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IMPACT ASSESSMENT

Accompanying the document

PROPOSAL FOR A DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

establishing a framework for the recovery and resolution of credit institutions and investment firms and amending Council Directives 77/91/EEC and 82/891/EC, Directives 2001/24/EC, 2002/47/EC, 2004/25/EC, 2005/56/EC, 2007/36/EC and 2011/35/EC and Regulation (EU) No 1093/2010

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This report commits only the Commission's services involved in its preparation and does not prejudge the final form of any decision to be taken by the Commission.

TABLE OF CONTENTS

1. INTRODUCTION

Over the course of the financial crisis, the ability of authorities to manage crises both domestically and in cross-border situations has been severely tested. Financial markets within the EU have become integrated to such an extent that the effects of problems occurring in one Member State cannot always be contained and isolated. Domestic shocks may be rapidly transmitted to credit institutions, businesses and markets in other Member States.

The lessons learned during this crisis have prompted the Commission services to examine the issue of bank recovery and resolution and to consider how existing arrangements and cross-border cooperation can be strengthened to better reflect the degree of integration in the EU financial services market. The Commission Services believe that resolving these issues will also be key to deepening the Internal Market by providing further confidence in the home-host arrangements underpinning banking supervision, and ensuring its smooth functioning in stressed situations.

A regime to facilitate an orderly resolution of failing banks and thus ensure smooth market exit is one of the most important pillars to maintain overall financial stability in crises. This relies on the ability of authorities to detect, prevent and manage problems which threaten the solvency of banks. The involvement of authorities may be crucial to maintaining the stability of the whole financial system, to protecting the deposits of people and companies and to maintaining the continuity of the payment systems and other basic financial services.

At international level, G20-Leaders have called as a medium-term action for a "review of resolution regimes and bankruptcy laws in light of recent experience to ensure that they permit an orderly wind-down of large complex cross-border institutions."[1] At the Pittsburgh summit on 25 September 2009, they committed to act together to "*...create more powerful tools to hold large global firms to account for the risks they take*" and, more specifically, to "*develop resolution tools and frameworks for the effective resolution of financial groups to help mitigate the disruption of financial institution failures and reduce moral hazard in the future.*"

In October 2011, the Financial Stability Board adopted "Key Attributes of Effective Resolution Regimes for Financial Institutions" (Key Attributes)[2] that set out the core elements that the FSB considers to be necessary for an effective resolution regime. Their implementation should allow authorities to resolve financial institutions in an orderly manner without taxpayer exposure to loss from solvency support, while maintaining continuity of their vital economic functions.

The Basel Committee also dealt with this issue and issued recommendation on cross border bank resolution.[3] In the US, the existing resolution arrangements have been further improved with the introduction of the Dodd-Frank Act.[4] In the EU, several Member States (UK, Spain, Germany, Sweden etc.) have reinforced their systems to enable the prompt and effective resolution of failing banks.

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1 G20 Leaders' declaration of the Summit on financial markets and the world economy, April 2009.

2 http://www.financialstabilityboard.org/publications/r_111104cc.pdf

3 A Basel Working Group called Cross-border Bank resolution Group (CBRG) was set up in December 2007 to study the resolution of cross-border banks. It issued its report and recommendations in December 2009. http://www.bis.org/publ/bcbs162.pdf

4 Dodd–Frank Wall Street Reform and Consumer Protection Act

The report of the High-Level Group on Financial Supervision in the EU chaired by Jacques de Larosière[5] observed: "*The lack of consistent crisis management and resolution tools across the Single Market places Europe at a disadvantage vis-à-vis the US and these issues should be addressed by the adoption at EU level of adequate measures.*"

2. PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES

2.1. Procedural issues

An Inter-service Steering Committee on early intervention and bank resolution was established in October 2008 comprising of the Directorate Generals MARKT, ECFIN, SG, SJ, ENTR, EMPL, COMP, JLS, TAXUD and the European Central Bank (ECB). The steering committee met in November 2008, June and September 2009 and supported works on communications, a staff working document and a related impact assessment[6]. In 2010 and 2011, the Committee continued to work on these issues with a view to a legislative proposal. The Steering Committee had meetings in November, December 2010, and in January, February 2011.

The draft impact assessment was discussed with the Impact Assessment Board (IAB) of the Commission on 18 May 2011. The IAB requested the following modifications to the text:

(1) Strengthen the analysis of the problem drivers and the baseline scenario.

(2) Clarify the legal and institutional context.

(3) Clarify the content, and better assess the proportionality, of the various options.

(4) Strengthen the analysis of impacts.

The IAB examined the above revisions of the resubmitted text on 9 June 2011 and issued additional recommendations. Adjustments reflecting these recommendations including updates following latest developments in international fora a as well as incorporation of results of the discussions on the bail-in tool that took part in April 2012 can be found in the following sections of the document:

1. Introduction: Reference is made to the Key Attributes of Effective Resolution Regimes for Financial Institutions" adopted by the Financial Stability Board in October 2011.

2. Consultation of interested parties: On one of the resolution tools, the so called bail-in or debt write down tool, targeted discussions were organised with experts from Member States, banking industry, academic world and legal firms in April 2012, the results of which are summarised in Annex XVIII. The presentation of all consultations can be found in detail in Annex III.

5 The high level group on financial supervision in the EU – Report, 25 February 2009 http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf

6 Documents related to the work on crisis management of banks can be found on the following website: http://ec.europa.eu/internal_market/bank/crisis_management/index_en.htm

3. Improved presentation of the legal and institutional context:

   Chapter 5.6 presents in a more details the responsibilities of national supervisors and resolution authorities and chapter 4.3.2 lays out in a more detail the relationships between the proposal for bail-in and the planned CRD requirements.

4. Better explained the content of some options:

   Chapter 5.4 presents safeguards envisaged to avoid unnecessarily intrusive actions by regulators.

   Chapter 4.3.2, *option 4: the debt write-down tool* presents extended description of this tool including its main aspects: the scope, interaction between ex-ante funds and bail-in and the amount of bail-in-able liabilities. This chapter also presents the impact on the cost of funding, the impact of the tool depending on its phasing- in as well as the bail-in tool in light of current international considerations. The preferred option of the bail-in tool incorporates view of the key stakeholders following the discussions organised by the Commission in the course of April 2012. Finally, Annex XIII provides for a more detailed overview of all the features of the debt write-down tool.

   Chapter 5.15 sets out the aspects of coherence with other proposals, namely related to the latest amendments to the Directive 94/19/EC on Deposit Guarantee Scheme, the proposal for a Financial Transaction Tax as well as with the Capital Requirements Directive.

5. Further strengthening impacts analysis: Chapter 5.6 presents the interaction between supervisors and resolution authorities. Furthermore, the impact of the proposed measures on existing national resolution regimes and other significant impacts are presented in chapter 4.3.2, in chapter 5.8 and 5.9 related to costs and benefit and the impact of the preferred option on stakeholders. Full analysis is available in Annex XIII dedicated to the debt write-down tool and in chapter 5.1. In addition, chapter 5.17 outlines current experience of Member States with bank resolution.

6. Other changes:

- Chapter 4.5 Financing Resolution: the related Annex XV has been merged with Annex XIII

- Chapter 5.11 Impact on EU budget: since EBA will have to develop an expertise in a completely new area, it is now estimated that compared to the previous conclusions that did not estimate any impact on EU budget, EBA will as a result need 5 permanent and 11 temporary staff for 2013 and 2014.

- Chapter 6 Monitoring and Evaluation: indicators for monitoring were added

2.2. Consultation of interested parties

In the period between 2008 and 2011, the Commission services organised a number of consultations with experts and key stakeholders concerning bank recovery and resolution. As the last public consultation before the adoption of the proposal, a Commission Staff Working Paper describing in detail the potential policy options under consideration by the Commission services was published for consultation in January 2011. The consultation ended on the 3rd of

March 2011. The summary of this consultation can be found in Annex XVII.[7] On one of the resolution tools, the so called bail-in or debt write down tool, targeted discussions were organised with experts from Member States, banking industry, academic world and legal firms in April 2012, the results of which are summarised in Annex XVIII. The presentation of all consultations can be found in detail in Annex III.

3. POLICY CONTEXT, PROBLEM DEFINITION AND SUBSIDIARITY

3.1. Background and context

3.1.1. Nature and size of the market concerned

The proposal addresses bank recovery and resolution in relation to all credit institutions and certain investment firms. The scope of the proposal is identical to that of the Capital Requirements Directive (CRD)[8], which harmonised banking legislation and introduced the Basel II framework in the EU[9]. Investment firms need to be part of the framework, as the recent crisis showed that their failure (i.e. Lehman Brothers) could have serious systemic consequences. The above mentioned public consultations supported this policy as respondents agreed that the framework should apply to all credit institutions and investment firms as defined in the CRD with the application of the proportionality principle (obligations proportionate to the systemic relevance of the institution concerned) and adequate adjustment to deal with the specificities of investment firms. They also supported that financial holding companies should be part of the framework.

According to the ECB[10], in 2009, 8,358 credit institutions[11] operated in the EU with total assets of €42,143 billion.[12] There are 39 large cross border banking groups in the EU and around 100 further banks that have subsidiaries or systemic branches in another Member State. According to the Committee of European Banking Supervisors, 3800 investment firms operated in the EU in 2009.

In the European Union banks traditionally play a more prominent role in financial intermediation than in the United States. The Institute of International Finance (IIF) calculated that as of end-2009, US banks accounted for only 24 per cent of credit intermediation in the country, versus 53 per cent in Japan and as much as 74 per cent in the Euro area[13]. EU financial markets are strongly integrated, in particular at the wholesale level. The banking and insurance markets are dominated by pan-European groups, whose risk management functions are usually centralised. The 39 large cross-border groups' total assets represent around 68 % of the total EU banking market. Especially in the EU-12, banking markets are dominated by foreign (mostly Western European) financial groups. In these countries, on average 65% of

7 Results of the public consultation can also be found on the website of DG Internal Market and Services of the European Commission:

http://ec.europa.eu/internal_market/consultations/2011/crisis_management_en.htm

8 Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions and Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions.

9 Work is underway to introduce the Basel III agreement in the EU.

10 ECB, EU Banking Structures, September 2010

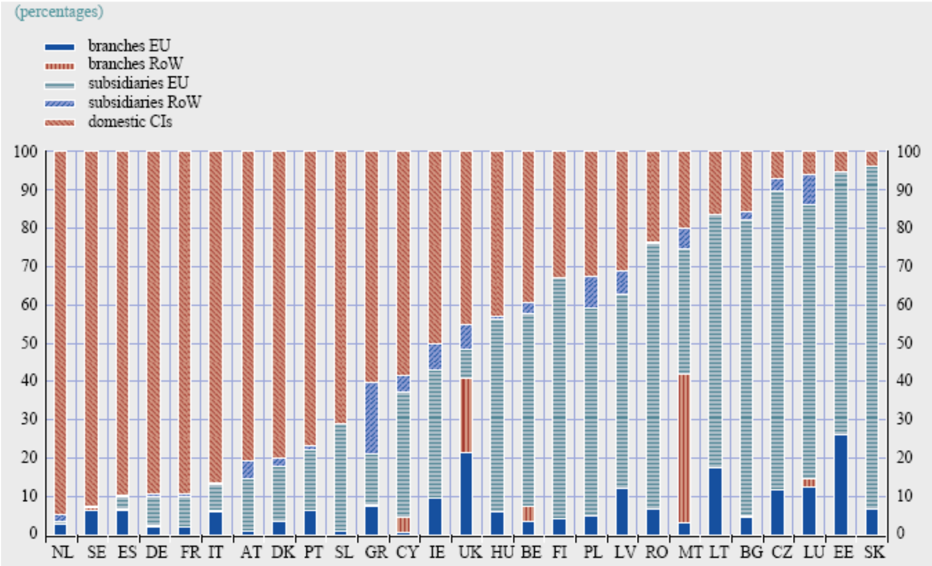
11 At a Member State level, this figure includes branches and subsidiaries of banks from other EU and third countries. Where a foreign bank has several branches in a given MS, they are counted as a single branch.

12 Consolidated data.

13 Source: Too Big to Fail: The Transatlantic Debate, Morris Goldstein and Nicolas Véron, January 2011.

banking assets are in foreign-owned banks. In countries like Estonia, the Czech Republic and Slovakia over 92% of banking assets are in foreign-owned banks.

Chart 1. Market share of foreign-owned EU subsidiaries and branches in Member States (% of total assets, 2009)



Source: ECB.

3.1.2. Overview of legislative framework and on-going developments

To guard against the risk of financial instability, banks are regulated and subject to supervision by authorities. The summary of the relevant EU and national legislation can be found in Annex IV. The description of on-going developments including the creation of the new European Supervisory Authorities and developments at the international level can be found in Annex V.

3.2. Problem definition

Key concepts used in this impact assessment:

Preparation and Prevention: improved supervision by banking ***supervisors*** which aim at collecting better information on the risks in the financial sector; contingency planning for de-risking and resolutions measures; and powers to prevent too complex and interlinked operation hence ensure resolvability.

Early intervention: early remedial actions of banking ***supervisors*** aimed at correcting problems at an early stage and hence helping banks to return to normal business, avoiding the need for resolution actions.

Bank resolution: administrative, non-judicial procedures and tools for the restructuring or managed dissolution of failing banks while preserving insured deposits and other services essential for maintaining financial stability such as payment services. Bank resolution may use specific tools (e.g. bridge banks, assisted acquisition, partial sale of assets, asset separation, debt write down, debt conversion to equity) to reach the above objectives. The resolution process is managed by an administrative ***resolution authority*** (national bank, financial supervisor, deposit guarantee scheme, ministry of finance, special authority), defined by Member States.

3.2.1. General description[14]

During the recent financial crisis, it became clear that there was no simple way for a bank to continue to provide essential banking functions whilst in insolvency, and in the case of a failure of a large bank, those functions could not be simply shut down or substituted without significant systemic damage.

The banking sector plays a special role in the economy and have critical functions which are essential for economic activity to take place. Banks collect funds (deposits and other forms of debt) from private persons and businesses (financial and non-financial). They carry out maturity transformation and provide loans for households and businesses allowing savings to be allocated most importantly to investments. They also manage payment transactions that are crucial for all sectors of the economy and society. The banking business is based on trust of stakeholders. Banks' most important capital is the reputation i.e. the confidence of others in it. If confidence is lost depositors and other debtors immediately try to withdraw their funds. This would make the bank unavoidably bankrupt since no bank holds sufficient liquid assets to cover all short term liabilities[15]. Bank failures are capable of undermining financial stability, especially if they lead to a loss of depositor confidence in other banks. During this crisis, these issues led Governments to, for the most part, recapitalise and save failing banks. The most important factors behind these decisions were the following:

- Fear of contagion and domino effects. The financial crisis has illustrated that the failure of some financial institutions would cause other financial institutions to fail and ultimately, cause wider damage to the financial system. The turmoil created after the failure of the Lehman Brothers, which the US Government decided not to save, demonstrated the materialisation of this risk. If a financial institution fails other banks that provide funds to it would not get access to those funds. This would cause liquidity problems for them that would make these banks vulnerable too. If their debtors and depositors consider that it is better to withdraw funds from these vulnerable banks then a domino effect could take place. This could cause liquidity and ultimately solvency problems to a significant part of the financial sector. Capital markets may also experience shocks and the payment systems be disrupted.

- Larger or more interconnected banks also are at increased risk of needing public support. Their failure would most likely result in the systemic instability described above. Size is not the only reason for an institution to be systemically important. The financial connections with other financial institutions are equally important. The more inter-connected a bank is, the more likely it is that problems affect other institutions (contagion). Moreover, if a bank is the dominant service provider in one market, then the consequences of its failure would be more significant (as there will be fewer institutions that can step into its place: substitutability). In addition, some institutions may be more complex than others due to their organisational set-up, risk management or funding structures. Finally, a bank active across the world in jurisdictions that have completely different rules, system of supervision, currencies etc may be more complex to resolve and hence more likely to fail were it to experience trouble, which would increase its potential systemic impact ex ante.

- **Lack of special powers and tools** to manage the failure of banks in an orderly way. Authorities could choose between placing banks into formal insolvency procedures and

[14] Detailed analysis of the problems and drivers can be found in Annex VI.

[15] One of the basic functions of banks in the economy is to transform short term funding to long(er) term investments.

risking systemic problems or rescuing the banks using public funds. No special tools and powers geared towards maintaining crucial financial services of a bank as an ongoing business (special resolution) were available in most Member States. (for example, the forced sale of Fortis was not available for Belgian authorities. The UK adopted the new banking act during the crisis to enable bank resolution instead of insolvency and it was subsequently applied in two cases) One of the reasons that in many cases authorities did not oblige creditors to pay in the crisis, or eliminate the holdings of shareholders, was because they did not have a legal mechanism to do so in an orderly manner without causing further financial disruption (i.e. outside an insolvency procedure).

- **The magnitude of problems**. In the crisis so many banks were affected that the crisis became systemic. (e.g. In the UK an number of mid and large banks suffered losses and needed help; All major banks in Belgium (KBC, Fortis, Dexia) had problems, In Ireland government support for banks amounted to more than 30% of GDP etc.).

Rescuing banks with public funds (bail-out) helped to avert what could have been economic depression on a scale not seen for 80 years, but it has also created a number of medium to long term problems that are becoming increasingly apparent:

- The distortion of competition: Institutions that are perceived by the market as being systemic are often perceived to benefit from an implicit state guarantee. As a result, those institutions are able to raise funds in the market at a cost that is lower than their non-systemic competitors. Research highlights that irrespective of methodological differences, the advantage can be significant.

- The realisation of moral hazard: as the state guarantee risks encouraging excessive risk-taking within systemic institutions. The management, senior executives and shareholders of systemic institutions could on the basis of past evidence reasonably expect that while they stand to gain from the upside risk (profits) of their actions, society would have to cover the downside risk (losses). Research shows that such a skewed incentive structure within financial institutions is not only a theoretical proposition, but over time has a material impact.

- Growth regardless of synergy gains: as non-systemic institutions have an incentive to reach systemic importance, thus leading banks to expand beyond their ideal economic size. This will over time contribute to an overly concentrated market place with potential negative effects on competition and welfare.

- Increased burden on public finances: Between October 2008 and October 2010, the European Commission has approved €3.6 trillion (equivalent to 31% of EU's GDP) of State aid measures to financial institutions, of which €1.2 trillion has been effectively used (of which €409 billion was used for capital injections and asset relief programs). Budgetary commitments and expenditures in this range are not sustainable from a fiscal point of view, and impose heavy burden on the present and future generations. Moreover, the crisis which started in the financial sector plunged the EU economy in a severe recession, with the EU GDP contracting by 4.2% or €0.7 trillion in 2009.[16]

[16] History suggests that it is the consequences of an economic downturn rather than the direct fiscal cost of supporting the financial sector that will have the largest effects (fall in tax revenues, increase in counter-cyclical spending), especially if the downturn is prolonged See e.g. Reinhart, Carmen M. and Kenneth S. Rogoff (2008), The Aftermath of Financial Crises http://www.economics.harvard.edu/faculty/rogoff/files/Aftermath.pdf.

