

**European Union: Publication of Financial Sector Assessment Program  
Documentation—Technical Note on Progress with Bank Restructuring and Resolution  
in Europe**

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FINANCIAL SECTOR ASSESSMENT PROGRAM

# EUROPEAN UNION

PROGRESS WITH BANK RESTRUCTURING AND RESOLUTION IN  
EUROPE

## TECHNICAL NOTE

MARCH 2013

INTERNATIONAL MONETARY FUND  
MONETARY AND CAPITAL MARKETS DEPARTMENT

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**GLOSSARY**

AMCs	Asset Management Companies
APF	Asset Purchase Facility
BSBS	Basel Committee on Banking Supervision
CEBS	Committee of European Bank Supervisors
EBA	European Banking Authority
EC	European Commission
ECB	European Central Bank
EEE	Emerging Economies in the EU
ELA	Emergency Liquidity Assistance
EU	European Union
LGD	Loss Recovery Rates
LTROs	Long-Term Refinancing Operations
NPLs	Nonperforming Loans
OMT	Outright Monetary Transactions
PDs	Probability of Default
RWAs	Risk Weighted Assets
SRM	Single Resolution Mechanism
SSM	Single Supervisory Mechanism

## EXECUTIVE SUMMARY

1. **The European Union (EU) banking system restructuring is under way, but is far from complete.** Some bank restructuring has started, and the level Tier 1 capital ratios of EU banks have been substantially increased<sup>1</sup> (thanks to government back-stops and capitalization exercises run by the European Banking Authority).<sup>2</sup> But system-wide, capital ratios have been met partly by deleveraging or recalibrations of the risk weights on activities. Consolidation in the banking sector has been slow, with banks rarely closed.<sup>3</sup> Nonperforming loans are building up in banks' balance sheets, and addiction to central bank liquidity remains high especially for banks in peripheral countries. Despite the EBA recapitalization exercise having led to €200 billion of new capital or reduction of capital needs by European banks, fresh capital is difficult to attract in an environment where prospects for profitability are uncertain.

2. **Several hurdles impair restructuring and resolution in Europe, and urgent progress needs to be made:**

- *First*, EU bank resolution tools need to be strengthened, aligning them with the Financial Stability Board *Key Attributes for Effective Resolution*. Fast adoption of the EU resolution directive is welcome, but enhancements are warranted. Swift transposition should follow.
- *Second*, restructuring of nonperforming loans (NPLs) should be facilitated. The legal framework should not slow down restructuring and maximize asset recovery. In several EU countries, such as Italy, Greece and in Eastern Europe, bankruptcy reforms lag behind in that, for instance, current practice does not allow the seizure of collateral in a reasonable timeframe. Banks should also manage more actively their NPLs, possibly allowing a market for distress assets to emerge in Europe.
- *Third*, further evolution of the General Directorate for Competition's (DG COMP) practices will be needed in systemic cases to ensure consistency with a country's macro-financial framework and support viability of weak banks, recovery of market access, and credit provision. Increased transparency would give added credibility and accountability.

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<sup>1</sup> 10 percent in June 2012 against 7 percent in December 2008; 57 EU banks (EBA).

<sup>2</sup> Measures related to RWAs were only allowed in limited cases, i.e., where new model rollout had been started before the start of the exercise.

<sup>3</sup> While banks were rarely closed, some have downsized by closing branches, selling or closing business lines and significantly reducing their staff levels in some cases.

- *Fourth*, disclosure should be significantly enhanced and harmonized by the EBA, to restore market confidence. In particular, interpretable metrics regarding the quality of banks' assets, in terms of NPLs, collateral, probability of defaults (PD) and loan recovery rates (LGD) are key for assessing the strength of banks and restoring confidence in the banking system.

## I. INTRODUCTION<sup>4</sup>

3. **The global and European financial crises revealed long-standing structural weaknesses that have yet to be fully addressed in individual banks and in banking systems.** In large part, they reflected weaknesses in the public, household, and corporate sectors, but the banks themselves contributed to the problems, and the financial sector constituted a feedback channel that reinforced negative tendencies elsewhere.

4. **In this context, the note looks at experience with bank restructuring in Europe in recent years, what pressures remain to restructure, the impediments that slow the process, and what policy actions could be helpful.** Thus, the discussion includes, but also goes beyond, a review of government-led resolution of problem banks.

## II. RECENT DEVELOPMENTS

5. **Before the onset of the crisis, relatively favorable conditions—and, in some economies, asset price and credit bubbles—masked underlying vulnerabilities.** Many financial systems in Europe were bank dominated, complex and very large in proportion to domestic GDP. Global assets of the five largest banks were typically more than 300 percent of their home country's GDP (Figure 1).<sup>5</sup> Credit and asset price bubbles (Reinhart and Rogoff, 2009; Laeven and Valencia, 2008) built up in several jurisdictions, with sharp increases in leverage for households, also reflected in many countries in a substantial increase in house prices. While risks were building up, the overall resilience of banks improved little. From 2000 to 2007, solvency ratios increased by only 0.2 percent.<sup>6</sup> Return on equity (ROE) was high, about 17 percent in 2007 for European banks. Leverage of many large financial institutions also increased, reflecting a reliance on short-term wholesale funding that was not generally considered a concern.

