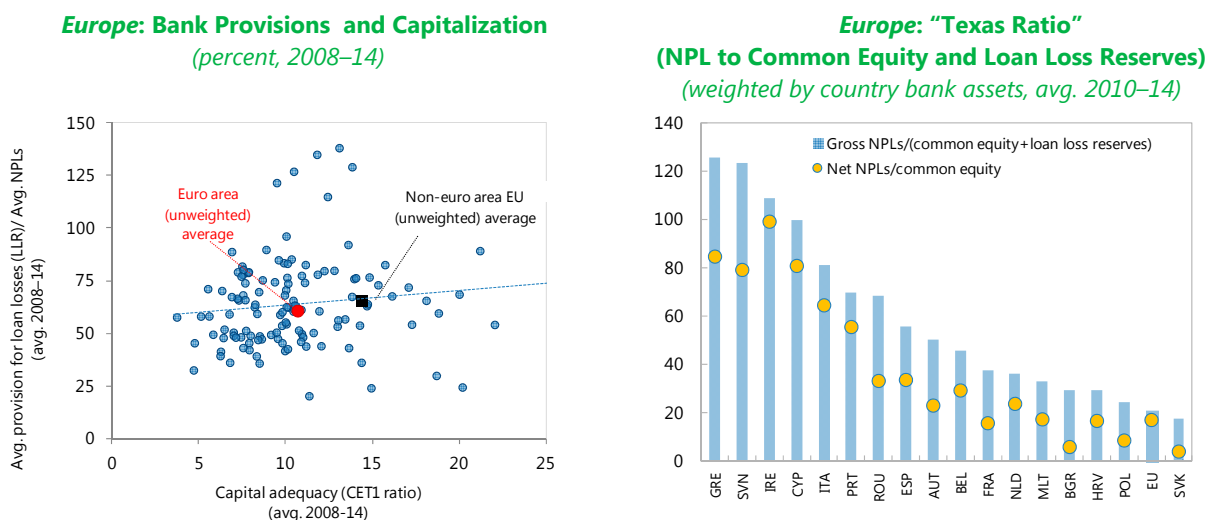
Source: IMF surveys of country authorities and banks; staff calculations.
 Notes: The survey-based country obstacles index takes values between 1 and 3 (3 = high degree of concern about institutional obstacles to NPL resolution; 2 = medium degree of concern; 1 = no concern). The survey-based obstacles score shown in the charts is Max (country, bank) (see Table A1 for details). For each country, the composite score is a simple average of five scores shown in Figure 6.

A. Prudential supervision

17. **Accounting standards, as implemented across European countries, weaken the incentives to resolve NPLs.** First, the incurred-loss approach to loan provisioning under International Financial Reporting Standards (IFRS) is backward-looking (this is expected to be addressed when IFRS 9 becomes effective in 2018)¹² and leaves much room for judgment, which may result in insufficient provisions. Second, while IFRS explicitly permits loan write-downs for impairment losses, it does not provide details on write-off modalities, which are left to the supervisors. Third, IFRS allows for the accrual of interest income from NPLs, which tends to inflate profitability, and lowers the incentives to dispose of NPLs (Background Notes, Section VII). And fourth, while collateral is taken into account in impairment loss recognition, there is no guidance on its valuation. Remedying the disincentives and ambiguities listed above does not require a change in the accounting standard, but can be done through stricter implementation guidelines and a more rigorous regulatory overlay.¹³

18. **Weak capital buffers and difficulties in realizing collateral increase banks' reluctance to address NPLs.** Low profitability and thin capital buffers constrain banks' ability to increase provisions and discourage the timely recognition of credit losses. The high level of NPLs relative to banks' going concern loss absorbing capacity (that is, common equity plus reserves) also constrains banks' ability to accept further credit losses (Figure 9).

Figure 9. Capitalization and Provisioning



Sources: SNL and IMF staff calculations. Note: Observations with CET1/RWA > 25% and LLR/ NPL > 150% were excluded from the sample.

Sources: SNL, EBA, and IMF staff calculations. Note: values are weighted by total assets of banks within each country.

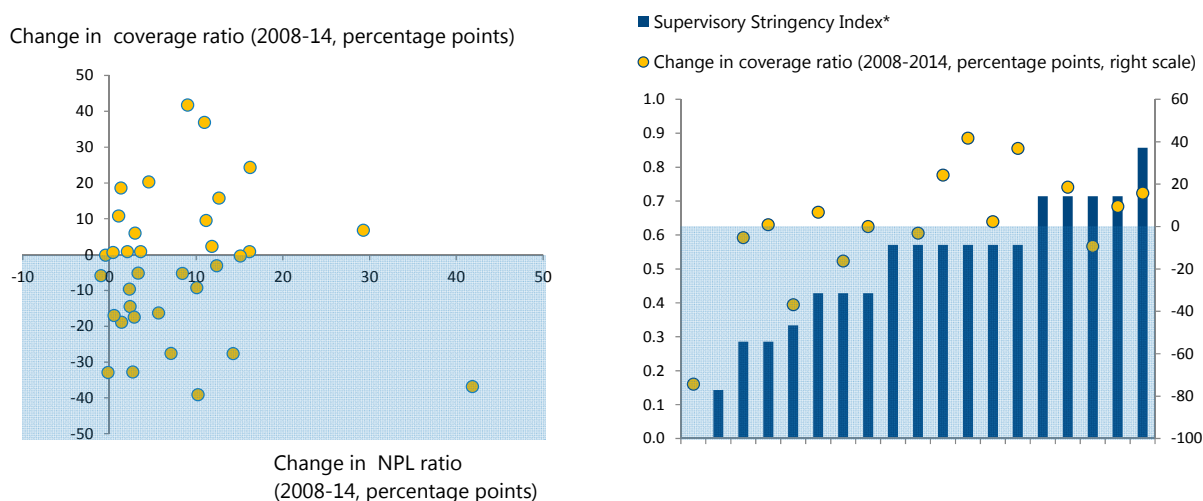
¹² IFRS 9 comprises a new principles-based approach for the valuation of financial assets and financial liabilities, including a single, forward-looking “expected loss” impairment model.

¹³ The United States provides an example of regulatory overlay to accounting standards. The U.S. GAAP is comparable to IFRS in that both apply the incurred loss approach to provisioning. But two key regulatory requirements are imposed in the United States: banks must (1) suspend interest income on NPLs once the loan is 90 days past due; and (2) write down the loan balance on the bank’s statements to the recoverable collateral value after six months. See Background Notes, Section VIII, for further details.

19. **According to the *IMF survey*, collateral-related issues are a greater concern than capital buffers.** While bank capital buffers are deemed a medium concern in about half the countries surveyed, collateral-related issues elicit either medium or high concern in most of them. These rankings partly reflect thin real estate markets (as the most common type of collateral is real estate) and difficulties in estimating collateral recovery values given weak debt enforcement frameworks. With only a few exceptions, collateral valuations are reportedly based on market prices, although in many countries, deep and liquid markets for foreclosed properties are lacking.

20. **Supervisory efforts aimed at improving bank capitalization and provisioning can influence the pace of NPL resolution and write-offs.** More robust supervision, including to ensure prudent provisioning and strong capital buffers, can enhance banks' incentives to recognize losses. For example, the robustness of coverage ratios—ratios of provisions to NPLs—appears to be linked to the stringency of supervision in the *IMF survey* responses (Figure 10).

Figure 10. Supervisory Stringency and Coverage Ratios



Sources: *IMF survey*; *FSI database* and *IMF staff calculations*.

Note: The supervisory stringency index is an average of responses to the following questions, with yes = 1 and no = 0: (1) "Have supervisors undertaken a thematic review of banks' NPL management capacity during 2012–14?"; (2) "Have supervisors issued formal guidelines to banks on NPL management practices?"; (3) "Does the on-site supervision team include specialists/advisors on NPLs?"; (4) "Have supervisors increased capital charges for NPLs?"; (5) "Have supervisors imposed time limits on how long NPLs can be carried on banks' balance sheets?"; (6) "Have supervisors incentivized banks to reduce reliance on collateral through increased provisioning?"; and (7) "Have supervisors incentivized banks to reduce reliance on collateral through assessment of valuation practices?"