Major problems addressed by the proposal

Before the crisis, neither banks nor supervisors and other authorities were sufficiently **prepared** for the financial crisis. Contingency planning for de risking banking operations and resolving failing banks were not in place. Supervisors discovered problems within banks at too late a stage. Highly complex operations and business structures, interlinkages and large institutions impeded resolution or liquidation of banks. There was no legislation at EU level governing the entire process of **bank resolution**. Beyond introducing a minimum set of **early intervention** powers for supervisory authorities aimed at restoring a situation in a bank[17], and establishing arrangements for the winding-up and reorganisation of credit institutions with branches in other Member States[18], no EU framework existed which set out how and under which conditions authorities should act in the event of a crisis arising in a bank.

During the financial crisis, authorities in many Member States did not have adequate tools and powers to handle the failure of banks. The lack of bank-specific resolution tools left authorities with no choice other than to intervene with public funds. This cost significant amount of taxpayers' money and in some cases even put the whole country at the risk of default. Although a few European authorities have tools available to **intervene in banking crisis**[19], the tools are different, or in many cases do not exist at all. The diverging approaches, tools, and powers are likely to lead to inefficient resolution and deliver sub optimal results at EU level. Differences and gaps, including legislative differences between Member States and/or a lack of a legislative/institutional basis in some countries, have the potential to complicate and even hinder the efficient cross-border handling of a banking crisis. This could weaken the functioning of the Internal Market.

In the absence of bank specific resolution tools, the reorganisation of banks under insolvency procedures would most likely be unsuccessful, as debtors would immediately withdraw funds from the banks. Depriving depositors' access to their accounts may not be compatible with objective of maintaining financial stability, and will usually lead to the loss of any residual franchise value in the bank, thereby reducing the likelihood of a recovery. Insolvency procedures may take years, and the objective of authorities is to maximise the value of assets of the failed firm in the interest of creditors. In contrast, the primary objective of a resolution is to maintain financial stability and minimise losses for the society, in particular taxpayers. For this reason, certain critical stakeholders and functions (such as depositors, payment systems) need to be protected and maintained as operational, while other parts, which are not considered key to financial stability, may be allowed to fail in the normal way. In order to avoid moral hazard and the use of taxpayers' money to support failing banks, shareholders and debt holders need to face the actual risks of banks and bear an appropriate share of the failure. Bank resolution also ensures that decisions are taken rapidly in order to avoid contagion.

Moreover, the existing EU **supervisory framework** has proved inadequate to deal with cross-border banking failure. While the operation of cross border banks has become highly integrated, (with the result that business lines and internal services have become interconnected and cannot be easily separated along geographical borders of Member States), crisis management as well as related legislative framework of banks has remained national[20].

[17] In Article 136 of the Capital Requirements Directives (CRD). See more details in Annex IV.

[18] Directive 2001/24 on the reorganisation and winding up of credit institutions deals with cross border branches and not with subsidiaries. More information can be found in Annex IV.

[19] More details can be found in Annex VII.

[20] As Bank of England governor Mervyn King, pointed out, at the moment "global banks are global in life, but national in death"

As a consequence, in the event of a cross border bank failure, financial supervisors and other (resolution) authorities concentrate only on the operations within their respective territories. A key shortcoming to effective cooperation is the misalignment between the national accountability and mandate of supervisors (protecting interest of depositors and creditors at national level) and the cross-border nature of the banking industry, which complicates voluntary co-operation between supervisors of different Member States and lead to inefficient and possibly competing resolution approaches and suboptimal results at EU level. The introduction of the EU Memorandum of Understanding on Cross-border Stability came too late to be applied during the recent bank failures, and moreover it is questionable whether this arrangement would have been sufficient to ensure optimal results at EU level.

The lack of private **financing arrangements** for bank resolution purposes[21] also led to the significant use of taxpayers' money to support banks. There were no or limited private funds available in Member States for financing resolution measures. Even though in some countries the funds of deposit guarantee schemes (DGS) could have been used for the purposes of resolution, they were not adequate in size and availability.

These problems led to more expensive outcomes for EU citizens and tax-payers, as the bail-out of systemically important cross border banks can be very expensive compared to the cost of a timely and effective resolution[22]. The extent of the cost savings that might result from effective bank recovery and resolution arrangements at EU level can be expected to be significant, given the overall costs associated with banking crises.

The financial crisis has provided clear examples (Fortis, Lehman Brothers, Anglo Irish, Icelandic banks among others) of how damaging the absence of adequate arrangements (both at national and EU level) in the field of bank resolution can be. The description of these cases and their relevance to the problems described in this chapter can be found in Annex VII.

3.2.2. The framework of bank recovery and resolution

There are three key stages which need to be considered in the context of a bank recovery and resolution framework: (i) **preparation and prevention**, (ii) **early intervention** and (iii) **resolution**. The chart below presents the different stages and the proposed policies under them.

The actual application of crisis management tools might follow the order presented in the chart, but it is also possible that authorities use the resolution tool directly without any intermediate solution. Since problems and failures can differ to a large extent it is important that the framework remains flexible and adaptable to all situations. More detailed explanation of the different stages can be found in Annex II.

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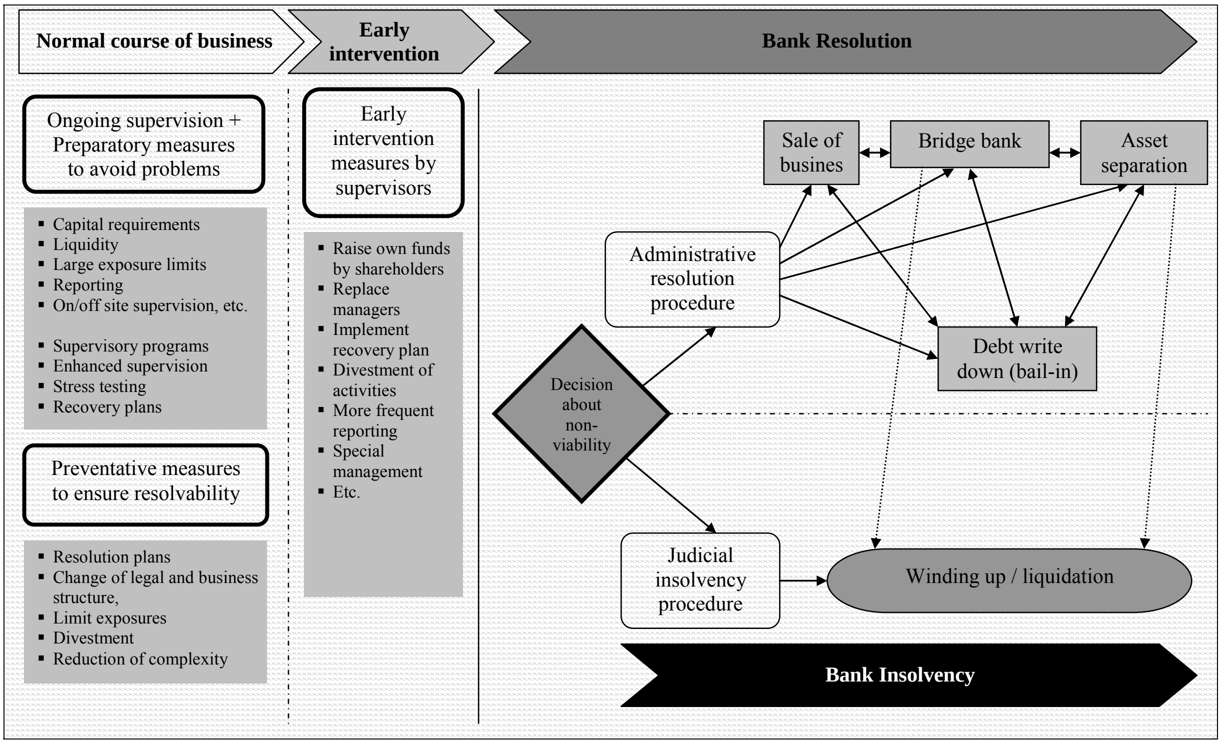
21 Financing is crucial when special resolution techniques (bridge bank, partial transfers, asset separation) are applied to enable the continuous operation of resolved entities to maintain the stability of the financial system as a whole. More detailed information on financing can be found in Annex XIII.

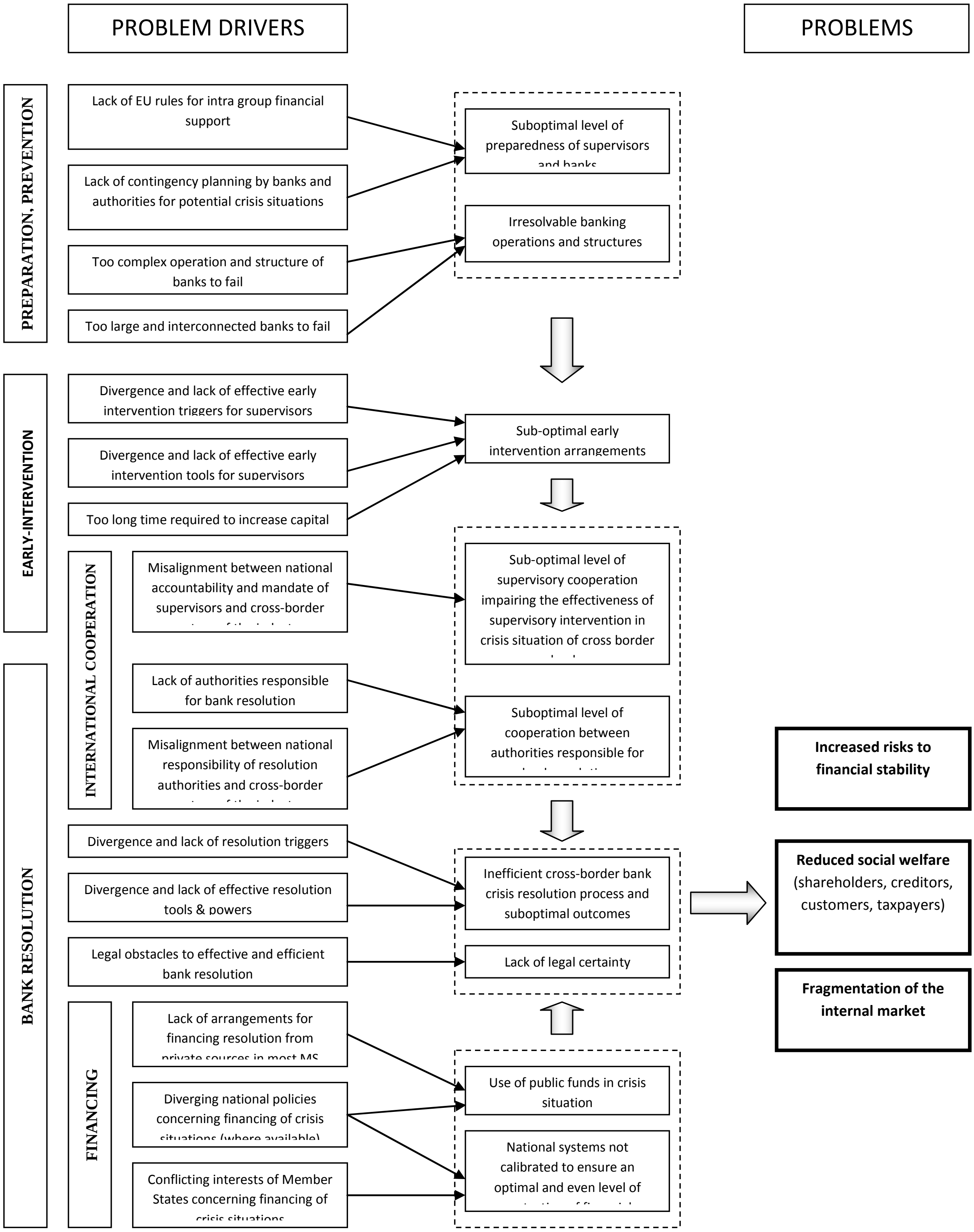
22 Effective cross border arrangements should ensure a result that is optimal at EU level, taking into account the interests of stakeholders in all Member States, and thus minimising the overall cost.

Chart 2. Stages of the bank recovery and resolution process



The diagram below presents the problems and their relations. The most important drivers for this proposal are the followings: i) Divergence and lack of effective resolution tools & powers and ii) Misalignment between national accountability and mandate of authorities and cross-border nature of the industry. While the proposal introduces policies that can solve the first problem, changing the political, institutional and legal setup that result in the second problem is beyond the objectives of this proposal. Annex VI extensively describes and discusses the drivers and problems contained in the problem tree.

3.2.3. *Problem tree*



3.2.4. Baseline scenario

The baseline scenario is one in which the EU continues to rely on the existing narrow (or non existing) EU legislation and widespread national legislations and arrangement in crisis situation of banks.

In the case of **preparation** and **prevention**, supervisors would continue to rely on current practices for detecting risks at credit institutions. In the absence of contingency plans, supervisors would lack key information about the possible de-risking strategies of credit institutions or about their recovery, financing or resolution possibilities. When it comes to failure, resolution authorities would not have an adequate overview about the structure and operation of complex banks thus it would be difficult to determine whether such banks could undergo special bank resolution. Supervisors would not have any power to ask overly complex, large or interrelated institutions to reorganise or simplify their operations which could be a major hurdle in an eventual resolution. This would entrench moral hazard among banks that are too big, complex or interconnected to fail. Lack of legal clarity around intra group financial support would discourage group entities to make arrangement help each other even if it were in the interest of the whole group.

In the case of **early intervention** by supervisors, this would mean that supervisors in different Member States would continue to have different powers and intervention tools for different members of the same cross border banking groups. They would be required to intervene at different times, under different conditions and implement different measures. This would probably not ensure that problems of cross border banks could be effectively dealt with before they became more serious and affected other financial institutions and members of the group located in different Member States. This would risk suboptimal outcomes for stakeholders in the EU and would maintain the uneven playing fields.

If no special **bank resolution** tools and powers are granted to authorities, resolution of systemic banks will remain impossible to execute, and bail-out remains the only alternative. Currently only a few Member States (UK, Germany, Sweden, Denmark) operate special bank resolution systems. If authorities can intervene in certain countries only when banks are formally insolvent, those countries will bear much higher social cost if banks fail. The lack of an EU framework will represent a source of distortions in the internal market.

When **cross border** banks approach insolvency, different national authorities would continue to focus their resolution activities only on the respective legal entity located in their territory. Conflicting interests would be likely to impede a more optimal reorganisation solution for the group as a whole, taking into consideration the interest of all Member States. Resolution of a cross border banking group would remain fragmented by national borders where authorities would follow diverging goals and apply diverging measures. National solutions would probably be more costly for the citizens and taxpayers of the EU than if the group was reorganised at EU level.

If no changes to current **financing** arrangements were implemented, there would be no private resources raised today to finance the resolution of tomorrow's failures in addition to existing safeguards. This accordingly means continuing to rely on capital buffers at the level of individual institutions and Deposit Guarantee Schemes (DGS) to the extent that these are able to finance resolution measures.[23] If losses are not be covered by private means, recourse to public funds may continue to be the only option for governments.

At the same time, as a result of recent measures, the new European Authorities will improve the macro warning systems and will create an improved supervisory environment. The **European System of Financial Supervisors** (ESFS), and the new **European Supervisory Authorities**[24] (ESAs), will help cooperation between supervisors and the better functioning of Supervisory Colleges. The ESAs should fulfil an active coordination role between national supervisory authorities, in particular in case of adverse developments which potentially jeopardise the orderly functioning and integrity of the financial system in the EU. However, in some emergency situations, coordination may not be sufficient. The ESAs will therefore, in such exceptional circumstances, have the power[25] to require national supervisors to take the necessary action. They will however have no formal role in the resolution phase of crisis management. The safeguard clause of the regulations on ESAs makes it clear that decisions by the ESAs should in no way impinge on the fiscal responsibilities of the Member States.

The current EU financial stability framework is focused on ensuring that banks are adequately capitalised. The Capital Requirements Directive (CRD)[26] contains provisions aimed at stabilising capital within banks, but it is not prescriptive in case the banks fail to meet the 8%[27] minimum capital threshold. The handling of situations when a bank does not meet the requirements of banking laws (8% CAR) but is still not insolvent is left to national legislation. At EU level, currently the article 136 of the CRD deals with the early intervention powers and tools of banking supervisors in a crisis situation. This article enables the supervisors to oblige banks to implement measures that correct irregularities and restore capital requirements, e.g. by requiring them to hold additional capital, improve governance, systems and internal control arrangements, increase reserves, limit business operations and risk exposures, etc. However, these early intervention powers proved to be insufficient in the financial crisis. The CRD also established rules about alerting other authorities[28] (i.e. Central Banks and Ministries of Finance) in emergency situations, requiring coordination of supervisory activities and exchange of information in emergency situations[29] among Member States. However, if no change in banking legislation is proposed, the CRD will not be enough (as it was not enough during the crisis) to address situations when banks actually fail.

In the future, banks will also need to abide stricter prudential requirements. The **Basel III** accord which is expected to be introduced in the EU acquis by modifying the Capital Requirements Directive (CRD4) will require banks to hold more and better quality capital. Banks will also need to fulfil new liquidity requirements, stricter rules in counterparty credit risk and at later stage limit leverage. The new rules are expected to largely increase the safety

[23] However, as documented by the impact assessment underpinning the Commission's 2010 proposal for amending the Directive on Deposit Guarantee Schemes (COM(2010) 368), currently many DGS are either not financed or under-financed, thus raising doubts about their ability to perform their central function, protect payouts, let alone facilitate resolution. Furthermore, as also documented by the same impact assessment, DGS mandates differ significantly as regards their ability to go beyond their core mandate of payout (e.g. liquidity support, restructuring).

[24] European Banking Authority (EBA), European Securities and Markets Authority (ESMA), European Insurance and Occupational Pensions Authority (EIOPA)

[25] Article 18 of Regulation 1093/2010.

[26] Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions and Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions.

[27] Capital Adequacy Ratio (CAR): bank's capital expressed as a percentage of its risk weighted assets.

[28] Article 130 CRD

[29] Article 129(1) CRD

of the banking sector, but will not completely eliminate the risk of bank failure. Thus there remains a strong need to have a new bank recovery and resolution framework in the EU.

