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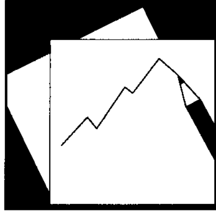

# IMF Working Paper

# Crisis Management and Resolution for a European Banking System

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# IMF Working Paper

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

## Crisis Management and Resolution for a European Banking System

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Authorized for distribution by Luc Everaert, Daniel Hardy, and Barend Jansen

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## Abstract

**This Working Paper should not be reported as representing the views of the IMF.**
The views expressed in this Working Paper are those of the author(s) and do not necessarily represent those of the IMF or IMF policy. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate.

This paper proposes an integrated crisis management and resolution framework for the EU's single banking market. It comprises a European Resolution Authority (ERA), armed with the mandate and the tools to deal cost-effectively with failing systemic cross-border banks, and is designed to address many fundamental operational and incentive problems. It also seeks to reduce moral hazard and better protect countries against the risk of twin fiscal-financial crises by detaching banks from government budgets. The ERA would be most effective if it were twinned or combined with a European Deposit Insurance and Resolution Fund.

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## List of Acronyms

| | |
|---|---|
| BCBS | Basel Committee for Banking Supervision |
| CBSG | Cross-Border Stability Group |
| CBRG | Cross-border Bank Resolution Group (of the Basel Committee) |
| CCP | Central Counterparty |
| CEBS | Committee of European Banking Supervisors |
| CEIOPS | Committee of European Insurance and Occupational Pensions Supervisors |
| CESR | Committee of European Securities Regulators |
| CoCo | Contingent Convertible (bond) |
| CPSS | Committee on Payment and Settlement Systems |
| CRD | Capital Requirements Directive |
| DG | Directorate-General |
| DGS | Deposit Guarantee Scheme |
| DLG | De Larosière Group |
| EBA | European Banking Authority |
| EC | European Commission |
| ECB | European Central Bank |
| ECOFIN | Economic and Financial Affairs Council (of Ministers) |
| EDIRF | European Deposit Insurance and Resolution Fund |
| EFC | Economic and Financial Committee |
| EIOPA | European Insurance and Occupational Pensions Authority |
| ELA | Emergency Liquidity Assistance |
| ERA | European Resolution Authority |
| ESA | European Supervisory Authority |
| ESCB | European System of Central Banks |
| ESFS | European System of Financial Supervisors |
| ESMA | European Securities and Markets Authority |
| ESRB | European Systemic Risk Board |
| EU | European Union |
| FCD | Financial Conglomerates Directive |
| FDIC | Federal Deposit Insurance Corporation |
| FSB | Financial Stability Board |
| FSC | Fiscal Safeguard Clause |
| HLWG | High-Level Working Group (of the EFC) |
| IOSCO | International Organization of Securities Commissions |
| ISDA | International Swaps and Derivatives Association |
| LOLR | Lender of Last Resort |
| MoU | Memorandum of Understanding |
| OECD | Organization for Economic Cooperation and Development |
| OTC | Over-the-counter |
| RBS | Royal Bank of Scotland |
| RCD | Reverse Capital Debenture |
| VSCA | Voluntary Specific Cooperation Agreement |

## EXECUTIVE SUMMARY AND CONCLUSIONS

The crisis has brought the long-building tension between increasingly transnational financial institutions and national financial stability arrangements to a breaking point. The choices the EU will make to remove that tension will shape its financial and economic future.

The urgency to act is great and the challenges to address manifold, notably establishing a sound prudential basis for the single banking market and the single passport, establishing effective market discipline, and reducing the mutual exposures between banks and taxpayers.

Key to addressing these challenges is the possibility to deal cost-effectively and impartially with a failing large cross-border bank, and transparency toward the financial sector and its counterparts about how this can and will be done. "Cost effectiveness" in this context should be defined broadly and comprises as a minimum: no losses to insured depositors, and minimal losses to deposit guarantee systems; minimal collateral damage to the economy; and minimal or no costs to government budgets.

To achieve this, the paper proposes an integrated EU-level framework for crisis prevention and management, crisis resolution, and depositor protection that resolves the problematic institutional mismatch between, on the one hand, pan-European banking groups and, on the other, crisis management and resolution by national authorities. It comprises:

- A European Resolution Authority (ERA) armed with the mandate and the tools to resolve large cross-border banks cost-effectively;

- A European Deposit Insurance and Resolution Fund (EDIRF) that is pre-funded by the industry through deposit insurance premiums and systemic levies; and

- A legal framework established through a 28th regime.

The system would need fiscal backing to be robust, but is designed to facilitate agreement on such fiscal backing, by focusing on addressing moral hazard, establishing ex ante agreement on resolution principles and procedures, and allowing efficient resolution decisions with the involvement of and accountability toward the member states.

With a focus on cost-efficient crisis management and resolution, and by providing an element of insurance against asymmetric financial shocks, it would much better shield taxpayers from financial sector problems than is currently the case. The obstacles that would need to be overcome to realize this system are admittedly significant. However, the potential benefit for the EU's citizens is large and justifies tackling these obstacles directly.

Political leadership will be the key to success.

# I. INTRODUCTION

Banking systems are shaped by financial stability arrangements. As the EU ponders reforms to its financial stability arrangements, it is also in the process of deciding what kind of financial system it will have in the future.[2] The crisis has brought the long-building tension between increasingly transnational financial institutions and national financial stability arrangements to a breaking point. The EU now needs to choose how to remove that tension. The choice it makes will shape its financial and economic future.

## A. The EU's Financial Integration and Stability Debate

Clearly, the financial crisis has accelerated the debate about arrangements for financial crisis management, crisis resolution, and burden sharing in the European Union (EU). Recognition that these arrangements needed to be adapted to make them consistent with the objective of a single financial market is not new.[3] This was the subject of a vigorous, albeit complex and not very public, debate in official and academic circles long before the crisis. Incidentally, a major strand of work undertaken in this context came to fruition during the early stages of the financial turmoil in 2007–08, with the adoption of a set of crisis management principles, a roadmap of reforms, and a new EU-wide Memorandum of Understanding (MoU) (see Section IIC below). However, the implementation of these reforms had just started when the financial turmoil morphed into a full-blown systemic crisis in the fall of 2008.

The financial crisis has demonstrated not only the shortcomings of the current EU-cross-border arrangements, but also that the reforms envisaged under the crisis management roadmap are insufficient to satisfactorily address these shortcomings. In addition, it has laid bare significant deficiencies also in global and national crisis management and resolution arrangements. The EU thus faces a need for reform at three levels: national, EU, and global. While the focus in this paper is on the EU level, the national and global levels will necessarily be touched upon as well given the many interdependencies.

The pre-crisis debate on crisis management and resolution was in many ways a very constrained one, limited by a general unwillingness to question the basic set-up of national prudential institutions backed up by national fiscal responsibilities.[4] The issue of fiscal responsibility was a particularly persistent sticking point. While taxpayer money has often

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[2] Much of this paper was written in the context of the European Commission's 2009-10 Public Consultation regarding an EU framework for Cross-Border Crisis Management in the Banking Sector. See European Commission (2009e, 2009f) and IMF staff (2010).

[3] See, among many others, Dermine (2005), Fonteyne and Van der Vossen (2007), and Véron (2007). In a recent contribution, Schoenmaker (2010) observes a "financial trilemma", which indicates that a stable financial system, an integrated financial system, and national financial autonomy are incompatible.

[4] This unwillingness persisted also in the handling of the crisis, as noted by Pisani-Ferry and Sapir (2009).

played a key role in resolving financial crises, the present one being an exception mainly in its magnitude and scope, the limited size and flexibility of the EU's budget and its lack of fiscal powers do not allow it to take on the role of "solvency provider of last resort" for the EU's financial system. In this decentralized fiscal framework, any public solvency support ultimately has to come from the Member States. Accordingly, fundamental reform was repeatedly rejected on the ground that responsibility for financial stability needs to be at the level of the fiscal authority that would have to pick up the bill when things go wrong (see Goodhart, 2004a; and Goodhart and Schoenmaker, 2006).

Thus, the debate was reduced to a complex technocratic discussion weighing the relative merits of various sub-optimal steps forward that could only mitigate the fundamental problems that remained unaddressed. In a way, the EU's financial stability debate was fundamentally stuck in an unproductive catch-22 situation, in which no major progress was possible either on the dimension of prudential and crisis management arrangements or on the dimension of fiscal responsibility (the burden sharing debate) without progress on the other dimension.

The crisis has produced a major breakthrough on prudential arrangements (see Annex 6), based on the recommendations of the De Larosière Group (DLG)—a group of eminent experts established by Commission President Barroso. However, the question of fiscal responsibility was once again a key stumbling block, both in the deliberations of the DLG and in the negotiations on the implementation of its recommendations. In response to the concerns of some member states—against an "overwhelming majority", the Council agreed that the binding powers of the new European Supervisory Authorities (ESAs) should "not in any way impinge on the fiscal responsibilities of the member states".[5] This is reflected in a Fiscal Safeguard Clause (FSC), the interpretation and application of which could well become the key factor determining the effectiveness of the new framework.

Nonetheless, the crisis has put the fiscal responsibility debate into a new light. The course and outcomes of the crisis have shown that the de facto link between financial systems and national budgets has severe disadvantages. First, taxpayers turned out to be far too exposed to financial institutions, especially in countries that contained important financial centers or had relatively large financial sectors. Second, financial institutions found themselves exposed to the fiscal situation of their home countries, which affected their perceived solvency and ratings and therefore their access to and cost of funding. Third, the national fiscal anchoring hampered coordination across borders in crisis management and resolution situations, as the incentives of decision-makers were geared toward national financial and political considerations. Finally, this anchoring also contributed to distortions of competition and set-backs to the single financial market. The severe twin financial-fiscal crises that quite a few

[5] See conclusions of the June 9, 2009 ECOFIN meeting. Available via the internet: http://www.consilium.europa.eu/ueDocs/cms_Data/docs/pressData/en/ecofin/108392.pdf

EU member states are currently struggling with only underscore the importance of a fundamental rethink of the dependence of financial systems on national budgets.

This paper takes a deliberately unconstrained approach to the problem at hand. Rather than examining the scope for progress within the existing arrangements, it starts from the fundamental question what kind of financial system Europe needs, considers what kind of financial stability and crisis management arrangements are required for such a system to be sound and efficient, and on that basis proposes concrete ways to establish such arrangements starting from the current institutional and legal set-up.

Such an approach is essential to establish a financial system built for the future and to prevent and contain future financial crises, rather than a recurrence of the present one. While no two crises are the same, financial stability arrangements tend to be built for the last crisis—just like generals tend to prepare for the last war—and prudential policies tend to be reactive (see Mayes, 2004b, and Goodhart, 2004c). They have tended to evolve in response to problems that have materialized, rather than to address ex ante identified risks and flaws. As a result, the EU entered the crisis with financial stability arrangements that were largely based on institutional legacies shaped by historical antecedents that took place in a financial world that no longer exists. History also shows that reforms of financial stability arrangements tend to happen in a piecemeal fashion, risking inconsistencies and suboptimal outcomes.

Reform requires political leadership. Few organizations are capable of re-organizing themselves without external or top-down guidance. Groups of organizations that perceive a zero-sum game tend to be even less capable of agreeing on reforms among themselves. Hence, European financial stability reform has suffered from what one could call "institutional hysteresis". Because crisis management arrangements are highly technical and reforms require significant expertise to design, politicians have largely delegated the reform mission to the technocrats. They asked the technocrats to reform themselves, subject to a political constraint of no fundamental change in institutional architectures or basic financial responsibility. This put the technocrats in the unenviable—or, more accurately, impossible—position of having to design an effective EU crisis management framework, without questioning the key underlying issues: (1) national political accountability versus transnational stability issues; (ii) national fiscal authority versus transnational solvency and liquidity needs; and (iii) the accountability deficit versus host countries.

The focus of this paper is primarily on systemic cross-border banks, a small subset of the EU's total banking sector but a dominant segment on most criteria. Before the crisis, such banks were increasingly emerging (Véron, 2007); different authors and policymakers put their number somewhere between about half a dozen and about 50. A mapping exercise by

the ESCB had identified 46 banking groups with significant cross-border operations.[6] Together, these accounted for 68 percent of EU banking assets in 2005.

To determine which banks a European crisis management framework should focus on, some criteria seem especially pertinent: (i) systemic importance in an EU country other than the home country; (ii) size and international operations that make a bank systemic for the EU, regardless of whether it is systemic in any individual country; and (iii) systemic importance in an EU home country combined with cross-border activities of a size large enough to affect the bank's soundness. The first of these criteria is important in part because of the particular challenges created by banks that are not systemic in their home country but that have foreign branches or subsidiaries that are systemic in host markets. The third criterion should capture cases such as the Icelandic banks. Complexity of (cross-border) operations could also be a factor to be considered. The risk of systemic situations needs to be considered, such as the seizing up of certain market segments or multiple simultaneous failures of individually non-systemic banks.

To solve the problem of fiscal responsibility in a manner that is consistent with the single financial market, there are essentially three basic solutions: making the financial system fully independent of taxpayer support, backing it at the European level through an enhanced EU budget and/or pooled fiscal resources, or establishing an ex-ante burden sharing agreement. All three options touch upon fundamental elements of how people think about the financial system and the EU.

One of the main reasons why the fiscal responsibility debate is so difficult and controversial, is that the fiscal "burden" in a resolution case is the residual of a long chain of decisions and choices. These include the decisions on licensing the bank, its regulation and supervision, the time and form of intervention, and the resolution strategy. Behind these concrete decisions lie more fundamental choices on how a country deals with its financial sector and its financial stability. Countries are understandably reluctant to pre-commit to picking up a bill, without having a say in all these other decisions that determine the ultimate size of this bill.

This paper endeavors to help resolve this most difficult hurdle in the EU's financial integration and stability debate, by proposing a comprehensive system spanning crisis prevention, crisis management, crisis resolution, depositor protection, and cost sharing. The rationale is that it is easier for countries to reach agreement on such a comprehensive package, than it is to agree on specific aspects in isolation. Also, addressing all these elements in one package facilitates coherence and internal consistency.

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[6] See European Central Bank (2006).

## B. Bank Failures in the 21st Century

Banking is an inherently risky business, and it is so by design. Banks are highly leveraged institutions that raise debt to invest in risky assets. Adding to the risk is the maturity and liquidity transformation that banks tend to engage in: their assets tend to be longer-term and less liquid than their liabilities. This allows banks to increase their profits (since in a normal, upward-sloping yield curve environment, short-term funding costs less than the yields on long-term investments) and provides society a service by giving economic agents the possibility to hold liquid bank deposits. The downside is that banks are at risk of runs (a rush to withdraw deposits, usually due to a fall in confidence) and, more generally, funding liquidity risk.[7] To allow banks to continue to raise deposits and contain the related risks to financial stability, public policymakers have set up bank safety nets that include deposit insurance schemes (aimed at reducing the risk of bank runs and limiting the economic fallout of bank failures) and mechanisms for central bank refinancing.

Traditionally, banks have had balance sheets that were dominated on the asset side by loans and on the liability side by deposits. In such banks, failures have occurred primarily through two channels—nonperforming loans on the asset side or a run on deposits on the liability side, usually due to a loss of confidence. Often these two factors interacted, as runs were triggered by the revelation of losses on the loan book.

Modern banks have much more complex balance sheets, operations, and contingent liabilities. In the EU, many large banking groups combine investment, commercial and retail banking, as well as securities-dealing and asset management operations, and in many cases also insurance and leasing. Often they provide a range of services in several different jurisdictions—both inside and outside the EU—adopting a variety of legal structures. The scale and complexity of such groups' activities have created new sources of vulnerability and made supervisors' tasks more difficult.

The current crisis has provided new insights into how 21st century bank failures occur. Whereas Northern Rock experienced a classic and very visible deposit run, with customers queuing outside branches, the intial source of its difficulties (the drying up of wholesale funding) was similar to that affecting other banks which experienced "invisible" retail deposit runs via the Internet and electronic payment systems. In a sense, the widespread electronic transfer possibilities may make runs more virulent and harder to contain. In the Internet age, transferring money from one bank to another is administratively simply and does not even require a bank's branches to be open. A 21st century bank run can happen over a weekend and within a matter of hours.

[7] Funding liquidity risk is the risk that a financial institution will be unable to service its liabilities as they fall due. For a discussion see International Monetary Fund (2008), Chapter 3.

Before the crisis, systemic risk was often seen as operating mainly through "domino effects", whereby one bank failure triggers others through interbank and other bilateral exposures. The crisis has had a different dynamic though. It operated essentially through shocks to confidence, expectations, and assumptions. Opacity fuelled uncertainty and mistrust, resulting in a freezing up of credit markets, with crippling effects for banks that had become increasingly reliant on wholesale funding.

Banking will change as a result of the incoming wave of re-regulation. The key challenges are threefold. Firstly, to regulate banks and their activities so as to reduce the likelihood, severity and costs of future crises. Secondly, to build sound crisis management and resolution frameworks that are well adapted to managing bank failures in the new landscape. Thirdly, to anticipate correctly the shape and magnitude of future risks to financial stability.

## II. Creating a Single and Sound Market for Banking Services

### A. Existing Arrangements

The EU's long-standing desire to create a single financial market—including an integrated banking system—has not yet been matched with a single legal and prudential framework that would produce such an outcome. Nonetheless, major progress has been made toward harmonization, cooperation, and cross-border competition. Key milestones have been the 1989 Second Banking Directive, which introduced the single banking passport; monetary union, which introduced a single currency; and the EU's 1999–2005 Financial Services Action Plan, which harmonized a significant part of the legal and regulatory framework for financial services provision.[8]

The guiding principle of the EU's existing cross-border banking system stability architecture is that of home country control: banks fall under the financial stability arrangements of the country in which they are incorporated, for all their operations within the EU. They are licensed, regulated, and supervised by their home country prudential authorities, and covered by the home country's crisis management, crisis resolution, deposit insurance, and insolvency frameworks. This consistent alignment of responsibilities ensures incentive compatibility along the bank dimension. If a country's authorities fail to properly regulate or supervise a bank, then that country has to deal with the banks' problems, its possible failure, and any crisis management or resolution costs.

[8] For a comprehensive overview, see Decressin, Faruqee and Fonteyne (2007), Chapters 1, 3, and 10.

Home country control is the prudential basis for the single passport, which grants EU-wide freedom of establishment and operation to any bank licensed in an EU member state.[9] Home country control also implies that cross-border banking operations that are organized in the form of a local subsidiary are covered by the financial stability framework of the country in which the subsidiary is incorporated—this is the "home country" for the subsidiary as a corporate entity and licensed bank, but a "host country" from the consolidated perspective of the banking group.[10] This means that different parts of such a banking group are covered by different countries' financial stability arrangements. For supervision, two additional layers are in place, though: consolidated supervision of a banking group as a whole by the home country authority, and coordinated supervision of financial conglomerates (including its non-bank parts) by a coordinating supervisor (which is not necessarily a banking supervisor).[11]

Crisis management arrangements in this system are based on a largely non-binding framework of cooperation and information exchange between partially harmonized national systems with cross-border powers.[12] Concrete arrangements are established in a network of bilateral and multilateral MoUs, which include central banks and Ministries of Finance. Crisis management exercises had been held to test these arrangements, and these had helped prepare for crises of limited scope and complexity. However, the effectiveness of this framework in dealing with a systemic cross-border solvency crisis in one or more pan-European institutions was seriously in doubt even before the crisis.[13]

### B. Performance During the Crisis

The crisis has confirmed many of these concerns, while also showing the potential of closer cooperation. The performance of the EU's financial stability and policy frameworks has already been extensively analyzed, notably by the De Larosière Group (2009), the Turner Review (Turner, 2009), a High-Level Working Group of the EFC (see Annexes 2 and 3, as well as Economic and Financial Committee (2009)), and Pisani-Ferry and Sapir (2009). Some common conclusions in these assessments are:

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[9] The principles of the single passport and home country control have been extended to the entire European Economic Area (which comprises Norway, Iceland, Liechtenstein as well as all EU members). Thus, they also applied for the Icelandic banks.

[10] Consistent with the consolidated group logic, and as is common practice, the home countries of such bank subsidiaries will usually be referred to as "host countries" throughout this paper.

[11] This coordinated supervision is required by the Financial Conglomerates Directive (Directive 2002/87/EC).

[12] For an in-depth description and analysis, see Fonteyne and Van der Vossen (2007).

[13] See for example, Eisenbeiss (2004), Eisenbeiss and Kaufman (2005), and Srejber (2006); as well as Baron Alexandre Lamfalussy's testimony to the European Parliament on October 3, 2006.