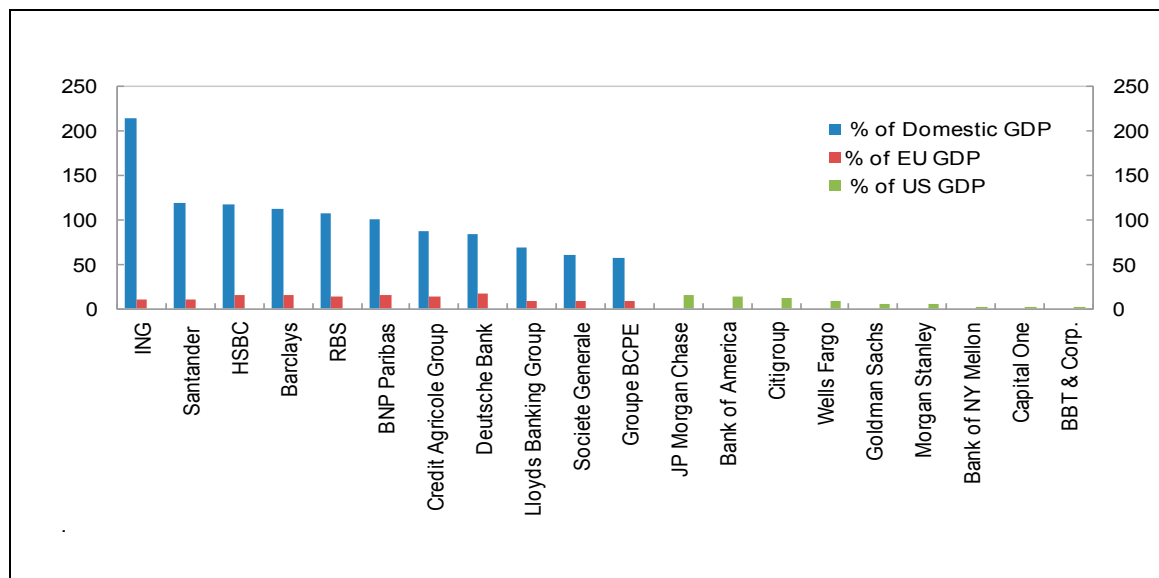
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<sup>4</sup> Prepared by Nadege Jassaud and Heiko Hesse (both MCM). Marc Dobler, Charles Enoch, Daniel Hardy, Barend Jansen, Marina Moretti, and Constant Verkoren provided helpful comments and guidance, and Ivan Guerra and Sarah Kwoh provided research support.

<sup>5</sup> Total bank assets account for 283 percent of GDP in the EU, compared to about 65 percent of GDP in the U.S.

<sup>6</sup> From 10.7 percent to 10.9 percent (sample of the largest 90 EU banks included in the 2011 EBA stress test), Bloomberg.

Figure 1. EU: Assets of EU and U.S. Banking Groups  
(2011, in percent of GDP)



Sources: Total assets' data from SNL Financial, GDP data from Eurostat, EU Commission.

6. **The crisis trigger was the U.S. mortgage market—to which some European banks were heavily exposed—but the developments displayed a number of adverse feedback loops, such that the crisis deepened and spread.** As a result, negative spirals between sovereigns, banks, and the real economy remain strong. Sovereigns, in turn, are in some cases struggling when they have to backstop weak banks on their own. Absent collective mechanisms to break these adverse feedback loops, the crisis has spilled across euro area countries.

### A. Crisis Response

7. **One element of the response was a massive extension of government aid to banks in the form mainly of recapitalization, funding guarantees, regulatory forbearance, and easier monetary conditions.** The amounts involved are very large:

- During recent years, EU governments have committed unprecedented support for backstopping the financial sector with tax payer money. Over the September 2008–December 2011 period, member states committed a total of nearly €4.5 trillion, i.e., 37 percent of the EU GDP.<sup>7</sup> The amount of tax payer money effectively used (mainly via capital injections, State guarantees issued on bank liabilities, etc) amounted to €1.7 trillion, or 13 percent of EU GDP (Table 1). Out of the 76 top EU banking groups, 19 currently have a major or even a 100 percent government stake.

<sup>7</sup> Estimated at €4.9 trillion or 39 percent of EU GDP in October 2012.



**Table 1. EU: Public Interventions<sup>8</sup> in the EU Banking Sector: 2008–2011**  
(In billions of Euros, unless indicated otherwise)

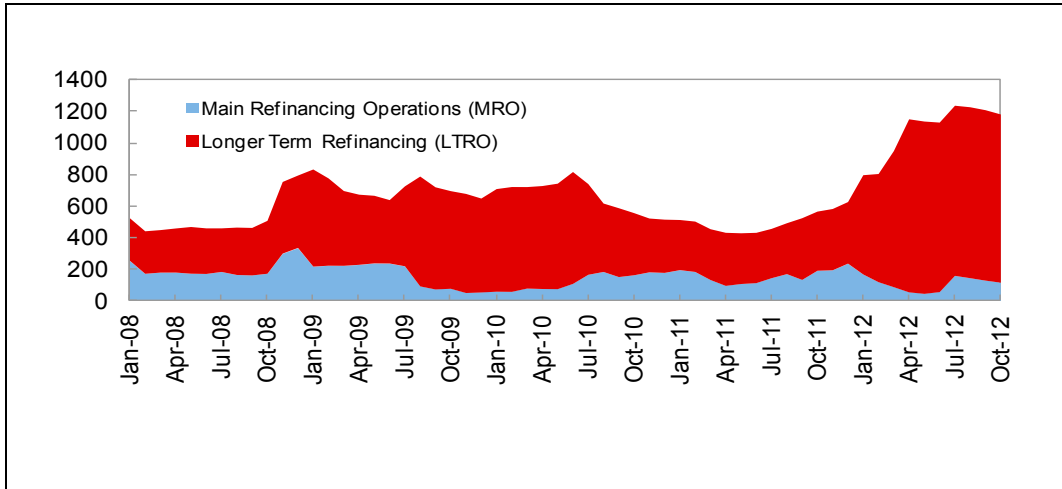
	Used Amounts		Approved Amounts	
		% of GDP		% of GDP
Capital injections	288	2.4	598	4.9
Guarantees on bank liabilities	1,112	9.1	3,290	26.8
Relief of impaired assets	121	1.0	421	3.4
Liquidity and bank funding support	87	0.7	198	1.6
<b>Total</b>	<b>1,608</b>	<b>13.1</b>	<b>4,506</b>	<b>36.7</b>

Source: EU Commission (2011c), \*: only till Dec 2010.

- Liquidity support has been especially large in the euro area and the United Kingdom.** In the euro area, the European Central Bank (ECB) provided enhanced support by (i) broadening the scope of eligible assets for central bank funding and setting up full allotment liquidity facilities for banks; (ii) undertaking refinancing operations at a fixed and historically low rates; and (iii) extending the maturity of central bank funding to a historical high via the Long-Term Refinancing Operations (LTROs); and (iv) actively purchasing assets (Figure 1). A program of Outright Monetary Transactions (OMT) was announced in September 2012 by the ECB. National central banks have also granted Emergency Liquidity Assistances (ELA) in crisis situations. In the United Kingdom, the Bank of England set up an Asset Purchase Facility (APF), for example, to buy high-quality assets, with cumulative assets purchased net of sales and redemptions totaling £360 billion (as of September 2012).