In addition, higher capital requirements for systemically important financial institutions (SIFIs) are being considered in the Financial Stability Board (FSB). There are three pillars of the too-big-to-fail (TBTF) or SIFI discussions: (i) higher loss absorbency, (ii) ensuring resolvability and (iii) more effective and intense supervision. This IA deals with the latter two. The requirements related to higher loss absorbency relate predominantly to so-called 'going concern' loss absorbency, i.e. a requirement for SIFIs to hold higher loss absorbing capital (capital surcharge) in good times to ensure that they can absorb losses without failing. The Commission is considering amending the CRD once the international negotiations on the attributes of such a loss absorbency regime (magnitude, imposition approach, instruments) have been finalised. This impact assessment deals with so-called 'gone concern' loss absorbency provisions, i.e. additional resources that could be mobilised once a SIFI is failing and hence placed in resolution context. These are the bail-in debt provisions, which will contribute to higher ability to absorb losses in a resolution context (by writing down the value of debt and, possibly, convert to equity (which could absorb further losses).

Nevertheless, the objectives of a resolution framework and capital surcharge are different: The former aims to reduce the impact of failure through improving resolvability while higher capital requirements are primarily a tool for reducing the probability of failure; they affect the impact of failure to a much lesser and more indirect extent. Estimates of the magnitude of potential further SIFI capital charges in the international debate are rather low compared to the levels required by many academic models. Moreover, capital buffers – while useful – have proven during this crisis to be of limited value. Many of the failed institutions had ample capital at the time of failure.[30] Accordingly, it is important to find more effective ways of increasing loss absorbency for banks than capital requirements. Debt write-down (bail-in) attempts to fill that gap, by (depending on scope/limitations etc) providing a potentially much larger (multiples of going concern higher loss absorbency) additional buffer in a resolution context.

The proposal of the Commission (in 2010) on changing the Directive on **Deposit Guarantee Schemes** also aims at improving the financial safety net. The risk of bank failures due to depositor runs should be reduced as a result of shorter payout delays and more robust funding arrangements. The coverage level has also been raised to € 100 000 by Directive 2009/14/EC. DGS are permitted to finance resolution. This role has clear relevance for financing bank resolution, as it is explained later in the Policy Options section of this document.

In the UK, the Independent Banking Commission assessed a variety of proposals to improve competition and increase resolvability of institutions.[31] These options range (in broad terms) from structural separation to higher capital requirements. Capital and competition issues are being considered through other legislative and non-legislative fora. The objective of this proposal is to ensure resolvability and in this context we have concluded that it is highly likely that there is no 'one size fits all' approach to resolution, for example non-deposit taking banks (e.g. investment banks) can contribute to systemic risk in the event they fail and may require public assistance in the absence of an effective resolution regime.[32]

30 For example, a few days prior to its default, Lehman had Tier 1 capital of 11%. Lehmann Brothers press release, Sept 10, 2008

31 The ICB's report can be found here: http://bankingcommission.independent.gov.uk/.

32 For example, Lehman Brothers was allowed to fail which caused significant disruption to the wider financial system, this led to money market mutual funds 'breaking the buck' and receiving a $50bn US Treasury guarantee package, AIG was bailed out, reportedly costing $85bn, the arranged $4bn bailout of hedge fund LTCM in the late 1990s was designed to avoid a downward price spiral in securities. In

Despite the above-mentioned improvements in banking regulation at EU level, failure of financial institutions cannot be excluded in the future. Increased and better quality capital, new liquidity rules provide stronger safety-net for bank losses. Strengthened DGS arrangements reinforce depositors' confidence in banks. However, if no legal framework is developed to manage the failure of financial institutions, governments could again find themselves in a situation when their only choices are to either rescue banks from public funds or risk financial systemic instability.

3.3. The EU's right to act and justification

Due to the advanced cross border integration of the financial sector, only EU action can ensure that credit institutions are subject to adequate interventions in crisis situation. EU level action is necessary since current tools to deal with bank crises are nationally based and insufficient to deal with cross-border institutions in difficulty. Moreover, objectives pursued by each national authority may differ. As a consequence, Member State authorities cannot be sure that critical problems arising in a cross-border banking group can be solved fairly, effectively and expediently. Unless these flaws in the framework are adequately addressed, national authorities will be left in practice with only two alternatives: they can either take the politically unpopular option of using public money to bail out banks or they can decide to ring fence assets in a cross-border bank and apply national resolution tools (where they exist) at each entity level – which may drive up the overall cost of the resolution. The first option can have substantial impacts on the budget of Member States, while the other would substantially fragment the internal market and could lead to overall more costly solutions (e.g. Fortis). Limited options available to authorities would increase the risk of moral hazard and generate an expectation that large; interconnected and complex banks would need public assistance in the event of problems.

As a response to the financial crisis, some Member States have already enacted legislative changes in order to introduce mechanisms to resolve failed credit institutions; others have indicated their intention to introduce such mechanisms. Differences in rules concerning the pre-conditions, tools and powers for resolving credit institutions would likely constitute barriers to the smooth operation of the internal market, as national authorities would not have the same level of control and the same ability to resolve credit institutions as each other. European financial markets are highly integrated and interconnected with many credit institutions operating extensively beyond national borders. The failure of a cross-border credit institution is likely to affect the stability of financial markets in the different Member States in which it operates. The inability of Member States to take control of a failed credit institution and resolve it effectively can undermine Member States' mutual trust and the credibility of the internal market in the field of financial services. These differences would hinder the cooperation between national authorities when dealing with failing banking groups operating across borders.

The framework should apply to all credit institutions (domestic and cross-border) since banking groups may be composed of several entities, only some of which operate cross-border, but it is necessary that authorities be able to intervene in all the entities and to resolve the group as a whole. Using different tools and powers for entities affiliated to the same group would be inefficient and would raise issues of inequality of treatment.

The proposal does not intend to introduce EU solution at the following two fields:

Japan in the 1990s, finance companies were used by banks to circumvent restrictions placed on real estate lending which led to an unregulated boom.

1. In order to achieve the objectives, it is necessary to confer resolution powers to a public administrative authority[33] to ensure the required speed of action. It is however not indispensable to determine which authority should be appointed in each Member States. A harmonisation would facilitate coordination but the effectiveness of resolution would not depend on the chosen institution. It would also interfere with the constitutional and administrative orders of Member States. A sufficient degree of coordination can be achieved also with the less intrusive requirement that all the national authorities involved in the resolution of a cross-border group be represented in resolution colleges, where coordination will take place. A detailed harmonisation of resolution processes would imply a deeper and more complex harmonisation of substantial and procedural insolvency rules applicable to banks.

This degree of flexibility for Member States was fully supported in the latest public consultation. Resolution authorities could be for example national banks, financial supervisors, deposit guarantee schemes, ministries of finance, or specially appointed authorities. They need to have adequate expertise and resources to manage possible bank resolutions at national and cross border level. If a member state decides to set up the resolution authority within the same institution that is responsible for supervision, functional separation of the two activities is recommended to avoid supervisory forbearance.[34] Most respondents to the public consultation acknowledged the risk of forbearance and favoured to combine resolution and supervision in the same institution with the establishment of functional separation. Even if resolution authorities would not be determined by EU legislation, their powers and tools would be harmonised to a certain extent by this proposal (minimum harmonisation, see in section 4.3.2).

2. Similarly there is no need for action at EU level as regards the way an administrative, non-judicial[35] resolution process is managed. There can be different models in different Member States, like receivership, administration or direct executive powers,[36] which can be equally effective during a bank resolution. This view was fully supported in the public consultation. Respondents believed that Member States should be free to choose what resolution mechanism they use, whether receivership, administration or executive decree mechanism or a combination. As long as it is clear what resolution mechanism(s) Member States use, different resolution solution should not stand in the way of an efficiently coordinated cross-border resolution.

3.4. Objectives

The **general objectives** are to

- Maintain financial stability and confidence in banks, ensure the continuity of essential financial services, avoid contagion of problems;
- Minimise losses for society as a whole and in particular for taxpayers, protect depositors, and reduce moral hazard;

[33] Since there is no special bank resolution framework in place in most Member States, there are no authorities designated to manage bank resolution in these countries.

[34] The risk of non-action by authorities when failure of banks and failure of supervision is linked.

[35] Bank resolution is carried out in an administrative, non-judicial process to ensure speed of actions and special skills needed for the financial sector.

[36] See definitions in the Glossary in Annex I.

- Strengthen the internal market for banking services while maintaining a level playing field (i.e. same conditions for all players to compete in the financial markets of the EU).

In the public consultation, all respondents supported the objectives of the bank recovery and resolution proposal. Public authorities had mixed views on the order of importance as half of them considered financial stability as the most important, while the other half regarded all objectives as equally essential.

The specific and operational objectives are the following:

Preparation and prevention

Problems	Problem drivers	Operational objectives	Specific objectives
Suboptimal level of preparedness of supervisors and banks for potential crisis situations	Lack of EU rules for intra group financial support	Develop framework for intra group financial support for effective crisis prevention while providing legal certainty	**Increase preparedness of supervisors and banks for crisis situations**
	Lack of contingency planning for potential crisis situations	Require contingency planning from credit institutions and authorities	
Irresolvable banking operations and structures	Too complex operation and structure of banks to fail	Make it possible to reduce the complexity of certain banks	**Enable resolvability of all banks**
	Too large and interconnected banks to fail	Make it possible to reduce the size and interdependence of certain banks	

Early intervention

Problems	Problem drivers	Operational objectives	Specific objectives
Sub-optimal early intervention arrangements for supervisors	Divergence and lack of effective early intervention triggers for supervisors	Provide all supervisors with effective early intervention triggers	**Improve early intervention arrangements for supervisors**
	Divergence and lack of effective early intervention tools for supervisors	Enabling all supervisors with effective tools to intervene at an early stage	
	Too long time required to increase capital in emergency situation	Shorten time period to increase capital at banks in emergency situation	

Bank resolution

Problems	Problem drivers	Operational objectives	Specific objectives
Inefficient bank resolution process and suboptimal outcomes	Divergence and lack of resolution triggers	Provide authorities with clear and reliable resolution triggers	**Ensure resolution of banks in a timely and robust manner**
	Divergence and lack of effective resolution tools & powers	Enabling all resolution authorities with a set of resolution tools and powers to resolve banks	
Lack of legal certainty in bank resolution	Legal obstacles to effective and efficient bank resolution	Amending EU and national legislation to eliminate legal uncertainties around the use of resolution tools by drawing the right balance between effective resolution and the protection of shareholders' rights	**Ensure legal certainty for bank resolution**

Cross border crisis management

Problems	Problem drivers	Operational objectives	Specific objectives
Suboptimal level of cooperation between authorities responsible for bank resolution	Misalignment between national responsibility of authorities and cross-border nature of the industry	Ensure that national interest of resolution authorities does not jeopardise resolution of cross border banks	**Foster efficient cooperation of authorities in cross border resolution**

Financing

Problems	Problem drivers	Operational objectives	Specific objectives
Use of public funds in crisis situation **National systems not calibrated to ensure an optimal and even level of protection of financial stability across MS (with other prudential measures)**	Lack of arrangements for financing resolution from private sources in most MS	Develop private financing arrangements for bank resolution	**Develop arrangements for financing bank resolution from private sources**
	Diverging national policies concerning financing of crisis situations (where available)	Develop and calibrate optimal arrangements for financing bank resolution across EU	**Develop arrangements to finance bank resolution that provide optimal and even level protection for all Member States (in line with other prudential measures)**
	Conflicting interests of Member States concerning financing of crisis situations	Align national interest with group wide (EU) interest in financial arrangements	

4. POLICY OPTIONS, ANALYSIS OF IMPACTS AND COMPARISON

This section sets out the policy options under consideration, their impacts on stakeholders and their comparison along the lines of effectiveness and efficiency. Description of certain policy options and their impact analysis can be found more extensively in the Annexes. The presented policy options are not necessarily mutually exclusive, hence the combination of two or more options are also analysed. We use the following score system when presenting impacts on stakeholders, efficiency and effectiveness: Magnitude of impact as compared with the baseline scenario (the baseline is indicated as 0): ++ strongly positive; + positive; – – strongly negative; – negative; +/– both positive and negative ≈ marginal/neutral; ? uncertain; n.a. not applicable

4.1. Preparation and prevention

4.1.1. *Possible policies to develop framework for intra group financial support*

Policy option	Description
1. No policy change	The baseline scenario applies
2. Introduction of group interest	The notion of 'group interest' could be introduced for credit institutions in the company law legislation of the EU. This approach would depart from the traditional focus on separate legal entities and would accept that a group of enterprises constitute a single economic entity.
3. Voluntary group financial support agreement	An EU parent credit institution or an EU parent financial holding company and subsidiaries that are credit institutions or investment firms could voluntarily enter into an agreement to provide financial support (in the form of a loan, the provision of guarantees, or the provision of assets for use as collateral in transaction) to any other party within the group that experiences financial difficulties. Any group financial support agreement could be approved ex-ante by the shareholders' meeting of every group entity that proposes to enter into the agreement. The shareholders' meeting could authorise the respective management body to take a decision that the entity will provide financial support if needed. State aid rules should be met. *Further information can be found in Annex X.*
4. Review of proposed agreement by supervisors	Supervisors could grant the authorisation for a group financial support agreement if the conditions for financial support are satisfied. As a safeguard for the financial stability, the supervisor of the transferor could have the power to prohibit or restrict a transfer of assets pursuant to the agreement when this transfer threatens the liquidity or solvency of the transferor or financial stability. If the supervisor were not to prohibit the transfer within a set period of time, the transferor should be able to proceed with the transfer.
5. Transfer by supervisors	In the case a voluntary intra group financial support agreement is already in place, supervisors may also apply the agreement for compulsory financial assistance. If a credit institution that is party to a group financial support agreement is in breach or is likely to be in breach of the requirements of the CRD, the supervisor could require the management body of the credit institution to request financial support pursuant to the agreement, after consulting the other supervisors responsible for supervising the entities subject to the agreement.

As a first option, the **notion of 'group interest'** would be very effective in reaching the goal of legal certainty around intra group asset transfer. With the group interest the legal concerns around the management's liability, retroactive void transfers in consecutive insolvency would be eliminated[37]. This would however undermine the traditional approach of company laws and insolvency laws that focus on the legal entity as a separate economic entity. In addition, not only these laws but also contract laws would need to be changed. The fundamental change of these laws would be disproportionate with the benefits of a clear asset transferability framework for crisis situations[38].

Signing a voluntary **agreement on intra group financial support** and eventually providing intra group financial assistance would greatly increase the effectiveness of crisis prevention. Financial help from an entity in one Member State to an entity in the other would also balance and minimise the effects of adverse financial developments across the EU. As an early financial support mechanism, it could stop the aggravation of financial problems at bank entities working as part of a group. Legal certainty would increase as it would be clear when and how such financial support can be provided. In this way, shareholders could jointly agree

[37] More explanation about these problems can be found in Annex VI.

[38] A draft 9th Company Law Directive was prepared and circulated by Commission in 1984; which tried to introduce group interest in the company law of the EU, but finally it did not even become a proposal.

on the importance of mutual financial help in cases where the group interest could prevail over the interest of group entities (with adequate safeguards). Shareholders' approval to the agreement would reinforce the mandate of bank managers to take into consideration the interest of the group as one economic entity and not only the interest of the entity they are directing. This would alleviate concerns regarding directors' liability laid down in company laws and the risk of rendering a transfer retroactively void in a consequent insolvency proceeding. In this way, managers of group entities would be more willing to help other group entities in the interest of all. Shareholders and creditors of group entities would be aware of the possibility of such pre-emptive transactions, which would further increase clarity. Transferring assets from a healthy entity would decrease its liquidity and capital and hence the position of debt holders and depositors could weaken. Safeguards are needed to ensure that they cannot suffer losses as a result. Therefore the transfers should be executable only in case it does not jeopardise the liquidity or solvency of the support provider.

The agreements should be on a voluntary basis, because it is best to leave to banking groups assess whether such arrangements would be in the group interest within the wider objective of the financial stability of the entire group (a group might more or less integrated and pursue more or less strongly a common strategy) and to identify the companies that should be part to the agreement or not (it may be appropriate to exclude certain companies that pursue the riskier activities). In addition, the interest in entering into such agreements will depend on the existence and the nature of the obstacles to asset transferability posed by national laws under which banks operate. Supervisors' approval is appropriate for prudential purposes in order to verify that the agreement complies with the specific conditions and the prudential requirements in general. The agreement should not work against resolvability because it is not an unconditional intra-group guarantee, rather a commitment to help only when this does not jeopardize the solvency of the supporting entity. In insolvency therefore the agreement would not apply. The supervisor's control of each transaction would be a further guarantee for financial stability; it is however limited in scope to verifying that the conditions for the support are met and it should be facilitated by the existence of the already approved underlying agreement.

Supervisory approval to the intra group agreement and actual asset transfers would largely increase the stability of the framework, as one of the main barriers/uncertainties (blocking of transfers by supervisors) could be eliminated. In addition, different national supervisors would need to come to an agreement about the interest of a cross border banking group, taking into account not only their own but the interest of other member states, too. This would also further strengthen the internal market, as host and home supervisors' opposing interest around an intra-group transfer could be tackled[39]. In case of disagreement, the European Banking Authority could play a mediating role.

Financial **support** from one group entity to the other may be **ordered by the supervisors** as part of an early intervention measure if a voluntary ex-ante agreement is in place. This measure would be very effective in providing quick fix to a temporary (liquidity) problem. Transfers required by supervisors could ensure optimal pre-emption solutions at EU level. At the same time, such a measure would limit the freedom of management over the banks' assets. This would probably discourage banks from voluntarily signing such agreements. Creditors (of both transferring and receiving entity) would be in a similar situation as under the third option.

[39] Home and host financial supervisors have two concerns around intra group asset transfers. Firstly they want to avoid contagion (i.e. one group entity exports its failure to the other) even though in certain cases financial assets in excess in one part of the group might help avoiding failure in another part of a group. Secondly, host supervisors may fear that financial support transferred to the mother bank would weaken the subsidiaries and increase their vulnerability..

Results of the **public consultation** are mixed on intra group financial support. Some Member States are in favour as they believe that a framework for asset transferability would be useful to improve the ability of groups to prevent financial difficulties and to increase the legal certainty and transparency of cross-border intra-group asset transfers. Other Member States are against such a framework because they fear that it would blur the boundaries of the limited liability of individual companies (and the distinction between branches and subsidiaries) and might become a source of contagion within a group. The main concerns from host Member States is the provision of up-stream financial support (i.e. from subsidiary to parent company).