21. **Many European countries have begun to allocate more supervisory attention to impaired assets, but time-bound operational targets for NPL reduction remain rare.** In most countries, banks have been subject to granular asset quality reviews over the past three years to ensure capital adequacy and sufficient provisioning. In three-quarters of surveyed countries, supervisors pushed banks to reduce reliance on collateral through assessment of valuation practices, and in about half of surveyed countries, through increased provisioning. According to the *IMF survey*, most banks are expected to have NPL action plans, but in many cases, these plans lack credibility as banks are not required to have *operational targets for NPL reductions* or *time limits* on how long they can carry NPLs on their balance sheets (Background Notes, Table VI.3). Only a few

countries (Albania, Montenegro, San Marino, Slovenia, and Romania) have reportedly imposed such time limits.¹⁴

22. **Despite formal supervisory guidelines on NPL management, many European banks lack the expertise, capacity, or tools to deal with NPLs on a large scale.** Given the severity of the recent downturn compared with previous recessions, banks may not have been equipped to deal with the observed surge of bad loans. Banks found that they lacked the experience, resources, and restructuring tools for large-scale loan restructurings.¹⁵ They also lacked specialized skills in real estate servicing and corporate turnarounds, which may be necessary to work out certain types of bad loans. According to the *IMF survey*, more than half of surveyed countries have some concerns about banks' capacity for NPL management, even though most banks tend to have dedicated NPL workout units. During 2012–14, supervisors undertook thematic reviews of banks' NPL management capacity in most surveyed countries and issued formal guidelines on NPL management practices in over half of surveyed countries. While banks are able, in principle, to outsource NPL management to third parties in about 70 percent of surveyed countries, it is not clear how often this is done in practice.

B. Legal obstacles

23. **Effective insolvency regimes and debt enforcement are essential for debt resolution.** The insolvency regime should ideally provide mechanisms for creditors to realize their claims in a predictable, speedy, and transparent manner, while protecting and maximizing value for all involved parties. An effective insolvency regime comprises two essential elements: *first*, an adequate resolution toolkit ranging from rehabilitation (for going-concern cases) to effective liquidation (for nonviable cases); and *second*, an effective institutional setting, as slow and inefficient court proceedings can render ineffective even a good insolvency regime. The ability to enforce claims (in particular, through foreclosure on real estate collateral) is essential to efficient workouts as it enables creditors to enforce their claims against debtors in a predictable, equitable, and transparent manner.

24. **Many European countries have recently overhauled or upgraded their insolvency regimes in line with international best practices, but reforms have been uneven** (see Background Notes, Sections X and XI). A few countries have decided to significantly overhaul their entire insolvency regime (Cyprus, Latvia, Poland, and Romania); others have updated it by

¹⁴ In Romania, for example, supervisors adopted a number of measures in 2014 that contributed to a significant decline in the NPL ratio (from 22.5 percent in February 2014 to 13.5 percent in April 2015). In particular, supervisors (1) sent letters to credit institutions recommending the write-off of NPLs fully covered by IFRS provisions; (2) recommended full provisioning of all loans for which repayment of principal or interest, or both, was overdue by more than 360 days and no legal procedures were taken against the debtors; and (3) required coverage of at least 90 percent of the gross exposure to debtors in insolvency for which the recovery value was small.

¹⁵ Some supervisory authorities (for example, Cyprus, Greece, and Ireland) hired independent workout specialists to assess banks' NPL management capacity and found that banks lacked expertise and loan restructuring tools, were unable to properly assess affordability, and were hindered by poor interbank collaboration. See Section IX of the Background Notes for further discussion of effective arrears management in banks.

simplifying the insolvency process (Greece, Italy, Latvia, Portugal, Slovenia, and Spain), or introducing enhanced features, such as debt-to-equity swaps or other debt-restructuring mechanisms (Croatia, Germany, Latvia, Slovenia, and Spain), pre-insolvency procedures (Croatia, Germany, France, Romania, Slovenia, and Portugal), or fast-track *prepack insolvency procedures* (Croatia, Greece, Italy, Latvia, Portugal, and Serbia).¹⁶ A number of countries have enhanced *out-of-court frameworks*, either with “hybrid” features (Italy, Portugal, and Spain) or without (Latvia, Portugal, Romania, Slovenia, and Serbia).¹⁷ Finally, some countries have decided to entirely overhaul their personal insolvency regimes (Cyprus and Ireland) or adopt new ones (Estonia, Greece, Hungary, Italy, Latvia, Lithuania, Poland, Romania, and Spain), with discharge periods ranging between one and five years.

25. Insolvency regimes for corporations are generally better developed than for households, but deficiencies remain in both areas. While recent changes have improved the prospects for harmonization across European countries, there remains much ground to cover.¹⁸

- *Corporate insolvency:* All European countries have developed corporate insolvency frameworks, but countries still need to address numerous issues. About half of surveyed countries have a prepack (fast-track resolution or rehabilitation) process or an out-of-court mechanism, though in some cases this is *de facto* not operational (see Background Notes, Table VI.2). Several problems remain, notably (1) lack of simplified and cost-effective frameworks for SMEs, which are the largest and most vulnerable corporate segment, in about half of all surveyed countries; and (2) obstacles to limiting shareholders’ decisions or replacing management in debt restructuring procedures in about 60 percent of surveyed euro area countries.
- *Household insolvency:* Personal insolvency regimes are absent in over one-third of surveyed countries. The problem is most acute in non-euro area countries, where most countries reported that either the framework does not exist or information is not available.¹⁹ About one-third of all respondents do not have an out-of-court settlement mechanism or mediation for personal insolvency, and no evidence shows that these mechanisms are actively used in the countries that have them.

¹⁶ “Prepacks” refer to procedures under which the court expeditiously approves a debt restructuring plan negotiated between the debtor and its creditors in a consensual manner before the initiation of an insolvency proceeding. This technique draws on a significant advantage of court-approved restructuring plans—the ability to make the plan binding on dissenting creditors—while leveraging a speedy out-of-court negotiation process.

¹⁷ “Hybrid” procedures are those for which the involvement of the judiciary or other authorities is an integral part of the procedure, but those procedures are less intensive than in formal insolvency proceedings.

¹⁸ The current *European Insolvency Regulation* addresses cross-border insolvency and creates mechanisms for the mutual recognition of insolvency processes and cooperation among courts and insolvency representatives in different member states. The EC has recently taken a step toward establishing common general principles for the national regimes of EU countries through a nonbinding *Recommendation* for a narrow area of insolvency law, namely, pre-insolvency regimes and out-of-court restructuring (European Commission 2014a and 2014b).

¹⁹ Hungary, Montenegro and Romania adopted personal insolvency regimes after the survey was completed.

26. **Perhaps an even more serious shortcoming is the slow and inconsistent implementation of insolvency laws.** Over 60 percent of non-euro area countries do not set strict *time limits* for the insolvency process, contributing to lengthy proceedings. There is also the perception that time limits to the extent that they do exist are sometimes not respected by the courts. And in about 60 percent of euro area countries, the remuneration of insolvency practitioners is not linked to the outcome of the liquidation, which weakens incentives for faster resolution. In some cases, there are no specialized judges to deal with insolvency issues, while in a few other cases, court fees for household insolvency cases are too high (Background Notes, Table VI.2).

27. **Countries used many of the standard restructuring tools during 2012–14, but much room for improvement remains.**

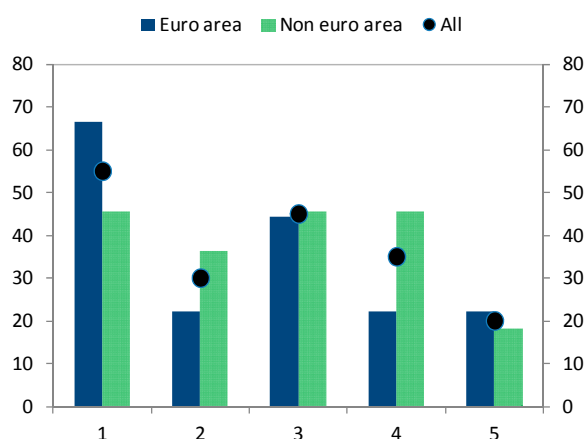
Interest-only loans were the most prevalent restructuring tool, especially in the euro area (Figure 11). Banks in nearly half of surveyed countries restructured loans by warehousing a portion of debt, thereby reducing repayments. Other tools were used less often, with only about a third of surveyed countries employing debt-for-equity swaps and less than 40 percent using performance-based write-offs (the latter could be partly due to tax disincentives—see below).