- Liquidity arrangements and ELA in the Eurosystem worked rather well, although there was sometimes a lack of clarity on respective responsibilities.
- Policy coordination was relatively slow to materialize and depended on agreements reached at the highest political levels.
- National approaches to crisis management resulted in several setbacks to the single financial market and supervisory retrenchment to national jurisdictions.
- Incentives for cooperation and information sharing were insufficient, including as a result of the lack of ex-ante arrangements for addressing the fiscal costs.
- Cooperation often depended on personal relations and ad hoc structures.
- Arrangements for depositor protection were insufficiently robust and had adverse spillover effects.
- Regulatory and legislative frameworks for crisis management and resolution were inadequate, including at the national level.
- The MoU framework did not play a key role in the crisis.

Even at the national level and in non-systemic cases, crisis management and resolution has proven difficult, as shown by the cases of IKB, Hypo Real Estate, SachsenLB, and Northern Rock. The direct or indirect availability, if not use, of taxpayer money proved key in resolving these banks.

As exemplified by the Northern Rock episode, it can be very difficult to reach agreement on what to do during a crisis even among a limited number of authorities within one country, if those authorities have different basic views on issues such as moral hazard and different assessments of the crisis itself. These problems cannot be expected to be any less severe when multiple authorities from multiple countries would need to agree.

The problems have indeed been compounded in cases of cross-border banks. In the case of Fortis, an agreement was reached on September 28, 2008, to save the group as a whole with taxpayer support from the three Benelux countries. However, the agreement quickly fell apart as liquidity pressures continued and the burden-sharing agreement proved politically unpalatable to the Netherlands. The Netherlands decided to nationalize the Dutch parts of Fortis. Belgium and Luxembourg sought a common solution for their parts of Fortis and eventually reached agreement on the sale of the banking arm to France's BNP Paribas. This outcome was an obvious setback to financial integration in the Benelux and was likely significantly more costly than a first-best joint solution for the group as a whole would have been.

On the upside, the best news is that the worst-case scenario of a disorderly failure of a systemic cross-border European financial institution did not materialize. However, the possibility of such an outcome was underscored by the disorderly failures that did occur in the non-systemic cases[14] of the Icelandic banks, with tragic consequences for Iceland. The crisis has also provided many examples of European authorities working together for their common good, and of cross-border banks remaining steadfast in their commitment to the countries in which they operate.

Also illustrative is the case of Dexia, for which a burden sharing agreement was reached between the Belgian, French and Luxembourg authorities and private shareholders. While there was no shortage of challenges and difficulties, and there was significant pressure for a break-up along national lines, the agreement worked and Dexia was saved as a group.

In most other cases of troubled cross-border groups (such as RBS and ING) the home country intervened alone to shore up the group as a whole. While this worked, it did significantly expose those countries' fiscal accounts and came often with explicit or implicit expectations that the group would redeploy toward its home market.

## C. Ongoing Reforms

### Crisis management and resolution

At the October 9, 2007 ECOFIN meeting in Luxembourg, the EU embarked on an extensive overhaul of its cross-border crisis management arrangements. The meeting approved a set of principles that should guide cross-border crisis management, stating that fiscal burdens should be shared, that crisis resolution should seek to minimize collective costs, and that national authorities need to take into account financial stability considerations in other EU member states in their crisis management decisions. However, specific mechanisms to put these principles into practice remain to be worked out. Importantly, the idea of putting in place detailed ex ante mechanisms for cross-border burden sharing was rejected. Opponents argued that such mechanisms would create moral hazard, would limit the authorities' flexibility in handling crises that by their very nature are unpredictable, and would impinge on countries' sovereignty by pre-committing taxpayer funds.

The October ECOFIN meeting also adopted a roadmap of reforms intended to underpin the implementation of these principles. One of the main elements was a new EU-wide Memorandum of Understanding (MoU), which was formally adopted on June 1, 2008. The MoU was signed by the EU's financial supervisory authorities (57), central banks (the ECB and the 27 national central banks) and ministries of finance (28, including two Danish

[14] Non-systemic from the European perspective. Of course, these banks were systemic in Iceland's domestic context.

ministries). In terms of substance, it reconfirms the ECOFIN principles, prescribes the establishment of cross-border cooperation agreements and networks, and commits the signatories to exchange information and coordinate public communication. It also provides a set of common practical guidelines covering various aspects of crisis preparedness and crisis management, as well as a common template for assessing the systemic nature of a crisis.

Under the MoU countries that share a single or several financial groups are to conclude non-legally binding Voluntary Specific Cooperation Agreements (VSCA) for shared financial groups, which are to provide for "specific and detailed crisis management procedures". These agreements could provide for the establishment of "Cross-Border Stability Groups" (CBSG), which bring together relevant supervisors, central banks, and ministries of finance.

Although the De Larosière Group focused on the supervisory and regulatory framework, it also made some recommendations in the area of crisis prevention and resolution (see Annex 4, and De Larosière Group (2009)). It called for the development of appropriate tools and a coherent framework for managing crises, both at the EU level for cross-border institutions—by harmonizing the rules applicable to such institutions—and at a domestic level for national banks. It also recommended that deposit insurance schemes be harmonized and pre-funded by the private sector, and that the powers of host countries in respect of branches be reviewed and strengthened.[15] Lastly, the De Larosière Group proposed certain criteria for burden sharing among Member States.

In October 2009, the Communication launched a public consultation on reforming the EU's cross-border crisis management framework.[16] It aimed at exploring possible reforms to make crisis management and resolution more effective, notably by giving national supervisors adequate tools to identify problems in banks and intervene early to address them, and to make it possible for cross-border banks to fail without serious disruptions or contagion. Areas in which reform is being contemplated include the strengthening of early intervention and resolution tools, the building up of a regime for cross-border transferability of assets within financial groups, the harmonization of the thresholds for supervisory action and of national insolvency regimes, and a rebalancing between shareholder rights and the public interest.

Also noteworthy are the recommendations of the Basel Committee's Cross-Border Bank Resolution Group (CBRG), which are aimed at the global level but carry a lot of relevance for the EU (see Annex 5 and Basel Committee on Banking Supervision (2009b)).

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[15] The De Larosière Group supported the harmonization of national deposit insurance scheme rather than a pooled EU fund, which it viewed as more difficult to manage for political and practical reasons.

[16] See European Commission (2009e and 2009f) and IMF Staff (2010). The latter contribution to the consultation served as a basis for this paper.

**Deposit insurance**

The directive on deposit guarantees originally required coverage of at least €20,000 per depositor.[17] Deposits in a subsidiary were covered by the deposit guarantee scheme (DGS) of the country where the subsidiary was incorporated, and deposits in branches were covered by the home country scheme, although banks could choose to make contributions to the local DGS in order to "top up" coverage to the local level. Otherwise the directive was not very prescriptive, and the schemes differed widely in terms of coverage levels and extent, co-insurance provisions, degree of pre-funding, the role of the deposit insurance in bank resolution, and payout modalities. Well before the crisis, the Commission was investigating possible improvements to the DGS regime, notably changes in the coverage level.[18]

During the recent crisis, the loss of confidence in banks raised the risk of bank runs. In response, countries strove to ensure that deposits and other financing remained available to their banks and were not attracted to jurisdictions with more generous insurance coverage. Starting in early October 2008, EU member countries effectively raced one another to extend deposit and other bank guarantees.

After a very short but hectic period, the EU countries began to act in a more coordinated manner. In October 2008 the Council agreed to raise minimum coverage to €50,000 initially and, subject to a Commission assessment, to €100,000 by end-2010.[19] Also, the time required to determine whether a bank has failed, and to make the necessary pay-outs to insured depositors, was significantly shortened. A public consultation was held in 2009 to further harmonize and improve deposit insurance.[20]

The consultation aimed at triggering a wide rethinking of the features and rationale of deposit insurance schemes. It questions several issues such as the scope and level of coverage (both minimum and maximum), the definition of deposit, the interaction with mutual guarantee schemes, an expanded mandate for DGS in the restructuring of a problem bank, and funding mechanisms. It also acknowledges the distortions of a fragmentation of deposit insurance schemes, which do not provide incentives for banking supervisors to reach solutions in the interest of all depositors and of the stability of all Member states. Therefore, the consultation discusses the structure of a pan-European scheme (as a single entity, a 28th regime entity, or a

[17] Directive 94/19/EC of the European Parliament and of the Council of 30 May, 1994 on deposit-guarantee schemes. Official Journal of the European Communities 31 May, 1994, L135/5. We use the terms deposit guarantee (scheme) and deposit insurance interchangeably.

[18] See European Commission (2005a, 2005b, 2006, and 2008a).

[19] This agreement is reflected in Directive 2009/14/EC of the European Parliament and the Council of 11 March, 2009.

[20] See European Commission (2009d) and International Monetary Fund Staff (2009).

network of national schemes), as well as its scope. Further legislative proposals, in light of such consultation, are expected to be made in 2010.

**Regulation and supervision**

The December 2, 2009 ECOFIN meeting reached agreement on an extensive set of reforms of the EU's cross-border supervisory framework (see Annex 6).[21,22] Rapid enactment and implementation is being sought, with a view to making the new framework fully operational by the start of 2011.[23] The European Parliament has proposed amendments to further strengthen the proposed structures (European Parliament—Economic and Monetary Affairs Committee, 2010). Keystones of the new framework are a new macroprudential body, the European Systemic Risk Board (ESRB), and three new supranational European Supervisory Authorities (ESAs), which will be integrated with existing national supervisors into a European System of Financial Supervisors (ESFS).

In parallel with the reforms of the supervisory architecture, changes have been agreed, through several proposals from the Commission, to strengthen capital requirements of banks and the financial system. The EU's substantive regulatory reforms are closely coordinated and tied in with the global reform process led by the Basel Committee.

## D. Challenges

This section seeks to identify the key challenges that a European crisis management and resolution framework needs to address or overcome, building on a similar pre-crisis exercise.[24]

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[21] The Commission's original proposals are available at: http://ec.europa.eu/internal_market/finances/committees/index_en.htm

[22] The agreement largely follows legislative proposals the Commission published on September 23 and October 26, based on the recommendations of the De Larosière Group and the political agreement reached at the June 18-19 European Council.

[23] Under EU legislative procedures, these proposals have to be approved by the European Council and the European Parliament. The ECOFIN agreement provides the Council presidency with a mandate to negotiate with the parliament on a final text. The legislative calendar in the European Parliament envisages enactment by mid-2010.

[24] See Fonteyne and Van der Vossen (2007).

**Providing a sound basis for the single financial market**

A single market for banking services can only emerge if banks can compete, realize economies of scale, and offer their products across the EU's internal borders with ease, choosing freely whether to do so through subsidiaries, branches, or the cross-border provision of services. The single passport—in the sense of the freedom to operate across the EU's internal borders—is essential for this. Yet, the rationale for the single passport is being questioned based on what happened with some of the banks that failed during the crisis. The UK's Turner Review recommended a combination of greater host country control and revised deposit guarantee arrangements for branch-based cross-border operations,[25] and the DLG recommended a review of host country powers over foreign branches (See Annex 4, Recommendation 14).[26] In 2009, the CRD was amended to increase host country involvement in the supervision of a "significant branch", in particular through participation in the supervisory college and close involvement in emergency situations.[27]

However, even with these changes, home country control remains inadequate as a prudential basis for the single passport. It has often been linked with deficiencies in cross-border supervision; it gives home country authorities powers in host country financial markets that are not matched with accountability arrangements toward that country; and the dependence of host country depositors on the home country's deposit guarantee system, fiscal resources and crisis management and resolution decisions are highly problematic. Moreover, aspects of home country control have complicated the adoption of a branch-based business model by existing cross-border groups.[28]

Moreover, a situation in which in practice only banks based in large countries can benefit from the single passport (because only large countries can credibly provide adequate resources to back-up resolution) is inequitable and at odds with the level playing field dimension of the single market.

***How can a sound prudential basis be established for the single passport that allows it to realize its potential as the main driver of European financial integration?***

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[25] See Turner (2009), Recommendation 28 on p.11, Box 1C on p.38, and Section 2.10 starting on p. 98.

[26] See also De Larosière Group (2009).

[27] Art. 42a of the CRD. For more background information, see Committee of European Banking Supervisors (2009).

[28] Nordea announced its intention to transform its Nordic operations into a branch-based Societas Europaea in 2003, but certain implications of the move toward home country control for deposit insurance and supervision turned out to be major obstacles that have thus far prevented it from completing this transformation.

Thus far, this potential has been far from exhausted. Cross-border banking has mainly been organized through subsidiaries, an inherently less economic approach. Often, this is simply a matter of historic accident, as banks entered host markets through acquisitions and do not deem it feasible or desirable to convert these acquired subsidiaries into branches. To accommodate this situation and offer banks a free choice in terms of their organization, ideally they would be able to operate such cross-border subsidiaries with about the same ease as a domestic subsidiary. This is currently not the case because these subsidiaries fall under the host country's—often substantially different—prudential and legal arrangements.

Before the crisis, prudential and legal considerations were often given insufficient attention. Group-wide operational integration—including of key functions such as liquidity and risk management, IT systems, and human resources—meant that subsidiaries could often not easily be separated from the rest of the group, making a local rescue a remote prospect in case of a group failure. Since the crisis, host countries have stepped up their control over subsidiaries and increasingly demand that they organize themselves as stand-alone units. While sensible from a domestic prudential point of view, this has economic costs. It also has financial stability costs at the level of the EU as it reduces the flexibility and stability of cross-border groups.

***How can business, legal, and prudential considerations best be reconciled to establish a sound basis for efficient cross-border group operations—allowing the operational integration of subsidiaries, easier conversion of subsidiaries into branches, or a combination of the two?***

**Establishing effective market discipline and disconnecting banks from taxpayers**

Moral hazard has been an inherent problem in Europe's banking system stability architecture. Before the crisis, there was a widespread perception among market participants and regulators that a troubled systemic financial institution would receive some form of direct or indirect solvency support.[29] Apart from experience, this moral hazard largely stems from the reasoning that the closure of a systemic bank would be unacceptably costly in economic and political terms for authorities to accept. Indeed, bank closures have been very rare in the EU, and have usually been limited to small banks.[30] Open bank support, this is restructuring

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[29] Illustrations abounded, including the fact that rating agencies varied their ratings in function of the likelihood of government support (Nguyen and Praet, 2006) and statements of academics and insiders. Goodhart (2004b), for example, expected that government support would be forthcoming in case "real disaster" struck UK banks. Mayes (2004b) noted that it is inherent in the notion of "systemically important" that a bank will not be closed, even in insolvency. During a 2006 public stakeholder consultation, answering a question regarding the effectiveness of current guarantee arrangements for the handling of cross-border bank failures, some respondents noted that taxpayers were most likely to pay the price (in under-funded deposit insurance systems) while others claimed that cross-border banks were too big to fail and other instruments would need to be resorted to in the event one of them failed (European Commission, 2006, p. 2).

[30] Europe is, of course, not alone in this respect. See OECD (2002).

helped by injections of public funds, has been common and exit has happened through "shotgun weddings". Often shareholders and management pay a price, through dilution of the former and replacement of the latter, but other claimants are normally largely protected. Hence, market discipline is weakened. The lack of exit also contributes to situations of overbanking.

The crisis has starkly illustrated how much public authorities continue to struggle in reconciling considerations of moral hazard with the immediate financial stability concerns that present themselves. It has patently underscored the "too-big-to-fail" and "too-interconnected-to-fail" problems, not in the least in the repercussions of the demise of Lehman Brothers. After this failure, any notion of "constructive ambiguity"—a concept that had not obviously deterred banks from taking on excessive risks before the crisis—was laid to rest as politicians explicitly committed not to let any other large bank fail. Some, however, derive from the crisis the conclusion that moral hazard is too costly a problem to address.

***How can moral hazard be addressed cost-effectively?***

***How can large and complex cross-border banks be credibly disciplined?***

***How can the exit of weak or failing banks be organized in ways that are economically, socially and politically acceptable?***

Moral hazard has an important flipside. The perception that banks are backed by their governments makes them vulnerable to the fiscal situation of these governments, in addition to the exposures to their government that they carry on their balance sheet. This has clearly been illustrated in the crisis, in the funding costs of banks "backed" by different sovereigns.[31] This implies a risk of fiscal problems adversely affecting banks and triggering a twin fiscal-financial crisis. The problems that Greek banks have recently experienced show that this risk is real. Moreover, banks that are "too large to fail" can also be "too large to save", because they are too big relative to the home country's resources.[32] And if a bank's operations are predominantly abroad, taxpayers may balk at having to pay for foreign claimants.[33]

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[31] During the crisis, this relationship was even built into the pricing formulas for State Aid to banks. Capital injections were priced on the basis of sovereign yield spreads during a (pre-Lehman) reference period. See European Central Bank (2008).

[32] This was pointed out, for example, by Dermine (2005).

[33] Goodhart and Schoenmaker (2006) pointed out that large-scale fiscal transfers in favor of foreign depositors were likely to be problematic. Prior to the crisis, the Swiss authorities habitually made it clear that they did not intend to provide solvency support for the international operations of the large, globally active Swiss banks.

***How can banks be made independent from sovereigns?***

Banks are, of course, not the only ones who are at risk as a result of the link between banks and government budgets. Taxpayers have been hit hard by the current crisis, and several countries find themselves in a fiscal crisis that is partially or largely the result of the financial crisis.[34] This means that a twin fiscal-financial crisis can originate on the financial as well as the fiscal side. In many cases, taxpayers have been exposed to or had to pay for the foreign operations of their banks—which tends to generate particular resistance and resentment.

***How can taxpayers be better shielded from the financial system, including in particular from their foreign operations?***

**Protecting depositors**

Deposit insurance serves three main aims, namely, (i) to provide protection to smaller savers who cannot be expected to assess the riskiness of the banks holding their deposits and who would be very hard hit by any losses, (ii) to pre-empt bank runs by mitigating fears about bank insolvency and illiquidity, and (iii) to allow banks to be subjected to market discipline, by facilitating the exit of institutions (not in the least from social and political perspectives). Of course, there is significant tension between the second and third of these objectives.

Multiple problems have manifested themselves with existing DGSs:

- They did not comprehensively protect retail depositors, generating the risk of bank runs but also leading to political pressures for bail-outs and ad hoc measures;
- They have not been effective in facilitating exit, in particular for systemic banks;[35]
- They generated moral hazard, for example, where a troubled bank raises cheap funding in a foreign market with generous top-up arrangements;
- Legal obligations of member states are unclear (as shown by the Iceland case);
- Pre-funding was non-existent or insufficient, implying that any payout would generate a pro-cyclical burden on the banking system;[36] and

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[34] For an analysis, see Sgherri and Zoli (2009).

[35] Not least thanks to the increase in coverage to €50,000–100,000, they did help to make the liquidation of some smaller banks publicly acceptable. The largest of these was DSB Bank in the Netherlands, with €8.2 billion in assets.

[36] A DGS can have an anti-competitive effect because it makes all banks bear costs incurred by a minority that make losses. Hence, banks have less incentive to drive their competitors out of business.

- The role of DGSs in bank resolution varied across countries, complicating the organization of cross-border crisis management.

There is a broad international consensus on the elements of an effective and efficient DGS.[37] Elements include mechanisms to ensure quick payouts, fairly comprehensive coverage, and adequate pre-funding. Also, deposit insurance must be well coordinated with on-going regulation and supervision, on the one hand, and crisis management on the other, in order to limit the moral hazard, regulatory arbitrage, and political distortions that can otherwise arise. Building such a scheme, however, can be challenging, both technically (e.g., to develop mechanisms to ensure rapid pay-outs) and financially (e.g., in building up adequate pre-funding).

***How should deposit guarantee schemes strike the right balance between protecting savers, maintaining financial stability, and facilitating exit?***

***How can they best be financed to avoid distortions to competition and procyclical effects on healthy banks?***

However, even well-designed DGSs have trouble dealing with systemic banks. The crisis has underscored this, as DGSs have played no role in dealing with any systemic bank, in Europe or elsewhere. In the largest cases they have had to deal with, the Icelandic banks, their application has been very problematic. In reality, depositors in large banks have been protected indirectly, by government interventions to keep these institutions alive. This has raised the question whether an explicit separate system is needed for depositor protection in systemic banks, one that focuses more on the institution than on the depositors themselves. The European Parliament's proposal for a European Financial Protection Fund puts this question on the table by offering the possibility of "protecting institutions".[38]

***How should depositor protection be organized for systemic banks? Should such protection focus on the depositors or the institution?***

***How can distortions to competition be avoided from differences in protection offered to depositors in systemic banks and in small banks?***

Additional challenges arise in a cross-border setting. When different deposit guarantee systems are in competition with one another, authorities may tend to design their DGS in order to gain an advantage for their banks, or banks and their depositors may undertake

[37] See Basel Committee on Banking Supervision and International Association of Deposit Insurers (2009).