The banking industry is mainly in favour of the framework with the exception of few respondents, who think that banks are already able to transfer assets within groups under the current rules and are concerned that the framework might reduce flexibility. The support of the industry shows that banks would be interested in having the possibility to benefit from a framework facilitating intra-group asset transfers, although a number of respondents expressed reservations on the need to obtain a preliminary shareholders' agreement.

The majority of respondents consider that a mediation role of EBA is necessary. However, the views are split regarding whether this role should imply a binding decision or not. The majority of supervisory authorities agree to give the supervisor the power to require an institution to request financial support; banks and federations, on the contrary, take the opposite view.

The **preferred option** is to implement the voluntary agreement together with the approval of supervisors without the possibility for supervisors to order a transfer.

Table 1. Intra group financial support - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Develop framework for intra group asset transferability	1. No policy change	0	0	0
	2. Introduction of group interest	++	-	-
	3. Voluntary group financial support agreement	++	+	+
	4. Review of proposed agreement by supervisors	+	+	+
	5. Transfer by supervisors	+	-	-
	6. Voluntary agreement with approval of supervisors	++	++	++

Table 2. Intra group financial support - impact on main stakeholders

	Transferring banks' creditors and depositors	Transferring banks' shareholders/ management	Receiving banks' creditors and depositors	Receiving banks' shareholders/ management	Supervisors
1. No policy change	0	0	0	0	0
2. Introduction of group interest	+/-	+/-	+/-	+/-	+/-
3. Voluntary group financial support agreement	+/-	+	+	+	++
4. Review of proposed agreement by supervisors	+	+	+	+	++
5. Transfer by supervisors	-	-	+	+	++
6. Voluntary agreement with approval of supervisors	+/-	+/-	+	+	++

4.1.2. *Possible policies to require contingency planning*[40]

Policy option	Description
1. No policy change	The baseline scenario applies
2. Introduction of recovery plans	Recovery plans prepared by the banks may set out the arrangements that banks have in place or the measures that it would adopt to enable it to take early action to restore its long term viability in the event of a material deterioration of its financial situation in foreseeable and conceivable situations of financial stress. Supervisors would assess and would need to approve recovery plans. For groups, recovery plans at both group and individual level would be necessary. *For more description, including the content of such plans see Annex XI.*
3. Introduction of resolution plans	A resolution plan, prepared by the resolution authorities in cooperation with supervisors in normal times of business may set out options for resolving the credit institution in a range of conceivable scenarios, including circumstances of systemic instability. Such plans could include details on the application of resolution tools, ways to ensure the continuity of critical functions, among others. Group resolution plans would also have to be drawn up. *For more description, including the content of such plans see Annex XI.*

Recovery plans could largely help supervisors in identifying the appropriate actions that can restore the viability of banks at an early stage. Early reaction could stop aggravation of problems and thus avoid the implementation of more serious (resolution) measures. As recovery plans would be prepared by banks, this process would also help them reviewing their operations, risks, and necessary actions in a problematic situation. Recovery plans thus would increase the preparedness and awareness of both banks and their supervisors for and about problematic financial situations. Planning in itself may not however be sufficient. It is also very critical that credit institutions take any necessary measures to ensure that there are no impediments to the implementation of the plan in situations of financial stress.

Resolution plans enable rapid, more efficient and effective execution of potential measures that can substantially decrease the (social) cost of bank failure. If resolution authorities are fully aware of the options they have to resolve or liquidate a failing bank or group, the likelihood of a successful resolution is substantially higher.

The case of Bradford & Bingley

UK authorities took Bradford & Bingley into temporary public ownership on 29 September 2008 following a determination by the FSA that the bank no longer met threshold conditions. Thanks to extensive prior contingency planning by the authorities, the UK was able over the weekend to conduct an auction of Bradford & Bingley's retail deposits, branches and associated systems and to sell these to Santander/Abbey. The Bradford & Bingley branches opened for business as usual on Monday morning with no interruption in service.

Resolution plans reduce moral hazard, as they indicate to the market that authorities will take steps to avoid to be "forced" to rescue large firms, and that no firm is necessarily to be considered as too big or too complex or too interconnected to fail. This can already have a salutary effect on market discipline. Moody's alerted investors to the fact that resolution plans "would remove the necessity to support banks as banks would no longer be too interconnected or complex to fail. This could potentially result in ratings downgrades where ratings currently incorporate a high degree of government support" (cited in Croft and Jenkins 2009).[41]

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40 A contingency plan in general is a plan devised to mitigate potential impacts of exceptional risk which is impractical or impossible to avoid. They are also referred to as living wills in the context of bank resolution.

41 Thomas F. Huertas: Living Wills: How Can the Concept be Implemented?, Wharton School of Management

In **public consultation**, the majority of supervisory authorities and banks supported the introduction of recovery and resolution plans. They considered the required content of recovery plans[42] to be sufficient with some suggestions to expand it. All respondents agreed that resolution plans would adequately prepare possible resolution of institutions. The majority of authorities believed that resolution plans should be required for all the institutions that would be covered by the framework. Most of them also considered that the content of the obligation should be proportionate to the size and systemic nature of the entity. The industry had mixed views whether all institutions should be required to prepare resolution plans. In some of their opinion small and not interconnected firms should be excluded as this would be too burdensome for them. Respondents would welcome the involvement of EBA in contingency planning, although views are mixed about the binding or non-binding nature of the involvement.

Devising, analysing and maintaining contingency plans would entail cost for both authorities and banks. Staff tasked with this activity need to be trained and prepared for carrying out this relatively new activity. Respondents to the public consultation however were unable to estimate these costs at this point in time.

The **preferred option** is the introduction of both plans, which, in a complementary way, would help supervisors, resolution authorities and banks in different phases of an evolving crisis situation. In case of disagreement between authorities in different Member States, the EBA could play a mediating role. In an early stage, recovery plans would make supervisory action more prompt and effective, hopefully avoiding the escalation of problems. Resolution plans, on the other hand, would enable a timely resolution of a failing bank. The development and continuous maintenance of such plans would increase cost at both supervisors and banks. However the benefits of quicker and more effective supervisory actions and the decrease in moral hazard would substantially surpass the expenses. In the US, the Dodd-Frank Act has also implemented similar requirements for contingency planning. Implementation in the EU would also contribute to a global level playing field.

Table 3. Contingency planning - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Require contingency planning from credit institutions and authorities	1. No policy change	0	0	0
	2. Introduction of recovery plans	+	+	+
	3. Introduction of resolution plans	+	+	+
	4. Introduction of both plans	++	++	+

Table 4. Contingency planning - impact on main stakeholders

	Bank shareholders	Bank creditors	Banks' clients (depositors, borrowers)	Supervisors and Resolution authorities	Taxpayers / governments
1. No policy change	0	0	0	0	0
2. Introduction of recovery plans	+/-	+	+	++	++
3. Introduction of resolution plans	+/-	-	+	++	++
4. Introduction of both plans	+/-	+/-	+	++	++

42 See Annex XI.

4.1.3. *Possible policies to ensure resolvability of banks*

Policy option	Description
1. No policy change	The baseline scenario applies
2. Ensure resolvability by general requirement of laws	Laws could require the changing of banking structures, limiting build up of certain business lines, unwind certain business models, imposing quotas (e.g. size caps), prohibiting certain activities altogether (e.g. Volcker rule) or downsize, break up banks.
3. Empower authorities to require the change of business structure and operation of credit institutions	If, as a result of preparing the resolution plan, an authority identifies significant impediments to the application of the resolution tools or the exercise of the resolution powers, a resolution authority could draw up a list of measures that the authorities reasonably believe to be necessary to address or remove those impediments. Measures to address or remove impediments might include requiring changes to legal or operational structures of the entity for which the resolution authority is responsible so as to reduce complexity in order to ensure that critical functions could be legally and economically separated from other functions through the application of the resolution tools.
4. Empower authorities to limit or modify exposures and activities of credit institutions	If an authority identifies in a resolution plan significant impediments to the application of the resolution tools or the exercise of the resolution powers, a resolution authority could also implement the following measures or ask the banks to address or remove impediments: (a) to draw up service level agreements (whether intra-group or with third parties) to cover the provision of critical economic functions or services; (b) to limit its maximum individual and aggregate exposures; (c) to impose specific or regular information requirements for resolution purposes; (d) to limit or cease certain existing or proposed activities; (e) to restrict or prevent the development or sale of new business lines or products; (f) to issue additional convertible capital instruments in excess of the minimum.

Option two would have the possible advantage that banks may be regulated in such a way that they would no longer pose any significant threat to an effective resolution and in theory avoid the need for banks to be bailed out using public money in future. Such a regulation would however have uncertain impacts since practically it would be very difficult to design general rules, methods, benchmarks that would suit to all situations and institutions and ensure resolvability of all banks. It would also be not efficient as a blanket rule would force many well functioning and ultimately resolvable banks to reorganise themselves. This could unjustifiably burden business without any certain, significant gains. General rules that prohibit certain businesses would also risk urging market players to shift activities to less regulated parts of the financial system. Finally, it may contribute to make banks more resolvable to some extent but it probably would not effectively reduce systemic risk and interconnectedness.

Separation of retail, wholesale and investment banking activities do not seem to deliver the desired financial stability either. Firstly, many interconnected financial institutions which may pose systemic risks are not deposit taking institutions (the problems at Bear Stearns, Lehman Brothers, and AIG would have been identical to what we experienced). Second, even the most basic deposit taking institutions can become systemic as seen in the savings and loans crisis of the late 1980s.[43]

Providing **power for resolution authorities to change the operation and business structure** of banks (option three) would place the right of judgement with authorities. Based on resolution plans, in normal times of business, they could effectively and efficiently examine those banks where such intervention might become necessary. Authorities could

[43] In which over 700 US deposit taking institutions failed.

satisfy themselves that critical functions of banks could be legally and economically separated from other functions so as to ensure continuity in a resolution.

Decisions on actual measures would be placed with the resolution authority but the proper involvement of supervisory authorities would need to be ensured. They would be consulted before any decision is taken in order to avoid any conflict between the resolution and the supervisory authorities. A forum where the decisions are discussed could ensure that prudential and supervisory concerns are taken into account while ensuring resolvability of banks.[44] In addition, the mediation of EBA could help to resolve conflicting interests at cross border level.

These actions would effectively remove the implicit state support (likely bail out) from those banks that are too complex or too important to fail. This would decrease moral hazard and ensure banks operate more prudently. Ensuring the resolvability of banks would mean that reliance on support using taxpayers funds would be reduced. At the same time, the removal of implicit state guarantee would likely increase funding cost for banks, some of which may be passed on to consumers..

The possible changes in operations and business structure would entail cost for banks. It is very difficult to estimate such costs in advance of the assessments of resolvability undertaken by national authorities. However based on experiences of certain restructurings (see the case of ING in Annex VII), global groups may spend tens of millions of euros on preparing, taking inventory and designing the restructuring of their business operation. The actual cost of execution of restructuring might go up to hundreds of millions of euros for the largest players, which might be the most concerned by such decision. These costs however have to be seen against the benefits, namely that as a result of the measures, banks could be resolved in a managed way, which would maintain financial stability and avoid the need to resort to public funds.

The powers to change business operation of banks may also have an impact on the internal market especially on the freedom of establishment if branches are requested to locally incorporate. Safeguards need to ensure that such measures should not be implemented or only in cases of public interest.

Limiting exposures, activities services by resolution authorities could also make certain banks more resolvable. This way the proposed resolution tools could be applied with more likelihood of success, and the objectives of resolution could be more easily reached. On the other hand, size limitations or downsizing would decrease economies of scale and certain business advantages, or synergies. Limiting exposures would also affect clients of banks which might not receive loans necessary for the development of their business. However clients could request financing from other banks, where restrictions are not needed for systemic considerations.

Some of the powers listed under option two and three are already available for supervisory authorities but not for resolution authorities. Their objectives are different: supervisors need to ensure that banks comply with banking legislation (CRD), limiting the probability of failure, while resolution authorities' aim is to make sure that banks are resolvable when a failure takes place.

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[44] For example one could imagine that a resolution authority could block an expansion of an institution into certain business lines for reasons of resolvability. However, this could not be sound from a prudential point of view. After discussions, the resolution authority could integrate the prudential aspects into its decision by, for example, allowing the expansion but conditioned to the establishment of an adequate legal and operational separation between the business lines.

The above measures would limit the rights of shareholders and management[45] to operate in the form and way that is the most optimal for their objectives and business strategies. This may decrease competitiveness. Hence, any measures proposed to address or remove impediments to resolution should be proportionate to the systemic importance of the credit institution and the likely impact of its failure on financial stability in Member States. Measures should also serve public interest. In addition the framework would propose a number of safeguards. These fall into two categories. The first restrict the way in which authorities may exercise such powers. In particular:

- the power may only be used to remove identified obstacles to resolvability;

- it cannot be used to address impediments that arise from operational or financial weaknesses in the home Member States or its resolution authority;

- it is expressly specified that the power should not be used in a way that restricts firms from exercising the freedom of establishment (for example, the right to establish branches rather than subsidiaries);

- national authorities may not propose measures that would have an adverse impact on financial stability in another Member States;

- any use of the power is subject to the usual principles, derived from ECH jurisprudence, that restrictive measures must be non-discriminatory, justified by an overriding public interest, and suitable and proportionate to achieving their objective.

The second category of safeguards is procedural. Decisions on the exercise of preventative powers in relation to groups would be subject to joint decision within the resolution college, with reference to the EBA where there is disagreement. The EBA would also have a role in ensuring that any decisions by individual authorities are consistent with Community law. Finally, the proposal will specify an iterative procedure between the authorities and the firm in question that allows the firm to challenge any measures proposed and suggest alternatives that would achieve the same objective, and, ultimately, to challenge the exercise of the power through judicial review.

The preventative powers would affect not only banks that are in the phase of development through organic growth or acquisitions, but also banks that are already too big, too interconnected or complex to undergo a resolution in a short space of time such as a weekend. Once the above powers are granted to authorities, these banks might expect that resolution authorities would require them to restructure in order to ensure resolvability.

With some exceptions, many respondents to the **public consultation** considered that the suggested powers are too intrusive. Authorities that opposed these powers consider that they would conflict with the powers they already have under Pillar II[46] of the CRD. For some of the respondents these powers could be accepted but only if they were to be used at the early intervention stage. These powers would, however, be granted to resolution authorities, and be used for different purposes than supervisors do. The main objective here is to ensure resolvability of banks before any problem materialises. Major overhaul of banks is time consuming so in an early intervention process, such measure would be too late to implement and expect results.

[45] Detailed analysis on the impacts on fundamental rights can be found in Annex XVI.

[46] See in Glossary in Annex I.

Respondents who supported the preventative powers argued that improving the resolvability of groups will help to ensure the correct functioning of the single market by removing implicit state aid. Respondents had mixed views whether the proposed safeguards are adequate to protect the rights of stakeholders: some were content while some suggested adding extra safeguards beyond the right of appeal and judicial review.

In cross border cases, most respondents considered that the EBA could play a mediation role. Respondents generally agreed that changes to legal or operational structures should not be decided by a single authority, even if it is the group level resolution authority. Respondents from the industry suggested that it would be fairer and more effective to confer such a power to the resolution college as a whole with a decisive mediation role played by EBA.

The **preferred option** is that authorities should be empowered to change the operation, business structure as well as the exposures and activities of banks to ensure resolvability. Despite the views of stakeholders, such a power is necessary to make the resolution framework effective and credible. If banks are not resolvable, authorities, even equipped with all resolution tools and powers, would not be able to complete a resolution within a short period of time.

No two banks are the same or operate (legally and in terms of business) in the same way. The objective pursued by the framework is that the authorities should fully understand the banks that they may have to deal with. This will be done through resolution planning. On the basis of these plans they will be able to assess the resolvability of each institution (either alone or in the context of a more systemic crisis) in accordance with the toolkit they have at their disposal and act if they consider that resolvability is not ensured.

The cooperation of different national resolution authorities[47] through colleges would ensure that cross border banks are made resolvable without losing the benefits of the single market. The involvement of the EBA could ensure that the single market is respected and a balance is maintained among Member States.

To avoid that banks shift activities to non-regulated parts of the system, resolvability should be assessed comprehensively and not only with respect to the regulated part of the bank. Measures should encompass both the supervised entities and the non-supervised ones and their internal relationships. To provide safeguards for stakeholders and ensure that measures are proportionate and triggered only if absolutely necessary, authorities need to apply the principles listed above.

[47] The policy options regarding cooperation of national resolution authorities can be found in Chapter 4.4.

Table 5. Resolvability of banks - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Enable resolvability of all banks	1. No policy change	0	0	0
	2. Ensure resolvability by general requirement of laws	-	-	-
	3. Empower authorities to require the change of business structure and operation of credit institutions	++	++	++
	4. Empower authorities to limit or modify exposures and activities of credit institutions	++	++	++
	5. Provide authorities with both powers	**++**	**++**	**++**

Table 6. Resolvability of banks - impact on main stakeholders

	Bank shareholders	Bank management	Bank creditors	Bank clients (depositors, borrowers)	Resolution authorities	Taxpayers / governments
1. No policy change	0	0	0	0	0	0
2. Ensure resolvability by general requirement of laws	-	-	-	-	+/-	+/-
3. Empower authorities to require the change of business structure and operation of credit institutions	-	-	-	+	++	++
4. Empower authorities to limit or modify exposures and activities of credit institutions	-	-	-	+/-	++	++
5. Provide authorities with both powers	**-**	**--**	**-**	**+**	**++**	**++**

4.2. Early Intervention

4.2.1. Possible policies to provide all supervisors with effective early intervention triggers

Policy option	Description
1. No policy change	The baseline scenario applies
2. Assessment of authorities (soft triggers)	In order to ensure that supervisors can intervene at a sufficiently early stage to address effectively a developing problem, the circumstances in which supervisors can impose measures under Article 136 of the CRD could be expanded. Powers of early intervention could be granted to the supervisors in not only those cases where any credit institution does not meet the requirements of the CRD but also in those where it is *likely* to fail to meet the requirements of the CRD.
3. Automatic, hard triggers	It is also possible to activate authorities to intervene if certain thresholds of indicators are hit (hard triggers). Mostly quantitative indicators can be applied for implementing such hard triggers based on solvency (such as a capital adequacy or leverage) or liquidity indicators. As a sub-option, it is also possible to tie concrete supervisory actions to thresholds i.e. obliging supervisors to implement predefined measures without any discretion regarding the concrete situation and specificity of the banking group.
4. Combination of soft and hard triggers	It is possible to combine the supervisory assessment with some pre-defined trigger mechanism tied to quantifiable benchmarks. If selected indicators are hit, supervisors will have the right to intervene. Action is however not compulsory, only a possibility.