28. **Debt enforcement and foreclosure vary considerably across countries in speed and rate of recovery.** Data on residential

mortgage enforcement is patchy, but several countries reported that the enforcement length is longer than a year (and goes up to five years). For instance, the average length of foreclosure proceedings in Italy is almost five years, compared with less than one year in Germany and Spain. Weak debt enforcement raises the legal cost of debt restructuring and hampers banks' ability to seize loan collateral, reducing the expected recovery rate on delinquent loans (Figure 12). As shown in Figure 12, NPLs tend to be lower in countries where foreclosure periods are shorter.²⁰ The ability to enforce credit claims (in particular through foreclosure) is essential to efficient debt workouts as it enables creditors to enforce their claims as a going or gone concern in a predictable, equitable, and transparent manner.

29. **The efficiency of the institutional framework (particularly judicial systems) matters as well.** In particular, the degree of concern about the judicial system appears to be higher than about insolvency frameworks (Background Notes, Section VI). The judicial system was viewed as posing

Figure 11. Use of Restructuring Tools, 2012–14
(percentage of respondents within each group)



- (1) interest-only loans
- (2) debt-for-equity swaps
- (3) reducing repayments by warehousing a portion of debt
- (4) performance-based write-off of a portion of debt
- (5) other tools

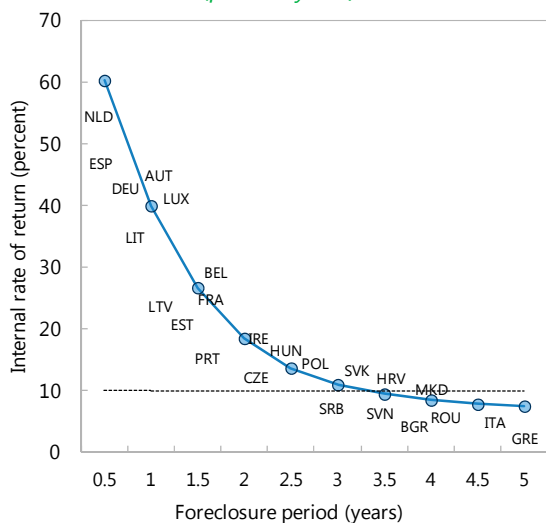
Source: IMF survey.

²⁰ Further details on the impact of foreclosure periods and the expected return of distressed investors on NPL disposal are discussed in Section V of the Background Notes.

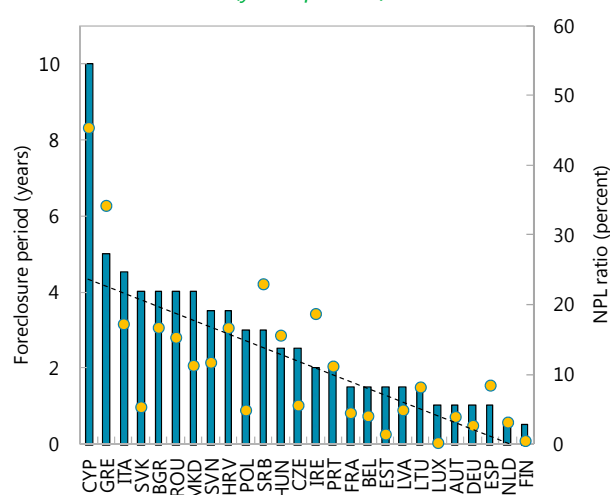
either a medium or a high degree of concern for debt resolution in nearly two-thirds of surveyed countries. This underscores the need for professionals, such as insolvency practitioners, to be adequately supervised and monitored and be subject to a fee structure that incentivizes rapid rehabilitation or liquidation. Some European countries (Cyprus, France, Ireland, Italy, and Portugal) have recently strengthened their judicial system, including the oversight and supervision of insolvency practitioners.²¹

Figure 12. Insolvency Regimes and Recovery Rates

Europe: Internal Rate of Return (IRR) on Investment in Distressed Assets and Time to Foreclosure
(percent/years)



Europe: Average Time to Foreclosure and Nonperforming Loans (2014)
(years/percent)



Sources: ECB; World Bank Doing Business Survey (2014); RBS Credit Strategy; and IMF staff calculations

C. Distressed debt markets

30. **The European market for distressed bank debt is relatively small, especially compared with the size of the outstanding stock of NPLs.** The distressed debt market comprises a mixture of outright sales to nonbank participants as well as joint ventures between banks, specialist firms, and investors. In terms of sales, the distressed debt market in Europe is underdeveloped and focuses mainly on commercial real estate and consumer loans. At end-2013, the market value of distressed debt transactions in Europe was only €64 billion compared with \$469 billion in the United States, despite a stock of NPLs several times bigger than the United States. In terms of joint ventures with

²¹ Ireland and Cyprus established and Portugal strengthened the supervisory and monitoring frameworks for insolvency practitioners. Italy and Portugal have undergone significant reforms in the organization of their judicial systems (such as increasing specialization, flexibility, and accountability).

NPL workout specialists and distressed debt investors, some have taken place, but fall far below what was observed in the United States.²²

31. **Developing a liquid market for NPLs is crucial to provide an outlet for banks to dispose of their distressed assets and to boost recovery values.** By allowing banks to move bad loans off their balance sheets, distressed debt markets help reduce the burden on banks and can boost loan recovery values by providing a more cost-effective alternative to internal NPL management, especially for smaller banks.²³ Indeed, most *IMF survey* respondents considered deficiencies in distressed debt or NPL markets to be an important obstacle to NPL resolution.

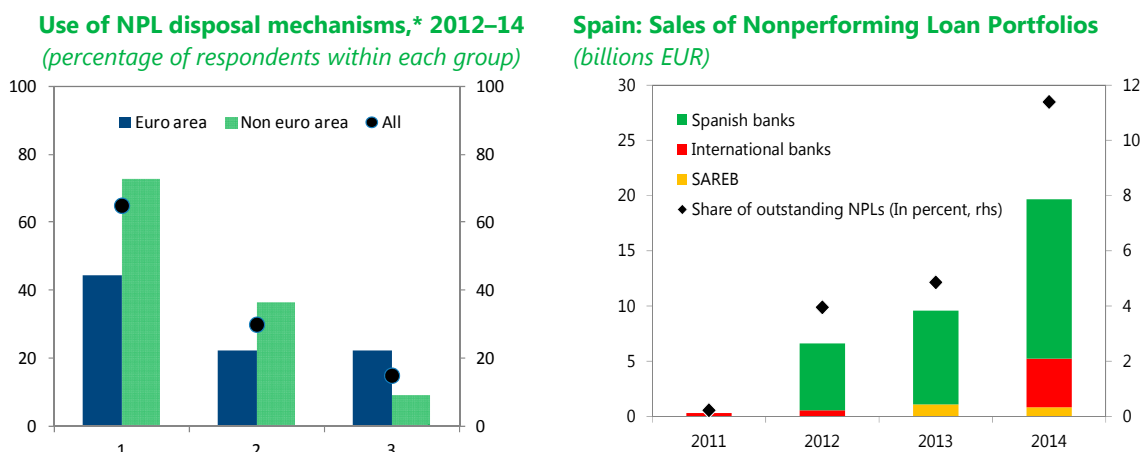
32. **Distressed debt markets in Europe suffer from various structural shortcomings.** The *IMF survey* reveals that there are relatively few explicit restrictions on sales of NPLs—most countries allow third-party (including foreign) banks, as well as institutional investors, to buy NPLs from local banks.²⁴ Banks are generally allowed to set up private asset management companies. Yet, distressed debt markets across Europe remain shallow or nonexistent. The survey suggests a few explanations: (1) incomplete credit information on borrowers; (2) lack of licensing and regulatory regimes to enable nonbanks to own and manage NPLs; (3) overvalued collateral and lack of liquid real estate markets; (4) low recovery values, partly related to lengthy court procedures; and (5) inadequate provisioning of NPLs. These factors, which are related to the obstacles discussed above, contribute to large pricing gaps between potential buyers and sellers of NPLs. Pricing gaps are indeed frequently cited by banks as the main reason why few distressed debt sales have transpired.