<sup>8</sup> Those figures do not include the LTRO amounts—including LTRO, the amount of money committed to banks stand at 23 percent of EU GDP.

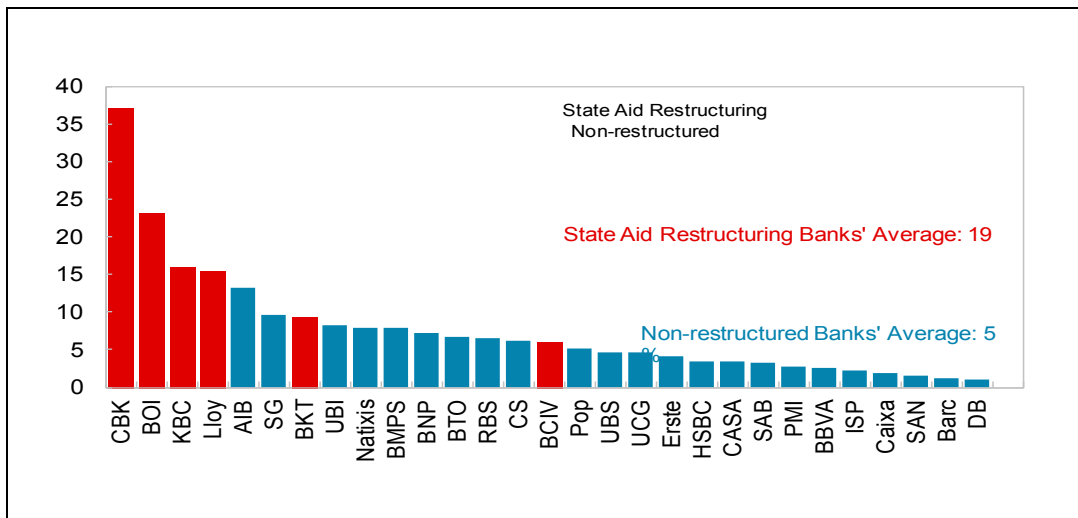
Figure 2. EU: ECB Monetary Financing Operations vis à vis Euro Area Banks  
(In billions of Euros)



Source: Bloomberg.

8. **Direct government support measures were normally complemented by action to restructure the affected banks, in part thanks to EU rules on State aid.** According to DG-COMP, 10-15 percent of the EU banking system is now under the State Aid framework and undergoing some forced restructuring. Based on a restricted sample of 30 EU large institutions, banks under EU State Aid rules have been (in the process of) deleveraging, with up to 19 percent of their total assets, according to Morgan Stanley research, while other banks that did not fall under DG COMP State rules deleveraged much less (Figure 3).

Figure 3. EU: Deleveraging/Restructuring Plans 1/  
(In percent of total assets)

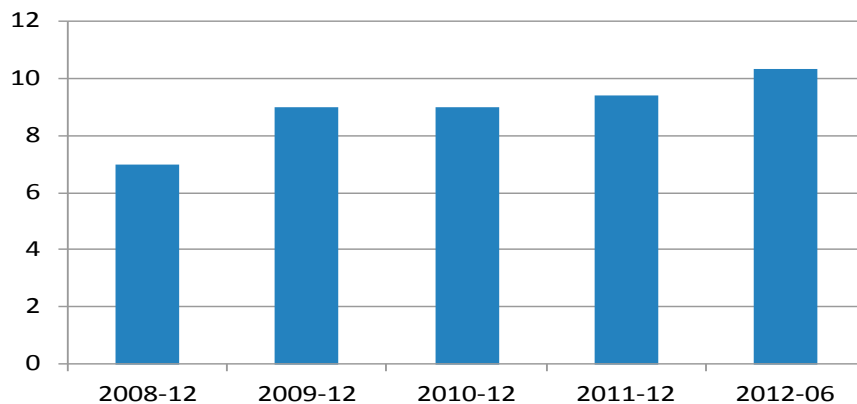


Source: Morgan Stanley.

1/ Banks under formal EU State Aid program as of September 2012.

9. **These direct policy actions went in parallel with supervisory actions on banks to recapitalize (Figure 4).**

Figure 4. EU: Tier 1 Ratio of EU Banks 2008–2012 1/



Source: EBA, sample consists of 57 banks and excludes hybrid instruments.

1/ Tier 1 ratio, excluding hybrid instruments, is used as a proxy for Core Tier 1 ratio.

- Led by the EBA, stress testing and recapitalization exercises resulted in banks increasing the quantity and quality of their capital. After the 2010 Committee of European Banking Supervisors CEBS and 2011 EBA EU-wide stress tests,<sup>9</sup> the EBA conducted a recapitalization exercise.<sup>10</sup> Capital plans submitted by banks have led to €200 billion of new capital or reduction of capital needs, for an aggregate capital shortfall of €115 billion, at end-June 2012. Tier 1 ratios<sup>11</sup> are now exceeding 10 percent, against 7 percent in December 2008 (Figure 3),
- In some of the countries subject to most stress, the authorities have embraced independent third party diagnostics (Appendix I), supplementing the EBA-led stress testing and recapitalization exercises, to regain market confidence in the system.

## B. On-Going Challenges

10. **An environment of very low interest rates, quantitative monetary injections, tolerated forbearance, and government backstops has helped avoid very abrupt restructuring and an intense credit crunch, but the underlying pressures remain.**

<sup>9</sup> The second EBA stress test (2011) that included 90 banks examined the resilience of the European banks against a single adverse macroeconomic scenario, using a core Tier 1 (CT1) capital threshold of 5 percent.

<sup>10</sup> The EBA recapitalization exercise recommended a higher core Tier 1 capital (CT1) target of 9 percent by end-June 2012 after establishing a sovereign buffer against banks' holdings of government securities based on a market-implied valuation of those holdings as of September 2011.