If supervisors can intervene in the operation of banks when they are likely to breach the requirements of CRD (e.g. capital and future liquidity ratios), it would give further room for **supervisors to assess** the financial situation of the bank. The timely intervention of supervisors can be a very effective tool to stop the escalation of financial problems, which would substantially increase the chances of a successful intervention. Banks on the other hand would be exposed to a more intrusive environment, where supervisors might intervene at the early stages of deterioration. The general early intervention powers would be an extension of the existing supervisory powers in the Capital Requirements Directive. A soft trigger is necessary to allow supervisors to respond flexibly to the diverse situations of breach (that may or may not involve financial distress) that an institution may encounter. For cross-border institutions, supervisory intervention is coordinated within supervisory colleges (Article 129 CRD).

Harmonised **hard triggers** applied in all Member States would greatly decrease the uncertainties around intervention of supervisors as conditions and possible actions of supervisors would be clear ex-ante. On the other hand, advance knowledge of the basis for supervisory intervention could provide opportunities for regulatory arbitrage on the part of banks. Knowledge that the supervisor focuses on certain indicators, might lead to perverse incentives within the bank to focus on particular metrics. Moreover, hard indicators / benchmark ratios could reduce supervisors' incentives to maintain comprehensive oversight of financial institutions, thereby allowing potential problems elsewhere to escape detection. Moreover, it is very difficult to identify single indicators that would be adequate to detect every possible technical problem and/or incorporate all the possible relevant data and information for a proper supervisory assessment. As each case is different, indicators that efficiently detect problems in a specific case can be also different[48]. A single set of hard triggers could thus prove to be a blunt instrument for use in complex and developing situations. If not only the need for actions is tied to quantitative levels, but also the measures/tools to be applied by supervisors are pre-defined, the certainty of intervention is even higher. This would protect supervisors from possible litigation by stakeholders who are negatively affected by the interventions (where that is possible under national law) and also bring certainty for ailing banks that can be fully aware of the consequences of their incorrect operation. On the other hand, supervisors would lose flexibility, increasing the risk that problems are inappropriately handled and potentially resulting in suboptimal outcomes.

It is possible to **combine the supervisory assessment with a pre-determined trigger mechanism** tied to quantifiable benchmarks. Authorities would be protected from litigation, if they act after the pre-defined triggers are hit. In addition, supervisory assessment would ensure the flexibility and adaptability of the system. Situations could be evaluated on a case by case basis and specificities could be taken into account. Ratios, indexes or other quantitative triggers could bring more transparency but at the same time they may not be adequate for all situations. Other arguments against such hard triggers (mentioned above) would also remain valid even in a mixed system.

In the **public consultation**, all Member States that replied to the consultation agreed with the inclusion of likely breach of the CRD as a trigger for early intervention. Few Member States were concerned that the wording gives too much discretion to supervisors. The industry respondents were generally against the preferred trigger as they considered it to be too vague and subjective, which could be interpreted in different ways across jurisdictions. The proposal

[48] The current crisis drew attention to the importance of liquidity indicators since capital ratios were not informative this time. In the future, it is not evident which indicators will have larger importance.

will ask EBA to develop guidelines about early intervention triggers, which would ensure harmonised application across the EU and higher certainty for stakeholders.

The **preferred option** is to allow supervisors to assess the situation freely (as it is currently in the CRD) but with a larger room for manoeuvre than presently granted. They should be able to implement early intervention measures in cases of *likely* breach of the requirements of the CRD (not only at actual breach as presently established). Potential problems regarding the transparency and predictability of 'soft' triggers can be addressed to a significant extent through the publication of guidance. It is proposed that the EBA should define common criteria to guide supervisors' assessment regarding the triggers. This will promote convergence and limit the extent to which supervisors take divergent approaches.

Table 7. Early intervention triggers - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Provide all supervisors with effective early intervention triggers	1. No policy change	0	0	0
	2. Assessment of authorities (soft triggers)	++	++	+
	3. Automatic, hard triggers	+/-	+/-	+/-
	4. Combination of soft and hard triggers	+/-	+/-	+/-

Table 8. Early intervention triggers - impact on main stakeholders

	Bank shareholders	Bank management	Bank creditors	Bank clients (depositors, borrowers)	Supervi-sors	Taxpayers / governments
1. No policy change	0	0	0	0	0	0
2. Assessment of authorities (soft triggers)	+/-	+/-	+	+	++	++
3. Automatic, hard triggers	+/-	+/-	+	+/-	+/-	+/-
4. Combination of soft and hard triggers	+/-	+/-	+	+/-	+/-	+/-

4.2.2. *Possible policies to provide supervisors with effective early intervention tools*

Policy option	Description
1. No policy change	The baseline scenario applies
2. Expanded minimum set of early intervention tools (minimum harmonisation)	Supervisory powers of early intervention under Article 136(1) of the CRD may be expanded to include the following powers: requiring the credit institution to take steps to raise own funds; to use net profits to strengthen the capital base, to request intra-group financial support, to replace one or more board members or managing directors or require their dismissal, to draw up and implement a specific recovery plan, to draw up a plan for negotiation on restructuring of debt with some or all of its creditors, to carry out a full fledged review of its activities. And also requiring the divestment of activities and imposing additional or more frequent reporting requirements.
3. Single set of harmonised early intervention tools (maximum harmonisation)	Fully harmonised, closed list of supervisory tools and powers that need to be made available for all European banking supervisors.
4. Introduction of special management	In addition to expanded supervisory powers under Article 136(1) of the CRD, supervisors could be given the power to appoint a special manager for a limited period of up to one year to take over the management, or assist the existing management, of an institution that is failing or likely to fail to meet the requirements of the CRD and either has not submitted a credible plan or fails to implement that plan effectively. The primary duty of a special manager would be to restore the financial situation of the credit institution by implementing the recovery plan or prepare for winding-down. A special manager would have all the powers of the management of the credit institution under the statutes of the credit institution and under applicable national law, including the power to exercise the administrative functions and powers of the management of the credit institution.

An **expanded harmonised set of early intervention tools** could pre-empt or deal with problems at supervisory level and therefore greatly increase financial stability. Measures like divestment of activities could substantially decrease accumulated excessive risks of institutions thus their failure could be avoided. A more aligned set of tools available to each supervisor could improve cooperation of different supervisors and enable important actions/measures that are presently not available in all Member States where a cross border banking group may operate.

The new early intervention measures that would be available under the current Article 136 of the CRD vary in their intrusiveness. First of all they would limit the freedom of management (e.g. limiting business, replacing managers) and shareholders (e.g. suspending dividend payment). Such measures could therefore be introduced only together with safeguards that ensure that these powers will not be misused and will serve public interest, and banks will not be forced to bear unnecessary limitations and costs. Hence, supervisors should only take actions or steps that are proportionate to the nature of the breach in question and appropriate to address that breach and restore compliance with the requirements of the CRD.

Compared to the baseline scenario, a **single set of supervisory early intervention tools** would deliver all the benefits which are outlined under the previous option. Having exactly the same tools and powers in all Member States would reinforce further chances of developing cooperative early remedial actions for the same banking group. This could also enable effective solutions to prevent escalation of problems and hence assure stability for all stakeholders. Legal implementation of such a solution might however pose problems for certain Member States. Due to differences in legal systems (e.g. constitutional limitations) and arrangements for banking supervision (single supervisor or shared competences among supervisor, national bank and DGS), setting exactly the same tools and powers (and not tools that achieve the same results) in all Member States could be difficult to reach. Certain Member States could be deprived of powers and tools that are available for them now and might be effective to settling problems at national level.

Although it could be part of the tool-set under option two, special management is considered separately given the intrusiveness of this measure. The nomination of a **special manager** to a bank is a very powerful and effective way to correct a problematic situation. Shareholders' right to nominate management would be limited and the nomination of a special manager would in most cases mean that existing managers would be removed. However, the special manager would need to respect company law legislation, and act in accordance with the decisions of the general meeting of shareholders. The main benefit would be that authorities could immediately stop mismanagement of banks and implement corrective measures to avoid the deterioration of the situation.

To avoid any uncertainty and legal challenge to the measures, supervisors should not be held liable against shareholders or creditors of a credit institution to which they have appointed a special manager for any actions, decisions taken by, or any failure to take an action or decision by the special manager. The actions of the special manager could be challenged at courts, and compensation could be obtained. It must also be made clear that the appointment of a special manager would not imply any state guarantee of the bank to which it is appointed.

The appointment of a special manager if made public could have implications to market participants and counterparties of a bank. This could be regarded as a sign that there are serious problems with the bank so counterparties and depositors in certain Member States might react by closing their positions or withdrawing their deposits. In other countries where special management has historical roots (e.g. Italy, France[49]), stakeholders of the bank could feel reassured that the problems are managed by the authorities which could increase the trust for the credit institution in question. Another possibility is not to make public the appointment of a special manager. In this case the special manager does not replace the management but only approves or refuses their decisions.[50]

In the **public consultation**, Member States regarded the proposed early intervention powers as sufficient but they asked for flexibility (minimum toolkit with the possibility to apply other national tools). On the other hand, most of the industry respondents considered that the powers are too far reaching especially if they are linked to 'likely breach' of the CRD. Most Member States supported the possibility to appoint a special manager; some expressed reservations and few were against. They opposed special management because the disclosure of this measure risks resulting in a loss of confidence in the distressed bank and could have negative financial consequences (bank runs, withdrawal of funding, loss of value, etc.). On the other hand, in countries where special management is already a common practice, examples showed that the nomination reinforced public trust in the problematic institutions. The industry expressed mixed views on the proposal to appoint a special manager. Many banks and bank federations were opposed to the use of this power in the early intervention phase and suggested that it should only be a resolution tool. Banks coming from countries where special management is already in place were in favour of the proposal.

[49] In the last 8 years, 20 administrators/special managers were appointed in France.

[50] A similar system is in place in the Netherlands.

The **preferred option** is the introduction of minimum set of powers together with the possibility to appoint a special manager. Even though the appointment of a special manager is an intrusive measure which should be applied only in exceptional cases, this tool proved to be a very effective and efficient measure in a number of countries (e.g. France, Italy). Hence it would be useful to provide this power for all EU authorities without any obligation for eventual application.

Table 9. Early intervention tools - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Enabling all supervisors with a common set of effective tools to intervene at an early stage	1. No policy change	0	0	0
	2. Expanded minimum set of early intervention tools (minimum harmonisation)	+	++	++
	3. Single set of harmonised early intervention tools (maximum harmonisation)	+	-	-
	4. Introduction of special management	++	++	+
	5. Minimum set of tools + special management	**++**	**++**	**++**

Table 10. Early intervention tools - impact on main stakeholders

	Bank shareholders	Bank management	Bank creditors	Bank clients (depositors, borrowers)	Supervi - sors	Taxpayers / governments
1. No policy change	0	0	0	0	0	0
2. Expanded minimum set of early intervention tools (minimum harmonisation)	+/-	+/-	+	++	++	++
3. Single set of harmonised early intervention tools (maximum harmonisation)	+/-	+/-	+	++	+/-	++
4. Introduction of special management	+/-	--	+	+	++	++
5. Minimum set of tools + special management	**+/-**	**-**	**+**	**++**	**++**	**++**

4.2.3. Possible policies to shorten time period for capital increase in emergency situation

Policy option	Description
1. No policy change	The baseline scenario applies
2. A shortened convocation period	In this option the general meeting would *ex ante* – i.e. outside any crisis - decide on a shortened period to convene the general meeting to decide on an increase of capital in an emergency situation. Shareholders' Rights Directive (2007/36/EC) would need to be amended accordingly. Such authorisation would be part of a credit institution's preparatory recovery plan or a group preparatory recovery plan, where appropriate.
3. Mandating the management body	In this option, the general meeting would *ex ante* mandate the management body of a credit institution to take a decision on the capital increase in an emergency situation. The mandate should specify the term of the mandate and the maximum amount of the increase. The Second Company Law Directive (77/91/EEC) would need to be amended accordingly. Such mandate would be part of a credit institution's preparatory recovery plan or a group preparatory recovery plan, where appropriate.

The **decision of the general meeting to shorten the convocation period** to convene the general meeting to increase capital by existing shareholders in an emergency situation would be very effective in shortening the time required for capital increase. A decision on a capital increase could be taken faster than under the current rules. Shareholders would retain their ultimate decision making powers as they first were to decide on the shortened convocation period and secondly on the capital increase.

Subject to the decision of the general meeting on a **mandate to the management body**, the management body could also take a rapid decision on a capital increase. As the general meeting would not need to be convened for the decision on the capital increase, it could take place faster than in the first option. From the point of view of shareholders' rights this option is more intrusive than the first as shareholders would not have the final decision making power on the increase, and it would not be possible for them to assess whether the situation in question qualifies as an emergency and whether there is a need for a capital increase.

The above options would also help supervisors in an emergency situation. With the immediate action of authorities and cooperation of banks, quick capital increase could prevent the degradation of the situation.

The preferred option is option two. It is not as efficient and effective as option three. It is, however, less intrusive, because it safeguards the ultimate voting rights and thus decision-making powers of the shareholders. This is particularly important as this situation would occur already in the early intervention stage. Option two is also more coherent within the overall framework. In addition, it allows for a much faster decision-making process and is therefore much more effective and efficient than the status quo.

Table 11. Shortened time for capital increase - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Remove legal obstacles to early intervention	1. No policy change	0	0	0
	2. A shortened convocation period	+	+	++
	3. Mandating the management body	++	++	-

Table 12. Shortened time for capital increase - impact on main stakeholders

	Bank shareholders	Bank management	Bank creditors	Bank clients (depositors, borrowers)	Supervisors
1. No policy change	0	0	+	0	0
2. A shortened convocation period	-	+	+	+	+
3. Mandating the management body	-	++	+	+	++

4.3. Bank resolution

4.3.1. Possible policies to provide authorities with clear and reliable resolution triggers

Policy option	Description
1. No policy change	The baseline scenario applies
2. Assessment of authorities (soft triggers) 2.1 Insolvency like conditions 2.2 Conditions of authorisation	Resolution tools could be activated following the assessment and decision of supervisory and resolution authorities. The assessment can be based on different considerations. <u>One sub-option</u> to decide whether a credit institution is failing or likely to fail is to examine if one or more of the following circumstances applies: (a) it has incurred or is likely to incur in losses that will deplete its equity, (b) the assets of the credit institution are or are likely to be less than its obligations, or (c) it is or is likely to be unable to pay its obligations in the normal course of business. A <u>second sub-option</u> could suggest a condition based on supervisory assessment of continued compliance with the conditions for authorisation. Accordingly supervisors would need to decide whether a credit institution is failing or likely to fail if the credit institution no longer fulfils, or is likely to fail to fulfil, the financial conditions for authorisation. In addition to a condition that the institution is failing or likely to fail two supplementary conditions could be used: - no other measures[51] are likely to avert failure and restore the condition of the institution in a reasonable timeframe. - the application of resolution tool is necessary in the public interest (e.g. financial stability, continuity of essential services, protection of public funds and protection of depositors)
3. Automatic, hard triggers	An option could propose a purely quantitative, capital trigger. Authorities could decide whether a credit institution is failing or likely to fail by for example concluding that the credit institution no longer possesses, or is likely to fail to possess, sufficient Tier 1 capital instruments[52] i.e. 4% of total risk weighted assets.
4. Combination of soft and hard triggers	In their assessment about the need for bank resolution measures, authorities might use both soft and hard triggers. If selected indicators are hit, resolution authorities will have the right to intervene. Action is however not compulsory, only a possibility.

For reasons of financial stability, the threshold conditions for the use of resolution tools and powers need to ensure that authorities are able to take an action before a bank is economically insolvent. Delaying intervention until the bank has reached that point is likely to limit the choice of effective options for resolution or increase the amount of funds that would need to be committed in support of such an option. Both the introduction of **'likely failure' and 'failure to fulfil authorisation conditions'** aim at bringing forward the point of intervention, when there are realistic chances for successful and effective resolution. The two sub-options overlap to a certain extent, but differ in focus and emphasis. The first would require supervisors to determine that an institution is, or is likely to become, financially insolvent based on either a solvency or a liquidity test. This is closer to the nature of the assessment of the conditions for ordinary corporate insolvency, and may be difficult to apply in a timely fashion to a large and complex bank: experts agree that it may be difficult to determine with a sufficient degree of certainty (given the extremely intrusive nature of the intervention that may be triggered) that solvency or liquidity-based tests are met. The second would require supervisors to determine that an institution breaches or is likely to breach its core financial operating conditions. This requires an assessment that, overall, the institution has sufficient resources to carry on its operations. Although this clearly overlaps with the solvency and liquidity assessment of the first option, the focus of the test is closer to the on-going

51 Such as fresh capital raising by the ailing institutions or asset disposal, and excluding public support measures.

52 Basel III and accordingly CRD4 will raise this level to 6%.

supervisory assessment of firms, and draws more readily on information that they have available.

The assessment whether an institution meets the conditions set out under sub-option 1 or 2 could be made by the supervisor, advising the resolution authority that those conditions are met. The resolution authority would then make the public interest assessment and decide which resolution tool (if any) would be most appropriate in the light of the resolution objectives.

The undefined nature of soft triggers and any uncertainty around them may be mitigated if Authorities issue guidance to market participants about their code of conduct in crisis situations.

However, as the possible tools may involve a significant interference with the fundamental rights of shareholders and creditors[53], the triggers for resolution must also ensure that resolution action is not taken before all other realistic recovery options are exhausted (resolution is a 'last resort') and that the intervention is in the public interest. The proposed framework could include a condition that the use of resolution tools is necessary on public interest grounds, and public interest is defined by reference to financial stability, continuity of essential services, protection of public funds and protection of depositors. This is necessary to justify interference with property rights. However, this does not mean that only a category of systemic institutions could effectively fall within the scope of the resolution regime. The assessment of public interest could be made in the circumstances of each specific case. Small institutions may provide essential services, and the objective of protecting public funds or insured depositors could apply in any case. This element of the test does not target institutions that are, per se, 'systemic'. Rather, it requires authorities to assess the appropriateness of using resolution tools in the circumstances of the case.

Hard triggers for resolution would bring transparency to the resolution framework by making it known *ex-ante* to all stakeholders when a possible public intervention might be prompted. This would leave less room for disputes about the necessity of a resolution and thus it would be more difficult for stakeholders (i.e. shareholders) to block or hinder the resolution. It would also reduce scope for divergence in the single market across resolution authorities' practices. On the other hand, hard triggers have a number of disadvantages. They could provide opportunities for regulatory arbitrage on the part of banks. Hard triggers might also reduce supervisors’ incentives to maintain comprehensive oversight of financial institutions. Moreover, it is difficult to identify single indicators to detect every possible problem that could cause the failure of banks. In the recent crisis, for example, capital ratios of many banks were above the minimum but their liquidity situation necessitated government support.