33. **Countries' efforts to promote the development of a market for distressed debt have had mixed results.** Distressed asset disposals took place in about two-thirds of sample countries (over 80 percent if missing responses are excluded). They were generally done via portfolio sales, with transfers to private or public AMCs used much less frequently (Figure 13).

²² The small size of the distressed debt market in Europe (with most transactions focused on commercial real estate and corporate loans) and faster NPL write-offs or disposals in the United States can be partly explained by the fact that about half of the U.S. states have nonrecourse rules for mortgages (together with strict time-bound rules for writing off NPLs). In nonrecourse lending, a loan (debt) is secured by a pledge of collateral but the borrower is not personally liable (limiting the lender's recovery to the collateral only and creating incentives for lenders to seek a timely resolution of NPLs).

²³ Smaller banks, in particular, may lack specialized expertise and economies of scale or scope in managing NPLs.

²⁴ In some cases, however, there may be more subtle legal restrictions. For example, in Serbia, a foreign investor cannot directly buy domestic secured NPLs without the written consent of the original debtor; in Greece and Serbia, loan transfers are limited to other banks operating domestically.

Figure 13. NPL Disposals and the Role of AMCs

Source: IMF survey.

Note: (*) The NPL disposal mechanisms include (1) portfolio sales, (2) transfer to private asset management companies, and (3) transfer to public asset management companies

Sources: PricewaterhouseCoopers; bank reports; and IMF staff estimates.

Note: Shows nominal volumes of publicly announced portfolio sale transactions; does not include private transactions or sales to retail; percent of nonperforming loan stocks as of end of previous year.

34. **Some countries established public AMCs as part of a comprehensive strategy to address banking system problems** (for example, Hungary, Ireland, Latvia, Slovenia, and Spain). In some cases, this was key to jump-starting the distressed debt market. The experience of SAREB in Spain is instructive. SAREB was set up as a centralized vehicle for the purchase of assets from Spanish banks at conservative prices. Its ownership included a 45 percent public sector share, although the majority of shares were held privately.²⁵ The announcement of the initiative was a trigger for other banks—fearing massive upcoming asset sales—to adjust their asset values and start selling their NPLs. With the market taking off, investors bought servicing platforms and turned from opportunistic to recurring buyers. During 2012–14, the volumes of NPL sales increased steadily (Figure 13).

D. Informational obstacles

35. **Incomplete information can impede effective resolution of distressed debt.** The *IMF survey* collected assessments of (1) public registers, (2) debt counseling services and citizen awareness, (3) quality of information reported by banks to supervisors, and (4) constraints on information sharing among creditors (see Background Notes, Table VI.1).

36. **Information deficiencies or constraints on information sharing are fairly common.** The general public is unable to conduct searches in public asset registers (in about one-third of surveyed countries) and real estate transaction registers (half the sample). And restrictions on sharing individual debtor's information for debt workout purposes are widespread. Furthermore, credit bureaus typically do not include certain information relevant for debt restructuring, that is, on tax

²⁵ It should be noted that SAREB was set up before the new EU rules took effect that require creditor bail-in in most cases of state aid (see Section V.C).

payments and social security contributions (about 80 percent of surveyed countries) and payments to utility companies (two-thirds of surveyed countries). Credit registers in more than half the sample do not have credit scoring for individuals, and about half do not produce credit scoring for SMEs and larger companies.

37. **Lack of debt counseling is another common problem.** Few countries offer free or subsidized budgeting or legal advice services for households, which is sometimes critical for debtors to become comfortable with creditors' debt restructuring proposals. In over half the surveyed countries, institutions that provide credit management training and advice for SMEs do not exist.

E. Tax and other obstacles

38. **Unfavorable tax treatment can create disincentives for adequate provisioning and loan write-offs.** According to the *IMF survey*, tax disincentives were considered of high or medium concern for NPL resolution in about half of responding countries, with about one-third unable to provide assessments. In some countries, charge-offs and provisions are not eligible (or are subject to caps) as deductions for income tax purposes.

- *Tax deductions for loan loss provisions* are allowed in most cases, but are often subject to a cap. For example, in Italy until recently, the tax deductibility of loan loss provisions was limited to 0.3 percent of outstanding loans—a clear disincentive to provisioning.²⁶ Further, in over half of non-euro area countries, there is no loss carry-forward mechanism such as *deferred tax assets (DTAs)*.
- *Tax deductions for loan write-offs or for loan principal reductions* are not allowed in about 60 percent of surveyed countries. For example, until the 2013 reforms, the tax treatment in Italy penalized banks that wrote off problem loans more aggressively, allowing tax deductibility for write-offs only in the state of insolvency. Spain recently eliminated taxes on debt-to-equity swaps in a similar move to encourage banks to recognize losses from impaired assets.
- *Tax deductions for collateral sales below book value* are quite rare (only about a quarter of surveyed countries).

39. **Often the privileged role of public creditors in debt restructuring can pose collective action problems.** This is compounded by poor coordination between public and private creditors.

- *Ranking of claims:* Priority, and especially super-priority, of public creditors' claims (such as tax claims) in insolvency and foreclosure processes may discourage banks from restructuring or foreclosing on a distressed debtor. Responses to the *IMF survey* indicate that public sector claims have priority over private secured claims (super-priority) in one-third of surveyed euro area countries and one-fifth of surveyed non-euro area countries, while public sector claims also

²⁶ A 2013 reform allowed provisions and write-offs to be fully deducted in equal installments over five years, and with a higher tax rate; and in June 2015, this period was further shortened to a year.

have priority over private unsecured claims in about half of the surveyed euro area countries and less than half of surveyed non-euro area countries.²⁷ In some countries the tax authorities are not required to participate in out-of-court debt restructuring or are effectively granted priority because they cannot be affected by a restructuring process. In Spain, for example, tax authorities are not bound by out-of-court debt restructuring decisions. In Portugal, on the other hand, legal changes in 2011 require tax authorities to participate in out-of-court workouts (although they remain at liberty to walk away from the restructuring).

- *Limits on debt relief by the public sector:* While in many cases public creditors appear to be able to agree to partial debt servicing, in most cases, they cannot provide debt write-off. The latter appears to be the case in 90 percent of surveyed countries in the euro area and over 70 percent of all surveyed countries.
- *Information sharing and coordination between public and private creditors:* In many instances, there is either an informational asymmetry between private and public creditors (since public creditors' records are not accessible or shared with private creditors) or a lack of coordination that arises from the insufficient participation of public creditors in the insolvency process.

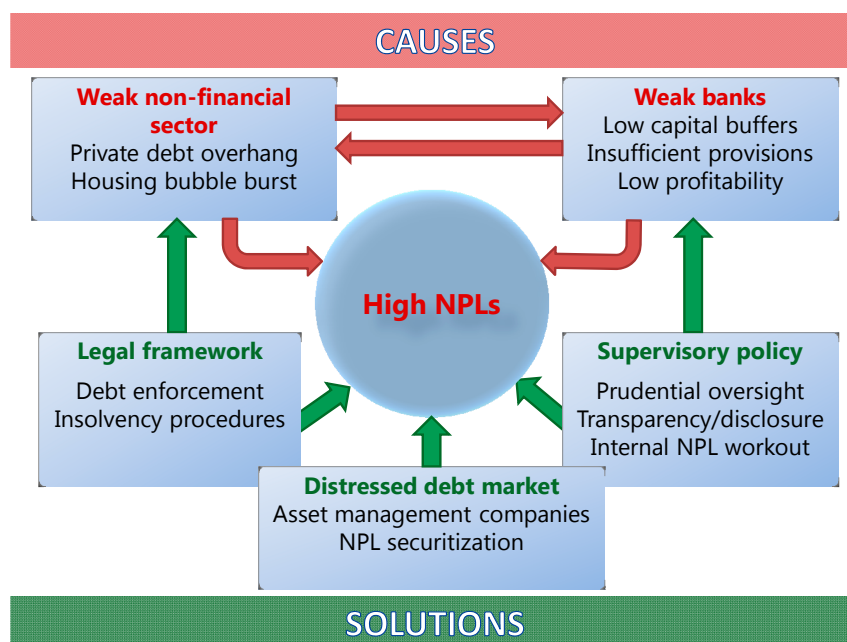
A COMPREHENSIVE NPL RESOLUTION STRATEGY

40. **International experience prior to the global financial crisis as well as recent European experience suggests that a comprehensive strategy is most effective in resolving NPLs** (Hagan and others 2003; Liu and Rosenberg 2013). Such a strategy typically includes three crucial elements: (1) tightened supervisory policies, (2) insolvency reforms, and (3) the development of a distressed debt market. Box 1 provides a brief summary of international experience in these areas.²⁸ In Europe, those countries that managed to significantly reduce their NPL ratios (by over 5 percentage points from peak to end-2014)—Iceland, Ireland, Latvia, Lithuania, and Romania—had all stepped up supervisory efforts to address NPLs, had taken early and aggressive measures to reform their insolvency frameworks, and, in some cases, had established AMCs. These countries scored below the median on obstacles to NPL resolution (see Figure 6).