[38] See European Parliament—Committee on Economic and Monetary Affairs (2010).

regulatory arbitrage.[39] Differences in crisis management arrangements and the legal system, including bank insolvency legislation, may complicate coordination across DGSs.

***How can cross-border distortions to competition from deposit guarantee schemes be eliminated?***

**Establishing common principles and approaches**

Thus far, the cross-border bank crisis management and resolution arrangements have mainly focused on allocating responsibilities and ensuring the exchange of information. Much less attention was given to the substance, i.e., with the question what to do with a failing bank.

Historically, European authorities have had different visions on this. Some countries have a tradition of not allowing any bank failures, because they place high weight on the objective of preserving confidence in the financial system. In other countries, concerns about market discipline and moral hazard have led to an approach in which bail-outs are, at least ex ante, considered the exception rather than the rule. Many countries have opted to maintain "constructive ambiguity" about their intended approach to bank insolvencies, in an attempt to avoid moral hazard while maintaining their freedom to act on a case-by-case basis.[40] Maintaining such flexibility is, of course, antithetic to agreeing substantive matters in advance so as to facilitate agreement in the midst of a crisis.

The 2007 crisis management principles and the common experience of the financial crisis has fostered a better understanding and a beginning of consensus on the substance of dealing with troubled banks. However, the difficulties, and in some cases inability, of country authorities to agree on resolution strategies in the cross-border cases we have witnessed underscore that much substance remains to be decided in the heat of a crisis.

***How can decision-making during crises best be facilitated?***

***What is the right balance between ex-ante understandings and agreements and allowing flexibility?***

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[39] See Hardy and Nieto (2010).

[40] According to German newspaper Handelsblatt (2006), governments showed marked differences in their willingness to let a financial institution fail during a financial crisis stress test.

**Aligning authority, responsibility, accountability, and *de facto* control**

There are significant mismatches between responsibility, authority, accountability and *de facto* ability to deal with financial stability issues, along the two relevant decision-making dimensions: institutions and countries.[41]

In the institutional dimension, the principle of home country control establishes a coherent decision-making framework for the EU-wide operation of banks. Prudential responsibility, authority, and accountability are all vested in the home country authorities, for all elements of the prudential framework with the sole exception of liquidity. However, there is a significant question mark on the question whether national supervisors are *de facto* able to supervise the EU-wide operations of their banks. In addition, the situation is far more complex for banking groups. There is no clear responsibility for the group as a whole, authority over the group is segmented, and accountability of the prudential authorities is toward the national political systems of each of the countries in which the group operates. Moreover, host country authorities often feel that their *de facto* control over subsidiaries is limited.

In the country dimension, there are serious misalignments. Whereas host country authorities are responsible for financial stability in their country, in many areas only home country authorities have the authority and ability to act. And the home country's authority over parts of host country financial systems is not aligned with its purely domestic accountability arrangements. As a result, financial stability management in host countries with a significant foreign bank presence becomes more difficult and cannot rely on prudential policies to the same extent as in other countries. For such countries, using prudential tools in response to perceived threats to financial stability requires the cooperation of, perhaps multiple, foreign prudential authorities, to an extent that is hard to achieve in the current framework.[42] This was an important factor in the limited control some Central and Eastern European countries had over the buildup of systemic risk they experienced prior to the crisis.

The proposed supervisory reforms based on the recommendations of the DLG offer the potential to significantly reduce some of these misalignments or at least the tensions they produce.[43] However, they introduce some new tensions, not in the least because they are not matched—thus far—by parallel reforms in crisis management and resolution.

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[41] See also Fonteyne and Van der Vossen (2007).

[42] For example, efforts to increase risk weights or raise lending standards for certain types of loans are difficult to implement in a system that has a substantial foreign branch presence that is beyond the control of the local supervisors.

[43] For a discussion, see Čihák and Fonteyne (2009).

In the latter areas, there are some specific problems due to misalignments. One stems from cross-border deposit-insurance arrangements and the home country's jurisdiction over a group's capital. It is worth considering cross-border branches and subsidiaries separately:

- Branches fall under the home country DGS, and are also supervised by the home country authorities. But branches can top up their coverage by subscribing to a host country's (more generous) DGS, in which case the host country DGS is exposed to the home country's decisions without being involved in the relevant decisions or having any commensurate top-up claim on the group's assets. Even without topping up, depositors in the host country are exposed to the solvency of the home country's DGS and ultimately its fiscal situation.

- Subsidiaries fall under the host DGS and supervision, but the parent group is supervised and possibly intervened by the home authorities. Therefore, a host country largely exposes its DGS and the reputation of its supervisors to the decisions of a foreign supervisor.[44]

Liquidity and solvency support by the host country authorities may be impeded or ineffective. The challenges involved in ring-fencing a subsidiary or branch[45] in a timely way and the existing differences in liquidity regulations mean that any support provided risks simply disappearing across the border. As a result, early support may be ineffective, and by the time the appropriate safeguards have been put in place, the support may come too late to allow a cost-minimizing resolution process. The use of collateral may reduce the risks to the host country authorities, but will not necessarily improve the effectiveness of the support.

***How can authority, responsibility, accountability and de facto control be aligned?***

***Alternatively, how can the resulting disincentives toward cooperation be mitigated?***

**Incentive compatibility and burden sharing**

Incentives diverge when problems emerge. In a decentralized framework, cross-border resolution has a natural tendency to amount to a "chaotic scramble for assets" (Herring,

[44] A subsidiaries needs to have local capital in the host country, but this capital—and holdings of liquid assets—can be minimize, for example, by relying on the group solidity and brand name to raise funds; through various forms of intra-group balance sheet and off-balance sheet operations; and by using the subsidiary for branch-like operations, in which it sells products produced by other parts of the group and has very limited operational and financial autonomy.

[45] Within the EU, country authorities are not supposed to ring-fence branch-based operations, even though they retain responsibility for liquidity regulation and ELA. Although managers of subsidiaries are legally required to ring-fence when other companies within the same group are becoming distressed, ring-fencing subsidiaries may still be difficult to enforce or achieve in a timely way for practical reasons, unless the host country authorities take control of the subsidiary.

2002) as national authorities seek to maximize the assets and minimize the liabilities a troubled bank holds on its territory. Even for branches, for which ring-fencing is in principle not allowed, there is a risk that authorities and/or creditors will seek to prevent the cross-border transfer of assets, creating facts on the ground that strengthen their positions while leaving the legal implications to be sorted out later.

The prisoners' dilemma country authorities face may render a first-best cooperative crisis resolution approach unachievable. In most cases, a cooperative solution would likely produce the most favorable outcome seen from the point of view of the combined welfare of all affected countries. But because the costs and benefits related to this most favorable outcome are likely to be unequally distributed, this may require compensation between countries—this is, burden sharing. However, country authorities also know that, in a non-cooperative solution, some countries might be better off than they would be under the cooperative solution, depending on the geographical distribution of the group's assets and liabilities and on the relative importance of the group in the different domestic markets. Knowing this and also that, in a non-cooperative outcome, those countries that acted in good faith towards a cooperative solution may end up being worst off, there is a risk that countries will hedge their bets and cooperate only reluctantly, while acting so as to minimize their losses under a non-cooperative outcome (e.g., by withholding crucial information and by ring-fencing assets). As a result, trust and cooperation may fall short of what is needed for the cooperative solution to be achievable (see also Čihák and Decressin, 2007).

***How can incentives best be aligned in favor of cooperative solutions?***

***How can burden sharing be made acceptable?***

**Urgency of finding solutions**

Without rapid progress toward comprehensive solutions, the single market is at risk. Politicians, the public and technocrats have recognized the need to build a more secure financial system. There is pressure to take demonstrative action to this end, and do so quickly.[46] If there is little progress towards a comprehensive and therefore credible European solution, countries will attempt to put in place national solutions, at the cost of the single market in financial services. At the same time, it is essential that the speed of progress does not go at the expense of the soundness and overall consistency of the reforms.

**The rest of this paper outlines what is, in our view, the best approach to meet the challenges identified above—although we cannot hope that they will fully address all of them.** Section III discusses the objectives and principles that should guide an EU bank crisis management and resolution framework, Section IV and V discuss the tools and approaches that can be used to that effect, and Section VI proposes an institutional framework.

[46] For a discussion of the risk of policy reversals caused by financial crises see, for example, Rajan (2006).

## III. Objectives and Principles

An EU crisis management framework should be designed to implement and achieve commonly agreed principles and objectives. Ex ante agreement on these objectives and principles is necessary to allow rapid decision-making in crisis situations and delegation of crisis management tasks. For countries to be able to agree to a third party managing financial crises for them, it is essential they feel secure that they will, on balance, not be left worse off than if they had handled the crisis in isolation, that risks to their financial stability will be well managed, that their interests will be looked after, and that their concerns and views will influence decisions.

An important step in this direction was taken on October 9, 2007, when the ECOFIN adopted a set of Crisis Management Principles (see Annex 1 and Section II.C. above).[47] These principles were later endorsed also by the financial supervisory authorities and central banks as part of the June 1, 2008 Crisis Management MoU.[48] Key elements of these principles are:

- That the **objective** of crisis management is to protect the stability of the financial system **in all countries involved and in the EU as a whole** (Principle 1);

- That crisis management should minimize potential harmful economic impacts **at the lowest overall collective cost** (Principle 1); and

- That **direct budgetary net costs are shared** among affected Member States on the basis of equitable and balanced criteria (Principle 4).

These principles reflected recognition of some of the challenges outlined above. Their acceptance was important, constituting a major step toward joint responsibility and accountability for financial stability. However, while these principles are sound, the crisis has demonstrated that non-binding commitments insufficiently guarantee their consistent implementation, to the detriment of mutual trust and cooperation and—consequently—crisis outcomes. Therefore, in our view, these principles should be pursued through ***binding and institutionalized arrangements***.

To support binding and institutionalized arrangements, the principles need to be further operationalized. First of all, the objective of cost minimization ought to be defined more precisely. Cost-effectiveness is a key challenge of any common framework, as avoiding costs is the best way to preclude disagreements about their distribution. Cost-effectiveness is also necessary to deal with moral hazard and too-big-to-fail: only a cost-effective resolution

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[47] See, Conclusions of the 2822nd Council meeting Economic and Financial Affairs, Luxembourg, October 9, 2007. Available at: http://ec.europa.eu/economy_finance/about/activities/sgp/council-october-2007_en.pdf .

[48] Available via the internet: http://www.ecb.eu/pub/pdf/other/mou-financialstability2008en.pdf .

framework can offer banks a credible threat of failure and exit (see also Čihák and Nier, 2009).

Hence, the key challenge is the possibility to cost-effectively deal with a failing large cross-border bank, and transparency toward the financial sector and its counterparts about how this can and will be done. "Cost effectiveness" in this context should be explicitly defined not only from financial stability and economic perspectives, but also from a political perspective. The reason is that political costs are often the driving force behind bail-out decisions.

As a minimum, this cost effectiveness should comprise:

- no losses to insured depositors, and minimal losses to deposit guarantee systems;
- minimal collateral damage to the economy; and
- minimal or no costs to government budgets.

Other elements could be considered. Notably, the question arises whether losses to uninsured retail depositors should also be minimized to the extent possible. Doing so would make bank closures politically more acceptable and may also help to reduce the economic fall-out. However, counterarguments are the retail deposits cannot be separated from wholesale deposits, that this may blunt incentives, and that the cost of additional compensation to such depositors would have to be financed somehow—they would go either at the expense of other creditors or have to be financed from outside sources (taxpayers being a prime candidate). Ensuring that adequate buffers are present in banks' balance sheets and that intervention and resolution happen early on might be the better way to safeguard such depositors' interests.

The principles can be made more specific in application to specific circumstances. Thus, the following set of policy objectives could be considered as a basis for bank resolution procedures when they become necessary:

- **Continuity in core operations**. Given the political and economic constraints and recent experience, simply closing down a failing cross-border systemic bank does not seem a viable option. Instead, resolution procedures should seek to continue such a bank's core activities (in particular large retail operations) as a going concern. By maintaining deposit availability, in particular, costs to the economy related to loss of deposit liquidity can be avoided (Kaufman, 2004).

- **Efficiency and speed**. In bank resolution, time is of the essence (Beck, 2003, and Goodhart, 2004b), which undermines lengthy negotiations or arbitration as viable options. Moreover, for a resolution process to be cost-minimizing, it must not only be quick, but also effective in addressing the problems at their roots, so as to avoid recurrence.

- **Flexibility**. Exceptional measures, and much greater freedom of action than in single bank resolution cases, may be needed in the case of a systemic crisis. A generalized debt crisis, for example, may require addressing the solvency problems of the bank and its clients as a package (see Clementi, 2001; OECD, 2002).

- **Moral hazard containment**. The most insidious forms of moral hazard in banking have to do with incentive structures for managers and controlling shareholders. In case of failure, these parties can be penalized adequately by firing managers without severance payments, prosecuting them for any illegal actions, and wiping out shareholders. Uninsured and unsecured creditors can also be penalized by applying haircuts to their claims.

## IV. Crisis Prevention

Containing the cost of crises starts with prevention. Prevention has to strike a delicate balance, though, on the one hand ensuring that the banking system can continue to fulfill its intermediation role, which inevitably requires risk-taking, and on the other stopping it from taking on more risk than it can bear.

The crisis has generated a lively debate on such preventive policies. Policy makers, regulators, academics, and the financial industry have put forward a wide range of proposals to reduce the likelihood of future crises (or put differently, the probability of default of credit institutions) and facilitate their "resolvability" (thus trying to minimize the loss-given-default). The first approach aims to strengthen credit institutions' resilience by a mixture of (i) higher prudential requirements (capital and liquidity); (ii) better micro and macro supervisory practices; and (iii) curtailment of size, breadth and riskiness. The second approach focuses on (i) enhancing the resolvability of (large and complex) financial institutions, and (ii) strengthening the resilience of the core financial infrastructure and markets so as to reduce the impact of failure.[49] These two approaches are not mutually exclusive but interconnected and two sides of the same coin.

[49] This distinction is not always clear to draw, of course, as measures can affect both the probability of default and the loss-given-default.

## A. Reducing the Probability of Failure

### Basel capital and liquidity proposal

In December 2009, the Basel Committee on Banking Supervision (BCBS) approved for consultation a package of proposals to strengthen global capital and liquidity regulations.[50] These proposals are aimed at raising the quality, consistency and transparency of bank capital (predominance of common equity, phasing out of hybrid Tier I, abolishing Tier III); introducing a simple capital-to-asset ratio (leverage ratio); introducing measures to promote the buildup of capital buffers in good times (counter-cyclical capital buffers) and restrictions on dissipating capital when buffers are depleted (capital conservation measures); strengthening the risk coverage of the capital framework (by increasing capital requirements for counterparty credit risk arising from derivatives, repos and securities financing activities); supporting efforts for forward looking provisioning and introducing a minimum global standard for liquidity.

### Contingent capital

There has been an increasing interest in contingent capital instruments.[51] These are debt instruments that automatically convert to common equity upon the occurrence of a pre-defined event, such as the breaching of a pre-set capital ratio.[52] In so doing, contingent capital provides a bank with loss absorbing capital when needed, particularly at (or in advance of) a time of financial distress. By imposing potential losses, it would also enhance unsecured

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[50] An earlier set of enhancements to Basel II was finalized in July 2009, for implementation by end-2010. These prescribe significantly higher capital requirements for banks' trading book exposures and for certain securitizations. Revised guidance regarding the supervisory review process (Pillar II) has also been issued, comprising firm-wide governance and risk management, management of risk concentrations, management of reputation risk, compensation, and liquidity risk management. All of these have entered into force.

[51] On November 3, 2009, the UK's Lloyds banking group offered investors to exchange £7 billion of its outstanding subordinated bonds for so-called "contingent convertibles" (CoCo) bonds, as part of a wider fund raising efforts. On March 12, 2010, Rabobank, the Dutch lender, issued €1.25 billion in contingent capital notes.

[52] Flannery (2005) proposed a financial instrument called "Reverse capital debentures" (RCD) which would automatically convert into common equity if a bank's market valuation falls below some pre-set value. Differently from conventional convertible bonds, RCD would convert at the stock's current market price, which forces shareholders to internalize the costs of risk. Starting from similar considerations, Kashyap, Rajan, and Stein (2008) propose to give banks the option to either accept above-minimum capital requirements or purchase capital insurance contracts that would pay-off an equal amount of capital should the overall banking system be in bad shape. Rochet (2008), commenting on this proposal, suggested that the insurance should be provided not by the private sector, which would raise issues related to the pricing of contracts and the solvency of the issuers, but by the government (through the issuance of a contingent bond), given its unique ability to tax households and firms in the future.

creditors' incentives to monitor bank management.[53] Finally, because these securities become equity right when they are most needed, they are implicitly counter-cyclical.

The contingent capital options should not be viewed as a replacement for but a complement to traditional capital regulation. Work is underway to examine the supervisory and market requirements for these instruments to be an effective solution.

**Strengthening supervision**

Rules and regulations are necessary but not sufficient conditions to reduce the likelihood of crisis; the quality of supervision is and remains a crucial factor. One of the main lessons of the current crisis is that even when the banking system is heavily regulated it remains vulnerable. No state-of-the-art set of rules is able to prevent financial crises from happening. Regulation has to be complemented by a strong supervisory regime. Clear objectives and mandates, operational independence, adequate resources, appropriate tools to identify emerging risks both at the firm and at the system level, an a wide range of remedial actions are all crucial components of a regime of effective supervision.

A clear lesson of the current crisis is the need to integrate macro with micro-prudential supervision and regulation, as observed by the DLG. While the main objective of micro-prudential supervision is to oversee and limit distress risks in individual financial institutions, macro-prudential supervision focuses on limiting risks to the financial system as a whole that may arise from broad developments in the economy.

The ongoing reforms of the European supervisory arrangements should be complemented by effective international arrangements that would help cooperation. Supervisory colleges have been instrumental in that regard. Initiatives are underway to assist the efficient operations of supervisory colleges and sharing of information, the role of supervisory colleges in crisis management and in macroprudential supervision.

In the context of the EU's single market, such a preventative approach requires a new supervisory culture, in various respects. First, supervisors need a fundamental change of mindset, toward dealing with problems through European rather than national approaches. Second, the burden of proof of safe behavior should fall on the banks, not the supervisors. And third, supervisors need to be able to deal with financial institutions from a position of strength, confidence, and systemic insight.

[53] While CoCos were designed to switch into equities at a pre-set capital level, Rabobank's bonds would be written down by 75 percent and remaining quarter returned to investors. Rabobank is a mutual organization and hence it could not offer to convert the bonds into equities.

**Special regime for large complex financial institutions**

A number of proposals have been made on how to deal with institutions that might become too big or too important to be allowed to fail, or that generate important (systemic) risks. Some proposals concentrate on making these institutions especially safe, and others aim to discourage or prevent institutions from generating such systemic risks, although the two aspects are often complementary. The former typically include capital or liquidity surcharges for institutions that grow beyond a certain size or that engage in certain activities. The latter proposals include suggestions for imposing a special levy on systemic institutions that take advantage of the too-big-to-fail protection.[54] Insofar as it can be calibrated to charge individual institutions for their specific contribution to systemic risk, the levy can make those institutions internalize the costs of negative externalities that they impose on the system should they fail or be rescued.

A more radical approach to limit the generation of systemic risk is the so-called Volcker rule: on January 21, 2010, the US Administration officially announced a proposal to limit the size and scope of commercial bank activities by (i) prohibiting banks (or financial institutions that own banks) from engaging in proprietary trading for their own account and from owning hedge funds and private equity firms; and (ii) setting a cap on banks' liabilities market share. The rule serves two purposes: reducing the scope and size of risk faced by any single institution, and address potential conflicts of interests.

These proposals have generated lively debate, which goes beyond the scope of this paper.

## B. Reducing the Losses of Failures

**Legal organization**

As a general matter, banks and banking groups should be able to legally structure their operations within the EU single market in the manner of their choice. In particular, banks should be allowed to choose freely whether to organize their intra-EU cross-border operations through branches, remote-access, or subsidiaries. As regards the use of subsidiaries, which have in contrast to branches a separate legal personality from the parent, banking groups should obviously respect the legal nature of the separate legal entities they set up. Notably, the rights of minority shareholders, creditors and other stakeholders (such as employees) of subsidiaries need to be respected. As a related matter, banking groups should

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[54] A financial stability fee was introduced in Sweden in 2009. The US has proposed to establish a Systemic Dissolution Fund (as envisaged in Congress Bill HR 4173 IH) and to tax certain liabilities of large financial institutions (Financial Crisis Responsibility Fee). A number of proposals for the imposition of systemic resolution levies have been put forward recently (for example, UK Treasury (2009), the NYU Stern Working Group on Financial Reform (2009), and Weber di Mauro (2010)).

comply more broadly with the legal obligations (such as listing requirements and corporate governance rules) applicable to group entities in the relevant jurisdictions.