The **combination of soft and hard triggers** seems to have advantages by combining flexibility with certain key indicators. Supervisory forbearance could somewhat decrease as at certain thresholds authorities would need to contemplate action. However as cases differ, conditions and needed reaction could also differ in particular situation, which would limit tailored solutions. Moreover, the disadvantages of hard triggers (listed above) would still remain in this case.

In the **public consultation**, Member States were split between favouring option 2.1, option 2.2 or their combination. The majority of banks and federations indicated their preference for option 2.1. A number of respondents expressed concerns about the use of the term "likely", which might create legal uncertainty. Federations suggested a number of conditions for the

53 Detailed analysis on the impacts on fundamental rights can be found in Annex XVI.

use of resolution tools like: it should only be used after all other alternatives have been explored; not automatic and as objective as possible; aligned with the triggers for bail-in; harmonised across EU and internationally; and easy to understand for investors. These conditions are largely in line with the principals incorporated in the proposal.

During the **discussions the Commission undertook in April 2012**[54] with key stakeholders on the bail-in tool, all parties: Member States, banking industry representatives as well as legal experts, agreed that there should be only one single trigger point for all possible resolution tools. In addition, legal experts as well as the Member States supported the soft trigger. Banks expressed some degree of concern about the possible impact of discretion involved in a soft trigger.

In the US, the Dodd Frank act has also opted for "soft" criteria[55] that need to be examined and fulfilled in order to launch a bank resolution. The Financial Stability Board (FSB) is also in the process of developing a trigger mechanism which is close to the second sub-option. This would provide international alignment for both banks and authorities.

The **preferred option** is to leave the decision to the assessment of authorities (soft trigger). However authorities can use resolution tools only if the institution is close to failure (i.e. a combined consideration of options 2.1 'likely failure' and 2.2. 'failure to fulfil authorisation conditions') and no other measures can restore its viability and the intervention is in the imperative public interest.

Soft triggers for resolution are necessary to capture the range of factors that might cause a bank to fail. Hard triggers, such as capital triggers, would be too restrictive and may apply too late – for example, capital is a lagging indicator of stress – to allow timely and effective intervention. Moreover, even if a 'hard' element could be included, an element of judgement to assess the public interest test that is a necessary part of the trigger for the use of resolution tools which by their nature interfere with rights to property.

It is acknowledged that there is potential for divergent application of such judgement-based triggers by national authorities. To address this, it is proposed that the EBA shall issue guidelines, to promote the convergence of supervisory and resolution practices regarding the interpretation of the different circumstances when an institution will be considered as failing or likely to fail.

Furthermore, the cooperative process of resolution planning and communication between authorities in resolution colleges should assist in promoting consistent assessments with respect to cross-border groups.

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[54] See Annex XVIII for more details.

[55] For example: the company is in default or in danger of default; the default of the financial company would have a serious adverse effect on the financial stability of the United States; no viable private sector alternative is available to prevent the default; the effect on the claims or interests of creditors, counterparties and shareholders of the financial company and other market participants of proceedings under the Act is appropriate, given the impact that any action under the Act would have on the financial stability of the United States; and an orderly liquidation would avoid or mitigate such adverse effects.

Table 13. Bank resolution triggers - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Developing effective bank resolution framework with clear and reliable triggers	1: No policy change	0	0	0
	2. Assessment of authorities (soft triggers)	**++**	**++**	**+**
	3. Automatic, hard triggers	+/-	+/-	+/-
	4. Combination of soft and hard triggers	+/-	+/-	+/-

Table 14. Bank resolution triggers - impact on main stakeholders

	Bank management + staff	Bank share-holders	Bank debt holders	Bank clients (depositors, borrowers)	Supervisors	Resolution authorities	Taxpayers /govern-ments
1. No policy change	0	0	0	+	0	0	0
2. Assessment of authorities (soft triggers)	**+/-**	**+/-**	**+**	**+**	**++**	**++**	**++**
3. Automatic, hard triggers	+/-	+/-	+	+	+/-	+/-	++
4. Combination of soft and hard triggers	+/-	+/-	+	+	+/-	+/-	++

4.3.2. *Possible policies to enable all resolution authorities with a set of resolution tools and powers to resolve banks*

Policy option	Description
Option 1. No policy change	The baseline scenario applies
Option 2. Minimum set of harmonised bank resolution tools (minimum harmonisation)	Resolution authorities could have the power to apply the following resolution tools, where the circumstances and conditions apply and are satisfied: (a) the sale of business tool; (b) the bridge bank tool; (c) the asset separation tool; The goal would not be that each authority should have exactly the same tools, but rather that measures implemented by different authorities should deliver the same or equivalent results. In addition to the minimum set of resolution tools, national authorities could keep their specific tools and powers in relation to bank resolution.
Option 3. Single set of bank resolution tools (maximum harmonisation)	Under this option a closed list of tools and powers could be defined for all resolution authorities dealing with cross border banks. Under an EU framework, tools and powers could be harmonised to a maximum extent.
Option 4. Debt write down tool 4.1 Comprehensive approach 4.2 Targeted approach 3 aspects within the above approaches: *(i) The interaction between ex-ante funds and bail-in* *(ii) The amount of bail-in-able liabilities* *(iii) Phasing-in*	This tool would enable resolution authorities to write down the claims of some or all of the unsecured creditors of a failing institution and, possibly, to convert debt claims to equity. It could be used to recapitalise a failing bank in order to help it to be viable in the long term; or to reduce those liabilities of a failing bank which are transferred to a 'bridge bank', thus effectively capitalising it. [56] There are two approaches which can be followed: Under a Comprehensive approach, resolution authorities could be given a statutory power to write down by a discretionary amount or convert to an equity claim, all senior debt deemed necessary to ensure the credit institution is returned to solvency. Under a Targeted approach, resolution authorities could require credit institutions to issue a fixed volume of 'bail-in able' debt which, in addition to the power to write off all equity, and either write off existing subordinated debt or convert it into an equity claim, could be written down or converted into equity on a statutory trigger. *For more description of the different approaches please see Annex XIII.*
5. Recapitalisation by using taxpayers' money /nationalisation	Recapitalisation of banks with the use of taxpayers' money was the option applied by most Member States in the recent crisis.

Option 2. Minimum set of harmonised bank resolution tools (minimum harmonisation)

The introduction of **special bank resolution tools** in all Member States (minimum harmonisation) would significantly increase the ability of authorities to achieve a successful and effective resolution and hence maintain financial stability. By introducing a special resolution procedure for banks, authorities could use techniques which are more suited to the needs of a bank resolution (e.g. decision on measures to be taken over a short period of time)

[56] The debt write down tool is different from contingent capital or contingent convertible bonds (cocos). Cocos are special fixed-income securities that convert into equity when a predetermined capital ratio threshold has been breached thereby increasing the company's Tier 1 Capital and decreasing the need to raise capital. Cocos are generally triggered in the early stage of problems when banks approach the 8% capital adequacy limit. The debt write down tool is, on the contrary, triggered when the bank fails or very likely to fail. In this case not only special bonds but shareholders and, depending on the policy choice, certain liabilities could be written down in proportion to the losses of the bank. Certain parts of these debts could be converted to equity.

and allow for a more appropriate balance of priorities to be exercised with regard to stakeholders (resolution favours depositors, continuity of services for all customers and eventually financial stability as opposed to only creditors under an insolvency procedure). If banks are sold to a viable market participant, or their viable parts are separated from bad assets, depositors can continue to access the bank and major banking services (e.g. payment systems) can stay operational. This would help to avoid runs on deposits, contagion to other banks and further risk to the stability of the financial system as a whole. Capital of the new entity (bridge bank) could be provided from resolution funds (see under section 4.5) and/or debt conversion (see option 4). Central banks could provide liquidity to the new entity, given that it would be deemed to be solvent.

Maintaining financial stability requires prompt action from resolution authorities. In case of imminent failure of a bank, they would exercise their resolution powers and tools without consent from the creditors or shareholders of the credit institution. Since one of the aims of resolution is to as far as possible avoid that public funds are needed, losses would be imposed first on shareholders. During a resolution, management would most likely be removed and new directors appointed. In order to minimise distortions of competition between banks and between Member States, State aid rules will need to be complied with. Partial transfer of assets to the new, viable entity could prompt the triggering of certain contractual clauses (e.g. netting, set-off), which could aggravate problems at the failing bank and in financial markets. Hence these contract and counterparties need to be protected. This point was widely supported by consultation respondents.

Option 3. Single set of bank resolution tools (maximum harmonisation)

A maximum harmonisation approach could bring some benefit in terms of consistency, compared with the baseline scenario. However, such an approach would most likely cause problems in many Member States because of differences between legal systems (e.g. constitutional limitations) and differences in responsibilities of authorities (banking supervisor, national bank, ministry of finance, deposit guarantee scheme). Furthermore, authorities would be deprived of tools and powers that are currently available for them and are suitable for national specificities. This might risk undermining the successful management of certain cases.

Option 4. Debt write-down tool (bail-in)

A supplementary resolution tool designed to enable the healthy part of a financial institution to continue as a going concern could also be developed. Under this tool authorities would be able to write-off equity, subordinated debt and either write-down certain other liabilities or convert them to new equity[57] (jointly referred to as **'debt write-down'** or **'bail-in'** below). The bail-in tool would also entail some form of reorganisation of the failing bank.

This tool could be particularly useful in cases where the resolution tools presented under option two are not sufficient to resolve a large, complex financial institution in a way that protects financial stability. For example, traditional resolution procedures may not enable authorities to maintain the systemically important activities of a large bank, such as its payments and lending functions. In fact, such business may be too large to sell to other banks in prevailing conditions without government support or without a significant anti-competitive impact, while if it is wound down its market functions may not be readily replaced by existing market players or new entrants.

57 A detailed analysis on debt write down or 'bail-in' can be found in Annex XIII.

Had the bail-in tool been available and applied in the recent crisis, most of the state support that was provided to distressed banks would not have been required. Instead, either only their subordinated debt or also a (often only small) part of their non-subordinated liabilities would have been written down, in order for the bank to fully absorb its losses and continue as a going concern.[58]

Design of the debt write-down tool: scope

As regards the scope of the bail-in tool, there are two possible ways to determine the scope of the write-down tool: (i) a comprehensive/broad scope where a wide range of liabilitites (such as unsecured debt, uncovered deposits, unsecured interbank exposures, etc.) could be haircut or converted and (ii) a restricted scope where only unsecured long term debt and long term uncovered deposits could be bailed-in.

(i) A large base of liabilities for bail-in purposes ensure that losses could be written-down when needed. On the other hand, certain categories of liabilities might be systemic or too complex to write-down and could be considered for exclusion from the regime.[59] Such exclusions may be also justified where one or more of the following conditions apply: (i) the net value of the liabilities is unstable, uncertain or difficult to ascertain in a timely manner; (ii) they are transactional counterparty exposures where the transaction would need to continue following resolution (such as IT suppliers); (iii) they are essential for the value or continued operation of the firm (e.g. employees, contractors, trade suppliers); and (iv) they are tied to specific assets as security.

Reflecting these considerations, derivatives (too complex), trade credit (to protect suppliers), deposits covered by DGS (as their inclusion generates risks of bank runs), very short term debt with maturity less than 1 month (as they could cause a liquidity run on the distressed bank before it goes into resolution) and secured debt (as this would clash with its treatment in insolvency) could be excluded from the bail-in regime.

In addition, if bail-in is applicable for almost all liabilities, the funding cost of banks risks increasing more than if bail-in is applied only to certain types of liabilities.[60]

(ii) A restricted approach to debt write-down in which bail-in is is confined to unsecured long term debt and long term uncovered deposits would entail running the risk that there is too little of bail-inable instruments available on banks' balance sheet, should losses be substantial. In addition, a restricted approach could cause difficulties for progressively more distressed banks to refinance such bail-inable instruments. On the other hand, if losses can be absorbed only by specific instruments, the increase in yields due to their bail-in-able nature would be limited to these instruments. The funding costs of other liabilities (e.g. senior unsecured debt) would in this case not change.[61]

58 For further details see a presentation shown in one of the GEBI meetings and available at ec.europa.eu/internal_market/bank/group_of_experts/index_en.htm. See also section 4.9 in Annex XIII.

59 Certain categories could be considered to be excluded from the bail-in debt category for financial stability reasons. Holders of those liabilities which are redeemable on demand (such as deposits) or within a short time period (such as short-term debt) might, if they believed that a resolution and possible bail-in was imminent, be likely to withdraw their funding. Such an action might likely cause a banking failure which via 'contagion' damaged other parts of the financial system. Thus it is considered important to 'carve out' certain liabilities to prevent a liquidity run on a stressed bank.

60 More information about the impact on the cost of funding can be found later in the text and in Annex XIII.

61 More information about the impact on the cost of funding can be found later in the text and in Annex XIII.

Based on an analysis of EU banks' balance sheet structure (see section 4.3 in Annex XIII), the share of bail-in-able liabilities for an average EU bank and for an average EU large banking group indicates the following results: (i) under the comprehensive bail-in, the share of bail-inable liabilities ranges between 30% for an average EU large banking group and 38% for an average EU bank. Under the restricted bail-in, the share of bail-in-able liabilities is obviously more limited, and it ranges between 13% for an average EU large banking group and 21% for an average EU bank.

This confirms, generally speaking, that the restricted bail-in option presents a theoretical risk of not providing a sufficient amount of bail-in-able liabilities, especially when large banking EU groups default and they need to be recapitalised for resolution purposes.[62].

During the **discussions the Commission Services undertook in April 2012**[63] with key stakeholders on the bail-in tool, most Member States supported a broad/comprehensive scope, while some Member States expressed reservations over the inclusion of DGS at least as a first buffer; and finally others expressed reservations over the exclusion of short term debt (< 1 month). Overall, there was a general support among Member States to include derivatives in the scope of bail-in. The banking industry preferred a much narrower scope. Should however a comprehensive approach be used, industry expressed their preference to exclude short term debt (< 3-6 months) and derivatives, while they were inclined to involve DGS. Legal experts were divided between the two options and generally agreed it would not be easy to distinguish liabilities on the basis of their maturity.

The interaction between ex-ante funds and bail-in

Ex-ante funds collected with contributions from the banking industry (Deposit Guarantee Scheme (DGS) and Resolution Funds (RF)) could greatly help in absorbing losses and recapitalizing distressed banks of systemic importance. If e.g. DGS were to help to absorb part of the losses, a lower amount of bail-inable liabilitites would be necessary.

Furthermore, the increase in the funding costs of banks due to the bail-in tool can be expected to be lower if ex-ante funds are also called upon to cover losses and provide new capital. This is due to the fact that expected haircut on bail-in-able liabilities would decrease.[64]

Finally, the involvement of DGS in resolution activities would be of great benefit for the DGS itself, as the total pay-out of the DGS would be considerably lower than if the bank failed and the DGS had to pay-out all covered deposits.

The amount of bail-in-able liabilities

The next question is whether banks would always hold enough bail-in-able liabilities that can be written down or whether banks should be requested to hold a minimum amount of bail-in-able liabilities. After the introduction of the bail-in tool, there is in fact a risk that financial institutions would shift their liabilities to excluded liabilities because the yields paid on bail-in-able liabilities would increase. As a result, banks might not hold enough bail-in-able liabilitites to absorb losses and finance recapitalisation.

[62] For a more detailed analysis see Annex XIII, section 4.3 and 4.4.

[63] See Annex XVIII for more details.

[64] Detailed calculations, assumptions and results can be found in section 5 of Annex XIII.

Setting a minimum amount of liabilities subject to bail-in in the first place would help address this problem. The minimum amount should be proportionate and adapted for each (category of) institution on the basis of their risk or their capital structure. Harmonised application of the minimum requirement at Union level could be ensured by EBA technical standards.

Since imposing a minimum requirement on bail in-able liabilities considered alone could penalize banks which prefer to hold more excess capital (capital above the minimum required by Basel III) and thus could unduly increase their funding costs, it would seem more efficient to take into consideration the regulatory capital of banks and define a *'Minimum Loss Absorbing Capacity (LAC) rule'* as follows: ***Total Regulatory Capital + 'bail-in able liabilities > x% of Total Liabilities.*** The advantage of using total liabilities instead of risk weighted assets in this formula is that it can better capture the actual amount of liabilities that are outstanding at the time of failure. On the other hand, using risk weighted assets in the formula would take into consideration the differing risk profile of banks, e.g. mortgage banks.[65]

The required levels of bail-in-able liabilities and the funding need of DGS/RF depend on the decision of how severe a crisis the framework needs to withstand. Model calculations considered extremely severe (SYMBOL model 99.99% percentile simulation) and very severe crisis (SYMBOL model 99.95% percentile simulation) scenarios which were similar in size to the recent crisis started in 2008.

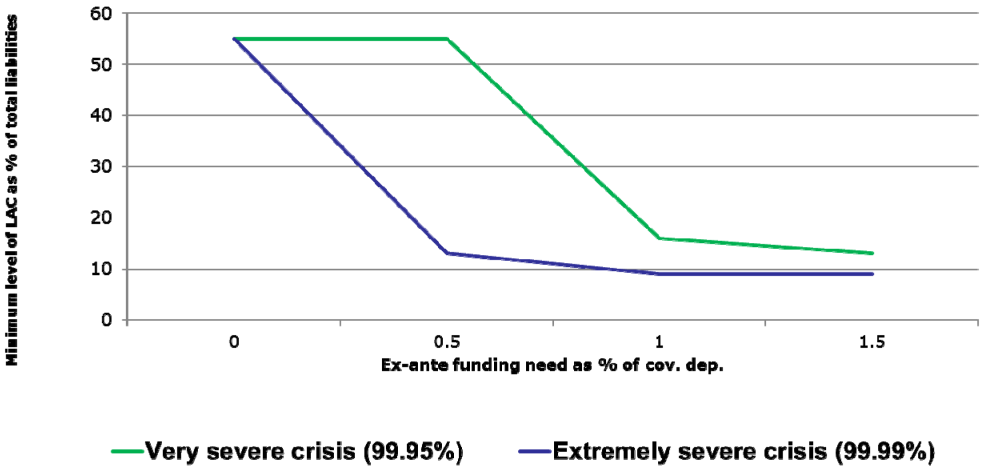
If the resolution framework is to be able to absorb losses in a very severe crisis scenario, depending on the level of ex-ante funds available, a minimum LAC of up to 12% of total liabilities could be needed.[66] If the resolution framework is to be able to recapitalise banks as well, a minimum LAC of up to 25% of total liabilities could be needed, still depending on the level of available DGS/RF funds.

Considering the two different crisis scenarios mentioned above, different combinations of ex-ante funding and of minimum LAC were examined (see Chart 3 and sections 6 and 7 in Annex XIII). An optimal combination of the two parameters could be considered to be: 10% LAC and 1% of total covered deposits as ex-ante funds. With this combination the system could in fact withstand a very severe crisis, by using resources most efficiently (i.e. if more ex-ante funds were required the minimum LAC would not significantly decrease).