<sup>11</sup> The Tier 1 excluding hybrid instruments so that it gives a proxy of the core Tier 1 ratio in EBA definition.

Accommodative monetary policies, for example, aim at dealing with acute liquidity stress and giving some breathing space. But they are not by themselves a solution, and must be combined with strong macro policies and comprehensive restructuring strategies (including asset diagnosis, recapitalization and resolution).

**11. While improving, the economic environment in much of the EU remains weak.**

The recession in most of the periphery has been spilling into other EU economies (see IMF WEO, October 2012). Activity in the euro area is expected to contract by 0.2 percent in 2013 (IMF WEO Update, January 2013). This reflects delays in the transmission of lower sovereign spreads and improved bank liquidity to private sector borrowing conditions, and still high uncertainty about the ultimate resolution of the crisis despite recent progress. Credit conditions are still tight in some EU countries especially those in the periphery and the Emerging Economies in the EU (EEE), which threatens the economic recovery.

**12. Recent developments in financial markets have been favorable, although the perceived risks to financial stability remain elevated.** Significant new efforts by European policymakers—in particular the launching of the OMT program by the ECB in August 2012—have somewhat allayed investors’ fears. Tail-risk perceptions have fueled a retrenchment of private financial exposures to the euro area periphery (see IMF GFSR, October 2012).

**13. NPLs in EU banks continue to rise, outpacing loan growth (Figure 4).**

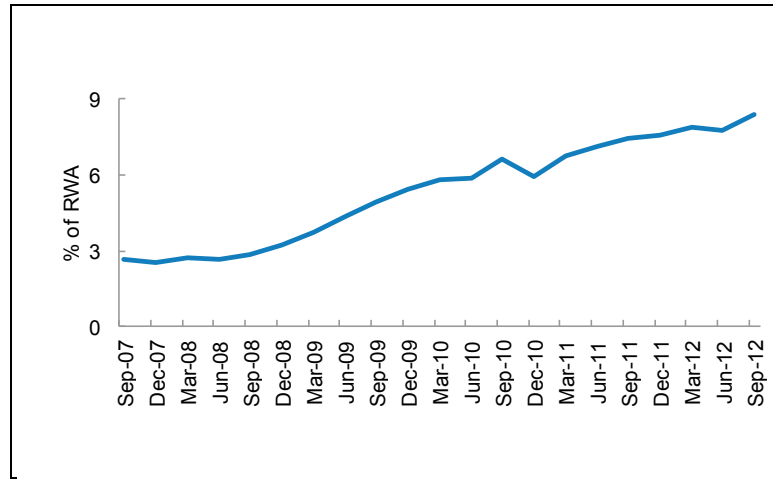
Since 2007, loans to the economy have decreased by 3 percent while NPLs<sup>12</sup> increased by almost 150 percent, i.e., €308 billion in absolute terms. And, this trend shows no sign of reversal, reflecting the continued macro deterioration in parts of the EU and the absence of restructuring. When NPLs remain on balance sheets, they absorb management capacity, and continued losses can weaken banks’ profitability. They can also foster forbearance, thereby deterring new investors by impairing transparency. In several countries, independent asset quality reviews and stress tests have facilitated a diagnosis of the quality of banks’ assets, supporting prospects for private recapitalization.<sup>13</sup>

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<sup>12</sup> NPLs have jumped from 2.6 percent in December 2007 to 8.4 percent of total loans in June 2012.

<sup>13</sup> Countries under/ near financial assistance (Cyprus, Greece, Ireland, Portugal, and Spain) have all carried out independent asset quality reviews to regain market confidence in the system. Similarly, Slovenia has carried out an independent assessment for the three largest banks.

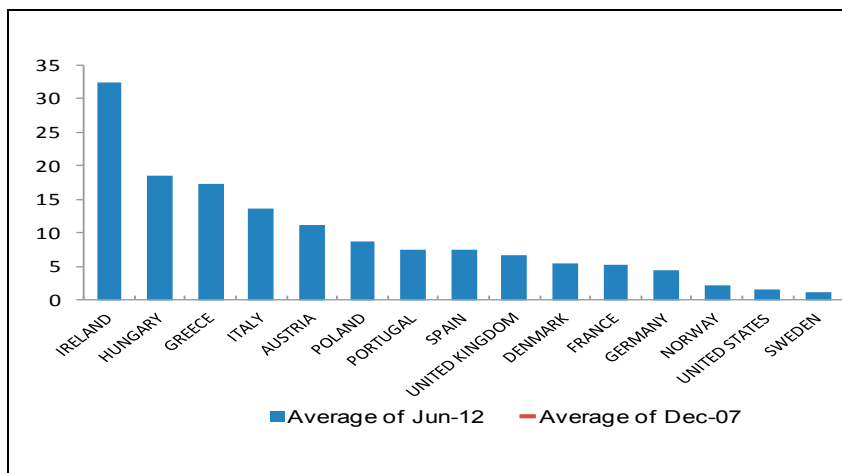
Figure 5. EU: EU Banks NPLs to Total Loans  
(EBA 90 SIFI Bank Sample)



Source: Bloomberg.

14. **NPLs across EU banks differ largely, with those in the “peripheral” countries (Greece, Ireland, Italy, Portugal and Spain) witnessing the largest increases.** For instance, from December 2007 to June 2012, the NPL ratio for Italy increased by 2.5 times, while in Spain, the increase was seven times (Figure 5). Ireland stands out with average NPLs of around 30 percent, followed by Hungary and Greece. However, definitions in this area remain non-harmonized and impair comparability across the EU.<sup>14</sup>

Figure 6. EU: NPLs to Total Loans  
(June 2012 vs. December 2007)



Sources: Bloomberg, EBA 90 SIFI Banks, September 2012.

<sup>14</sup> Across European countries, there can be large differences in NPL definitions, making asset quality assessment across countries and banks difficult.

15. **Capital ratios have increased, but concerns have been expressed about the consistency of the Basel risk weights across firms.** During the last EBA recapitalization exercise, 30 percent of the shortfall that banks were required to make up was met through reduction in RWAs, of which €10 billion came through RWA “recalibrations” (validation, roll out or changes to parameters of internal models). Such recalibrations of RWAs are expected to continue, contributing to opacity in bank capital computations. The recent Bank of England Financial Stability Report (November 2012) showed that banks’ RWAs calculations for the same hypothetical portfolio can be vastly different, with the most prudent banks calculating over twice the needed capital as the most aggressive banks.