A bank's freedom to choose the most efficient legal structure should, however, not be absolute. From a supervisory perspective, banking groups should be organized in ways that facilitate their supervision (see Basel Core Principles). From a crisis management and resolution perspective, they should organize themselves in ways that are consistent with the crisis management and resolution framework and that facilitate dealing with them in times of difficulties or insolvency. (see also Recommendation 5 of the Basel Committee's Cross-Border Bank Resolution Group (Basel Committee on Banking Supervision, 2009b)).

Specifically relevant for crisis management, the resolution of cross-border banks is complicated by the sophisticated legal and financial structures underlying most large international banks. Many, if not most, cross-border banks in the EU combine the following three characteristics:

- **Cross-border banks are often organized as conglomerate groups.** International banks commonly own or are affiliated to non-bank financial companies (e.g., leasing companies, insurance firms or asset management companies) located in the same or other jurisdictions as the bank. Alternatively, banks may be owned by a non-bank parent (bank holding company or insurance firm). These non-bank financial companies will typically have separate legal personality and will be licensed and supervised in their country of incorporation. The non-bank financial companies within the group may be subject to insolvency regimes that are different from the bank insolvency framework—for example, general corporate insolvency law or a special resolution regime (e.g., for insurance firms).

- **Cross-border activities of banks include both subsidiaries and branches.** While the organizational choice between a branch or subsidiary may not have significant operational consequences when the bank is functioning as a going concern, it may have a major impact on the conduct of insolvency proceedings. Foreign branches of a bank do not have a separate legal personality from the parent. As per the EU Winding-Up Directive for banks, host country branches of EU banks will be subject to the reorganization or winding-up proceedings that are commenced against their parent in the latter's home country. In contrast, foreign subsidiaries of an EU bank will not be immediately affected by the commencement of insolvency proceedings against the parent bank. As a rule, these subsidiaries will be resolved according to the legal framework of their own jurisdiction (and not the parent's).

- **Banking groups are interconnected through two main channels**: (i) financial transactions among affiliates; and (ii) performance of activities within divisions that

> may cross corporate and geographic lines.[55] Once financial connectedness has occurred, it can be difficult to disentangle in a bank failure. For example, in group structures where liquidity is centralized, the commencement of insolvency proceedings against that entity would lead to the immediate illiquidity of the other entities in the group.[56] Also, the triggering of cross default or cross guarantee arrangements for funding purposes may also lead to financial distress of other entities within the group. When a bank group fails, the interconnectedness of the group may affect the expectations and treatment of the counterparties to the bank, e.g., where the assumption of risk by a business line may have exceeded the amount of capital available to satisfy the claims of counterparties against one bank entity.

This demonstrates that, notwithstanding their EU wide integrated operations, cross border banks are inevitably governed by a variety of national legal frameworks, which poses an obstacle to the integrated prevention and resolution of bank failures. Even in the relatively harmonized legal framework of the EU, cross-border banking groups will include bank and regulated non-bank financial companies that are regulated and supervised in different member states. By consequence, these entities will not only face some divergences in supervisory frameworks generally, but also significant differences in pre-insolvency remedial tools (such as powers to remove managers, curtail risky activities or require the disposal of certain assets) for which EU law has not provided a framework of minimum harmonization. As for banks specifically, the different legal entities of the banking groups will additionally be subject to deposit guarantee schemes of the various member states in which they operate, as well as to different rules on access to central bank liquidity, including in case of emergency.

To facilitate pan EU crisis management, supervisors need to seek alignment between a banking group's legal and operational organization on the one hand and the crisis management and insolvency framework on the other. More specifically, prudential supervision should pay due attention to the legal structure of banking groups. Furthermore, to achieve the said alignment, supervisors should have legal powers allowing them to veto legal structures that inappropriately complicate the operation of the banking group and its restructuring in case of insolvency. This might include powers to direct banks to wind down subsidiaries and discontinue certain activities through specified legal vehicles.

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[55] The types of financial transactions that give rise to interconnectedness include funding and treasury operations by the most highly rated group that can borrow money cheaply, cash management by one entity on behalf of other entities, clearing by one entity on behalf of other entities, bank guarantees of affiliate operations, cross default provisions and other triggers in documents, and capital allocations for business, profit target and compensation purposes.

[56] The "knock-on effects" of the initiation of insolvency proceedings of Lehman Brothers parent company on its subsidiaries, is perhaps the clearest illustration of this problem.

**Contingent Resolution Plans**

Contingent Resolution Plans ("Living wills") could be an effective tool for crisis contingency preparedness for large and complex financial groups (see also Basel Committee for Banking Supervision, 2009b, Calomiris 2009a, 2009b). These institutions would be required to devise detailed and regularly updated plans for dissolution that need to be approved by the supervisory authority. In principle, these plans would also "specify formulas for loss sharing among international subsidiaries of the bank (such loss-sharing arrangement would be preapproved by regulators in countries where subsidiaries are located)" (Calomiris, 2009b, p.10).

Notably, if established in an interactive process between management and supervisors, "living wills" could help in fostering a common understanding on the structures of the group and their implications for crisis management and resolution. However, group structures should be subject to regular review and discussion in any case. When this happens, the value added of living wills may be much reduced. Nonetheless, supervisors should have the power to require a banking group to formulate an acceptable winding-down plan.

Significant practical limitations need to be taken into account:

- Coordination among supervisors in their approval and implementation should be organized through the supervisory colleges and, where applicable, the Cross-Border Stability Groups;
- The confidentiality of the plans needs to be preserved; and
- A banking group may have to adjust any "living will" very frequently as its business evolves, and supervisors may find it difficult to assess such adjustments.

**Strengthen the core financial infrastructure and markets**

Reducing the cost of failures also requires mechanisms and systems to limit the effects of one bank's failure on the rest of the system. Essential for this, is solid core financial infrastructures and markets that have built-in safeguards against contagion. Significant work, under the joint leadership of CPSS and IOSCO, is ongoing in this area. It can be summarized in the following four topics:

- Strengthening central counterparty clearing (CCP);
- Reviewing CPSS/IOSCO standards on financial market infrastructures;
- Improving market practices in the tri-party repo market; and
- Improving customer asset protection.

Extending the use of CCPs to OTC derivatives, which are relatively opaque and bear the risk of contagion, would contribute to strengthening financial stability.[57] CCPs would help to reduce counterparty risk trough multilateral netting and increase transparency of market activity, by allowing for easy collection of information. However, they also concentrate credit and operational risk, and could actually increase systemic risk if not prudently managed and regulated.

Currently in Europe, CCPs provide services on a European-wide basis but remain regulated at national level. They are either part of the exchanges, settlement systems or independent entities. In the later case, they are mostly chartered as banks and, consequently, subject to the banking supervisory authorities. Furthermore, due to their impact on the orderly function of securities market they are also regulated by securities regulators. Most of the CCPs are also subjected to central bank oversight due to their systemic importance. While the CESR-ESCB (Committee of European Securities Regulators and European System of Central Banks) recommendations for CCPs, based on the CPSS-IOSCO ones, have started a process of converging national approaches, they are not legally binding (CESR/ECB, 2009). Recently, the European Commission (EC) initiated work to produce European legislation that will govern the activities of CCPs, linkages between CCPs and the features of instruments to be cleared. This work aims at allowing cross-border provision of CCP services, once it has been authorized by one member state's authorities.[58]

## V. Early Intervention, Resolution And Insolvency

### A. Managing the Failure of Banking Groups

The Basel Committee (2002) lists as principles for dealing with weak banks: speed, cost-efficiency, flexibility, consistency, avoiding moral hazard, transparency and cooperation. Thus, even before the crisis, a growing body of literature emphasized the need for early intervention powers that allow competent authorities to act quickly, with a view to addressing a bank's difficulties before they become insurmountable.[59] Such ***early intervention*** is almost

[57] For a more thorough discussion see Chapter 3 of the forthcoming GFSR "Making OTC derivatives safer: the role of central counterparties" (International Monetary Fund, 2010).

[58] This paragraph draws on Box 4.6 in the forthcoming GFSR and was prepared by Elias Kazarian. See International Monetary Fund (2010).

[59] Schemes that prescribe mandatory action at certain "trigger points" are referred to as "structured early intervention and resolution" (SEIR) The term and the principles of Structured Early Intervention and Resolution were first formulated by Benston and Kaufman (1988). "Prompt corrective action" (PCA), can be considered as a specific form of SEIR that mandates progressively intrusive actions. For a broader discussion, see Nieto and Wall (2006a), and Mayes (2007). Mayes, Halme, and Liuksila (2001; see also Mayes, 2004b) propose a specific efficient resolution procedure (the MHL procedure). Similarly, Eisenbeis and Kaufman (2005) propose four principles for efficient bank resolution (the EK principles). These two sets of proposals are very similar,

(continued…)

invariably the most cost-effective solution to a bank's problems, helping to preserve franchise value.[60] To the extent that early intervention fails, competent authorities need to have at their disposal a broad range of ***special resolution powers*** to reorganize a bank, ideally exclusively within the private sector but, if this proves impossible and if financial stability concerns in a severe systemic crisis demand it, possibly involving temporary public ownership. Finally, to the extent that resolution powers are unable to return a bank or substantial parts of its business to viability, bank ***insolvency frameworks*** need to ensure that the wind down of a bank can be completed in an as swift and orderly manner as possible, with prompt payout to protected creditors (in particular retail depositors) and appropriate post-insolvency protection for certain payments, securities settlements and financial collateral arrangements. Ultimately, the objective should not be to prevent bank failures in every instance but to ensure that when banks do fail, the systemic and broader economic impact of the failure is, as far as possible, contained.

Early intervention, resolution, and insolvency processes are all rendered more complex in the context of a banking *group* composed of multiple branches and subsidiaries in various jurisdictions. In some cases, these groups consist of banks only, while in others they include all kinds of financial companies (insurance, leasing and asset management for example) and thus exist as a true financial conglomerate. Therefore, the failure of a European banking group might engage several different competent authorities both within and outside the EU. While uncertainty regarding jurisdictional competency for the winding up of EU bank *branches* is dealt with by the Winding Up Directive for banks,[61] the question of coordinating concurrent regulatory interventions, resolution actions and insolvency proceedings in the context of a failing banking group remains largely unaddressed at present. Frameworks for early intervention and resolution need to reflect the fact that banks are increasingly part of larger, international groups.

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emphasizing the need for early and decisive intervention, a full takeover from existing shareholders, and continuity in the operations of the bank. One of the main differences is that the EK principles argue for intervention at a positive solvency level, whereas the MHL procedure would postpone takeover until solvency has reached zero. Hence, the former implicitly assign a higher relative weight to minimizing costs and third party losses and the latter to respect for ownership rights. The European Shadow Financial Regulatory Committee (1998, 2005) has long advocated a similar system for the EU.

[60] See, for instance, Basel Committee on Banking Supervision (2002).

[61] Directive 2001/24/EC on the reorganization and winding up of credit institutions. The Directive gives home country authorities sole responsibility to deal with the reorganization and/or winding up of a credit institution, including branches in other member states, in accordance with the home country's national laws, regulations and procedures. It makes those measures applicable throughout the European Union. The Directive leaves host country authorities responsible for dealing with the reorganization or winding up of a subsidiary licensed as a bank in the host country. In 2007, the Commission held a public consultation on possible revisions to the Directive. See European Commission (2007a, 2007b).

A well designed legal concept of "banking group" would be an essential element of the supervision and financial stability framework and would be the key to coordinated intervention and resolution. Such concept should be based on clear and transparent criteria, notably to facilitate an integrated approach to intra-group crisis management and a coordinated approach to resolution. More specifically, this concept of banking group could represent the legal underpinning of a coordination mechanism identifying a lead supervisory authority entitled to initiate intervention in the group (see Section B below). This entails a precise definition of a banking group, based on the relationship of control[62] and on objective criteria such as the component of the banking activity within the group, and susceptible of being then monitored by the authorities and disclosed to third parties.

A concept of banking group would complement but at the same time be distinguishable from and more specific than that of "financial conglomerate",[63] a supervisory concept covered by Directive 2002/87/EC ("Financial Conglomerates Directive", FCD). This Directive provides for supplementary supervision of certain identified financial conglomerates, enabling authorities to assess at a group-wide level the financial situation of credit institutions, insurance undertakings and investment firms in such financial conglomerate. A coordinator is appointed among the competent authorities, with the responsibility to coordinate and exercise the supplementary supervision at the group-level. A regime on banking groups, while drawing from certain elements existing also in the FCD (such as in the provision of coordination mechanisms) would address the peculiarities of a group where the banking component is predominant, aiding early intervention and resolution.

Not only would such a concept of banking group be relevant in the context of crisis management— which is covered by the FCD and the Banking Directive only to a limited extent —but its scope and function should fall coherently within the supervisory system and be closely aligned with the other relevant provisions of the EU legal framework for banks. The enhancement of a concept of banking group could entail, for instance, stronger obligations of the parent company—valid also towards minority shareholders and creditors—for the sound management of the group. This entails a heightened suitability test of the significant and controlling shareholders, responsible for the financial stability and capitalization of the group, to be performed by the supervisory authorities. Enabling such

[62] For a definition of control, based on far reaching criteria and recalled also by the Banking Directive, see Article 1 of the Directive 83/349/EEC of 13 June 1983 on companies' consolidated accounts. It should be noted that consolidated supervision could spread also to the participations held by a credit institution, with the materiality threshold of 20 percent provided under the Banking Directive. So it may include entities not covered in the perimeter of a group. The concept of banking group is instead strictly connected to a relationship of control, and serves its function also in the context of early intervention and resolution, for instance as a pre-requisite for intra-group asset transferability and in order to have a coordinated resolution framework of entities within such group.

[63] In a financial conglomerate, at least one of the entities in the group operates in the insurance sector and at least one entity operates in the banking or investment services sector.

authorities to request the submission of a restoration plan of the group as a whole, and to enforce such plan, may represent another beneficial tool. While the current EU and domestic frameworks already provide for, or imply, obligations of parent companies (in relation for instance to the maintenance of capital requirements or the provision of information on the group), a more comprehensive framework for the obligations of parent entities should represent the underpinning to call for legally binding commitments to provide financial support and for the overall responsibility to direct and coordinate the activity of the group. Finally, as discussed in Section C below, the concept of group interest could inform intra-group financial support to manage liquidity positions and stabilize group entities at the early intervention stage.

Building upon a regime for banking groups, the authority and powers of a lead supervisor should be further strengthened in the context of early intervention and crisis management, with checks and balances granted to the host supervisor.[64] The consolidating supervisors' responsibility would be coherently extended to all the components of the group. Recent proposed amendments to the Capital Requirements Directive follow a similar line by strengthening the powers of the consolidating supervisor. Such supervisor is vested with certain decision making powers in relation to capital and disclosure requirements of cross-border banks and with the authority to establish colleges of supervisors, as instruments for the exchange of information and for coordinated ongoing supervision. Early intervention and resolution of entities within a banking group should entail, and reinforce, similar centralized powers, taking into account the exigencies of host supervisors, in line with the European framework set out under Section VI.

### B. Early Intervention

There is an inherent tension between the two main objectives of any official action with respect to banks: namely minimizing financial instability on the one hand; and avoiding moral hazard on the other. Addressing problems before they spiral out of control, through tough, uncompromising supervision and decisive, early intervention can help to reduce this tension though.

Art. 136 of Directive 2006/48/EC on the taking up and pursuit of the business of credit institutions (the "**Banking Directive**") already sets out the following early regulatory intervention powers, to be applied to institutions that are otherwise failing to meet the requirements of the Banking Directive:

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[64] Strengthening certain rights of host authorities also in crisis management and resolution would be in line with provisions of existing Directives. Under Articles 30 and 33 of the Capital Requirements Directive, the authorities of the host Member State where a branch is established or services are provided may require the relevant credit institution to cease any irregularity and take any precautionary measure. Information rights of systemically important branches are reinforced under the proposed changes to such Directive. The "Mifid" Directive also provides for stringent powers of the host supervisor of investment firms acting in its territory.

i. obliging credit institutions to hold own funds in excess of the minimum level;

ii. requiring the reinforcement of the arrangements, processes, mechanisms and strategies implemented to comply with Articles 22 and 123;

iii. requiring credit institutions to apply a specific provisioning policy or treatment of assets in terms of own funds requirements;

iv. restricting or limiting the business, operations or network of credit institutions; and

v. requiring the reduction of the risk inherent in the activities, products and systems of credit institutions.

On paper, these powers appear relatively robust and wide-ranging but the result of the crisis suggests they may be insufficient, that the threshold previously set for the engagement of early intervention powers was too high, or that such powers were not aligned with resolution powers. On this basis, recently agreed changes to the Capital Requirements Directive and further changes currently under consideration are to be welcomed but may require further adjustment.[65]

The following additional or more specific early intervention tools might be valuable in any future framework:

- The possibility to require a capital increase, the conversion of contingent capital into equity, and to call on any form of capital insurance or other legally-binding support commitments (e.g., from shareholders or group members). This should be in addition to the possibility to require a group restoration plan, as from public policy and financial stability perspectives a restoration of capitalization has very different implications depending on whether it happens through an increase in capital or a decrease in (risk-weighted) assets;[66]

- The possibility to impose temporary limits on compensation when compensation pay-outs risk weakening an institution (these emergency intervention powers should be in addition to a more comprehensive overhaul of compensation practices as is currently

[65] CRD II (IP/08/1433) of October 2008; CRD III (IP/09/1120) of July 2009; and CRD IV (IP/10/197) of February 2010.

[66] An increase in capital (i.e., the numerator of the Capital Adequacy Ratio) allows a bank to maintain or increase the assets it holds on its balance sheet, including loans. Restoring capitalization through the denominator requires selling off assets and/or curtailing lending. This may have implications for the availability of credit in the economy and asset prices, especially if multiple institutions are divesting at the same time. The resulting feedback loops may hamper or undermine a selling bank's efforts to restore its soundness.

under discussion). These powers should focus on variable pay components and high pay packages;

- The possibility to require the divestment or winding-down of activities that are deemed to pose excessive risks to the soundness of a banking group, be unviable, be beyond the group's capacity to manage or support, or represent a fundamental conflict of interest;

- The possibility to put limits on the growth of an institution or veto expansion plans;

- The power to require a reduction of the refinancing risks in a banks' funding structure, through a lengthening of maturities and reduced reliance on wholesale markets; and

- The power to demand changes to legal group structures and/or operational organization in order to facilitate supervision and ensure consistency with crisis management and resolution arrangements.

For early intervention to be effective, competent authorities need to act as soon as a solvency shortfall or other warning signals are detected. Provided that any solvency shortfall is not large, a bank should initially be given a grace period to restore its solvency to the regulatory minimum, albeit under intensified supervision and restrictions on its actions (e.g., no dividend payments; limits on growth, new lending, and position-taking in financial markets).

If there is no improvement after the grace period, regulatory intervention might escalate to require a capital injection. In the absence of controlling shareholders or in case they are unable to mobilize new capital, shareholders would have to accept a dilution of their ownership stake through the entry of new private shareholders. All of these actions may need to be taken in a shortened, streamlined, timeframe.

If early intervention efforts to bolster the capital of a troubled bank fail and solvency drops below a certain level then more severe resolution action (such as a forced merger) might ensue.

**Thresholds for early intervention**

The definition among supervisors of common early intervention thresholds is crucial to effectively addressing problems of a troubled cross-border bank. Narrowly-defined, automatic triggers would not be satisfactory because it is impossible to specify in advance all relevant circumstances. However, certain other elements would be desirable:

- There should be a clear escalation of supervisory interventions, according to the principle of proportionality;

- Management and shareholders should normally be given the opportunity to redress the situation, subject to strict deadlines and oversight, and provided that the institution is not at imminent risk of insolvency or subject to rapid loss of value;

- An indicative list of triggers and thresholds (in terms of capitalization, liquidity difficulties, etc.) should be established and published in advance, so that regulatory uncertainty is reduced, and accountability and coordination are facilitated;

- The use of ELA should always trigger a supervisory investigation and should, when warranted, trigger a set of supervisory actions that may escalate to intervention;

- Supervisors should be accountable both for action taken, and for action not taken. In particular, not reacting to the breach of an (indicative) threshold should require explanation at least to the relevant college and Cross-Border Stability Group, the EBA, and any potential EU-level Resolution Authority. This should reduce the risk of forbearance, enhance information sharing, and improve the allocation of responsibility;

- A decision not to take action should be contestable by the members of a supervisory college and the EBA (and, if applicable, the European Resolution Authority). It should be handled under the EBA's procedures for emergency situations;

- The EBA should have an explicit mandate to oversee the consistent application not only of regulations and supervisory standards, but also of early intervention principles and actions.