[65] A comparison between these two options can be found in section 8 of Annex XIII.

[66] The more ex-ante funds are available, the fewer bail-inable liabilities banks need to hold to cope with a given simulated crisis scenario.

Chart 3: Possible combination of ex-ante funding and minimum LAC levels with sequenced (option 3 as detailed in Annex XIII) application of bail-in to absorb losses and recapitalise banks



During the **discussions the Commission Services undertook in April 2012** with key stakeholders on the minimum level of bail-in-able liabilities, some Member States have indicated support for the idea of a harmonised minimum level but did not have firm views on the suggested level (i.e. the 10% LAC). Other Member States who also favoured a broad/comprehensive scope of bail-in-able instruments argued that no minimum level was required. One Member State expressed a preference for national authorities to be able to determine any required level on a case-by-case, taking account of differences in banks' funding profiles and systemic relevance. Industry was overall critical of a common minimum requirement. Many argued that it would fail to take account of different banking models and that it would force them to raise new capital or issue debt which is costly or inconsistent/inefficient from the point of view of their funding model. Legal experts who favoured a restricted bail-in argued that a minimum level would be needed, although they also indicated preference for flexibility to work it out together with authorities.

Impact on the cost of funding

The decision about the minimum level of bail-in able liabilities also needs to take into consideration the impact of bail-in on the funding cost of banks and eventually on macroeconomic developments.

Although the eventual use of the debt write-down in a crisis situation would be at the discretion of authorities, the proposal would make certain debt categories bail-in-able. This would have an impact on bank funding markets. The actual costs will depend, first of all, on the increase in yields of the bail-in-able instruments, for which a central estimate can be considered to be 87 bp, following industry estimates. [67]Secondly it will depend on the share of bail-inable liabilities within total liabilities, since the increase will affect only this categoryThirdly, the costs of bail-in will depend on the existence and extent of possible mitigating factors which include, among others: (i) the inclusion in the framework of a no creditor worse-off principle, (ii) the presence of a proportionate application of the bail-in tool,

[67] JP Morgan estimated an average downgrade for a group of 55 European banks of 3-4 notches on Moody's ratings scale from the removal of implicit government support to banks.JP Morgan suggests in particular that investors would demand an 87 basis points premium of a single A bank if debt write-down was feasible. See Annex XIII for more details.

which would apply mainly to SIFIs only, (iii) the existence of ex-ante funds financing and supporting resolution in addition to bail-in and (iv) banks' incentive to protect their unsecured senior debt by issuing either more equity capital or more subordinated liabilities.[68] These factors can significantly (overall by 65%) reduce the increase in overall funding cost due to bail-in.

Taking into account all above assumptions and factors, calculations show that if a minimum Loss Absorbing Capacity (regulatory capital + bail-in-able liabilities) were set at 10% and ex-ante funds (DGS/RF) of 1% of covered deposits were available to finance bank resolution, the total funding cost of banks in the EU would increase on average by a range of 5 to 15 bp.

Impact on the macro economy

Macroeconomic calculations were carried on the basis of an appropriately adapted version of a model first proposed by the Bank of England. to see what would be the effect of different levels of funding cost increases for the banking sector on the EU's GDP. If the overall cost of funding for banks increases by 5 or 15 bp, this would cause a cost equivalent to 0.14% - 0.4% of EU GDP annually;[69] Annex XIII presents the macroeconomic costs of bail-in in detail, as well as its benefits for financial stability.

Phasing-in

The impact of the bail-in tool also depends on the phasing-in approach. There are two options to be examined: (i) In case of a failure, the bail-in tool can be applied from the date of transposition of the directive by Member States for any eligible liabilities banks have in their balance sheet (either issued before or after the implementation day, no grandfathering). (ii) The bail-in tool can be applied only on newly issued eligible liabilities (issued after a specific date e.g. 2013, grandfathering).

The first option has the advantage that from the date of transposition authorities could write down any eligible (i.e. non-excluded) liabilities, which would offer a large base for absorbing potential losses. A large majority of the 16 largest banking groups in the EU could already fulfil the 10% minimum requirement at present, so they can offer a wide basis to absorb losses.

The immediate application of the bail-in tool on all outstanding eligible liabilities in case of a failure after the directive is transposed would, however, have an immediate impact on the bank debt market. It would even change the nature of some of the currently outstanding bank debts (liabilities issued before the introduction of the bail-in tool and maturing after the transposition date), which could weaken legal certainty. In addition, under the current difficult market conditions it would make new debt issuance even more difficult for banks, which could further deteriorate the liquidity and financial position of some of the banks.

Under the second option, authorities could not haircut liabilities issued before a specific date. The disadvantage of this option is that authorities would need to wait until banks accumulate adequate levels of bail-in-able liabilities i.e. if a bank fails in the build-up period, authorities could not use the bail-in tool as effectively as in the first option, for a while they would have only banks' capital to rely on. On the other hand, this option would respect legal certainty and

[68] More detailed analysis can be found in section 4 of Annex XIII.

[69] Macroeconomic calculations were also carried out with the QUEST model of the European Commission. Results confirm the estimation of the model also used by the Bank of England, which is presented in Appendix 5 to Annex XIII.

would give time for both investors and banks to prepare for this new instrument. Under current fragile market circumstances, the application of the bail-in tool on liabilities issued only after a specific date would also help banks re-establish their healthy funding.

During the **discussions the Commission undertook in April 2012**[70]**,** there was very little support among all types of stakeholders for the grandfathering of existing debt. Rather a preference was given to delayed implementation of the bail-in tool.

Preferred options for the bail-in tool

Based on the above considerations, bail-in tool is preferred to be applied to all liabilities with only a limited number of exclusions: secured liabilities, covered deposits, trade liabilities, very short term debt (< 1 month) as well as some derivatives. Member State authorities could be given powers to exclude certain other liabilities on case by case basis depending on the impact that applying bail-in to them could have on financial stability. Harmonisation and relative certainty as to the use of this power would be ensured by EBA issuing guidelines or implementing rules.

Since creditors will suffer losses on their assets in an administrative resolution process, it needs to be assured that the tool is used in a justified and proportional way. This can be achieved by using three principles. Firstly bail-in should be triggered close to insolvency. In this moment creditors would anyway imminently face a judicial process, where their claims would most likely not be granted to 100%. Secondly, the process must ensure that the rankings of ordinary insolvency process are respected as much as possible[71]. Finally, a minimum amount of bail-in-able liability could be determined by resolution authorities depending on the systemic importance of each bank/financial institution and taking into consideration the differences in organisational structure of banking groups. According to model results the reference value of the minimum LAC would on average be around 10% of total liabilities.

Links with CRD

The debt write down tool also has links to the CRD and the objectives are complementary. Capital eligible for regulatory purposes should absorb losses on a 'going concern' basis. The bail-in regime would go further – effectively requiring bail-in-able liabilities to absorb losses when the banks approach failure (insolvency). The required level of bail-in-able liabilities would take into consideration regulatory capital (tier 1 and tier 2 capital regulated by the CRD), since banks would need to hold minimum (possibly 10%) LAC (regulatory capital plus bail-in-able liabilities).

Calculations carried out on the impact of the bail-in tool assuming a 10% minimum LAC have espicitly taken into consideration the existing and coming Basel III regulations on capital requirements. When calculating the benefits and costs of the bail-in regime, only the costs and benefits compared to a fully implemented Basel III framework (i.e. total regulatory capital using the more stringent Basel III definition>10.5% of RWA) were considered.

The link between the 10% LAC and the 3% leverage ratio proposed by Basel III and CRD 4 for application from 2018 has also been analysed. Both create a theoretical risk of deleveraging for banks. Calculations show that the minimum LAC on average would not

[70] See Annex XVIII for more details.

[71] Financial stability reasons could justify divergence e.g. exclusion of interbank deposits.

create any substantial deleveraging neither in itself nor vis-à-vis the leverage ratio implemented from 2018. There might be, however, selected cases of deleveraging if the minimum LAC rule were introduced before 2018 (where the leverage ratio would still to be implemented).

International considerations

In terms of the ongoing debate at international level in the Financial Stability Board[72] regarding Systemically Important Financial Institutions (SIFIs), we need to separately examine the issue of bail-in and the additional loss absorbency (the 'SIFI surcharge') as they fulfil two different purposes. The first provides additional loss absorbency in a resolution context, i.e. when the bank is likely to fail or has already failed. It does so by writing down the value of debt, thus providing the institution with time during which it can restructure its business or be closed down in a more orderly manner. A capital surcharge strengthens an institution's ability to absorb losses in normal times (far from bankruptcy situation). Basel III will significantly strengthen the capital adequacy of banks, by e.g. improving both the level and quality of their regulatory capital. Higher capital requirements will therefore decrease the probability of failure but cannot exclude it.

The Commission is working closely with its international partners in the FSB to develop a framework for bank resolution. The 'Key Attributes of effective Resolution Regimes for Financial Institutions' prepared by the FSB and approved by the G20 includes the debt write down tool as part of the resolution framework. The Commission has assessed carefully the proposed regime and will align the proposed recovery and resolution framework with the FSB's 'Key Attributes'.

The risk that the introduction of a bail-in tool in the EU alone might significantly disadvantage EU banks vis-à-vis their competitors elsewhere[73] would also have to be considered and weighed against the benefits of the tool. In the US, the Dodd-Frank Act has introduced the debt write down tool. The FDIC has the power to write down senior debt that is transferred to a bridge bank (closed bank approach). However, by contrast to the preferred options of the EU, FDIC is not allowed to use 'bail-in' and keep the bank open as a going concern.

Moreover there is a need to ensure that non-EU authorities accept decisions taken by EU resolution authorities in respect of debt issued outside the EU by EU banks, which is subject to non-EU law. Finally, if the bail-in tool is implemented consistently at global level, the increase in funding costs of debt instruments is expected to be lower than in the case of EU only implementation, since the possibility of substitutions for investors would be lower.

Option 5. Recapitalisation by using taxpayers' money /nationalisation

As a last option in bank resolution, failing banks can be **recapitalised by the state by using taxpayers' money**. This option is very effective as it immediately restores the solvency of a bank and hence avoids contagion and reduces risks to financial stability. It could be very beneficial for bank debt holders if their claims remain fully protected (no write down). In certain cases shareholders can be also on the beneficiary side, as their shares could appreciate

[72] The Financial Stability Board (FSB) is currently working on 'bail-in' in the context of improving the resolvability of SIFIs. The Commission, as participants on FSB meetings, intends to closely follow the work and align with the results in order to provide level playing field for EU banks on international markets.

[73] The experience of Denmark, which introduced a particular form of debt write down in 2010, suggests that the banks of a country which applies it could suffer higher funding costs than their rivals from countries which do not.

in case the bank recovers. However this tool could put significant burden on taxpayers and future generations as evidenced several examples during the recent crisis. Given that the purpose of the framework is to avoid that cost of bank failures in the future would be borne by taxpayers, this tool does not support the achievement of that objective. In addition it would maintain moral hazard of banks.

In the **public consultation**, respondents believed that the proposed resolution tools are sufficiently comprehensive. Some proposed to include partial nationalisation and/or capital injection as resolution tool, provided that it is adequately restricted to special cases in order to avoid moral hazard. Responding authorities favoured "minimum" harmonisation of the toolkit. There were suggestions that national resolution tool should only be used as long as they are compatible with the principles and objectives of the bank resolution framework and they do not hinder the possibility of achieving cross border group resolution. A number of industry respondents favoured maximum harmonisation of resolution tools. The majority of respondents agreed with the core principle that no creditor should be worse off as a result of bank resolution than in liquidation under judicial insolvency proceedings.

Respondents to the public consultation supported that authorities should have to power to write down any debt. They requested high transparency and clarity around the use and triggering of this tool. All respondents agreed that rules for 'bail-in' must be consistent with international recommendations and standards, as capital and liquidity markets are highly integrated worldwide.

The **preferred option** is the introduction of a minimum set of resolution tools with the possibility to write down and convert debt to equity. The 'basic' resolution tools can be applied with great expected success in cases when the failure concerns only an individual bank or a group and is not of systemic nature. Furthermore, they are mostly applicable for small or mid sized banks. The debt write down tool (bail-in) could therefore be added to the 'basic' toolkit of authorities and thus contribute to increasing the chances of a bank resolution in all segments of the banking sector especially for systemically important institutions. Taking into consideration the views of stakeholders the framework will be flexible and allow authorities to apply rules regarding bail-in (e.g. minimum level of LAC) on a case by case basis and with proportionality that takes into account their specificities deriving from their business model, organisational structure, sources of financing, size or cross-border operations.

Table 15. Bank resolution tools - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Enabling all resolution authorities with a set of resolution tools and powers to reorganise banks	1: No policy change	0	0	0
	2. Minimum set of harmonised bank resolution tools (minimum harmonisation)	++	++	++
	3. Single set of bank resolution tools (maximum harmonisation)	+	-	-
	4. Debt write down	++	++	+
	5. Recapitalisation by using taxpayers' money /nationalisation	+	--	--
	6. Minimum set of tools + debt write down	++	++	++

Table 16. Bank resolution tools - impact on main stakeholders

	Bank manage-ment	Bank employees	Bank share-holders	Bank debt holders	Bank clients (depositors, borrowers)	Taxpayers government s	Resolution authorities
1. No policy change	0	0	0	0	0	0	0
2. Minimum set of harmonised bank resolution tools	-	+/-	-	+/-	++	++	++
3. Single set of bank resolution tools	-	+/-	-	+/-	++	++	+/-
4. Debt write down	-	+/-	-	+/-	++	++	++
5. Recapitalisation by using taxpayers' money/nationalisation	+	+	+/-	+	+	--	--
6. Minimum set of tools + debt write down	-	+/-	-	+/-	++	++	++

4.3.3. Possible options to amend EU and national legislation to eliminate legal uncertainties around the use of resolution tools

Policy option	Description
1. No policy change	The baseline scenario applies
2. Adjustments in EU Company Law Directives to support bank resolution by giving the Member States the possibility to derogate from the relevant provisions.	In this option Member States would be given the possibility to derogate from clearly defined company law provisions which imply having to seek consent from the stakeholders (creditors or shareholders) or otherwise can hinder the effective use of resolution tools and powers. Derogating would be possible from parts of 2nd Company Law Directive, Article 5(1) of the Takeover Bids Directive, and the whole of Company Law Directives concerning mergers and divisions, Cross-border mergers Directive and Shareholders' Rights Directive. This would enable the Member States to allow their resolution authorities to apply the resolution powers effectively without taking into account the requirements imposed by mandatory EU rules. As it is vital to guarantee maximum legal certainty for the stakeholders, derogating would only be possible to the extent necessary for the application of resolution powers provided that trigger conditions and public interest test for their use are met.
3. Adjustments in EU Company Law Directives to support bank resolution by requiring the Member States to derogate from the relevant provisions.	In this option, the Member States would have to derogate from clearly defined company law provisions listed above to the extent necessary for the application of resolution powers provided that trigger conditions and public interest test for their use are met.

Both options two and three would significantly diminish shareholders' procedural rights in the resolution phase[74]. On the other hand, this would facilitate the effective use of resolution powers by resolution authorities as shareholders' views on capital or restructuring measures would not need to be taken into account. This corresponds to the overall objective of the bank recovery and resolution framework notably to minimise losses for society as a whole and especially for taxpayers. The threat of losing the rights should also incite stakeholders to take necessary actions earlier on in the process, before the threshold conditions for resolution are met[75].

With regard to the Takeover Bids Directive the derogation from the mandatory bid rule in the resolution phase would have a negative impact on the protection of minority shareholders in case of change of control as they would be faced with a new controlling shareholder and possible devaluation of their investment. However, if the credit institution would fail the value of the shares would certainly decrease and may even be zero.

The difference between the two options is the margin of discretion left to the Member States. Option two would enable the Member States create a framework that guarantees effective application of resolution tools and powers. However, there is a risk that this option would result in different minimum resolution tools and powers for resolution authorities in different Member States as regards the stakeholders' rights. This could have a negative impact for an effective resolution in cross-border situations. Option three would better guarantee that resolution authorities in different Member States can apply the resolution tools and powers in a more harmonised way and is thus the preferred option.

The **preferred option** is option three as it would better guarantee that resolution authorities in different Member States can apply the resolution tools and powers in a more harmonised way.

74 See Annex XV for details on the derogations from specific shareholders' and creditors' rights as foreseen by EU company law.

75 See also Annex XVI for more details on the fundamental rights aspects.

Table 17. Legal changes - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Amending EU and national legislation to eliminate legal uncertainties around the use of resolution tools	1: No policy change	0	0	0
	2. Adjustments in company laws to support bank resolution (possibility to derogate)	+	+	+
	3. Adjustment in company laws to support bank resolution (requirement to derogate)	++	++	++

Table 18. Legal changes - impact on main stakeholders

	Bank shareholders	Bank debt holders	Bank management	Supervisors	Resolution authorities
1. No policy change	0	0	0	0	0
2. Adjustments in company laws (possibility to derogate)	-	+/-	-	+	+
3. Adjustment in company laws (requirement to derogate)	-	-	-	++	++

4.4. Cross border crisis management

4.4.1. Possible policies to foster efficient cooperation of authorities in cross border resolution

Policy option	Description
1. No policy change	The baseline scenario applies
2. Establish cooperation arrangements (resolution colleges) between resolution authorities	Resolution authorities could establish resolution colleges to facilitate the exercise of the tasks in relation to group resolution plans and the effective coordination and cooperation between resolution authorities and, where appropriate, with third country authorities that perform equivalent functions within their territories. Resolution colleges would provide a framework for resolution authorities to exchange information and to undertake the planning and coordination of activities related to resolution, in preparation for and during emergency situations in cooperation with colleges of supervisors. Agreements with third countries regarding the coordination of bank resolution could be established.
3. Increased powers to EU authorities in bank resolution	Under a new European framework, EU authorities could be given decision-making roles in a cross border bank resolution. EU authorities (e.g. the European Banking Authority) could be empowered to coordinate and/or lead a resolution of banking groups. If national resolution authorities were unable to reach an agreement, an EU authority might be best placed to make the final binding decision. EBA could be given a role in the development and coordination of recovery and resolution plans. Furthermore, EBA could be given a responsibility to, if required, resolve disagreements between resolution authorities of the application of preparatory and preventative powers.
4. Setting up an EU Resolution Authority	It is also an option to set up a new Authority which would be responsible for the management of a cross border resolution mechanisms within the EU.