16. **Funding remains a large challenge, especially for banks in the peripheral countries.** Many such banks are heavily reliant on ECB funding with challenges on asset encumbrance and collateral eligibility due to, for instance, rating downgrades, valuation effects on their collateral and overall loss of market confidence. Banks in Greece and Ireland have also substantially used ELA. Following the announcement of the OMT program by the ECB, funding conditions have somewhat eased for peripheral banks, and some have been able to issue debt in primary markets; peripheral bank CDS spreads have been easing. But wholesale funding remains prohibitively expensive for the euro area periphery banks to sustainably support lending in the current environment.

### III. RESOLUTION AND RESTRUCTURING FRAMEWORK

17. **To deal with these challenges, the EU needs to enhance the framework for bank resolution and restructuring.** Issues arise relating to bank resolution—on a “gone” or on a “going” concern basis; rules on State aid; measures to facilitate private sector, market-based adjustment; and other areas.

18. **The Single Supervisory Mechanism (SSM) will only be one step towards an effective banking union (BU) as resolution, a deposit guarantee scheme (DGS), and a single rulebook are essential counterparts.** Resolution and a DGS will need to be centralized, with a common backstop. Meanwhile, as a key element in addressing the crisis, the European Stability Mechanism (ESM) is being prepared to directly recapitalize banks as well as providing fiscal support. The European Council decision of June 2012 provided the ESM the possibility of direct bank recapitalization when an effective SSM is in place (see IMF EU FSAP FSSA and Goyal et al, 2013).

#### A. Resolution Framework for Problem Banks

19. **Across the national FSAPs, countries lacked domestic resolution tools.**<sup>15</sup> In reaction to the crisis, the United Kingdom created a special resolution regime (SRR) and

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<sup>15</sup> FSAP safety nets on Netherlands, Germany, the U.K., Spain, and Luxembourg.

Germany adopted a restructuring law, both of which granted the authorities the power to utilize various resolution tools. Now both countries can sell failing businesses, i.e., to transfer all or part of the business to a private sector purchaser, and or to create a bridge bank. The German Bank Reorganization Act (January 2011) also provides for an asset separation tool (the power to transfer all or part of a business to an entity, even if not a bank, in which the restructuring fund owns shares) and the possibility to bail-in senior unsecured creditors through a court-led proceeding on the initiative of the bank.

20. **A critical new EU resolution directive is in preparation.** As a national approach to resolution may well not be appropriate in the EU given the importance of cross-border banking, and the failure of existing cross-country coordination mechanisms, the European Commission (EC) has taken steps to harmonize and strengthen domestic resolution regimes. This should help avoid regulatory arbitrage and make orderly resolution effective and efficient for cross-border banks. In June 2012, the Commission issued a draft directive for harmonized crisis management and resolution framework in all EU countries. The Irish Presidency will make the adoption of the resolution framework a top priority and plans to adopt it during the first part of 2013. The new national resolution regimes endow EU countries with strong early intervention powers and resolution tools. The transposition of the directive into national laws should be accelerated relative to the current deadlines (01/2015, and 01/2018 for bail-ins).

21. **While the proposed directive will mark a big step forward, further enhancements are needed (box 1).** EU countries need to be endowed with strong early intervention powers. The FSB has developed new international standards for resolution (*Key Attributes*) that were endorsed by the G-20 leaders in 2011. They specify essential features that should be part of the resolution framework at both the national and international levels for Global Systemic financial institutions (G-SIFIS). The key objective is to make resolution feasible without severe systemic disruption and without exposing taxpayers to loss.<sup>16</sup>

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<sup>16</sup> In recognition of the impending legislative proposals the EBA has been active in developing methods for the recovery and resolution of failing banks, such as in its efforts for recovery plans, such as developing templates.

**Box 1. Proposed Resolution Directive—Risks and Areas for Enhancements<sup>1</sup>**

- Resolution of banks is undermined by the absence of a more effective EU-wide framework to fund resolution. Binding mediation powers for the EBA and mutual borrowing arrangements between national funds face inherent constraints (in particular, the EBA cannot impinge on the fiscal responsibilities of EU member states).
- Passage of the directive will substantially enhance the range of tools available to resolution agencies in the EU. But the scope of the directive should be widened to include systemic insurance companies and financial market infrastructures. The European Commission launched a consultation at the end of 2012 on this issue. All banks should be subject to the regime, without the possibility of ordinary corporate insolvency proceedings.
- The breadth and timing of the triggers for resolution should be enhanced by providing the authority with sufficient flexibility to determine the non-viability of the financial institution (including breaches of liquidity requirements and other serious regulatory failings, not just capital/asset shortfalls). There should be provision for mandatory intervention in the event a specified solvency trigger is crossed.
- The directive affords less flexibility for using certain resolution powers than the key attributes. For instance, it does not permit exercising the mandatory recapitalization power and the asset separation tool on a standalone basis. Also, bail-in safeguards should not prevent departure from pari passu treatment where necessary on grounds of financial stability or to maximize value for creditors as a whole.
- Depositor preference should be established for insured depositors<sup>2</sup>, with the right of subrogation for the DGS.

<sup>1</sup> Box prepared by Marc Dobler.

<sup>2</sup> Staff recommendation related to depositor preference is not drawn from the Key Attributes best practices.