**Early intervention in groups**

The concept of group interest could underpin intra-group financial support mechanisms to manage liquidity positions and stabilize group entities at an early stage. However, this raises some specific considerations. Indeed, the benefits and burdens that a bank draws from its belonging to a group should be appropriately acknowledged in the EU legal framework and inform the analysis of the group interest. Transactions entered by group companies should not be viewed on a stand-alone basis but should rather be framed within the aggregate strategic interest of the group: the detriment suffered by one group company as a result of a particular transfer could be compensated by the restoration of the financial soundness of the whole, which ultimately brings benefits also to the transferor. Thus, intra-group asset transferability could represent a possible restructuring and rehabilitation tool, aimed at avoiding contagion effects within the group: in this context, it serves an ***early intervention*** function, and should not be configured as a mechanism of a resolution or insolvency framework.

The logic of the group concept and asset transfers is consistent with the objective of enabling a certain degree of operational integration within banking groups, and it could in certain

cases significantly curtail the scope and cost of crises. To overcome the inherent legal challenges, one could consider requiring that such integration be backed up by contractual mutual support obligations that establish legally-binding joint and several liability for each other's commitments. As banking groups already claim that, in practice, they cannot allow a subsidiary to fail due to reputational risk, such a commitment would basically amount to formalization of existing market practice. It would greatly enhance transparency for all parties involved. We note that such or similar formal arrangements already exist within some cooperative and savings banking groups, and these appear to have functioned well.

The benefits of the group concept need to be balanced against the drawbacks of "piercing the corporate veil" and the risk of potentially weakening a healthy transferor in order to shore up a transferee company. An asset transfer framework would need to carefully consider how the expectations of creditors of the transferor could be affected. Risk management and due diligence would potentially become more difficult and more expensive for a party that enters a contract with an entity whose assets might be depleted under an asset transfer regime. Additionally, to the extent that an asset transfer regime required modification of company or insolvency law in order for the transfers to be enforceable and effective, these modifications would have to be very carefully prescribed and limited, bearing in mind that the modification and adaptation would need to be made to systems of national company and insolvency law which may not operate identically.

It could also be worth considering the interaction between intra-group asset transferability and the operation of branches and subsidiaries established by EU banks in non EU-jurisdictions, which may create different layers in a banking group. This could be especially relevant in light of the possible trend towards a "subsidiarization" of the extra-EU bank network.

Moreover, one has to distinguish between asset transferability as a way to address liquidity problems of a group as a form of interbank lending, or, by contrast, as capital support given by a group company; different considerations, for instance on the granting of collateral, would apply in each case. Also, it would be useful to better distinguish between transfers made at the instigation of supervisors and those made at the instigation of the group's management. A minimal approach, which would still be useful, would aim to facilitate the transfer of assets under the direction of, or with the approval of both home and host supervisors, when the group is still operating. For transfers across borders, consideration could be given to requiring the consent of both supervisors involved before a transfer is blocked, or at a minimum, the blocking supervisor should immediately inform other supervisors who may be affected. In any case, and regardless of whether transfers are made at the instigation of the management or of the supervisors, intra-group transferability should be underpinned by a robust framework, in line with clearly prescribed safeguards.

There needs to be ex ante transparency about the implications of any group concept and the possibility of asset transfers toward the counterparts of the various legal entities, including

minority shareholders and creditors. Hence, the criteria allowing for intra-group transfers should be precisely circumscribed in advance. These criteria must take into account the conditions under which a transaction, although being prejudicial to the economic interests of a single group company if viewed on a stand-alone basis, can bring broader benefits to the aggregate strategic interest of the group and be part of a commonly understood system of mutual support. Such analysis could draw from the principles of "compensative advantages", fair compensation and group interest, developed in some legal systems of Member States, and should also be linked with the overall benefits that a company draws from its belonging to a group.

Moreover, it could be an explicit requirement that any supervisor-mandated transfer be undertaken under a reasonable expectation that it will contribute to a least cost solution, the burden of which would then be equitably allocated. Such a requirement would reduce concerns that a transfer would greatly disadvantage creditors or taxpayers in one country, or be used to provide short-term support to a nonviable part of a group at the expense of viable parts of the group. This analysis should take into account that, while intra-group support could restore the financial stability of the group, certain nonviable parts may best be liquidated.

## C. Resolution

Early intervention potentially involving liquidity support, recapitalization or intra-group asset transfers might prove insufficient to address the difficulties of a failing bank. Where this is the case, the presumption ought to be that the bank will fail, entering an insolvency process in which it is wound up in a prompt and orderly fashion. However, in certain cases, the public interest (having regard in particular to financial stability and the interests of depositors) may mitigate against letting the bank or its business lapse into formal insolvency.[67] Where, despite the failure of early intervention, a bank retains some franchise value, the quickest, most cost effective solution involving least threat to financial stability may be a form of special resolution in which the bank (or a part of it) is transferred to a private sector purchaser by means of "purchase and assumption" or "bridge bank" type transaction. Such private sector solutions allow competent authorities to isolate and preserve those more valuable assets and protected liabilities of the bank which are to be saved, leaving behind impaired assets and unsecured creditors in a shell bank to be placed into insolvency.

[67] Many countries have established special procedures for banks. In the US, for example, the FDIC has "extraordinary powers as a receiver" (Herring, 2002, quoting former FDIC Chairman Ricki Helfer), and has a wide range of options to deal with a troubled bank. According to Bovenzi (2002), speaking before the crisis, its preferred option to deal with a large internationally active bank would be to establish a bridge bank rather than to take the entire bank through bankruptcy proceedings. Hüpkes (2005) provides a cross-country overview of insolvency procedures for banks and makes the case for bank-specific procedures. The UK 2009 Banking Act provides a recent, post-crisis example of a special bank resolution framework incorporating a range of restructuring and insolvency based tools.

In severe systemic crises, where no private sector rescue proves possible but the bank is systemically significant, a period of temporary public ownership or other public financial support may prove necessary.[68]

**Resolution tools**

Bank resolution tools should be used to achieve resolution in line with the objectives and principles set for the framework. Resolution tools should also be applied to ensure that losses fall commensurately with the degree of risk assumed by different classes of stakeholders, it being likely that shareholders and unsecured creditors would bear the brunt of losses.

In the resolution phase the competent authorities should first and foremost have the possibility to take administrative control of a financial group and exercise the powers normally reserved for management and shareholders.[69] In addition, we suggest giving consideration to granting the administrator additional powers to allocate losses to shareholders (by taking write-downs on assets, thus reducing net equity, which will require capital increases that are likely to dilute existing shareholders); and, in some cases, to uninsured creditors (by applying "haircuts" to claims) in order to restore the book value of an institution to zero from negative levels. However, judicial oversight would be needed to mandate changes in contracts such as haircuts on creditors' claims. Developing debt instruments that would facilitate uninsured creditors taking a loss would support such an approach.

In a severe systemic crisis, if a private solution is not feasible, nationalization may be necessary to preserve stability.[70] An EU resolution regime should ideally provide the

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[68] The aim of temporary public sector ownership should be to recapitalize, restructure, and prepare a bank for sale, as a whole or in parts, to private acquirers within a relatively short time period. The systemic nature and size of a large bank might make it difficult to find a purchaser at short notice however, due to competition rules (Mayes, 2004b), regulatory considerations, and the complexity of assessing the value and risks of such a group. Moreover, the number of potential purchasers that are fit and proper, and have the financial strength and managerial capacity to take on responsibility for a failed systemic bank is quite limited, and supervisors may need time to ascertain whether a takeover would simply result in a bigger weak bank. From a cost minimization point of view, awaiting a full audit of the troubled bank, and restructuring it at least in part under public ownership might be a superior option to a hastily arranged merger or purchase and assumption. At least, it would reduce the risk that the rapid sale of a failed institution would lead to mispricing (see Stover, 1997).

[69] The presumption should be that top management ought to be replaced. However, replacing management can be disruptive and may lead to loss of information and competence that could be helpful in restructuring the bank. This argues in favor of keeping the replacement limited to the absolute top of the bank, requiring sidelined managers to stay around to provide advice, and applying some leniency in cases where the banks' problems are clearly not the result of management mistakes. Also, existing management should be legally bound to cooperate with the replacing one.

[70] Nationalization is an economic concept referring to governments acquiring control over an enterprise. From a legal perspective, such control can be acquired through several legal mechanisms: the official sector can contribute to a capital increase, thus diluting pre-resolution shareholders; the official sector can purchase

(continued…)

possibility, in such cases, to organize a "joint nationalization" under a streamlined ownership and governance structure involving the concerned Member States, in ways that do not result in an unnecessary and potentially costly break-up of the group in question along national lines. However, nationalization should always be a temporary solution, nationalized institutions should be managed on commercial terms, and the objective should be to restore the institution to private ownership once it has been restored to health, systemic risks have abated, and market conditions have normalized.

**Thresholds for resolution**

A decision by competent authorities to resolve a failing bank using special resolution tools involves discretion and the exercise of subjective judgment, for example, as to the possible threat to financial stability which a particular failing institution might pose. Nevertheless, such discretion ought to be exercised, to the extent possible, on the basis of objective and transparent criteria. Examples of such criteria are: (i) the bank is in serious and/or persistent breach of regulatory requirements; (ii) the bank is otherwise deemed to be no longer economically viable; (iii) the bank's capital buffer has shrunk to a level that risks not being adequate to cover the additional losses that can be expected to materialize during resolution proceedings; and (iv) early interventions have failed, after a reasonable period, to restore the bank to soundness. Other similar triggers may also be appropriate. Thresholds for intervention could be correspondingly higher for more radical intervention measures; in particular any measure that potentially derogates from the property rights of shareholders or involves public funding. To the extent that different national resolution regimes might apply in the context of the resolution of a cross-border group, it would be desirable for national regimes to have broadly harmonized triggers for intervention.

It is difficult to strike a proper balance between public and private stakeholders' interest in crisis resolution. However, the current crisis has demonstrated that existing crisis management and resolution arrangements often put insufficient weight on the former. Resolution proceedings should be initiated well before a situation of insolvency in book value terms is reached—while the business retains some franchise value. The resolution authority should not need the approval of private stakeholders to initiate these proceedings and apply its resolution tools. Also in the case of official administration, the administrator should have the power to exercise certain rights, titles, powers, and privileges of any stockholder or member of the bank. Likewise, procedural requirements, such as those regarding the convocation of shareholders' meetings and the exercise of pre-emption rights, could be streamlined. The legal framework, including the EU Company Law Directives, should be adapted accordingly. In that regard, it should be noted that derogations from the property and company law rights of shareholders might be possible only when objectively

existing shares from shareholders; and the government can acquire existing shares from the latter through expropriation.

justifiable on the grounds that such derogation is necessary in the public interest and in order to preserve financial stability. Conceivably though, in a systemic crisis, such criteria would almost invariably be satisfied.

Any EU level framework for bank resolution would need to ensure that transfers of property during special resolution could not upset netting and financial collateral arrangements or interfere with payment flows in certain types of capital markets transactions, including covered bonds and securitizations. When breaking up a failing bank, competent authorities should not be able to "cherry pick" rights and liabilities that are protected under financial collateral arrangements. Additionally, partial property transfers should not be used in ways which might interfere with a central counterparty's ability to operate its default rules effectively. The UK Special Resolution Regime (in particular the Restriction of Partial Property Transfers Order 2009 (the 'Safeguards' Order)) has explored the protection of netting and collateral rights in some detail. While any EU framework would need to be sensitive to different national laws of Member States, the UK regime may provide a helpful starting point for establishing best practices in the context of partial property transfers.

In cases covered by an EU-level bank resolution framework, the provisions of that framework would override national rules if they were to be enshrined in regulations. More generally, we see considerable merit in a significant degree of harmonization of national crisis resolution frameworks and relevant rules for all banks whether or not systemic and whether or not operating across borders.

Where resolution tools interfere with shareholders' rights in company and property law, the possibility and terms of such interference should be clearly prescribed in law. The interference ought only to be permissible in cases where the risk from financial instability outweighs the individual rights of shareholders. While the threshold for such interference would therefore be high, the determination as to whether the threshold had been met would necessarily involve the competent authorities making a subjective judgment. As such, any decision to resolve a failing bank ought to be susceptible to some form of judicial review to determine the propriety of action taken but not to "second guess" decisions. To the extent that special resolution measures interfere with the rights or ordinary expectations of shareholders or creditors, compensation should be available and calculated as the difference between what recovery such creditors made following special resolution and the recovery they could have been expected to make had the bank been wound up rather than resolved using special resolution measures.

The scope for conflict and disagreement in cross-border crisis resolution is such that, in our view, the involvement of a neutral party that acts as the guardian of the "common good" and of the common crisis management principles is needed. Such a party could be a European Resolution Authority, the EBA or a specific subcommittee or representative of the EBA, or one or more independent experts (see Chapter VI).

Given the low frequency of systemic crises, authorities typically lack expertise to deal with such situations. The kind of third party proposed above could therefore fulfill a useful role by pooling relevant expertise and making this expertise available to national authorities in resolution cases. The role of such a party could take various forms: mediator, arbiter, initiator of proposals, and resolution authority.

One possible approach could be for such a neutral party to take the lead by drawing up a concrete proposal for a resolution strategy, including any necessary financing and the sources of that financing, based on the common crisis management principles. National authorities could then be required to approve this proposal (perhaps in the context of the relevant Cross-Border Stability Group) on the basis of a yes or no vote or to take this proposal as a starting point for negotiations.[71] In the former case, ways should be foreseen to proceed without "no" voters as long as those represent a relatively small minority in terms of their weight in the economic interests at stake.

**Resolution of groups**

Consideration should be given to introducing an internationally coordinated framework for the resolution of a banking group. Under this framework, a lead supervisory or resolution authority would be empowered to initiate intervention and manage the orderly resolution of group companies, whether or not these companies are ordinarily supervised by that supervisory authority. Such a framework could be built upon a clear definition of a banking group, which would include the subsidiaries of the group exercising a banking activity and other non-banks institutions, and would not collapse their separate legal personalities. A minimum approach of the described regime would allow for a procedural coordination of the resolution process, lead by an identified home country authority; however, its function and purposes could be more effectively sustained by a harmonization of the resolution framework applicable to the banking group, and eventually served by an EU agency. To the extent that parts of a banking group (i.e., certain branches, subsidiaries or assets/liabilities of particular group components) are not included in any special resolution transfer of the business, these parts would be left to be wound up under applicable insolvency law (home state for branches, host state for subsidiaries).

## D. Insolvency

If early intervention fails and resolution tools prove insufficient to restore a bank to viability, formal insolvency will be the outcome. Moreover, a swift and orderly wind down or insolvent administration of the business should be the default outcome for any institution

[71] A similar role is proposed for a "Treuhand" in Posen and Véron (2009).

whose failure would not threaten financial stability or the interests of insured depositors.[72] However, unmodified corporate insolvency laws are generally ill suited to dealing with bank failures. This is because some features of corporate insolvency frameworks (particularly stays and moratoria) are at odds with achieving a swift and orderly wind down. For example, much as the administrator or liquidator of a failed power company needs to contain the broader impact of the failure, making sure that "the lights stay on", so a body responsible for winding up or overseeing the insolvent administration of a failed bank needs to ensure, through the continuity of certain core functions, the protection of netting and close-out rights, payments and settlements, that the insolvency process causes as little systemic disruption as possible.

Systemic and core operations of the bank, including basic retail services, should continue uninterrupted or after a minimal interruption not exceeding one or two days. From a legal point of view, the continuation of these operations could be assured by a new entity (a bridge bank)[73]. In other cases, it may be that core services need to be provided by an insolvent shell bank to a transferee of the business following a purchase and assumption. In either case, key staff and supplier contracts need to be made "insolvency proof" and banks may need to maintain a ring-fenced "operational reserve" during life, to fund this continuity of functions after death.

The DGS plays a key role in ensuring the continued availability of financial services and reducing the cost to the economy of a bank's insolvency, in addition to its function of supporting confidence in the banking system. As discussed further below, it is highly desirable that a DGS be able to pay out to depositors in a matter of days if the need arises.

The protection of netting and set-off rights and financial collateral arrangements from attack under standard insolvency laws is important to safeguard financial stability. These risk mitigation tools act as a barrier to contagion effects in a bank failure. The same is true for the legal protections which are afforded by settlement finality legislation. Netting, collateral and settlement finality arrangements all derive their value as risk mitigation tools precisely because of their invulnerability to attack under insolvency laws. Any regulatory or legal changes which would in future interfere with or limit these protections should be weighed

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[72] In many cases though, the interests of depositors and financial stability concerns will mean that a partial private sector transfer of the business will be the best outcome, with only the residual 'shell' bank entering liquidation. See Section C.

[73] Kaufman and Seelig (2002), and Kaufman in earlier work, call "too big to fail" a misnomer. They point out that the systemic nature of these banks is such that they are "too big not to protect some or all uninsured stakeholders" or "too big to liquidate quickly", rather than too big to fail and dissolve as a legal entity. Like every company, a bank is a nexus of contracts. These contracts, or a subset of them, can be assumed by a different legal entity, thus avoiding the disruptive impact of the bank's operational closure while allowing the legal liquidation to go ahead.

very carefully. An erosion of netting and collateral rights could increase the risk of contagion in a bank failure and could impede counterparties' ability to manage credit risk effectively.

**Cross-border and group coordination**

There is a case for further harmonization of EU bank bankruptcy legislation for systemic cross-border banks. Differences in bankruptcy procedures have in the past been major obstacles to the efficient resolution of cross-border banks (Herring, 2002 and 2004; Eisenbeis, 2004). The current Winding-up Directive falls short of fully removing these obstacles, in part because it does not remove the features of standard bankruptcy law that are harmful when applied to banks (e.g., a stay). The home-host division of labor the Directive put in place is at odds with the way modern cross-border banks organize themselves, and does not allow a single receiver to deal with a consolidated group comprising a mixture of subsidiaries and branches. Therefore, a more harmonized bankruptcy framework would probably be a precondition for an EU-level bank resolution framework. Thinking more ambitiously, it should be possible to design a specific bankruptcy framework for cross-border banks (a "28th bank bankruptcy regime"). This could perhaps be linked to the European Company statute (*Societas Europaea*), combined with a requirement that systemic cross-border EU banks adopt this statute.

Insolvency proceedings should take place on an entity by entity basis, but should be coordinated group-wide. The coherent treatment of a banking group in insolvency via the procedural coordination of insolvency proceedings would be an important step forward. However, any integrated treatment of corporate entities in insolvency or any "collapsing" of groups poses a number of concerns. Further analysis could certainly be beneficial in establishing criteria to determine whether an intermingling of assets and liabilities or a fraudulent activity would justify treating a group as a single enterprise in certain specific cases. However, a substantive consolidation going beyond limited cases could alter essential protections of counterparties, with detrimental effect to legal certainty and the predictability that is key to long-term economic relationships. Such a proposal could also raise a number of complex challenges in its implementation, for instance in relation to the enforcement of security interests created in different jurisdictions. Moreover, there is a superior alternative way to achieve whatever benefits could be derived from such an integrated insolvency framework, which is to establish a sound framework for branch-based cross-border banking under the single passport (see Section G).

## E. Competition Policy and State Aid

Competition and State Aid policy has served as the de facto main coordinating mechanism in bank resolution during the current crisis, in the sense that it was the only binding framework available that could foster a form of coordination. To allow support to be provided in an

efficient manner consistent with this framework, the Commission issued four sets of guidelines.[74] The Commission's approach sought to balance, on the one hand, the restoration of financial stability and of lending to the economy with, on the other, containing moral hazard, preserving competition and a level playing field, and restoring sound market functioning. Banks that experienced difficulties after recapitalization or were deemed unsound, were required to submit a restructuring plan after 6 months. These plans are vetted, among other criteria, on whether they restore long-term viability. To compensate for the State aid-induced distortions to competition, the Commission also requires the restructuring plan to comprise a significant downsizing.

However, the interventions by the Commission's Competition services have raised significant concern, discussion, and criticism. Among the main criticisms were:

- insufficient consideration for financial stability and economic growth;
- discouraging banks from making use of the public support measures by attaching overly heavy conditionality;
- adding uncertainty to the market and to restructuring efforts, by taking too much time to approve operations and making support subject to periodic reviews;
- getting too involved in the details of restructuring operations;
- abetting the disintegration of the single market, by encouraging banks to sell foreign subsidiaries; and
- taking a blanket approach in its requirements for downsizing.