41. **A multifaceted strategy for NPL resolution in the European context would combine more robust supervision, institutional reforms to insolvency regimes, and developing markets for distressed debt.** These measures should be supported by changes to the tax regime and reforms to improve access to information. Given the urgency of the NPL problem, the recommended measures should be implemented as soon as possible. Some measures, such as stricter supervision, can be implemented immediately. Others, such as legal reforms and market infrastructure development, will take more time, but the groundwork should begin now.

²⁷ However, it seems that not all of those surveyed countries legally afford super-priority to public sector claims. It should also be noted that the survey results may reflect the preferential status of certain private claims. For example, labor claims fall under the category of private unsecured claims but have a preferred status over the public sector claims in numerous countries.

²⁸ For a more extensive treatment see Aiyar and others 2015b.



42. **At the national level, policy reforms should be coordinated among the many stakeholders.** In cases where NPLs exceed a systemic threshold, governments should consider establishing a coordination mechanism, such as a ministerial council. The mandate should be to fully diagnose the obstacles to NPL resolution, set reform priorities, and ensure that all stakeholders are clear on their role in implementation. A coordinated public communications strategy as well as a dedicated project management office would help ensure effective implementation.

A. Supervisory policies

43. **Pursue a conservative application of accounting standards.** Swift loan loss recognition has proved crucial to resolving elevated impaired asset levels in past international experience (Box 1). More robust provisioning, write-offs, and income recognition should be encouraged. In euro area countries (and more, broadly, in EU countries), the SSM and EBA could spearhead this effort, while national regulators will need to take the lead in other jurisdictions.²⁹ Specific guidance on provisions (following the approaches taken in Ireland and Cyprus) should focus on appropriate impairment triggers, provisioning methodologies for collectively assessed loans, and management judgment and assumptions. This should be accompanied by extensive dialogue between the SSM, national competent authorities (NCAs), and the accounting profession, including on approaches to reinforce implementation of IAS 39. The SSM and EBA should also clarify supervision regarding write-offs and foster consistent practices across EU banks.³⁰ In particular, a supervisory policy should be introduced that underscores the importance of timely uncollectible loan write-off before having

²⁹ As a general point, the supervisory recommendations for the SSM in this section should be understood as recommendations for national regulators for countries where the SSM has no supervisory jurisdiction.

³⁰ In June 2015, the SSM created a joint task force with several NCAs to establish consistent and common supervisory practices for NPL resolution.

exhausted all legal means to collect the debt. Time-bound write-off requirements for uncollectible loans could also be considered where the domestic legal framework allows it. With regard to interest accrual practices, the adoption, for prudential purposes, of a nonaccrual principle for loans past a set delinquency threshold would be critical.

44. **Ensure that banks apply a conservative approach to collateral valuation.** While it is reasonable to take account of collateral in provisioning, a conservative approach should be adopted, reflecting various constraints in valuing, accessing, and disposing of collateral. In particular, the value of collateral should reflect changes in market conditions, the costs of sale, and delays in realizing proceeds. Furthermore, collateral should be periodically valued by reliable and independent third parties and subject to enhanced supervisory scrutiny. In the case of real estate, banks should obtain sound appraisals of the current fair value of the collateral from qualified professionals.

45. **Strengthen capital requirements to encourage asset disposal.** Conservative application of accounting standards should be supplemented by micro- and macroprudential measures, such as time-bound targets for resolving delinquent assets and raising risk weights on impaired assets of a certain vintage (above the current 150 percent, for instance, for banks reporting under the “standardized approach”). Such targets could be initiated by NCAs using Pillar II requirements for macroprudential purposes. The SSM could play a coordinating role among NCAs by encouraging the use of these instruments, while applying such targets as microprudential measures to the large banks under its direct supervision.³¹ In some cases, the combination of realistic provisioning, conservative collateral valuation, and stronger valuation may reveal that certain banks are insolvent, in which case regulators should encourage these banks to exit the market.

46. **Enhance prudential oversight.** The SSM and some NCAs have already followed a supervisory review approach to fostering more active resolution of NPLs by placing banks with high NPLs under enhanced monitoring and setting operational targets for these banks to restructure or write off problem loans.³² The SSM should ensure that NCAs follow a similar approach for smaller banks. Banks with NPLs above a set threshold (for example, 10 percent) should be subject to a more intensive oversight regime to ensure that they conservatively recognize and proactively address asset quality problems. Prudential reporting requirements for NPL portfolios should be significantly enhanced through detailed submissions (on a quarterly or more frequent basis).³³ For banks with high NPLs, the SSM could agree with banks on operational targets for NPL resolution and introduce standardized criteria for identifying nonviable firms for quick liquidation and viable ones for

³¹ The case of Ireland is instructive. From early 2013 through end-2014, the Central Bank of Ireland imposed quantitative targets for the resolution of nonperforming residential mortgage loans. For distressed SME loans, nonpublic supervisory targets were set bank by bank.

³² According to the *IMF survey*, specific operational targets or time limits on how long banks can carry NPLs on their balance sheets are in place in only a few countries (Section IV).

³³ As adopted in Greece and Ireland, such reporting should include granular details on portfolio segmentation (that is, distribution of days past due for various NPL categories), key performance statistics (that is, cash recoveries, forbearance metrics, and collateral data), legal workout activity statistics, and loan modifications flow data.

restructuring (the “trriage approach”).³⁴ For non-EU jurisdictions, similar measures could be envisaged by national authorities where necessary.

47. **Require banks to develop internal NPL management capabilities.** Banks should be encouraged to develop a comprehensive NPL management plan, which determines rules and work practices for NPL resolution, such as (1) removing impaired loans from regular loan servicing and adopting specific tools for early arrears, (2) conducting risk scoring to set case prioritization, and (3) developing a customer charter to cater for hardship and sensitive cases, subject to clearly defined implementation targets (Background Notes, Section IX). A code of conduct could be considered to set minimum standards of customer interaction for target portfolios as adopted in Cyprus (all retail and SME loans), Greece (all retail and commercial loans), and Ireland (mortgages).

48. **Enhance disclosure.** Extended Pillar III reporting of NPLs and granular disclosure by supervisory authorities of NPL portfolios and NPL management performance would increase market transparency and discipline. Disclosures could usefully include the accrual treatment for NPLs.

49. **Strengthen the regulatory sanctions toolkit.** While the toolkit for regulatory sanctions is typically well developed for capital and market abuse, it is often underdeveloped for NPL oversight. NCAs should review their sanctioning powers in this regard.

B. Insolvency and debt enforcement reforms

50. **Strengthen incentives for viable but distressed debtors and creditors to participate in meaningful restructuring.** The legal framework should consist of both *legal tools* designed to facilitate speedy in- and out-of-court solutions and an *adequate institutional framework* (including courts and insolvency practitioners) to support the consistent, efficient, and predictable implementation of the laws. More specifically, European authorities should

- *Enable the rapid exit of nonviable firms and the rehabilitation of viable firms.* A number of features could enhance insolvency laws: (1) expedient in-court approval of settlements negotiated out of court (“prepacks”); (2) post-commencement financing recognizing creditor priority to enable financing for the firm during restructuring (Bergthaler and others 2015); (3) inclusive restructuring involving all creditors (including secured and public creditors) (Background Notes, Section XII); (4) pre-insolvency processes that enable restructuring before reaching nonviability; (5) majority voting in classes (including cram downs); (6) simplified and cost-effective insolvency processes for SMEs enabling a fresh start for entrepreneurs within a reasonable time period (Bergthaler and others 2015); and (7) the facilitation of various restructuring tools, such as debt-equity swaps (for example, through removing the requirement for shareholders to approve corporate changes) (Background Notes, Section XIII).