22. **It is desirable to move quickly beyond the harmonized national regimes, and set up a single resolution mechanism (SRM), ideally with common backstops and safety nets, at least for the countries participating in the SSM.** Just as banks are nowadays too interconnected to be effectively supervised at a national level, so national resolution regimes would have difficulty, even under harmonized arrangements, in handling the bigger banks of the EU. Moreover, there would be limited incentives among national resolution authorities for least-cost and rapid action to address problems; also, coordination difficulties, especially for large cross-border banks, in the absence of common backstops, may undermine effectiveness. To be fully aligned with best practices,<sup>17</sup> the resolution authority should seek to achieve least cost resolution of financial institutions without disrupting financial stability. It should protect insured depositors, and ensure that shareholders and unsecured, uninsured creditors absorb losses. The SRM will need a mandate, alongside the SSM, to develop resolution and recovery plans and intervene before insolvency using well-defined

<sup>17</sup> The FSB Key Attributes of Effective Resolution Regimes for Financial Institutions.



quantitative and qualitative triggers. It will need strong powers and a range of tools to take early intervention measures and restructure banks' assets and liabilities (for example, bail-in subordinated and senior unsecured creditors, transfer assets and liabilities with "purchase and assumption," and separate bad assets by setting up asset management vehicles), override shareholder rights, establish bridge banks to maintain essential financial services, and close insolvent banks.

23. **The SRM will need to coordinate closely with the SSM.** For instance, there could be regular formal meetings with the Chair of the supervisory Board of the ECB. Alternatively, the ECB Chair of the supervisory Board could serve on the board of the SRM, together with national representatives and representatives of other EU bodies.

24. **Resolution will likely be subject to state aid rules, so the SRM will have to coordinate closely with DG COMP.** Any of the existing agencies would likely have to undergo operational and possibly legal changes in order to carry out a resolution role; for the time being it may be worthwhile to use the ESM as the resolution mechanism, but in the medium term it may be best that the single resolution agency be created from new. This agency can begin operating once agreement on common resolution funding and backstops are in place.

25. **Borrower restructuring needs to be facilitated, with legal hurdles lifted.** The legal framework should facilitate the restructuring of NPLs and maximize asset recovery. In several EU countries, including Italy, Greece and Portugal, the IMF is involved in bankruptcy/insolvency law reform, including by introducing fast track restructuring tools and out-of-court restructuring process. For instance, repossession of the collateral backing a retail mortgage may take several years in Italy versus few months in Scandinavia and United Kingdom. The asset recovery process is also very prolonged in many EEE countries.<sup>18</sup> Sometimes in those jurisdictions, the issue is implementation, with banks being unable to enforce collateral. This can weigh heavily on the value of the bank, making its collateral worth less and leaving NPLs on their balance sheets. An efficient framework for handling NPLs is key to rehabilitate viable borrowers and provide the exit of non-viable borrowers.

26. **Active management of NPLs is needed.** In principle, NPLs can either be:  
 (i) retained and managed by banks themselves at appropriately written-down values, while the banks receive financial assistance from the government for recapitalization; or  
 (ii) relocated or sold to one or more decentralized "bad banks," loan recovery companies, or Asset Management Companies (AMCs) that specialize in the management of impaired

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<sup>18</sup> The European Banking Coordination "Vienna" Initiative (2012) in a working group focused on NPL issues in Central, Eastern and Southeastern Europe. Recommendations, among others, focused on establishing a conducive legal framework for NPL resolution, removing tax impediments and regulatory obstacles, as well as enabling out-of-court settlements.

assets; (iii) sold to a centralized AMC set up for public policy purposes (possibly when the size of NPLs reaches systemic proportions, see Appendix II).

27. **The EU experience with AMCs is at an early stage, although they have been used widely in many other parts of the world.** A number of AMCs were established, including in Belgium, Denmark, Ireland, Spain, Switzerland, and the United Kingdom. Discussions on possible AMCs are underway in Cyprus and Slovenia; and AMCs were considered but ruled out in Iceland. While it is early to fully assess the recent experience, it is useful to compare and contrast features and approaches with AMCs in other countries both past and present; discuss the rationale behind any deviation from established practice; and draw where possible some preliminary conclusions.

### **Government support and State Aid rules for financial sector action**

28. **Competition and State Aid policy has served de facto as the main coordinating mechanism in bank restructuring during the crisis, as the only binding EU framework available for this purpose.**<sup>19</sup> DG COMP has the exclusive mandate and power to ensure that State aid is compatible with the treaty, and that State aid provision is accepted in exchange for strict conditionality. Member states have provided aid through capital injections, guarantees and asset purchases. Compensatory measures required by DG COMP have included divestments, penalty interest rates, management removals, dividend suspensions and burden sharing (shareholder dilutions, and bail in of subordinated debt). According to DG Comp, 60 EU banks—accounting for 10–15 percent of the EU banking assets—underwent a deep restructuring. Under the State aid regime, 20 banks were resolved.

29. **Interventions by DG COMP have been instrumental in imposing restructuring on banks but have on occasion heightened macro-financial concerns.** In particular, there have been concerns about the speed of decision making and insufficient transparency, and the impact of compensatory measures on financial stability and economic growth. State aid decisions have involved relatively long timeframes, and rules not well understood by markets have at times exacerbated uncertainties. Since DG COMP could only act in response to national State aid proposals, decisions were taken case-by-case on an individual basis even in the presence of system-wide problems. The case-by-case approach has led on occasion to concerns about excessive private sector deleveraging and undesirable macro-financial outcomes.

30. **State aid management is evolving to respond more flexibly to the crisis, but faces fundamental challenges.** DG COMP is assigned a difficult task in mitigating competitive

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<sup>19</sup> The TFEU contains strict limitations on State aid to avoid distorting competition and the internal market. According to the Article 107 of the treaty, no State aid should be granted in any form which distorts or threatens competition. However, State aid can be exceptionally allowed under paragraph 3 of Article 107 in cases of serious disturbances to the economy.

distortions, yet preserving financial stability, and limiting the costs to the taxpayers while ensuring the long term viability of the institutions that receive State aid. The design of intervention strategies, therefore, sometimes involves significant trade-offs. Procedures have been accelerated, and sector-wide implications have been taken into account. The ongoing Spanish arrangement, for example, takes a broader approach. The Commission's powers regarding the resolution of banks have been strengthened further, since ESM support to bank recapitalization is now conditional upon the Commission's approval of those banks' restructuring plans. The new mechanism has given DG COMP greater influence in the restructuring and resolution of banks receiving State aid, and led to a significant acceleration in the approval process. For instance, it took less than six months to approve the restructuring plans of eight Spanish banks, consistent with the timelines of the European program of assistance to Spain. Stronger coordination with other institutions is desirable with a view to achieving the Commission's objective of "restoring financial stability, ensuring lending to the real economy, and dealing with systemic risk of possible insolvency."