Not all of this criticism was justified, the approach was adapted over time as experience was gained, and the demands placed on the relevant Commission services severely stretched their resources.[75]

From a short-term financial stability perspective, support to an ailing institution, a merger, or a purchase and assumption operation are sensible strategies. However, when singularly based on the short-term imperative of containing financial instability, such decisions can end up

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[74] A general Communication on measures in the financial sector, with particular focus on guarantees (European Commission, 2008b), a Communication detailing conditions for recapitalization (European Commission, 2009a), and a Communication on the treatment of impaired assets (European Commission, 2009b). In addition, the Commission also issued a Communication on measures to support access to finance for non-financial economic agents (European Commission, 2009c).

[75] For the Commission services' own assessment of the support schemes and their counterarguments to some of the criticism, see European Commission (2009g).

having undesirable long-term consequences in terms of market structure and competition. These consequences may in turn create new, structural financial stability challenges (such as too-big-to-fail and distortions to competition). Therefore, the challenge is to find a balance between the short-term and long-term considerations and to foster a more integrated approach between the Commission as the guardian of competition and those authorities charged with competency for overseeing bank resolution and safeguarding financial stability at the EU level.

As the Commission's competition role is enshrined in the Treaty, there are several options to improve the balance between financial stability and competition. One option would be to make a carve-out from regular competition policy and allocate responsibility for competition policy in the financial sector to a stability-oriented EU body. Another option would be to build on the experience gained during this crisis and establish a specific framework and permanent coordination mechanisms between the Commission's DG Competition and the financial stability authorities to deal efficiently with the State aid and competition aspects of future resolution cases.

### F. Depositor Protection

Arrangements for depositor protection need to be carefully integrated in the overall crisis management framework. A DGS is, in most circumstances, a valuable component of the framework, providing underlying assurance to an economically, socially and politically important group of claimants both in good times and in bad. Yet, to some extent, a DGS and a resolution mechanism are substitutes, as the resolution strategy determines how much, if any, losses the DGS has to compensate, and whether or not depositors face an interruption in access to their deposits. In particular, the need to activate the "pay-out box" function of a DGS does not materialize in cases when the bank or most of it is kept as a going concern. An efficient "purchase and assumption" mechanism, whereby deposits are transferred to a healthy bank along with some assets and possibly assistance from the DGS, obviates the need to make actual payouts, and—in the US experience—facilitates the maintenance of both confidence and liquidity services to depositors and borrowers.

An optimized EU-level deposit insurance scheme for systemic cross-border EU banks could be significantly superior to current arrangements (see also Mayes (2006); Brockmeijer (2009); and Carmassi, Luchetti, and Micossi (2010)). As described above, there are inherent weaknesses in having decentralized deposit insurance systems for an integrated market.[76] Eisenbeis (2004) and Garcia and Nieto (2005) identify a wide range of problems with current

[76] Eisenbeis (2004) notes that the US experience with decentralized deposit insurance has been largely negative, as these systems proved unable to cope with the failure of large institutions or simultaneous failures among small institutions. Similar flaws that led to their failure—underfunding, lack of diversification, and unclear or missing governmental financial backing—are features of Europe's current systems.

arrangements, including agency and conflict of interest problems, and the risk of breakdown/inadequacy during a systemic crisis. Kaufman (2004) emphasizes the need for deposit insurance to provide also for the maintenance of liquidity services for retail customers, which current arrangements typically do not.

Fully overcoming these weaknesses would require an integrated EU-level system of resolution and depositor protection, at least for systemic banks. However, a pan-European scheme could be extended to all banks, or at least all banks with significant cross-border deposit-taking operations. Such a broader mandate would promote a "level playing field," including between purely domestic and cross-border banks, reduce the scope for regulatory arbitrage, and facilitate consumer education. It would also share risks across a larger and more diverse pool.

One possibility would be an FDIC-style agency, combining the function of resolution agency and DGS.[77] A pan-European DGS could supply funds needed to facilitate the resolution of a cross-border banking group, provided this was less costly than paying out deposits in liquidation.[78] It might also assume a role in negotiating the resolution path, alongside the relevant national authorities. This agency would have to become involved at an early stage in the resolution of cross-border banks, alongside the relevant fiscal authorities. It should also be represented on the ESFS. Less ambitiously, the pan-European DGS might serve just as a "pay-out box," although this conception leaves open the crucial issue of establishing a resolution agency or some organization of supervisors that can take the lead in bank resolution

Important steps can be taken to improve and supplement existing DGSs, consistent with an eventual move to a system as outlined above.[79] These steps can be broadly organized under the following headings:

- Promoting competition and the internal market through harmonizing coverage (which would also eliminate the need for topping-up); allowing relatively easy migration on

[77] Along these lines, the European Parliament has proposed a European Financial Protection Fund, covering both depositors and institutions in systemic situations. The relevant Amendment to the proposed Regulation establishing a European Banking Authority reads: "(23c) A European Financial Protection Fund (Fund) should be established to protect depositors and institutions facing difficulties when those could menace financial stability of the European single financial market. The Fund should be financed through contributions from those institutions, through debt issued by the Fund or, in exceptional circumstances, through contributions made by the affected Member States in accordance with criteria previously agreed upon (revised Memorandum of Understanding). The contributions to the Fund should replace those made to the national Deposit Guarantee Schemes." Source: European Parliament—Committee on Economic and Monetary Affairs (2010).

[78] However, a European (or national) DGS should not provide liquidity assistance or funds for an ailing bank in advance of its resolution.

[79] For a detailed discussion, see IMF Staff (2009).

reasonable terms between DGSs when operations are consolidated; and mandatory membership of an official DGS of all licensed banks;

- Increasing confidence in deposit insurance through the establishment of mechanisms to ensure rapid payout of the vast majority of insured deposits; better information provision on the level of coverage, instruments that are covered or not covered, payout modalities, and basic conditions; and

- Facilitating bank resolution through pre-funding and the establishment of contingent financing; clarifying rules on the priority of claims in bank insolvencies, ideally by granting the DGS privileged status;[80] and planning for the early involvement of the DGS in problem banks, working in close coordination with the receiver and/or acting as the receiver. When it becomes clear that a bank may possibly fail, the DGS will need to begin planning for insured deposit repayment, and analyze the impact of a potential bank failure on the reserve fund.

## G. A New Basis for the Single Passport

A sound basis for the single passport of large, systemic cross-border banks can best be provided through an EU-level cross-border crisis management and resolution framework combined with a deposit guarantee and resolution fund as proposed above. This would have to be matched with EU-level supervisory arrangements that maintain consistency in incentives. Several options exist to do so. One is lead supervision by the EBA, with the national authorities of home and host country acting as agents. This would mix the advantages of impartiality and proximity. Alternatively, colleges of supervisors could be established also for branch-based cross-border groups. This is foreseen, for significant branches and for consultative purposes, by recent amendments to the CRD. A stronger form of this would give shared supervisory responsibility to these colleges. Finally, the supervision by the home authority could be placed under the oversight of the EBA and/or the EU-level resolution authority, and combined with increased use of delegation between home and host authorities. In contrast, cross-border branching on a scale that raises concern in neither home nor host country could still happen under the existing arrangements.

Such an EU-level system would much better safeguard the interests of host countries. Further safeguards should be provided by ensuring that host country supervisors have adequate access to information on the activities of foreign banks in their domestic market and that they can bring any concerns they have to the attention of the EBA and ESRB, for mandatory follow-up.

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[80] Granting the DGS a high ranking priority right over the unencumbered assets of a bank is a crucial tool in underpinning purchase and assumption transactions. This can be achieved by granting the right directly to the

(continued…)

# VI. ESTABLISHING A EUROPEAN FRAMEWORK

The substantive reforms proposed in the two previous sections will only achieve the stated objectives if they are underpinned by far-going institutional reforms. In particular, it is our view that an ***integrated EU-level framework for crisis prevention and management, crisis resolution, and depositor protection*** is imperative to deliver EU-wide financial stability.[81] Such a framework would resolve the institutional mismatch between, on the one hand, pan European banking groups and, on the other hand, supervision and resolution by national authorities. With a focus on cost-efficient crisis management and resolution, and by providing an element of insurance against asymmetric financial shocks, it would also much better shield taxpayers from financial sector problems than is currently the case. The potential for a collective improvement in the well-being of the EU's citizens, relative to any conceivable second-best solution, is large and warrants tackling the considerable obstacles that admittedly would need to be overcome.

## A. Legal Set-up for Substantive Reform

Establishing an integrated EU level framework for crisis prevention and resolution should follow a **two-pronged approach**: (i) a largely Regulation-based early intervention and resolution framework for all systemic cross-border EU banks (the "28th regime"), and (ii) a Directive-based framework for non-systemic cross-border banks and purely domestic banks.

### A Regulation for a 28th Regime for Systemic Cross-Border Banks

As discussed in Section V, the EU-level 28th regime should comprise ***two pillars: one that focuses on individual banks and branch-based cross-border operations and a second that allows dealing in an integrated and coordinated manner with banking groups***. As argued above, fundamentally the objective of the proposed reform is the maintenance and strengthening of an efficient and sound internal market in banking services. This requires that banks can efficiently organize their cross-border operations, choosing freely whether to do so through branches or subsidiaries, but fully consistent with the legal implications of either approach (see Section IV, B). The crisis management and resolution framework needs to support both approaches. Concretely:

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DGS, or alternatively to protected depositors up to the insured amounts, whereby the DGS is subrogated in the rights of the depositors.

[81] See also Fund staff comments dated August 12, 2009, submitted in the context of the Commission's public consultation on the Review of Directive 94/19/EC on Deposit-Guarantee Schemes (DGS) (IMF Staff, 2009).

***Scope***

The 28$^{th}$ regime should focus on systemic cross-border banks. In particular, it should be applied to any bank with cross-border activities under the single passport that are of a magnitude and scope that raise legitimate concerns in host or home country. Banks that are considered systemic in any host country should be considered systemic for this purpose regardless of their importance or lack thereof to the home country. While the definition of "systemic" can be debated, the judgment of the host country prudential authorities should carry significant weight in the assessment.

As to the types of institutions covered by the framework, the focus should in the first instance be on credit institutions and groups of such institutions. However, alongside an EU regime for deposit-taking institutions, a separate regime might be needed for certain types of investment firm (e.g., broker-dealers). Currently, there is no equivalent of the Winding Up Directive for broker-dealers. If there were an equivalent of that Directive for broker-dealers it might help creditors of broker-dealers manage legal risk better by giving more certainty as to whose insolvency laws would apply in the event that a broker-dealer with many European branches became insolvent.

***First Pillar***

Recognizing banks' legitimate (and desirable!) wish to organize their cross-border operations efficiently within the internal market, it is of utmost importance that an effective framework be established for resolving individual banks, including their foreign (EU) branches. This would be the first pillar of our proposed framework. As such, it should cover the operations in both the home country and host country of the bank (i.e. branches). Such a regime—to be enshrined in a regulation—would thus need to include both substantive rules and elements similar to those currently included in the Winding Up Directive for Banks.

***Second Pillar***

Our proposed second pillar would provide group-wide tools and mechanisms to organize integrated early interventions and coordinated resolution of all legal entities constituting a banking group, including for non-bank entities of such groups, drawing on the first pillar as appropriate. This would enable group-wide operational integration up to, but no further than, that allowed by the fundamental legal nature of the subsidiary-based banking model. The full consolidation of insolvency estates, by contrast, seems to offer more disadvantages than advantages.

This would entail that all bank subsidiaries of covered banking groups would be resolved according to the 28$^{th}$ regime. In contrast, the aim is not to generalize the substantive resolution rules of banks to non-bank components of banking groups. Indeed, each non-bank entity of a banking group should be resolved per the rules established for that type of entity. However, the legal framework should include coordination mechanisms whereby the lead

resolution authority coordinates resolution of all entities of the group, working together as appropriate with specialized resolution authorities in case of non-bank entities. One option is to entrust the EBA or lead supervisor with this responsibility. Another option could be for Cross-Border Stability Groups to agree on a case-by-case basis how resolution will be approached and which tasks should be entrusted to the EU framework. As a minimum, the EU level should always provide some form of coordinating and enabling function.

**A Directive for domestic and non-systemic banks**

At the same time, a Directive-based modernization and harmonization of resolution frameworks for other banks would also be useful. The directive should aim mainly at improving and harmonizing national frameworks as well as assuring consistency with the systemic EU-level regime. Such directive should include rules that are materially very similar to the ones proposed for the regulation establishing the 28$^{th}$ regime, i.e. an adequate framework for official administration with appropriate resolution tools.

At any rate, the harmonization of key substantive bank resolution rules would be conducive to an orderly and predictable bank resolution framework. This should be kept clearly distinct from the debate on whether a coordination mechanism or a single resolution authority should be envisaged (see next subsection). In particular, even if the institutional reforms proposed below do not materialize, reforms aimed at harmonizing the Member States' frameworks for the early intervention and resolution of banks by way of directives can significantly contribute to enhancing financial stability and the single market in the EU.

## B. Institutional Architecture

The crisis has demonstrated quite clearly that—in the EU's highly integrated context—leaving cross-border resolution in the hands of one country's domestic authorities, with domestically oriented accountability mechanisms and incentives, is a recipe for problems (see also Section II). It is almost an open invitation to favor domestic interests and shift costs abroad, especially when taxpayer funds get involved. Non-binding ex-ante commitments and even legal obligations have proven to be unreliable in countering the basic incentives toward non-cooperation. The crisis has also shown the scope for damage from failure to agree among national authorities in cross-border resolution cases.

Yet, the framework proposed above implies a significant move in the direction of *more*, not less, cross-border resolution proceedings. The reasons are simple: the economic and efficiency benefits are compelling in a single financial market where banks operate across borders, and the alternative is not consistent with such a single financial market. However, the major benefits that the framework offers can only be realized for the union as a whole if responsibility for crisis resolution is placed in an impartial institution. That is why some sort of European Resolution Authority is essential to run the process.

If well designed, an ERA could overcome conflicts of interest, make decisions with the promptness that is so crucial in bank resolution, facilitate coordination between all relevant parties, and bring together otherwise rare and dispersed competence and knowledge. Crucially, it is the best guarantee for impartiality and a focus on the common good.

**A European Resolution Authority (ERA)**

Operational considerations also plead in favor of an ERA. As regards bank resolution generally, the need for quick decision-making argues for an administrative approach rather than a court-led approach to crisis resolution (see above). However, this requires a dedicated and well staffed institution and specialized capabilities. The ERA also needs adequate powers, clear mandates to pursue the common good based on ex-ante agreed common principles and objectives, robust legal and accountability frameworks, and appropriate safeguards.

To be able to implement resolution procedures as outlined above, the resolution agency would need access to financing. In essence, it would be a true Lender of Last Resort (coming even after ELA). [82] This requires established channels of communication and consultation with the fiscal authorities. In essence the ERA would be positioned in between supervisors and Ministries of Finance. Accountability should also be toward the fiscal authorities, among other parties.

The ERA would also need to be empowered to involve itself with a troubled bank as soon as there are indications of solvency problems, take over primary responsibility from the supervisor at a well-defined and preferably positive solvency threshold, make rapid decisions within a strong mandate, and have those decisions being subject mainly to ex post accountability and limited judicial recourse.[83] Continuous full and real-time access to prudential information on the groups for which it might have to take responsibility would allow the agency to be prepared optimally at all times, while also ensuring timely intervention and some independent quality control over the supervisory authorities.

Organizationally, the ERA could take several forms, including:

- A lean, stand-alone agency. However, because banking crises are—in the past and presumably also in the future—rare events, this would either be a major waste of resources or it would have to be set up as a shell institution containing very few

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[82] Goodhart has made the point that, in the US, the FDIC acts as a true lender of last resort, whereas the Federal Reserve merely provides collateralized lending (which is not really LOLR) (Goodhart, 2004b).

[83] Goodhart (2004b) emphasizes that a bank's owners should not have the possibility to seek judicial redress for the "appropriation" of any remaining shareholder value under a resolution procedure.

permanent staff but maintaining and supporting a network of trained experts who work elsewhere but can be mobilized when the need arises.

- The European Banking Authority, working with national supervisors as agents but with the process controlled by the EBA itself and overseen by its board. An argument in favor of this option is that supervisors know the banks well and are therefore best placed to run a complex resolution process tailored to the needs of such a bank. A counterargument, which also applies to leaving resolution with national supervisors, is that this very proximity tends to produce hesitance to intervene (Kane (1990), Boot and Thakor (1993), and Beck (2003)) and may lead to resolution approaches that put too much weight on the interests of the bank. Moreover, if taxpayer money needs to be spend, it may render the EBA dependent on Ministries of Finance and thus threaten its independence.

- The ESCB, given its ability to act as a Lender of Last Resort. However, this would require it to build up specialist resources to handle a failing bank. There is also a risk that too extensive involvement in banking problems could interfere with its other responsibilities (see, for example, Boot, 2006), or that it would morph ELA into solvency support that could weaken the central banks' balance sheets. In any event, the current legal framework of the ESCB, which is enshrined in the Treaty, does not foresee this option.

- A European deposit insurance fund that also acts as a crisis resolution agency, mirroring the role of the FDIC in the US.[84] This would facilitate direct access to funding and clarity of responsibility for the use of this funding. In terms of incentives, this may be the best approach.

**A European Deposit Insurance and Resolution Fund (EDIRF)**

Regardless of its setup, the ERA would function best if it could work in tandem with a pre-funded European DGS and if it could also tap any pre-funded resources set aside for the resolution of systemic institutions (e.g., a systemic surcharge). A single integrated fund for depositor protection and resolution would be ideal, because that would allow the ERA maximum flexibility to chose the most cost-effective resolution strategy and apply the available funds fungibly to finance that strategy.

**A consistent prudential framework**

The importance of consistency (see Section II) makes a case for the integrated system for crisis management and resolution to be accompanied also by integrated arrangements for the

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[84] Mayes (2006) proposes such a combined European DGS and resolution agency.

other elements of the financial safety framework.[85] In addition to the ERA, this approach would ideally involve EU-level licensing, regulation and supervision for large systemic cross-border banks and banking groups, so as to make the proposed resolution framework part of a "cradle-to-grave" EU-level prudential system.[86] (Non-systemic cross-border banks and purely domestic banks would continue to be governed by current arrangements.)

This could be accomplished by making the EBA the lead supervisor for the banks and the parent banks of banking groups covered by the framework. For the banking groups, it would then also act as consolidating and, where relevant, coordinating supervisor. In exercising these responsibilities, the EBA could best draw on extensive delegation of tasks to national authorities for day-to-day supervision. A European banking charter, which could build on the Societas Europaea statute, could be one way to facilitate such a wholesale shift to the EU level and reconcile unconstrained intra-EU cross-border banking with efficient cross-border crisis management and resolution.[87]

**Accountability**

The framework must balance the need for accountability and the right to judicial review with the need for legal certainty, expediency and the protection of taxpayers from unreasonable damage claims resulting from crisis management and resolution decisions. One means toward this objective could be to establish a specialized financial chamber at the European Court of Justice or Tribunal of First Instance, staffed with judges that are experts in financial law and organized to convene and decide in very short order. Within reasonably established time limits, such a chamber could settle disputes that arise during a crisis management and resolution process. In general, possibilities to appeal resolution decisions should be carefully defined, not have suspensive effect, and be time-efficient. The standards for judicial review should be based on deference to the administrative decisions taken by the ERA, and should allow a balancing of the public interest against private rights.

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[85] Srejber (2006) emphasizes that arrangements for supervision, crisis management and crisis resolution should be dealt with jointly as a package. She proposes a framework consisting of a European supervisory agency responsible for large cross-border banks and a European deposit insurance fund for the same banks. In this framework, the deposit insurance fund should be able to borrow in the capital market backed by a guarantee provided by all EU member states. A—preferably fixed—key for burden sharing should be in place for when the deposit insurance fund needs to be propped up. Prompt corrective action, structured early interventions and the option to reconstruct troubled banks should help to contain the costs.

[86] This would also require enshrining the prudential framework for such banks in regulations rather than directives.

[87] For a specific proposal, see Čihák and Decressin (2007).

## C. Financing and Burden Sharing

**Role of fiscal support**

The framework that is proposed in this paper should greatly reduce the likelihood and size of any need for taxpayer funds in crisis management and resolution, at least on a net basis. Compared to the existing situation, it would feature enhanced prevention, banks would have greater buffers in their own balance sheets, crisis management and resolution would be more cost effective and preserve more value in failing banks, losses would be applied in the first place to shareholders and creditors of the banks, and funds pre-paid by the industry would be available to cover a certain degree of losses or compensate depositors.