³⁴ See Bergthaler and others 2015 for policies aimed at SME problem loans.

- *Augment out-of-court frameworks with hybrid features.* International practice suggests that out-of-court debt restructuring generates more rapid and cost-effective results, especially if the restructuring occurs against the backdrop of strong insolvency procedures. Out-of-court frameworks that use hybrid and enhanced features, such as a stay on creditor actions, majority voting, mediation or arbitration, or a coordinating committee, achieve the best results. *Strengthen debt enforcement and foreclosure processes.* Enforcement and foreclosure processes should be simplified and streamlined (for example, to clearly specify enforceable titles, limit appeals, set short preclusive deadlines) to enable a swift process. Out-of-court enforcement and foreclosure should be considered where appropriate.
- *Improve the institutional framework.* The judicial system should be strengthened by increasing the specialization of judges *and establishing special benches for commercial or insolvency matters.* The performance of professionals (such as insolvency practitioners or bailiffs) should be properly supervised and adequately monitored. The fee structure should incentivize the rapid return to productive value of business assets and be performance based.
- *Facilitate participation of public creditors in restructuring.* Super-priorities for public claims should be avoided and priorities for public claims should be limited. In principle, public claims restructuring should be permitted like any private sector claim. Finally, clear and predictable guidance should be provided to public creditors under which they can participate in debt restructuring (Background Notes, Section XII).

51. **The prioritization and sequencing of insolvency, debt enforcement, and related institutional reforms should be informed by the country's institutional capacity.** It is important to recognize that legal and institutional reforms take time to bear fruit. In particular, institutional reforms (such as reforms of the judiciary or insolvency administrators) have a longer-term horizon and should be planned and rolled out properly to maximize their impact.

52. **Encourage outcome-based (or "functional") convergence of insolvency and debt enforcement regimes across EU countries to facilitate asset recovery.** The European Commission (EC) could issue further *Recommendations* (beyond the current guidance on pre-insolvency regimes and out-of-court restructuring (EC 2014a and 2014b) to establish principles based on international best practices against which member states will be assessed (preferably by an independent agency other than the EC) or need to regularly report on. Functional convergence of insolvency regimes across EU countries would greatly facilitate the move toward an EU Capital Markets Union (EC 2015). In some areas of debt enforcement and foreclosure, the EU has adopted *Directives* to harmonize the legal regime for EU members, such as the late-payment directive, cross-border garnishments, and the European payment order. Data collection on insolvency and enforcement processes should be unified and enhanced within the EU to enable adequate comparisons and proper assessments.

C. External NPL management and distressed debt markets

53. **Foster the development of markets for distressed assets to facilitate the disposal of NPLs, recognizing market infrastructure as a crucial constraint.** Access to timely financial

information on distressed borrowers, collateral valuations, and recent NPL sales are critical for the development of an active market for NPL restructuring. Facilitating the licensing of nonbanks for restructuring, as opposed to entities with a banking license, would lower the cost of entry into this market and allow for greater specialization. Use of specialist NPL servicing and legal workout agencies, and more efficient collateral auctions would help raise recovery values.

54. **Structured finance techniques can also facilitate the removal of impaired assets from bank balance sheets** (Aiyar and others 2015a; Barkbu and others 2013; Jassaud and Kang, 2015). European institutions, such as the EIB/EIF, could play a role in fostering markets for distressed debt, for example through investing in senior tranches or providing guarantees on mezzanine tranches of NPL securitization transactions. This involvement may also foster transparency and homogeneity, setting the stage for a truly pan-European market. The securitization of NPLs has proven to be a successful resolution technique in many jurisdictions.

55. **AMCs or other special-purpose vehicles could help kick-start a market for distressed debt.** First, they bring *economies of scale*, which may help smaller banks in particular resolve problem loans. For example, centralizing impaired assets from several banks into an AMC may help reduce the fixed cost of asset resolution, increase the efficiency of asset recovery, and allow for a more efficient packaging of assets for sale to outside specialist investors. Second, and relatedly, AMCs are likely to enjoy greater *bargaining power* due to their size, especially when loans are scattered within the system, collateral is pledged to multiple creditors, and the size of debtors is large relative to that of banks. Third, they encourage *specialization* by enabling banks to focus on new lending while allowing the AMC to concentrate on the recovery of impaired assets. This division of labor becomes increasingly important if NPLs are at systemically high levels and for smaller banks, which lack workout expertise and resources. Fourth, increased specialization can facilitate *better valuation and credit discipline*. The transfer of NPLs entails a separation of the loan administration away from their credit officers, which could foster a more objective assessment of credit quality. Finally, all these points together suggest that AMCs could be crucial to *price discovery*. Economies of scale, central bargaining power, and better valuation are likely to be key to solving the problem of collective inaction, thereby bridging the pricing gap in situations where no market exists, or the market is extremely illiquid.³⁵

56. **AMCs could be private or public.** Larger banks may be in a better position to establish their own private AMCs. However, for smaller banks or in cases of market failure due to significant structural constraints or where NPLs have reached systemically high levels, consideration could be given to a national-level AMC with public participation. In either case, AMCs should be (1) *complementary* to other NPL resolution strategies (such as loan workouts in separate bank unit or bank-specific AMCs); and (2) *combined* with strict supervisory policies, robust insolvency

³⁵ In some cases, banks may choose to maintain NPL-AMCs on their balance sheets. On-balance-sheet structures can help overcome structural constraints (mandatory licensing, tax implications, and insufficient data quality) and boost expected returns. Here, banks can continue to service loans while the AMC focuses on providing management services for the restructuring or liquidation of impaired assets. Alternatively, servicing companies could be used to leverage outside expertise to help banks resolve on-balance-sheet NPLs.

frameworks, and the removal of obstacles to NPL resolution as described in the previous sections. Good governance and transparency are crucial to the success of AMCs. In cases of public participation, it would be necessary to ensure that the AMC operates as an independent entity and has a clear mandate to maximize the recovery value of assets. For instance, an AMC should not be set up as a unit within a central bank or a subsidiary thereof (Ingves and others 2004).

57. **In the EU, public sector involvement in AMCs needs to be compatible with state aid rules.** Box 2 outlines a possible model for national AMCs in which assets are sold at market prices and, therefore, no transfer of public resources occurs. This practice avoids the need to restructure participating banks and bail-in their creditors as required by the Banking Recovery and Resolution Directive (BRRD). But circumstances may arise in which state aid is needed to address otherwise unbridgeable pricing gaps (for example, if market prices are otherwise too low to induce banks to sell assets) or to address risks to financial stability or market failures arising, for example, from costly enforcement and lengthy foreclosure procedures. Here, the EC could issue guidance that clarifies *ex ante* the permissible design or implementation of AMCs involving public support, which would *not* result in a requirement to restructure the benefiting banks. In the current context, this guidance should take into account that NPLs have assumed systemic proportions in several EU economies, hindering credit supply and impairing the monetary transmission mechanism. Greater flexibility under these conditions would allow earlier and more proactive steps to address potential risks to financial stability.³⁶

D. Support measures

The three-pillared strategy described above should be underpinned by support measures that cut across pillars, such as improving access to information and reforming tax regimes.

58. **Improve access to debtor information to enhance the effectiveness of NPL workouts.** Credit bureaus should include full details of borrowers' debts above a specific threshold, including arrears to utility companies or tax authorities. Asset registers that record real estate, vehicle, machinery, and equipment ownership should contain sufficiently granular information to facilitate reliable wealth assessments. Authorities should also ensure that such repositories are centralized, electronic, accessible to private sector agents, and economical. Improved links between asset registers and credit bureaus across national borders are needed in some regions to fully capture wealth and debt abroad.³⁷

59. **Deploy debt advisory services so debtors are well informed and confident to engage with creditors.** Households should have access to free or subsidized budgeting and legal advice

³⁶ In several countries, uncertainty about EU state aid rules has delayed the resolution of NPLs, such as in the case of Slovenia, or hampered the return of banks to financial health, such as in Portugal and Spain.