**31. DG COMP's practices in systemic cases can be further enhanced to ensure consistency with a country's macro-financial framework and transparency should be enhanced.** Phasing and composition of bank restructuring is critical to mitigate adverse macroeconomic effects. DG COMP seeks to set the right incentives to make the best use of State aid and withdraw from state protection as soon as possible. A pricing policy has been established based on recommendations of the ECB that seeks to limit moral hazard by ensuring a sufficient degree of burden sharing, although at a level which is still below the remuneration that would, in the absence of State aid, be requested by the market. However, increased transparency in pricing and proposed deleveraging would give added credibility to DG COMP's efforts, which sometimes appear to be ad hoc. An examination, for instance with the IMF and ECB, of its policy for determining the remuneration of instruments used for capital support would be appropriate, to ensure on the one hand that it is not double-hitting a fragile institution and on the other not simply delaying the institution's demise, and thereby undermining financial stability going forward. Similarly, it would be helpful to look again at the methodology for determining the required degree of bank deleveraging.

**32. DG COMP's role will change as a dedicated resolution framework for the BU is developed.** The challenge will be to find a balance to foster a more integrated approach between the Commission as the guardian of competition and institutions that, concomitant with the BU, will be charged with overseeing bank resolution and safeguarding financial stability at the EU level. One option would be to foster a permanent coordination mechanism between DG COMP and financial stability authorities to deal efficiently with the competition and State aid aspects of future resolution cases. Moreover, as most large EA banks have presence outside the likely BU perimeter, there is likely to be an important role in coordinating between the BU resolution authority and those in the remaining EU member states using the framework of the prospective resolution directive.

## B. Disclosure

33. **Publication of EBA stress test results allowed for enhanced transparency, but remaining data gaps impede market discipline.** EBA stress tests allowed for enhanced transparency with over 3,000 data points disclosed by EU banks. However, consistent public data across banks are missing on many fronts, including the funding side (collateral encumbrance, ECB funding, LCR ratios), derivatives portfolio and other off-balance sheet activities, RWAs, PDs.

34. **NPL definitions are not harmonized across Europe.** There can be large differences in NPL definitions, making asset quality assessment across countries and banks difficult. In December 2012, the ESMA stressed the need for transparency and the importance of appropriate and consistent application of impairments (Treatment of Forbearance practices in IFRS Financial Statements of Financial institutions). While it recognized a certain degree of judgment in the classification, it suggested some examples of trigger events. Similarly, practices in terms of write-offs under IFRS are relatively flexible, making comparison across banks very difficult.

35. **Disclosure of collateral is not mandatory.** IFRS does not require disclosing the amount of collateral, and therefore, when banks disclose a value, there is no consistency. The practices differ in using Fair value, nominal value, nominal realizable value (capped to the 'gross' value of the loan) or stressed value. The periodicity (how often data is revalued) and what is the governance of that process also varies across banks.

36. **The EBA must continue to promote better dissemination of supervisory micro-data across the EU and to enhance transparency in the disclosure of banks' risk-related data.** The 2011 stress test exercised showed the value brought by disclosure of detailed information. As quality assurance is key, the EBA should strive to (i) enhance the quality assurance process; (ii) promote the disclosure of granular asset quality information; and (iii) expand depth, and coverage of audits. In addition, the EBA should raise the awareness of supervisors on asset quality issues, in particular by issuing guidelines for supervisors on best practices for the conduction of asset quality reviews, addressing some specific sectors, and urgently pushing for enhancing comparability and completeness of Pillar 3 reports. The EBA should work with national authorities and coordinate the provision of technical expertise where needed (cf. TN on EBA).

37. **The EBA should also enhance its work on supervisory convergence.** Current work on the consistency of RWAs should be a priority. Initial work in this area identified divergences in the application of Internal Ratings Based (IRB) models, differences of interpretation/implementation of the regulatory framework, and dispersion across banks in the gap between expected losses on defaulted and non-defaulted assets. This work is of great relevance for supervisory convergence and the level playing field in the single market. It should be kept in harmony with Basel Committee on Banking Supervision (BCBS) Level 3

exercises, and followed up with the issuance of guidelines (and perhaps Regulatory Technical Standards) to ensure consistency.<sup>20</sup>

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<sup>20</sup> See also the technical note on the EBA.

## APPENDIX I. EXPERIENCE WITH ASSET QUALITY REVIEWS

38. **Independent Asset Quality Reviews have been conducted in most of the distressed EU countries.** Countries under/near financial assistance (Cyprus, Greece, Ireland, Portugal, and Spain) have carried out independent Asset Quality Reviews to regain market confidence.<sup>21</sup> Self assessments are usually difficult in a crisis environment because supervisors may be under political pressures to hide losses (Table 1).