However, the cost-effective resolution of a failing bank is likely to require significant gross financing. A failing bank will almost certainly be cut off from private funding sources, and once a bank is deemed to have a solvency problem, ELA is no longer appropriate. Hence, the ERA should have access to readily available sources of large-scale financing, with which it can take over the financing of the troubled institution from central banks (in case ELA has been provided in an initial round). These sources could include credit lines from the EU budget and/or the Member States, the possibility to issue EU or Member States-guaranteed debt, and the possibility to issue guarantees on behalf of the EU or Member States. Clearly, fiscal backing is needed for these financing mechanisms, to ensure that any net resolution costs will be covered.

Net fiscal costs can occur at different stages of the crisis management and resolution process: they can be the result of a need to honor the abovementioned guarantees, from a failure to fully recover capital injected in a bank when the restructured bank is sold, or from providing support to an acquirer of a failing bank. If the bank is liquidated, they could also result from governmental action to cover shortfalls in the DGS. Such net costs would, of course, only need to be covered by taxpayer funds to the extent that the available pre-funded resources are insufficient and costs cannot be recouped from the industry.

In systemic situations, the desire to limit the broader economic impact of one or more bank failures may argue in favor of a resolution strategy that protects uninsured claimants.[88] Leaving this option open

[88] A principled stance against bail-outs of uninsured creditors would be more credible under the framework proposed in this paper than under existing arrangements (Herring, 2002), but risks leaving the authorities powerless to prevent a systemic breakdown. The Northern Rock crisis also illustrated that a principled "no bail-out" stance may become untenable under the combined pressures of market, political, and media forces.

**Incentive compatibility**

To allow efficient resolution strategies, it is essential that there is no doubt about the availability of taxpayer back-up and that any decision to commit taxpayer funds can be made efficiently. Also because the ex-ante and ex-post incentives to contribute in the sharing of a burden differ, ex ante arrangements are preferable. Such ex ante commitments have thus far been difficult to reach because they raise concerns about underwriting a blank check, exposure to decisions made by others, and fostering moral hazard. However, the framework proposed here is designed to address moral hazard, is based on ex ante agreement on the principles and procedures that govern resolution, and provides a framework to make efficient resolution decisions with the involvement of and accountability toward the member states.

While a burden sharing agreement is generally thought of as encouraging cooperation between Member States, because it makes the authorities of different countries jointly financially responsible and gives them a stake in a cost-effective resolution process, it poses new problems of its own that may make agreements harder to reach. This has mainly to do with the socialization of losses that a burden sharing agreement implies, which may significantly alter authorities' preferences with respect to the resolution strategy to pursue and could invite gaming that seeks cost-shifting to others. If combined with national supervision, a burden-sharing arrangement also risks reducing incentives for prudential authorities to put in place the best possible bank regulation and supervision framework.

For purposes of this discussion, we define the costs that a given resolution strategy imposes directly on the claimants of a bank and indirectly on the broader economy, as the (direct and indirect) external resolution costs. The net costs made by the resolution authority to finance a resolution strategy we label the internal resolution costs.

The internal and external resolution costs are both a function of the choice of resolution strategy. Traditionally, the problem with burden sharing in cross-border bank resolution is that the external resolution costs are unequally distributed and usually not aligned with the locations where internal resolution costs have to be made.

In any system for burden sharing without binding ex-ante commitments, countries' willingness to support a specific resolution strategy and bear the related burden will depend on the ratio between the avoided external resolution costs and the internal resolution costs it is being asked to contribute. Countries for which this ratio is low can be expected to oppose the strategy and may seek to opt out altogether. Countries with a high ratio may be willing to pay more for the resolution strategy to proceed but end up being unable to use this willingness to sway the decision in their favor. More general differences in preferences on the trade-off between external and internal resolution costs—for example based on differences in view about the appropriate role of the state in the economy and the importance of market discipline—may also impede an agreement. If a decision were to require

unanimity, no positive agreement is likely to be achievable, and the burden-sharing system could unravel.

For that reason, the decision to share a burden and the decision on at least the basic parameters of the resolution strategy have to be taken as a package. This applies for general ex-ante burden sharing commitments made before a crisis as well as to specific burden sharing decisions made in the midst of a crisis. Once taken, these decisions have to be binding, since allowing countries to opt out or re-negotiate ex post would be unworkable. During a crisis, decisions should probably be made on the basis of a qualified and/or weighted majority voting that also binds the dissenters, automatically on the basis of ex-ante established criteria, or by an independent body.

The solution proposed here is to address these incentive problems by depoliticizing the design of the resolution strategy, putting it in the hands of an independent body with a strong mandate that reflects the ex-ante decided preferences of politicians.[89] Essential for this to be workable and sustainable is that the mandate explicitly asks the ERA to consider the direct and indirect external resolution costs and that it considers the interests of each affected member state individually. In line with the spirit already reflected in the first of the 2007 crisis management principles, it should be mandated to make sure that costs do not fall disproportionately on one or a few member states.

**Possible fiscal back-up arrangements**

The actual fiscal backing can be set up in various ways, and could be organized differently for various kinds of fiscal liabilities. One useful distinction to make is between the general fiscal backing for the ERA as an institution and the fiscal arrangements for specific cases of failed institutions.

***General backing for the ERA***

For the ERA to be able to function effectively and be able to obtain financing as quickly as it would have to in emergencies, it would be best that it benefit from a general backing from all the member states for all its obligations—including debt issued and guarantees provided.[90] This could be organized through the EU budget, which would have to be enlarged or reinforced with specific provisions to give it the necessary capacity.[91] Or it could take the

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[89] We advocate this specific solution as a first best option for the European Union, which features deep political, institutional and legal integration. In contrast, this might not be an optimal, or even workable, approach for other intergovernmental arrangements, in particular outside economic and monetary unions.

[90] This would be an arrangement not unlike that for the European Investment Bank.

[91] Goodhart has advocated this approach, arguing for limited fiscal federalism within the euro area and, eventually, the EU (see Carletti, Čihák, and Fonteyne, 2008).

form of joint and several liability for the ERA's debts on account of each Member State, combined with a general distribution key in case this backing ever needs to be drawn upon. This could be the standard key determining countries' contributions to the EU budget,[92] or a key based on more specific economic or financial sector-related indicators.[93]

### *Fiscal responsibility for individual cases*

Such a general agreement could be complemented with additional arrangements for net resolution costs made in specific cases. For these, it would be useful to distinguish between ***standard cases*** in which a cost-minimizing resolution strategy (with respect to internal resolution costs) is applied along the lines proposed in this paper, and ***special cases*** in which a higher-cost resolution strategy is pursued due to considerations of economic and financial stability in one or more Member States. Such special cases could result from a decision of the ERA, fulfilling its mandate to safeguard the economic and financial stability of member states, or provisions could be made to allow concerned member states—as a group—to request a special resolution approach. The latter possibility would raise complications but could also constitute an important safety valve.

For standard cases, any net resolution costs are likely to be low, if positive at all, and should in the first instance be borne by the deposit guarantee scheme and/or resolution fund. Costs that exceed the available funds could, to a limited extent, be recovered from the rest of the industry. Any residual would best be distributed over all member states using the same mechanism as losses that would materialize as a result of the general backing described above. This would also enhance the cross-country insurance function of the ERA and be in line with the basic fact that financial stability and the single financial market are common goods.

Special cases that result from a decision by the ERA in the pursuit of its mandate present an important choice in the design of the framework. Applying the general financing mechanism and key to these cases would maximize the framework's insurance and solidarity functions and minimize the risk of member states falling victim to twin fiscal-financial crises. To the extent that there is insufficient appetite to build such a degree of solidarity into the system, those cases could be subject to a specific distribution mechanism that applies the costs to the member states concerned. In any rate, above-standard resolution costs generated by special cases at the request of member states should also be borne only by the member states concerned.

[92] This is the approach advocated by Čihak and Decressin (2007).

[93] See the discussion on general burden-sharing formulas in Goodhart and Schoenmaker (2006).

At least three basic approaches exist to set up such a specific burden-sharing mechanism for such special cases.

- Ex ante agreements: the ERA could negotiate ex ante agreements for each of the groups covered by the EU-level crisis management and resolution framework with the member states in which that group operates. This would be in line with current efforts.[94]
- A binding formula, based on one or more specific keys:[95] these keys would have to be clearly defined and allow the ERA to determine exactly how much each concerned member state should pay.
- A looser set of indicative criteria combined with a mechanism that ensures that a decision is reached.

A burden-sharing formula cannot possibly be perfect under all circumstances. For the sake of efficiency and overall welfare maximization, burden sharing will have to involve at least some inequities. However, inequities are inherent in most crisis situations, as well as in most feasible resolution options.

***Possible keys and criteria***

The 2007 crisis management principles state that "If public resources are involved, direct budgetary net costs are shared among affected Member States on the basis of equitable and balanced criteria, which take into account the economic impact of the crisis in the countries affected and the framework of home and host countries' supervisory powers" (see Annex 1). While a number of such criteria were discussed in the negotiations on the 2008 MoU, no specific ones were included in the MoU.

The DLG recommended the adoption of specific, but still indicative criteria, and suggested consideration of the following:

- the deposits of the institution;
- the assets of the institution (valued in accounting, market, or risk-weighted terms);

[94] The EFC High-Level Working Group chaired by Lars Nyberg recommended voluntary ex ante arrangements for burden sharing regarding cross-border financial groups, which contemplate the possibility of an equitable distribution of costs among the Member States involved. The development of these should be supported by certain EU principles and mechanisms (see Annex 2).

[95] In a more general context, Goodhart and Schoenmaker (2006) see a specific burden-sharing formula as the best solution to facilitate cross-border resolution, and the choice of an appropriate key as the main challenge. In their view, assets are a better key than deposits, because they provide a proxy for the benefits a country receives from the bank's presence.

- the revenue flows of the institution;
- the share of payment system flows of the institution;
- and the division of supervisory responsibility.

Possible specific burden sharing keys and criteria have been proposed and discussed in various other contexts, and are usually related to the financial institution that is in need of saving or resolving. A senior European policymaker has suggested distributing crisis resolution costs in function of the residency of the depositors, using the residency data that banks have to collect for anti-money laundering purposes. Goodhart and Schoenmaker (2006) consider an institution's assets a better key than deposits, because they provide a proxy for the benefits a country receives from the bank's presence.

However, a key based on assets would disproportionately hit financial centers such as the UK and Luxembourg and risks creating problems of double-counting due to intra-group exposures. Better solutions could be to focus on specific kinds of assets, to weigh assets according to their economic importance (e.g., a higher weight for retail assets) and risk of contagion, to use some measure of value added (e.g., profits, profits plus wages, or revenues), or to use an average of assets and deposits. These would allow the formula to better align internal and (avoided) external resolution costs. To avoid last-minute asset-shifting, the formula should probably refer to average observations of the key variable(s) over a certain time period, e.g., the last two years before insolvency. In line with the above-cited fourth crisis management principle, the formula could include specific penalties for the home country (whose prudential authorities were best placed to prevent the insolvency).

## VII. Interim Measures

It will take time and political will to move to a full European framework as proposed above. In the meantime, significant steps can be taken to facilitate crisis management and resolution through more integrated EU arrangements.

Even in the absence of a full-fledged EU resolution regime, the complexity and the scope for conflicts of interest in cross-border crisis management within a single market necessitate the close involvement of an EU-level body (e.g., the EBA), with a mandate to provide an independent perspective guided by the commonly agreed principles and objectives, to provide expertise, and to facilitate the quick decision-making that is needed for cost-effective crisis management and resolution. To this end, the EBA should play a lead role in the Cross-Border Stability Groups.

More specific arrangements for burden sharing, and any steps toward increased private sector funding, would be very helpful. The work of the EFC Ad-Hoc Working Group on this topic is very important.

Consideration could be given to the introduction of a legal duty on national resolution agencies (and supervisors) to consider the consequences of early remedial and resolution actions for other member states, and to seek cooperative solutions, where possible, i.e., as a "European mandate." [96] Such a mandate would not preclude nationalistic behavior, but spill-overs would not be so easily neglected, and cooperation would be facilitated, especially in advance of a crisis and after the acute phase.

Within the EU, reforms should be considered in conjunction with the other components of the EU regulatory framework (CRD, Deposit Guarantee Scheme, Insolvency regime, Company Law), which are also in the process of being revised. For instance, it should be clarified whether and to what extent the applicable Deposit Guarantee Scheme (nationals or pan-European) would be involved in the winding-up of a cross-border institution.

Regardless of the institutional arrangements and the existence or not of an EU-level framework, crisis management and resolution would be greatly facilitated by greater harmonization of national frameworks. Most of these frameworks face similar reform needs to protect their domestic financial stability and taxpayer interests.[97] In some cases, this may require significant amendments to national laws through EU directives harmonizing substantive bank resolution laws (in addition to the Winding-Up Directive for Banks, which focuses on private international law).

[96] See Hardy (2009).

[97] See Čihák and Nier (2009).

**Annex 1: The ECOFIN Crisis Management Principles**[98]

The Parties agree to follow a set of common principles in the management of any cross-border financial crisis, which involves at least one banking group which (i) has substantial cross-border activities and (ii) is facing severe problems which are expected to trigger systemic effects in at least one Member State; and (iii) is assessed to be at risk of becoming insolvent.

The common principles are the following:

1. The objective of crisis management is to protect the stability of the financial system in all countries involved and in the EU as a whole and to minimize potential harmful economic impacts at the lowest overall collective cost. The objective is not to prevent bank failures.

2. In a crisis situation, primacy will always be given to private sector solutions which as far as possible will build on the financial situation of a banking group as a whole. The management of an ailing institution will be held accountable, shareholders will not be bailed out and creditors and uninsured depositors should expect to face losses.

3. The use of public money to resolve a crisis can never be taken for granted and will only be considered to remedy a serious disturbance in the economy and when overall social benefits are assessed to exceed the cost of recapitalization at public expense. The circumstances and the timing of a possible public intervention cannot be set in advance. Strict and uniform conditions shall be applied to any use of public money.

4. Managing a cross-border financial crisis is a matter of common interest for all Member States affected. Where a bank group has significant cross-border activities in different Member States, authorities in these countries will carefully cooperate and prepare in normal times as much as possible for sharing a potential fiscal burden. If public resources are involved, direct budgetary net costs are shared among affected Member States on the basis of equitable and balanced criteria, which take into account the economic impact of the crisis in the countries affected and the framework of home and host countries' supervisory powers.

5. Arrangements and tools for cross-border crisis management will be designed flexibly to allow for adapting to the specific features of a financial crisis, individual institutions, balance sheet items and markets. Cross-border arrangements will build on effective national arrangements and cooperation between authorities of different countries. Competent authorities in the Member States affected by a crisis should be in a position to promptly assess the systemic nature of the crisis and its cross-border implications based on common terminology and a common analytical framework.

6. Arrangements for crisis management and crisis resolution will be consistent with the arrangements for supervision and crisis prevention. This consistency particularly refers to the

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[98] Source: 2008 MoU. The text is verbatim, except for the change to US English spelling. The MoU is available via the internet: http://www.ecb.eu/pub/pdf/other/mou-financialstability2008en.pdf .

division of responsibilities between authorities and the coordinating role of home country supervisory authorities.

7. Full participation in management and resolution of a crisis will be ensured at an early stage for those Member States that may be affected through individual institutions or infrastructures, taking into account that quick actions may be needed to solve the crisis.

8. Policy actions in the context of crisis management will preserve a level playing field. Especially, any public intervention must comply with EU competition and state-aid rules.

9. The global dimension will be taken into account in financial stability arrangements whenever necessary. Authorities from third countries will be involved where appropriate.

The common principles include references to banks and banking groups, reflecting their specific role in the financial system. To the extent that some of the principles may be of relevance to financial markets or other types of financial groups, they also apply to them, in case the stability of the financial system is at risk with a potential cross-border systemic impact.

## Annex 2: EFC HLWG Lessons from the Crisis[99]

***Findings of the EFC High-Level Working Group on Cross-border Financial Stability Arrangements—Lessons from the Financial Crisis for European Financial Stability Arrangements***

***Lessons on EU Policy Coordination:***

1. The policy coordination among Member States' governments deepened at a relatively late stage of the development of the crisis.

2. State aid policy emerged as the main EU coordination tool, which raised issues regarding the appropriate interplay between the ex ante coordination of policy measures among Member States in managing the crisis and the need for tight ex post control of such measures by the Commission.

3. The level-playing field among financial institutions has been distorted within the single financial market as a result of nationally-based and uncoordinated actions.

4. Technical coordination often only takes place after political decisions.

5. The EU committees' major limitation is that they do not offer the appropriate setting and conditions for exchanging information.

***Lessons on relations between home- and host-country authorities:***

6. Free establishment under the Treaty, on the basis of home-country control and mutual recognition, enabled financial institutions to expand unlimitedly their provision of services across the EU without due consideration for the eventuality of a financial crisis and related spillovers across Member States.

7. The cooperation between home- and host-country authorities is to some extent hampered in crisis situations by a number of factors:

    a) The distribution of tasks between home- and host-country authorities is not always clear in practice.
    b) The lack of burden-sharing agreements between home and host countries implied that there were limited incentives for cooperation and information-sharing between the respective financial stability authorities.

[99] Source: Economic and Financial Committee (2009). While all the lessons listed here are extracted from the before-mentioned report, the numbering has been adapted, the wording has in some instances been shortened, and US spelling has been adopted. The full text of the lessons is available in the original report.

c) The host-country authorities have limited scope and powers to safeguard national markets and question the home-country decisions, in the case of branching. This is increasingly the case also for subsidiaries as cross-border financial groups are inclined to centralize certain functions.
d) The lack of a mandate for national authorities to safeguard financial stability at the European level may also be a factor in the lack of trust between home and host-country authorities.

8. The harmonization of national laws required for the operation of the single passport for branches and for the supervision of cross-border banking groups should not be limited to ongoing prudential supervision and crisis prevention, but also include the crisis management and resolution frameworks.

***Lessons on burden sharing:***

9. The financial crisis has demonstrated that progress in the single financial market and in the enhancement of the EU's financial stability framework hinges on the arrangements for addressing the fiscal costs of a crisis.

10. Safeguarding the viability of a cross-border financial group as a whole will either require full home-country support or a burden-sharing agreement.

11. In cases where authorities' interests and assessments diverge, a non-binding burden-sharing agreement may not be sufficient to safeguard the cross-border financial group as a whole.

12. It appears likely that in the future the safety and soundness of a European cross-border financial group will be perceived to be dependent on the capability of the home-country to support the financial group as a whole, or on the existence of an ex-ante burden-sharing agreement, which ensures that there is a joint capability of home- and host-countries to support the financial group.

13. The lack of ex ante burden sharing agreements can also explain the observed reluctance during the financial crisis of authorities to share sensitive information and assessments.

14. The presence of sound bank resolution mechanisms limiting the costs associated to a bank failure in each of the countries in which a cross-border banking group is present, is likely to facilitate the negotiations of a burden-sharing agreement.

***Lessons on EU supervisory cooperation:***

15. The financial crisis confirmed that the home- and host-country supervisory framework is not aligned with the cross-border structures of financial groups.

16. This contributed to the observed supervisory retrenchment to national jurisdictions.

17. The management of the crisis between supervisors often relied on bilateral relations between the home (consolidating) and host supervisors, as well as on other informal and ad hoc structures for crisis management.

18. The exchange of information between supervisors was considered to be insufficient in some cases. In particular, some supervisory authorities, usually of host-countries, consider that they were not always sufficiently informed by home authorities about the difficulties faced by important cross-border institutions.

19. The supervisory arrangements for cross-border financial groups did not take sufficiently into account the impact of business models on financial stability.

20. The supervisory arrangements for cross-border financial groups did not take sufficiently into account the macro-systemic risks arising from correlated horizontal shocks across the single financial market.

***Lessons on EU central banking cooperation:***

21. The actions of the ECB/Eurosystem and national central banks were decisive for the management of the financial crisis.

22. In addition to the market-wide liquidity operations conducted by the ESCB national central banks, the provision of emergency liquidity assistance (ELA) – a term which should be used only for assistance to specific institutions – was also a key instrument used by some national central banks to address the liquidity pressures faced by domestic institutions and cross-border banking groups. Nonetheless, the crisis experience raised the following issues:

a) The responsibilities of home- and host-country central banks could have been clarified before the crisis, in particular for host-country central banks in regard to foreign subsidiaries with stronger links to another market than the domestic one.

b) Less differentiated collateral frameworks could make it easier for banks, especially multinational banks, to mobilize collateral at different central banks. One possibility that major central banks may wish to consider in the longer term is conducting open market operations against, or accepting at standing facilities, a common list of high-quality collateral denominated in a range of global currencies. (FSB Recommendation)

c) Under specific circumstances, liquidity management within banking groups benefiting from ELA operations can be hindered by supervisory

constraints on intra-group funding flows. This ring fencing may unduly increase the volume of ELA and consequently also the risk-taking by central banks, in order to offset ring-fencing measures.

d) There is some scope for conflict between the market disclosure of public support in the form of ELA and the authorities need for discretion, at least initially, when seeking a solution.