³⁷ Some EU countries have recently taken steps to deal with these shortcomings. Ireland, for example, has provided for and is introducing a new public credit register and a new real estate transaction register, and has made improvements to other national repositories.

services to ensure they are aware of their options and are comfortable discussing them with creditors. These services should be complemented by coordinated public outreach campaigns including through availability of standard advice pamphlets at bank branches and creation of a citizens' advice website dedicated to household debt management. Micro and small enterprises should have access to institutes of credit management to ensure sufficient understanding of debt and supply chain credit management. Implementation of such services for both households and small businesses would greatly benefit from the establishment of a qualification or profession for debt counselors.

60. **Widen the scope for real estate investment and price discovery.** Household and commercial real estate transaction prices as well as key property attributes should be made available on a public website to enable informed investment decisions. Real estate auctions should aim to attract the largest number of bidders, such as through announcement via a public website and implementation of the auction itself on an electronic platform.

61. **Reform tax rules to encourage NPL resolution.** The credit hierarchy that applies to secured and unsecured private creditors and public authorities should be modified as necessary to ensure that all creditors are broadly and equally incentivized to support debt restructuring as well as enforcement and liquidation options (Background Notes, Section XII). Tax rules should be reviewed and amended in areas where creditors are discouraged from provisioning or writing off loans or from selling any underlying collateral. Tax rules that inhibit debtors from accepting debt restructuring or write-off deals should also be amended.

CONCLUSION

62. **Reducing the level of impaired assets is essential for restoring the health of the banking sector and supporting credit growth in Europe.** High NPLs hold back credit supply by locking up capital that could be used to support fresh lending. And low write-off rates hinder necessary corporate restructuring and prolong the debt overhang, depressing credit demand. Given that impediments to NPL resolution are often interlinked, a comprehensive strategy is needed to address the NPL problem. Based on international experience, such a strategy should be based on three key pillars: (1) enhanced supervision, (2) insolvency reforms, and (3) the development of a distressed debt market. Given that European banks tend to operate in multiple jurisdictions—within and outside the euro area—a successful NPL resolution strategy would require close coordination between EU, euro area, and national competent authorities.

Box 1. Lessons from the Past International Experiences with NPL Resolutions¹

International experience with tackling high levels of NPLs in past crises points to the critical importance of intensive supervision to ensure swift loss recognition and the exit of nonviable borrowers, and the strengthening of insolvency systems including by developing out-of-court workouts. AMCs helped dispose of NPLs and restructure corporates in some cases.

Swift loss recognition and the exit of nonviable borrowers to accelerate the resolution process was a critical element in many successful cases. In Japan (2001), the Financial Services Agency (FSA) required major banks to apply strict discounted cash flow analysis in their NPL assessments. Similarly, in Korea (1998), the supervisor instructed banks to separate out nonviable firms, following specific forward-looking criteria and leverage levels. In Sweden (1994), firms with low interest coverage ratios and high leverage were identified for bankruptcy or liquidation.

Countries also strengthened their insolvency systems to facilitate reorganization and out-of-court workouts (Indonesia [1999], Thailand [1999], Turkey [2002], Japan [1999, 2008], and Korea [1998, 2006]). Countries enhanced their insolvency laws to encourage rehabilitation, while creating a credible threat of bankruptcy for recalcitrant debtors, thereby setting proper incentives and expected payouts for negotiating agreements out of court. Reforms typically enabled the rapid liquidation of nonviable debtors, allowed for ownership changes in debt restructuring agreements, and introduced prepack procedures for quick court approval of debt restructuring plans negotiated out of court. Crisis countries also introduced temporary, formal, and hybrid out-of-court workout frameworks with government involvement, using a range of techniques including arbitration and mediation, creditor committees, majority voting, and limited judicial intervention (Korea [1997, 2004], Indonesia [1997], Thailand [1998], Malaysia [1998], and Turkey [2002]). Experience showed that these hybrid schemes enabled better coordination among creditors, enhanced incentives for both creditors and debtors to participate in such schemes (Hagan and others 2003), and delivered encouraging results, albeit mostly for large corporates. Insolvency reforms were complemented by other reforms such as specialized courts (Indonesia, Thailand), the reform of insolvency administrators (Indonesia), and the removal of tax and other regulatory obstacles (Korea, Thailand).

AMCs, both private and public, have been used in some cases to facilitate NPL disposal and corporate restructuring (Sweden, Indonesia, Malaysia, Korea, and Thailand).² AMCs helped with separating bad from good assets, allowing the ceding bank(s) and the AMCs to focus on their respective (but often conflicting) objectives—financial intermediation and asset recovery. AMCs were particularly effective in Asia, where they were instrumental in bridging the gap between the price at which banks were willing to sell and investors willing to buy (the “pricing gap”). By buying and then selling bad assets back to private investors, these AMCs—which were typically centralized—helped incubate a market for distressed debt and provided an outlet for banks to manage their NPL portfolios.

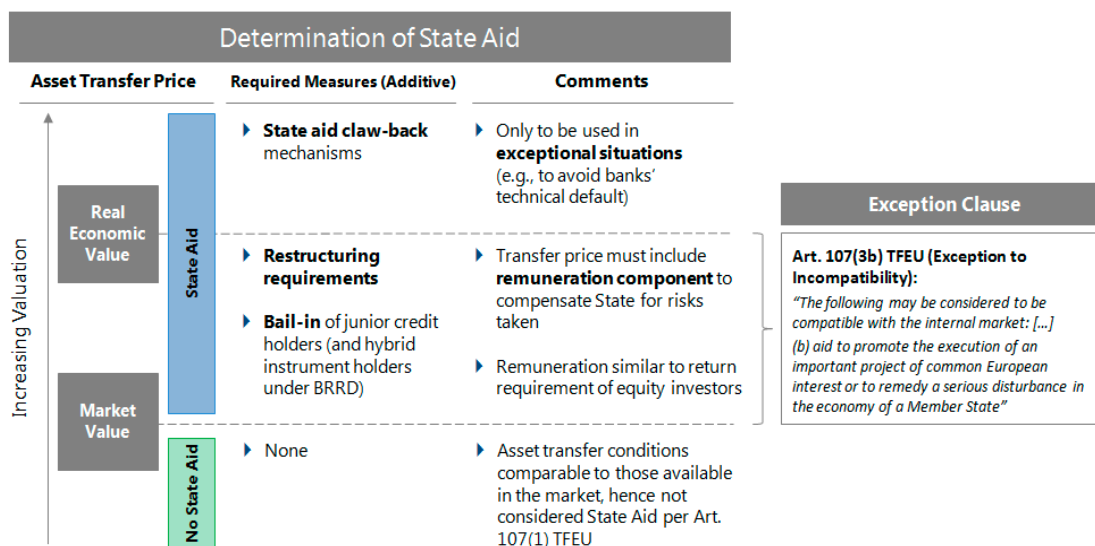
¹ This box draws on Aiyar and others 2015b.

² Other examples of AMCs include the Resolution Trust Corporation in the United States (now part of the Federal Deposit Insurance Corporation), the Malaysian Danaharta, and the Indonesian Bank Restructuring Agency.

Box 2. Compatibility of AMCs with EU State Aid Rules

To allow banks to sell NPLs without facing penalties, AMCs should comply with EU state aid rules.

They should either (1) involve no transfer of public resources or (2) receive only such public sector support as is compatible with the EU treaty. If assets are transferred to the AMC "above market value," then the existence of state aid is implied. Such public support would usually trigger the bail-in of junior creditors and hybrid instruments holders, and the implementation of a restructuring plan for the bank to return to long-term viability. In exceptional circumstances, exemptions to the restructuring and bail-in requirements could be granted, for example on the grounds that the public support addresses a market failure or remedies a serious disturbance in the economy of a member state.



A possible model for national AMCs without transfer of public resources would require asset sales at market prices and include several other desirable characteristics:

- *Transfer at market price.* Assets should be transferred from banks to the AMC at market prices. If no market exists, or if the market is undermined by severe illiquidity, prices should be determined using a model-based approach agreed with DG Competition (factoring in risk premia in line with valuations of similar asset classes elsewhere).
- *Semiprivate ownership.* Public sector participation would demonstrate political commitment and attract private sector funding through shared ownership. But public ownership should be limited to a minority stake so that AMC liabilities would be treated as only as contingent liabilities for the state, helping overcome potential fiscal constraints.
- *Voluntary participation by banks.* Banks should have the option to work out loans internally or through their own AMCs.
- *Governance.* To avoid risks of moral hazard and warehousing of bad assets, national AMCs should have a clear mandate to maximize the recovery value of acquired assets over a fixed life span. Clawbacks could be used to protect public investment in the event of losses.
- *Strengthening the recovery value of NPLs.* Temporary powers, such as time-bound fast-track restructuring, might be needed to overcome structural deficiencies (inefficient debt enforcement processes, deficient insolvency laws, and clogged judicial systems), subject to consistency with constitutional law. Any such powers would be granted to *all* market participants, including banks that are resolving NPLs internally, to ensure a level playing field.