**Appendix Table 1. EU: Asset Quality Reviews Conducted in EU Countries: 2008–2012**

Ireland	Greece	Portugal	Cyprus	Spain
Jan–Mar 2011	Aug–Dec 2011	Jul–Nov 2011	Sept–Dec 2012	May–Jun 2012
<p>In December 2010, as part of the EU/IMF program, BlackRock Solutions was engaged to perform a loan diagnosis of over €275 billion across the five largest Irish banks.</p> <p>The diagnosis had five building blocks:</p> <ul style="list-style-type: none"> <li>• an asset quality review to assess the quality of aggregate and individual loan portfolios and the monitoring processes employed;</li> <li>• a distressed credit operations review to assess the operational capability and effectiveness of distressed loan portfolio management in the banks including arrears management and workout practices in curing NPLs and reducing loan losses;</li> </ul>	<p>As part of the 2<sup>nd</sup> Memorandum of Economic and Financial Policies, BlackRock was engaged to perform a loan diagnosis over all Greek banks.</p> <p>Individual results were communicated to banks but no disclosure has been made to the public.</p>	<p>Under the EU/IMF program, the supervisor led detailed asset quality reviews of the eight largest national banking groups' loan portfolios and regulatory capital (RWA) calculations.</p> <p>Those eight largest banking groups account for more than 80 percent of the banking system's total assets.</p> <p>This "Special Inspection Program" (SIP) was carried out with support from external parties, Ernst &amp; Young, PWC and Oliver Wyman.</p> <p>The SIP had three different work streams (WS):</p> <ul style="list-style-type: none"> <li>• the valuation of the credit portfolio,</li> </ul>	<p>An asset quality review of the Cypriot banks will be conducted, including a stress test exercise.</p> <p>The Central Bank of Cyprus appointed the investment companies Pimco and Deloitte to conduct the asset quality review of on 22 institutions, which is a mix of EU subsidiaries, co-operative credit institutions, and domestic banks.</p> <p>The participating banks account for 73 percent of the Cyprus banking system.</p> <p>The stress test will have a three-year horizon from mid-2012 to mid-2015.</p>	<p>Olivier and Wyman and Roland Berger were assigned to assess the resilience of the main Spanish banking groups (14 which hold 88 percent of the market asset share).</p> <p>Cumulative credit losses for the top-down stress test with a three-year horizon are €250-270 billion in the adverse scenario and €170-190 billion in the base scenario.</p> <p>The estimated capital needs range from €51-62 billion and €16-25 billion in the adverse and base scenario, respectively, and the capital buffer requirement of €37 billion for a core Tier 1 threshold of 7 percent.</p>

<sup>21</sup> Slovenia has almost conducted an independent assessment.

**Appendix Table 1. EU: Asset Quality Reviews Conducted in EU Countries—2008–2012 (continued)**

Ireland	Greece	Portugal	Cyprus	Spain
Jan–Mar 2011	Aug–Dec 2011	Jul–Nov 2011	Sept–Dec 2012	May–Jun 2012
<ul style="list-style-type: none"> <li>• a data integrity validation exercise to assess the reliability of banks' data;</li> <li>• a loan loss forecast (LLF) under base and stress scenarios; and</li> <li>• a public communication.</li> </ul> <p>Under the Loan Loss Forecast, Blackrock estimated future losses with forecasted financial statements through end-2013 (three- year horizon) as well as baseline losses.</p>		<ul style="list-style-type: none"> <li>• a credit risk capital requirements calculation, and</li> <li>• a stress test conducted (by Olivier and Wyman).</li> </ul> <p>The results of the W1 and W2 were made public in December 2011. The results of the W3 were not disclosed.</p>		<p>The second part of the assessment with four domestic auditors was completed at the end of September.</p>

## APPENDIX II. EXPERIENCE WITH ASSET MANAGEMENT COMPANIES IN CRISIS COUNTRIES

39. **In past crisis, AMC**s have been extensively used as a way of facilitating bank restructuring (Sweden, Indonesia, Malaysia, Korea, and Thailand). While there is no single optimal solution, operational independence, appropriately structured incentives and commercial orientation are key design features.

40. **In the current EU crisis, a number of AMC**s were established, including in Ireland, Spain, Belgium, Denmark, and the U.K; discussions on possible AMCs are underway in Cyprus and Slovenia.

**Appendix Table 2. EU: AMC**s—Challenges and Key Design Features

Costs and Benefits	Key Design Features	EU Crisis Countries
<p>AMC allow consolidation of scarce workout skills and resources in one agency, and the application of uniform workout procedures:</p> <ul style="list-style-type: none"> <li>• help securitization because of the larger pool of assets;</li> <li>• provide greater leverage over debtors (especially if AMCs are granted special powers of loan recovery);</li> <li>• prevent fire sales or destabilizing spillover effects, as banks deleverage; and</li> <li>• allow the good banks to focus on their core business.</li> </ul> <p>However, asset purchases by an AMC do not raise banks' net worth unless the operation is done at above-market prices, which should be avoided. Asset purchases, thus, do not solve a problem of lack of capital in the banking sector.</p> <p>The overall cost may be higher than expected, depending on the legal and operational environment for loan recovery and the likelihood of being subject to political pressure.</p>	<ul style="list-style-type: none"> <li>• Governance: operational independence is necessary to assure the effective operation of an AMC.</li> <li>• Structured incentives: the AMC should not become a "warehouse" of NPLs and have incentives to ensure effective and efficient asset management and asset disposals.</li> <li>• Commercial orientation: assets should be purchased at a price as close to a fair market value as possible to minimize losses (possibly considering some form of profit-sharing arrangement).<sup>1</sup></li> </ul> <p>Funding shall be adequate. the AMC must have sufficient funds to perform its intended functions, with the operating budget separate from funding for asset takeover. In past crises, funding came from either the proceeds of government bond issues or the AMC's own bond issuance backed by the government.</p> <p>A key advantage of using a company without a banking license (an AMC) instead of a—bad bank is that AMCs do not need to meet regulatory capital and liquidity requirements, thereby reducing their overall costs.</p>	<p>Ireland: the National Asset Management Agency (NAMA) was set up in December 2009, to help Irish banks divest of bad loans (Irish commercial property) and in turn receive government-backed securities as collateral against ECB funding. NAMA aimed to achieve this task by:</p> <ul style="list-style-type: none"> <li>• Acquiring bad loans from the five participating banks,</li> <li>• Working pro-actively on a business plan for acquiring and disposing bad loans, and</li> <li>• Protecting and enhancing to the maximum possible level, value of these assets.</li> </ul> <p>Spain: the legislation enacted in August 2012 established the Asset Management Company for assets arising from bank restructuring (Sareb) and empowers the Fund for the Orderly Restructuring of the Banking Sector (FROB) to instruct distressed banks to transfer problematic assets to it.</p> <p>Mid–December 2012, Sareb increased its capital to allow its main private participants (banks) to become shareholders.</p>

Source: Ingves, Stefan and David S. Hoelscher (2005), "The Resolution of Systemic Banking System Crises," Enoch, Charles, Gillian Garcia and V. Sundarajan, (2001) "Recapitalizing Banks with Public Funds," IMF Staff Paper Vol. 48, No.1, Bank of Ireland, FROB Websites.

<sup>1</sup> The Malaysian Danaharta, for example, purchased impaired loans at an average discount of 55 percent, while banks that sold assets retained the right to receive 80 percent of any recoveries in excess of acquisition costs that the AMC was able to realize.



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