***Lessons on Deposit Guarantee Schemes (DGS):***

23. The present arrangements for safeguarding the interests of depositors have not proved sufficiently robust during the current crisis.

a) At the domestic level the DGS did not always assure depositors that their savings were protected to an adequate level and that they could be compensated in a timely manner in the case of a bank failure. This may have contributed to bank-runs or threats of bank-runs.

b) At the EU level, the current framework based on the reliance on national DGS for safeguarding depositors of foreign branches proved to be inadequate in some cases due to the mismatch between the significant deposit guarantee liabilities and the funding ability of the home-country's DGS to meet such liabilities. In addition, there was the perception that governments were not necessarily financially responsible for the fulfillment of DGS obligations. If this perception continues, it may in the future impinge on the expansion of cross-border banking services on the basis of the single passport, either through the direct provision of services or through branching.

24. The provision of state guarantees over retail deposits, in some cases unlimited, had spillovers across Member States.

25. Inadequacies and differences in the functioning of DGS across Member States have the potential to be a serious source of financial instability.

26. The shortcomings in the functioning of DGS emerging from the crisis need to be addressed, given their key stabilizing role in a systemic crisis.

***Lessons on the EU regulatory framework for crisis management:***

27. The financial crisis has shown the fragmented landscape of crisis management regulatory frameworks in the single financial market. This fragmentation relates mainly to the inconsistencies across Member States in:

a) the triggers and tools for the early intervention of public authorities;

b) the powers and instruments that authorities have available to contain a crisis, and

c) the options for exiting from the market, including restructuring and resolution of financial institutions.

28. Such inconsistencies result in obstacles for effective cross-border crisis management since they may be a potential source for ring-fencing and other unilateral actions which may be destabilizing or costly in a crisis.

29. The development of a special resolution regime for cross-border financial groups would significantly enhance the EU's financial stability arrangements.

30. National reforms will only be fully effective in fulfilling their objectives if they are part of a wider harmonization and convergence process, in order to make possible or improve the interaction between national systems and tools, and addressing in particular cross-border financial institutions. Accordingly, a better designed EU regulatory framework which addresses the broader legal aspects and sets the right cooperation incentives is required to fit the needs of the single financial market and facilitate the handling of a crisis, domestically and cross-border.

***Lessons on the 2008 MoU on cross-border financial stability:***

31. The MoU framework has not played a key operational role in the management of the crisis.

32. The main added value of the MoU in the crisis regarded a better exchange of information and the development of common tools and principles.

33. The common principles for cross-border financial crisis management set out in the MoU have been broadly reflected in the actions of EU and national authorities, regarding in particular the management of the crisis as a matter of common interest for all Member States.

34. Looking forward, the MoU could be enhanced for providing a more complete framework for EU cross-border financial stability.

35. In the meantime, the implementation of the MoU should continue and be completed as soon as possible.

***Lessons on relations with third-country authorities:***

36. Interactions with third-country authorities were an important component when EU and national authorities managed the crisis. Such interactions materialized as: (i) *global policy action*, regarding in particular the initiatives agreed at the G-20, central banking measures (including also foreign currency swap lines), and also the adoption of certain supervisory measures, such as the ban on short-selling in financial shares; (ii) *bilateral relations between home- and host countries of major cross-border institutions*, originating from or providing services in EU Member States, and (iii) *regional relations among EU Member States and third-countries*, such as Iceland.

37. This experience implies that the relations and coordination between the EU and third-country authorities should feature as a key component of the EU's financial stability arrangements.

38. A coordinating role in developing such arrangements with third-country authorities could be envisaged for the new EU structures.

***Lessons on the EU logistical infrastructure for a financial crisis:***

39. The financial crisis involved considerable logistical means for communication between the authorities responsible for safeguarding financial stability.

40. Authorities have used contact lists, teleconferencing and secured email as the main communication channels during the crisis.

41. The recent development of state-of-the-art websites for supervisors in some countries has facilitated the exchange of information between supervisors in the context of colleges.

## Annex 3: EFC HLWG Recommendations[100]

***Summary of Recommendations of the EFC High-Level Working Group on Cross-border Financial Stability Arrangements***

1. POLICY COORDINATION:

Safeguarding the single financial market on the basis of the current decentralised fiscal policy arrangements requires the development of a framework for close EU policy coordination in a financial crisis, with a number of concrete elements.

2. RELATIONS HOME-/HOST-COUNTRY AUTHORITIES:

The application of the home-country principle must be safeguarded with a strengthened coordination framework in order to ensure financial stability in all Member States, and continue a sustainable expansion of cross-border provision of financial services. A number of principles and mechanisms – in compliance with the Treaty – could be contemplated in EU legislation.

3. BURDEN-SHARING ARRANGEMENTS:

The EU framework for financial stability should include voluntary ex ante arrangements for burden sharing regarding cross-border financial groups, which contemplate the possibility of an equitable distribution of costs among the Member States involved, if ever required. In this context, the development of ex ante burden-sharing arrangements should be supported in the EU by certain principles and mechanisms.

4. EU SUPERVISORY COOPERATION:

The arrangements for the supervision of cross-border financial groups on the basis of colleges should be significantly enhanced in order to address the risks for financial stability and to effectively manage a financial crisis. Accordingly, a number of enhancements should be implemented.

5. EU CENTRAL BANKING COOPERATION:

The provision of ELA is a central banking competence, which is exercised with complete independence. This independence should remain fully safeguarded in any future development of the EU framework. Without compromising on independence, central banks may consider the experience in the financial crisis for further developing the current framework for the provision of ELA in certain areas and decide as appropriate.

[100] Source: Economic and Financial Committee (2009).

6. DEPOSIT-GUARANTEE SCHEMES (DGS):

The fragmented landscape for DGS across Member States proved to be a weakness in the EU financial stability arrangements. The safety net provided by DGS for the single financial market should be improved, in the short term, through the review of the EU Directive on DGS, and in the medium to long term with solutions more consistent with the single financial market.

7. EU REGULATORY FRAMEWORK:

The EU regulatory framework for crisis management should be significantly enhanced. In the short term, Member States with shared financial stability concerns stemming from the presence of at least one financial group should plan for the use of their crisis management and resolution tools on a cross-border basis. In the medium term, a special resolution regime for cross-border financial groups could be considered at the EU level and aspects of the current EU legislation could also be improved.

8. 2008 MEMORANDUM OF UNDERSTANDING:

The implementation of the MoU should continue and be completed as soon as possible, particularly with regard to the establishment of Cross-Border Stability Groups for all major EU cross-border financial institutions, when they will be deemed useful. In the medium-term the MoU could be enhanced for providing a more complete framework for EU cross-border financial stability.

9. RELATIONS WITH THIRD-COUNTRY AUTHORITIES:

The functioning of the relations and coordination between the EU Member States and third-country authorities should feature as a key component of the EU financial stability arrangements and be improved for the future with a number of concrete elements.

10. EU LOGISTICAL INFRASTRUCTURE:

Arrangements for safeguarding financial stability at the EU level and among Member States with common financial stability concerns should be supported by an EU-wide operational infrastructure.

## Annex 4: DLG Recommendations on Crisis Management and Resolution[101]

### Recommendation 13:

The Group calls for a coherent and workable regulatory framework for crisis management in the EU:

- without pre-judging the intervention in future individual cases of distressed financial institutions, a transparent and clear framework for managing crises should be developed;
- all relevant authorities in the EU should be equipped with appropriate and equivalent crisis prevention and crisis intervention tools;
- legal obstacles which stand in the way of using these tools in a cross-border context should be removed, with adequate measures to be adopted at EU level.

### Recommendation 14:

Deposit Guarantee Schemes (DGS) in the EU should be harmonized and preferably be pre-funded by the private sector (in exceptional cases topped up by the State) and provide high, equal protection to all bank customers throughout the EU.

The principle of high, equal protection of all customers should also be implemented in the insurance and investment sectors.

The Group recognizes that the present arrangements for safeguarding the interests of depositors in host countries have not proved robust in all cases, and recommends that the existing powers of host countries in respect of branches be reviewed to deal with the problems which have occurred in this context.

### Recommendation 15:

In view of the absence of an EU-level mechanisms for financing cross-border crisis resolution efforts, Member States should agree on more detailed criteria for burden sharing than those contained in the existing Memorandum of Understanding (MoU) and amend the MoU accordingly.

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[101] Source: De Larosière Group (2009). The text has been copied verbatim, except for a change to US English spelling.

## Annex 5: CBRG Recommendations[102]

### *Recommendations of the Basel Committee's Cross-Border Bank Resolution Group*

### Recommendation 1: Effective national resolution powers

National authorities should have appropriate tools to deal with all types of financial institutions in difficulties so that an orderly resolution can be achieved that helps maintain financial stability, minimize systemic risk, protect consumers, limit moral hazard and promote market efficiency. Such frameworks should minimize the impact of a crisis or resolution on the financial system and promote the continuity of systemically important functions. Examples of tools that will improve national resolution frameworks are powers, applied where appropriate, to create bridge financial institutions, transfer assets, liabilities, and business operations to other institutions, and resolve claims.

### Recommendation 2: Frameworks for a coordinated resolution of financial groups

Each jurisdiction should establish a national framework to coordinate the resolution of the legal entities of financial groups and financial conglomerates within its jurisdiction.

### Recommendation 3: Convergence of national resolution measures

National authorities should seek convergence of national resolution tools and measures toward those identified in Recommendations 1 and 2 in order to facilitate the coordinated resolution of financial institutions active in multiple jurisdictions.

### Recommendation 4: Cross-border effects of national resolution measures

To promote better coordination among national authorities in cross-border resolutions, national authorities should consider the development of procedures to facilitate the mutual recognition of crisis management and resolution proceedings and/or measures.

### Recommendation 5: Reduction of complexity and interconnectedness of group structures and operations

Supervisors should work closely with relevant home and host resolution authorities in order to understand how group structures and their individual components would be resolved in a crisis. If national authorities believe that financial institutions' group structures are too complex to permit orderly and cost-effective resolution, they should consider imposing regulatory incentives on those institutions, through capital or other prudential requirements, designed to encourage simplification of the structures in a manner that facilitates effective resolution.

[102] Source: Basel Committee of Banking Supervisors (2009b). The text has been copied verbatim, except for a change to US English spelling.

**Recommendation 6: Planning in advance for orderly resolution**

The contingency plans of all systemically important cross-border financial institutions should address as a contingency a period of severe financial distress or financial instability and provide a plan, proportionate to the size and complexity of the institution, to preserve the firm as a going concern, promote the resiliency of key functions and facilitate the rapid resolution or wind-down should that prove necessary. Such resiliency and wind-down contingency planning should be a regular component of supervisory oversight and take into account cross-border dependencies, implications of legal separateness of entities for resolution and the possible exercise of intervention and resolution powers.

**Recommendation 7: Cross-border cooperation and information sharing**

Effective crisis management and resolution of cross-border financial institutions require a clear understanding by different national authorities of their respective responsibilities for regulation, supervision, liquidity provision, crisis management and resolution. Key home and host authorities should agree, consistent with national law and policy, on arrangements that ensure the timely production and sharing of the needed information, both for purposes of contingency planning during normal times and for crisis management and resolution during times of stress.

**Recommendation 8: Strengthening risk mitigation mechanisms**

Jurisdictions should promote the use of risk mitigation techniques that reduce systemic risk and enhance the resiliency of critical financial or market functions during a crisis or resolution of financial institutions. These risk mitigation techniques include enforceable netting agreements, collateralization, and segregation of client positions. Additional risk reduction benefits can be achieved by encouraging greater standardization of derivatives contracts, migration of standardized contracts onto regulated exchanges and the clearing and settlement of such contracts through regulated central counterparties, and greater transparency in reporting for OTC contracts through trade repositories. Such risk mitigation techniques should not hamper the effective implementation of resolution measures (cf. Recommendation 9).

**Recommendation 9: Transfer of contractual relationships**

National resolution authorities should have the legal authority to temporarily delay immediate operation of contractual termination clauses in order to complete a transfer of certain financial market contracts to another sound financial institution, a bridge financial institution or other public entity. Where a transfer is not available, authorities should ensure that contractual rights to terminate, net, and apply pledged collateral are preserved. Relevant laws should be amended, where necessary, to allow a short delay in the operation of such termination clauses in order to promote the continuity of market functions. Authorities should also encourage industry groups, such as ISDA, to explore development of standardized contract provisions that support such transfers as a way to reduce the risk of contagion in a crisis.

**Recommendation 10: Exit strategies and market discipline**

In order to restore market discipline and promote the efficient operation of financial markets, the national authorities should consider, and incorporate into their planning, clear options or principles for the exit from public intervention.

**Annex 6: The EU's New Supervisory Framework**[103]

This annex describes the EU's planned new cross-border supervisory framework, as agreed by the Council in December 2009. The European Parliament, whose agreement on the reforms is needed under co-decision, is still considering the proposals and has proposed a set of amendments that is not reflected here.

**Macro-prudential oversight**

A European Systemic Risk Board (ESRB) will be established to monitor and assess macro-financial risks and issue warnings and recommendations to address them.

***Set-up and composition.*** The ESRB will be organizationally closely tied to the ECB and the European System of Central Banks (ESCB),[104] including for logistical and analytical support, and will not have separate legal personality or binding powers. It will be composed of the President of the ECB, the Governors of the EU's central banks, the heads of the European Supervisory Authorities (ESAs, see below), and a representative of the European Commission. The president of the Economic and Financial Committee (EFC) and one representative per country of the national supervisory agencies will participate as observers, the latter alongside their central bank Governors in a 1+1 formula. The Chairman will be a central bank Governor or the ECB President (in the latter case, the ECB will be represented by its Vice-President) and will be elected by the members of the General Council of the ECB,[105] essentially the central bank Governors. The Vice Chairman will be elected by the ESRB members.

***Mandate.*** The ESRB will focus on analyzing risks that arise from macroeconomic developments and developments within the financial system as a whole. It will issue risk warnings and, where necessary, recommendations and advice on measures to address these risks, including possible legislative ones. The risk warnings and recommendations can be either of a general nature or concern individual member states or groups of member states. Accountability will be vis-à-vis the European Parliament and the European Council.

***Functioning.*** A small Steering Committee will set the work agenda and prepare decisions.[106] The ESRB will meet at least quarterly and decide based on simple unweighted majority

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[103] This Annex draws on Fonteyne (2009).

[104] The European System of Central Banks (ESCB) reunites all EU central banks, regardless of whether their country has adopted the euro. Central banks of euro area member states also form the Eurosystem, whose membership therefore constitutes a subgroup of the ESCB.

[105] The ECB's General Council is composed of the President and Vice-President of the ECB, as well as the Governors of the central banks of all EU member states.

[106] Comprising the Chairman, Vice-Chairman, and two additional central bank members of the ESRB, the Chairs of the ESAs, the representative of the European Commission, and the EFC president.

voting. It is expected that most of the analytical and preparatory work will be conducted by the ECB, in coordination with the other central banks within the ESCB. The existing Banking Supervision Committee is expected to be transformed into a broader technical advisory body to the ESRB that will bring together all national supervisory agencies. The ESRB will also be able to draw on the advice of other parties and is expected to liaise closely with the Financial Stability Board, the IMF, and other international bodies.

Risk warnings and recommendations will generally be addressed to the ECOFIN and, as appropriate, to the ESAs. They will normally be kept confidential, but could be made public on a case-by-case basis. The ESRB will be required to follow up on its risk warnings and monitor the implementation of its recommendations. While these recommendations will be non-binding, non-implementation will have to be explained ("act or explain").[107] The option of publication should also help to encourage action.

**Micro-prudential supervision**

***Set-up.*** A European System of Financial Supervisors (ESFS) will be established, bringing together the EU's national supervisory agencies with three new independent, sectoral, supranational European Supervisory Authorities (ESAs): the European Banking Authority (EBA), the European Securities and Markets Authority (ESMA), and the European Insurance and Occupational Pensions Authority (EIOPA). The ESAs will be formed out of the existing Level-3 committees in the Lamfalussy structure, and have the same sectoral coverage.[108] They will have legal personality. A Joint Committee will be established to coordinate and ensure consistent approaches among the three ESAs, seeking in particular effective supervision of conglomerates and a level playing field between sectors.

The ESAs will have significantly strengthened governance systems, powers, and operational autonomy compared to the Level-3 Committees. They will have full-time, independent chairpersons and secretary-generals, a Supervisory Board composed of the highest-level representatives of the corresponding national supervisory autorities, and a Management Board composed of representatives of the same national authorities. It is envisaged that decisions will be made on the basis of qualified majority voting, using the Treaty weights of the member states. The ESAs will have increased resources and staff levels compared to the secretariats of the current Level-3 committees.

***Mandate.*** The ESAs will be tasked with building a common supervisory culture, ensuring consistent supervisory practices, and establishing uniform procedures and consistent approaches across supervisory colleges. Specifically, they will seek to establish a single rule

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[107] A similar "comply or explain" mechanism was recently introduced by the Level-3 Committees, and has reportedly proven to be effective.

[108] The Committee of European Banking Supervisors (CEBS) will become the European Banking Authority (EBA), the Committee of European Securities Regulators (CESR) will become the European Securities and Markets Authority (ESMA), and the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) will be turned into the European Insurance and Occupational Pensions Authority (EIOPA).

book (see below), ensure consistency in the interpretation of these rules, collect feedback on practical issues that arise in the implementation of these rules, issue guidelines on practical supervisory issues, coordinate supervisory analyses, conduct peer analysis with a view to achieving consistency in supervisory outcomes, develop common training programs, and provide input into international issues. The ESAs will be directly accountable to the European Council, the European Parliament, and the European Commission.

***Functioning.*** While the ESAs will have direct supervisory powers over rating agencies (and possibly central counterparty clearing houses), other institutions will continue to be supervised by the national supervisory authorities, i.e., the national level of the ESFS. For cross-border groups, supervisors will set up colleges, in which the ESAs will be able to participate as observers.

***Enforcement and conflict resolution.*** The ESAs will fulfill an important role in enforcement and conflict resolution within the ESFS. Two important tools are envisaged. First, in case of a manifest breach of EU Law or the ESAs' binding technical standards, the ESAs will be able to address recommendations to the relevant national supervisor. If non-compliance nonetheless persists, the ESAs can refer the case to the European Commission so that the latter can use its enforcement powers to resolve the matter.[109] Second, in case of disagreement between national supervisors or within a college of supervisors, the ESAs will be able to initiate a binding process of mediation, in which they facilitate a dialogue and assist the supervisors in coming to a joint agreement. If no agreement can be reached after a phase of reconciliation, the ESAs will have the power to settle the matter with a binding decision. However, the areas in which such binding decisions can be taken remain to be clarified at the time of writing, as the June 19 European Council agreed that such binding decisions can not impinge on the fiscal responsibilities of the member states. Binding decisions will be subject to judicial review in the EU's Community Courts.

**Regulation**

The ESFS is expected to establish a "single rule book applicable to all financial institutions in the Single Market." A three-pronged approach is envisaged to achieve this goal:

- a review of existing Directives to remove national exceptions and achieve greater harmonization;

[109] Under the Lamfalussy process, enforcement (Level 4) was the task of the Commission. This new arrangement shifts the task essentially to the ESAs, using the (threat of the) Commission's existing enforcement powers to give the ESA recommendations teeth.

- a new mechanism that would turn the ESAs into rule-setting bodies: within areas specified in EU legislation, the ESAs will be able to set binding harmonized technical standards subject to Commission endorsement;[110]

- the ESAs will also draw up non-binding standards, recommendations and interpretative guidelines, which would be applied by the national authorities in taking individual decisions. While non-binding, application will be on a "comply or explain" basis, which has proven to be effective in achieving compliance.

**Information gathering and sharing**

An integrated system for collecting, managing, and sharing prudential information is envisaged. It will comprise the following elements:

- the ESAs will be responsible for the definition, collection and aggregation of all relevant micro-prudential information emanating from national supervisors (who will remain the point of contact the prudential reporting of financial institutions);

- a central European database will be established and managed by the ESAs;

- the information in the central European database will be made available to the relevant authorities in the colleges of supervisors;

- the ESFS Steering Committee will organize the sharing of this information with the ESRB, subject to specific confidentiality arrangements; and

- the European Commission has been asked to review existing legislation in order to facilitate the functioning of this system.

[110] Compared to the existing Lamfalussy process, this implies that the rulemaking functions of Levels 2 (detailed technical rules) and 3 (technical advice and industry consultations on such rules) are largely merged in the ESAs.

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