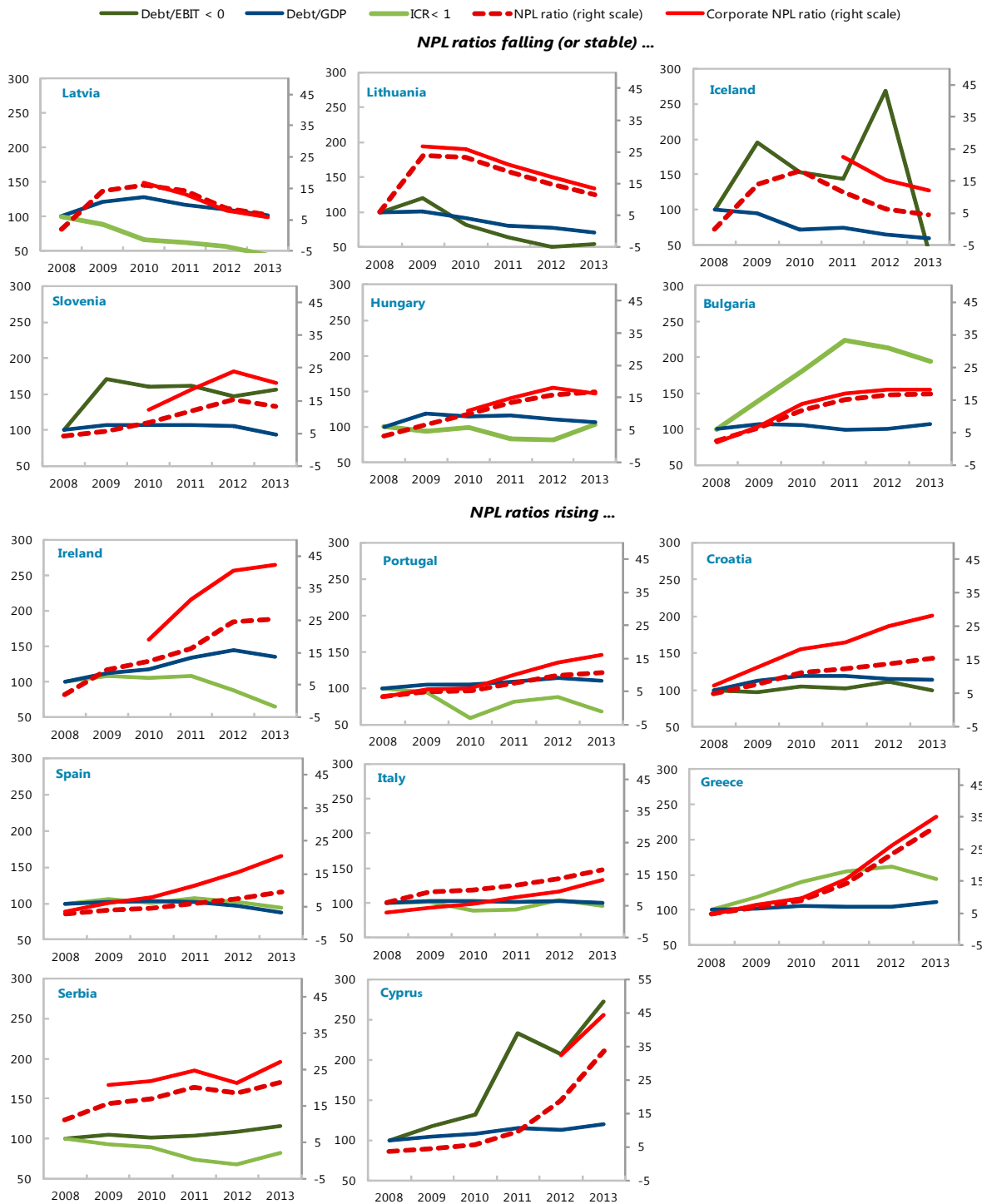
References

- Aiyar, Shekhar, Ali Al-Eyd, Bergljot Barkbu, and Andreas Jobst. 2015a. "Revitalizing SME Securitization in Europe." IMF Staff Discussion Note 07/15, European Department, International Monetary Fund, Washington, May 7.
- Aiyar, Shekhar, Wolfgang Bergthaler, Jose M. Garrido, Andreas (Andy) Jobst, Kenneth Kang, Yan Liu, Dermot Monaghan, Marina Moretti, and Jean Portier. 2015b. "Policy Options for Tackling Non-performing Loans in the Euro Area." Euro Area Policies: Selected Issues, IMF Country Report 15/205, International Monetary Fund, Washington, pp. 57–86.
- Barkbu, Bergljot, Nadège Jassaud, and Kenneth Kang. 2013. "Strategy for Fostering a Market for Distressed Debt in Italy." IMF Country Report 13/299, International Monetary Fund, Washington, pp. 71–8.
- Bergthaler, Wolfgang, Kenneth Kang, Yan Liu, and Dermot Monaghan. 2015. "Tackling SME Problem Loans in Europe." Staff Discussion Note 15/04, International Monetary Fund, Washington.
- European Commission. 2015. "Building a Capital Markets Union." COM(2015) 63 Green Paper, European Commission, Brussels, February 18.
- . 2014a. "Commission Recommendation on a New Approach to Business Failure and Insolvency." C(2014) 1500 Final, European Commission, Brussels, March 12.
- . 2014b. "Study on a New Approach to Business Failure and Insolvency—Comparative Legal Analysis of the Member States' Relevant Provisions and Practices: Annex 2 (Part 1: Confidential Proceedings)." Tender No. JUST/2012/JCIV/CT/0194/A4, INSOL Europe, European Commission, Brussels.
- Goretti, Manuela, and Marcos Souto. 2013. "Macro-Financial Implications of Corporate (De)Leveraging in the Euro Area Periphery." IMF Working Paper 13/154, International Monetary Fund, Washington.
- Hagan, Sean, Eliot Kalter, and Rhoda Weeks-Brown. 2003. "Chapter VII: Corporate Debt Restructuring in the Wake of Economic Crises." In *Managing Financial Crises: Recent Experience and Lessons for Latin America*, edited by Charles Collyns and G. Russell Kincaid. IMF Occasional Paper 217, International Monetary Fund, Washington, April 10.
- Ingves, Stefan, Steven A. Seelig, and Dong He. 2004. "Issues in the Establishment of Asset Management Companies." IMF Policy Discussion Paper 3/04, International Monetary Fund, Washington.
- International Monetary Fund (IMF). 2013. "Transition Challenges to Stability." *Global Financial Stability Report*, Chapter 1, International Monetary Fund, Washington, April.
- Jassaud, Nadège and Kenneth Kang, 2015, "A Strategy for Developing a Market for Nonperforming Loans in Italy," IMF Working Paper No. 15/24 (Washington, D.C.: International Monetary Fund).
- Liu, Yan, and Christoph B. Rosenberg. 2013. "Dealing with Private Debt Distress in the Wake of the European Financial Crisis: A Review of the Economics and Legal Toolbox." IMF Working Paper 13/44, International Monetary Fund, Washington.

Woo, David, 2000, "Two Approaches to Resolving Nonperforming Assets During Financial Crises,"
IMF Working Paper No. 00/33 (Washington, D.C.: International Monetary Fund).

ANNEX

Figure A1. Corporate Sector Debt Metrics and NPL Ratios



Sources: Orbis; Eurostat; IMF's FSIs; national authorities; and IMF staff calculations. Note: The debt-at-risk is defined as a share of debt owed by weak firms in total debt of sample firms, where weak firms are either those with ICR<1 (interest coverage ratio (ICR) = earnings as a share of interest expense) or Debt/EBIT<0 (that is, positive debt and negative earnings); Debt/GDP is calculated from sectoral financial and national accounts data. Both debt-at-risk and Debt/GDP series are indexed (2008 = 100). Note that in the case of Ireland, the NPL ratio started to decline in 2014.