Cooperation of resolution authorities could be formalised with the establishment of **resolution colleges**. This would ensure that national authorities inform each other about emergency situation, discuss and decide on joint or coordinated actions in case of cross border failing banks. The decisions made in colleges would not be binding but members would be obliged to give explanation in case of non-compliance. Efficiency and effectiveness at EU level will be significantly increased if the group level resolution authorities establish and coordinate activities of resolution colleges. Decision on which of the authorities eligible to participate in the resolution colleges will also increase efficiency especially when time is running out. The decision of the group level resolution authorities would take into account the relevance of the meetings or activities in question for those authorities and the stability of the financial system in the Member States concerned. The participation and possible mediation role of EBA on meetings and activities of all resolution colleges would further ensure that the interest of all Member States and stakeholders are taken into account and the fragmentation of the internal market is avoided. Agreements with third country authorities could ensure that authorities could consult each other when the use of a resolution power or tool may have an impact on the financial stability in third countries or in the EU, and strive to reach common and consistent approaches to the resolution of a credit institution, or a third country branch.

Increased powers to EU authorities in bank resolution could bring certain benefits. However, it is unlikely that Member States would currently be in the position to shift their powers on bank resolution to any EU body. To come to a situation where an EU body could decide on these issues, further steps are needed to come to robust burden-sharing arrangements between Member States and harmonisation of insolvency laws. Regarding EBA's possible power in relation to resolution, it is important to note that some may consider it inappropriate for EBA's Board of Supervisors, which is composed of representatives from supervisory authorities, to take decisions relating to disagreements between resolution authorities.

An EU resolution authority would be expected to consider all interests, benefits and cost at national and EU level, and choose the most optimal solution for all EU and third country stakeholders. Decisions on resolution could be granted to the EU authority hence Member States would need to resign of their rights to resolve local banks of cross border groups. Decisions of the Authority could however oblige Member States (depending on the financing scheme) to contribute to the cost of resolution. In the absence of jointly accepted financing mechanism at EU level, politically this seems to be not feasible until at least the EU has harmonised insolvency laws. The setting up and operation of a new Authority would also entail cost for the budget of Member States and the EU.

Most respondents of the **public consultation**, except a few Member States, supported the idea of resolution colleges. Member States disagreed however about the composition (e.g. all or selected authorities), and the decision making mechanism. Most Member States considered that the effectiveness of the proposed coordination mechanism is diminished if host resolution authorities can decide not to comply with the scheme. They all agreed that coordination by the group level resolution authority is desirable. The industry supported the proposed solutions and believed that it would strike a reasonable balance. Respondents agreed that an internationally coordinated approach is the most desirable and suggested representing this principle in negotiations at G-20, FSB and the Basel Committee.

The **preferred option** is the establishment and operation of resolution colleges with the assistance of EBA[76]. Even though this solution does not necessarily ensure that all issues regarding the misalignment of the responsibilities of national authorities and the cross border nature of the industry will be solved in the most effective way in a crisis situation, this option has the highest acceptance among Member States, hence this is the most realistic under current circumstances.

EBA has been entrusted with responsibilities to ensure a coordinated approach to crisis management and prevention (articles 23-27 of the Regulation 1093/2010). These include, inter alia, developing criteria for the measurement and identification of systemic risk, ensuring an ongoing capacity to respond to the materialisation of systemic risks, contributing

[76] Article 1(2) of the EBA regulation makes it clear that the EBA shall act within the scope of certain directives, such as the Capital Requirements Directive, and any further legally binding Union Act which confers tasks on the authority. Thus it is clear that the EBA may be given certain tasks under the current proposal. In terms of the authorities that may be represented, Article 40(5) provides for the possibility that Members of the Board of Supervisors of the EBA may bring a non voting representative from the relevant national authority.

and participating actively in the development of recovery and resolution plans, and developing best practices for cross border resolution. The EBA will be able to bring together national authorities – both through its own management structure (board of supervisors, management board and sub committees) and within resolution colleges, to exchange best practices and ensure the highest standards. Additionally, the EBA's powers to coordinate both during and before a crisis (as outlined above), to develop best practices and technical standards, and if necessary mediate disputes, will all contribute to ensuring a consistent and effective approach across Member States.

In terms of formal decisions, the EBA can clearly be given a strong binding role in the prevention and preparation phases. In the resolution phase, the complexity and speed at which resolution decisions must be taken, and the importance of legal certainty, means that further consideration needs to be given to the exact mechanics of any binding EBA role in this phase.

Table 19. International cooperation - comparison of options

Operational objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Enabling all resolution authorities with a set of resolution tools and powers to reorganise banks	1: No policy change	0	0	0
	2. Establish cooperation arrangements (resolution colleges)	+	+	++
	3. Increased powers to EU authorities in bank resolution	++	++	-
	4. Setting up an EU Resolution Authority	++	++	-

Table 20. International cooperation - impact on main stakeholders

	Banks	Resolution authorities	Supervi sors	EBA	Taxpayers / governments
1. No policy change	0	0	0	0	0
2. Establish cooperation arrangements (resolution colleges)	+	++	++	+	+/-
3. Increased powers to EU authorities in bank resolution	+	+/-	+/-	+/-	+/-
4. Setting up an EU Resolution Authority	+	-	≈	≈	+/-

4.5. Financing resolution

4.5.1. Possible policies to develop arrangements to finance bank resolution that provide optimal and even level of protection for all Member States

Policy option	Description
1. No policy change	The baseline scenario applies
2. Calibrating national Resolution Funds (RF) (in isolation from other prudential measures) (ex-ante or ex-post)	All Member States could set up national funds that would finance bank resolution. Under this option, the calibration would not take into account other prudential measures in place such as increased capital requirements under Basel 3, and the existence of DGS.
3. National Resolution Funds jointly calibrated with Deposit Guarantee Schemes (DGS) and the debt write down/bail-in tool (ex-ante or ex-post)	The funds to finance resolution could be calibrated in a way that takes into account available funds in DGS and the ability of the bail-in tool. Both can absorb losses and provide new capital in a bank resolution.
4. Setting up and calibrating a European Resolution Fund (ex-ante or ex-post)	A single European Resolution Fund could provide funding for all banks operating in the EU.

The purpose is to give resolution authorities available funds to finance resolution measures. The trigger of the fund would coincide with the resolution trigger. In a resolution, it is crucial to preserve the liquidity and re-establish capital position of the systemically important part of the failing bank. In this way, contagion to other banks is blocked, and financial stability is preserved. In addition, resolution measures require financing for other purposes as well e.g. to provide funding for a bridge bank.

The option of calibrating a **Resolution Fund (RF) in each Member State in isolation from other prudential measures** would have the advantages of (a) providing dedicated funds for resolution purposes, and (b) empowering resolution authorities to use funds, should they become the administrators of such funds. In the case that funds for financing resolution are calibrated in separation from the Deposit Guarantee Schemes (DGS), Member States would be free as to how to organise resolution financing and how to determine the criteria for financing resolution. However, the main drawback of such an arrangement would be the lack of coordination with other existing safety nets, such as DGS. This entails the risk that the funds raised from banks are not optimal. It could be either too low for ensuring financial stability, or too high and creating an excessive burden to banks. Moreover, in a cross border case, the decision to finance the resolution of cross border banks could be jeopardised by the conflicting interests of national authorities (i.e. financing resolution of banks in other Member States).

Despite the different scope of **DGS and RF**, there are a number of synergies from a combined design and calibration. Economies of scale would exist, as the existence of optimally calibrated financing needs for resolution allows the DGS needs to be reduced. When a resolution framework that stops contagion is in place, the DGS fund would only finance a few banks (pay out depositors) that default eventually. In contrast, when no resolution measures are available and contagion spreads through the financial system, the amount of money that the DGS needs to pay out in a MS is considerably higher. In countries where the interbank market is more developed the synergies of the two funds are higher (as contagion risk is higher). In addition if DGS finances resolution measures (e.g. deposits transferred to a healthy bank), its payment obligation would mostly likely be smaller than the payout of all eligible deposits if the bank is liquidated.

As synergies do not depend on whether one single or two separate institutions perform the tasks of protecting depositors and allow the resolution of banks, Member States can be left free to choose to have one single institution or two separate institutions to perform DGS and RF tasks. The disadvantage of national funds financing a cross border resolution is however maintained at this option.

The calibration brings further synergies if it takes into account the possibility to **write down** and convert certain **liabilities** to equity in a failing bank. If losses are spread more evenly among different liability holders, the need for ex-ante funding decreases.

A **single European Resolution Fund** (ERF) would have the advantage of creating one common fund across the Single Market, which could facilitate in particular the financing of resolution measures aimed at banks active across the Single Market. Furthermore, if funds are collected at EU level, the large pool of funds would provide credibility as an ERF could finance the resolution of larger banks or SIFIs, too.

However, there are a number of disadvantages. First, it is not immediately clear who should administer the fund. In view of insolvency rules and procedures not yet being harmonised and resolution measures being of predominantly national kind, a European Resolution Authority is neither desirable nor feasible at this current juncture. Furthermore, even though the EU now has new supervisory authorities (ESAs), their involvement is not assured if resolution measures have fiscal consequences. Accordingly, there is no natural candidate for administering an EU Resolution Fund neither from a resolution nor a supervision perspective.

Ex-ante versus ex-post funding

Regarding the choice of ex-ante versus ex-post financing of funds, the arguments are the following. Ex post financing is pro-cyclical, as raising resources from financial institutions in the midst of a crisis would be difficult, as it would drain resources from the financial sector at a time when they are most needed. Accordingly this might further accentuate a financial crisis. Ex post can be regarded as unfair, as contributions would exclusively be paid by the surviving institutions, not the failed institution (which creates moral hazard). Banks that do not have to pay ex-ante contributions are able to generate returns on these funds, which constitutes a competitive advantage vis-à-vis their competitors in other Member States with ex-ante funded funds. Furthermore it does not affect incentives; raising funds after an event would not address the incentives of a failed financial institution and would accordingly create a free-rider problem.

Ex ante financing would eliminate all disadvantages of ex-post financing listed above. Its disadvantage however, is that it might increase cost for banks, depending on the method of collection. This higher cost, which results from a more accurate pricing of risk, could be passed on to bank clients (depositors, borrowers) who could get banking services at less favourable terms.

Appropriate target amount

In addition to determining the best policy about the operation of resolution financing, the most crucial issue is the optimal amount of funds that should be made available for resolution purposes. The optimal calibration of financing needs for resolution is performed on the basis of the so called SYMBOL model[77].

If ex-ante funds need to absorb banks' losses that their capital could not absorb and also provide new capital, estimations based on the model concluded that the appropriate target size[78] of the DGS and RF would be between 1% and 4% of EU banks' total covered deposits. The actual number depends on the size of the crisis the framework needs to withstand and on the method how the bail-in tool interacts with the ex-ante funds in a bank resolution. The preferred option is to collect ex-ante funds equal to 1% of EU banks' covered deposits to finance resolution. Further analysis can be read in Annex XIII.

Contribution base

The contribution base of a bank levy that is appropriate for DGS (covered deposits) is not appropriate for RF. If the resolution framework were funded solely on the basis of insured deposits, this would not ensure the appropriate funding for the resolution of those banks that even if not especially funded by deposits, do create important systemic risk due to either their size or their interconnections. In general, these banks would need to be saved without contributing at all to the funding of their resolution.[79] The funding of resolution is to be expected very dependent on the size of banks' liabilities.

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[77] SYMBOL model was developed by the Joint Research Centre and DG Internal Market and Services. Detailed presentation of the methodology and the results of the model can be found in Annex XIII.

[78] Calibrations were executed on the basis of Symbol simulation of 99.95% percentile, which is similar to the banking crisis of 2008-2010.

[79] A contribution base centred on insured deposits would most likely unfairly penalise smaller banks (specialised mainly in deposit taking) to the advantage of larger, universal banks that have a more diversified balance sheet structure and are, instead, potentially more systemically important.

When calibrating for joint DGS-RF, it seems appropriate to calculate contributions according to two basis: (i) covered deposits – for ensuring the pay-out of covered deposits (or, as an alternative, their transfer to a sound institution); and (ii) liabilities excluding capital and covered deposits – for financing crisis management and resolution. The actual contribution of each banks could also vary depending on the riskiness and nature of the business. Methodology for risk based calculation could be developed by EBA.

Relationship between target fund and banks levies where they already exist

The impact of the calculated, optimal target level of DGS+RF, financed with the contributions of banks, were also analysed vis-à-vis Member States already using some form of bank levy or tax. From a legal point of view, the Commission's proposal would not create any obligation on Member States to change and/or revise their existing levies. Nonetheless, it is fair to say that certain Member States might be under pressure to reduce their levies once the proposal of the Commission is implemented.

In the **public consultation** many Member States called on the Commission to propose a general requirement for them to make financing available for resolution but to leave the design of such a requirement to the discretion of Member States. The industry mostly argued against resolution financing since alternative arrangements (DGS, national levies) already exist or are in the process of being introduced and since it can increase moral hazard.

There was strong support for exploiting synergies with DGS with some reservations related to the differences in objective and scope (pay-out of depositors in a failure). Some respondents also argued that if the two instruments become integrated, then safeguards will be needed to ring fence resources for the depositor pay-out function. Respondents had mixed views about ex-ante versus ex-post financing. Some were against ex-ante financing because it is difficult to foresee how much funds would be needed and because of economic inefficiency (funds could be used to finance real economy). Others supported ex-ante financing because it is fairer (every institution pays not only the survivors) and reduces adverse incentives (free rider problem).

There were mixed views the on level of harmonisation, notably as regards whether the objective, base and rate of contributions should be harmonised. Among Member States, proponents of a harmonised European regime are typically those that have already instituted one. Other Member States generally promoted the freedom to design key aspects of a financing regime (e.g. base, contribution). Industry and some Member States strongly urged the Commission to ensure that the outcome was coordinated and avoided double imposition resulting from uncoordinated national financing approaches.

The **preferred option** is a jointly calibrated DGS and Resolution Funds (RF) that are financed ex-ante and managed at national level. Despite opposing views of stakeholders, if funding in the future should not come from public sources, there is a need to set up a private resolution funding mechanism. However to minimise the impact of ex-ante funds, and hence cater for the concerns of some of the stakeholders, the calibration has chosen the smallest fund size that would still be effective in tackling a very severe crisis in combination with the bail-in tool.

Table 21. Financing - comparison of options

Specific objective	Policy options	Comparison criteria		
		Effectiveness	Efficiency	Coherence
Develop arrangements to finance bank resolution that provide optimal and consistent protection for all Member States (in line with other prudential measures)	1. No policy change	0	0	0
	2. Setting up and calibrating national Resolution Funds in isolation from other prudential measures	+	+	+
	3. National Resolution Funds jointly calibrated with DGS and bail-in	++	++	++
	4. Setting up and calibrating a European Resolution Fund	++	++	+

Table 22. Financing - impact on main stakeholders

	Banks management + staff	Bank share holders	Bank debt holders	Bank customers (depositors, borrowers)	Resolution authorities	DGS	Taxpayers Governments
1: No policy change	0	0	0	0	0	0	0
2. Setting up and calibrating national Resolution Funds in isolation from other prudential measures	≈	-	+	+/-	+	≈	+
3. National Resolution Funds jointly calibrated with DGS and bail-in	≈	--	+/-	+	++	++	++
4. Setting up and calibrating a European Resolution Fund	≈	-	+	++/-	++	+	++

5. Overall impact of preferred options

5.1. The proposed framework

The proposed crisis management framework at EU level intends to further enable financial stability, reduce moral hazard, and protect depositors, crucial banking services and taxpayers' money. In addition it aims to protect and further develop the internal market for financial institutions. The framework would consist of three stages which constitute a coherent system: Preparation and Prevention, Early intervention and Bank Resolution. These are so interconnected that policies could not be introduced in isolation. The three stages are complemented with the international cooperation aspect and the issue of financing.

The **Preparation** part would include a voluntary intra group financial support agreement framework and contingency planning. **Prevention** powers would ensure that banks are resolvable in case of failure. This part would aim to prevent the development of a crisis situation. The presently existing **early intervention** framework would be further developed. Supervisors would be able to intervene at an even earlier stage and would be equipped with an expanded list of tools and powers. This part would aim to prevent the further deterioration of financial difficulties in banks.

The **Resolution** framework would allow the managed failure of any bank. Special bank resolution tools (e.g. sale of business, asset separation, bridge banks), applied outside of judicial insolvency proceedings, would enable timely intervention, the maintenance of key banking services and the protection of depositors. Debt write-down and conversion would protect taxpayers' money even in the case of large and complex institutions. Changes in company law would ensure legal certainty for stakeholders. This part aims to put the burden on bank shareholders and debt holders instead of taxpayers and at the same time maintain financial stability and discourage moral hazard.

International cooperation through the establishment of resolution colleges would provide optimal solutions for cross border banks at EU level. Jointly calibrated **Resolution Funds** with DGS financed by the industry would increase the success of resolution measures and provide further safeguards for taxpayers.

The new bank recovery and resolution framework would remove the implicit state guarantee from the banking sector. In other words, the cost previously borne by taxpayers will be now borne by bank stakeholders (clients and owners). This could lead to possible downgrades of banks by credit rating agencies. The debt write down tool could also increase the expected yields on bank debt. The overall effect of these measures could increase the funding cost for banks. If the funding cost is maintained at a higher level than presently, banks could transmit this cost to their clients or to their shareholders.

Of course, the proposal cannot solve all the underlying problems of (cross border) banking failures. The misalignment between the mandate of authorities and the cross border nature of banks can be managed to a certain extent but an overhaul of the supervisory structure would be beyond the objectives of this proposal. The proposal cannot fully ensure either that the measures would be applied the same way in all Member States. Harmonisation of powers, triggers and tools provide a basis for a common approach and the European Banking Authority could facilitate coordinated application.

It cannot be excluded that eventually for political or other reasons authorities would not apply certain resolution tools (e.g. special administration, bail-in) that would be available to them within the bank resolution framework. However, the framework sends a clear signal to stakeholders that risk should be borne by shareholders and creditors in the first place and not by taxpayers.

Some of the Member States (e.g. the UK, Germany, Denmark, Ireland, Greece, Portugal, the Netherlands) have recently introduced or are in the process of developing their national bank resolution systems. These systems are largely compatible with the present proposal, hence these Member States will not need to substantially adjust their existing systems. In general the proposed EU framework includes more tools and powers (especially the bail-in tool) than existing national systems and also introduces the cross border cooperation framework, which national legislations do not address at all.

Resolutions of banking groups need to take into consideration the various ways EU banking groups are organised. Already resolution plans should reflect the different treatments of different structures.

If a group is operated in a less interrelated way, where the subsidiaries can function independent of the mother and each other (e.g. Santander model), the resolution could take place at the subsidiary level, without involving the mother company.

If the group is highly integrated (e.g. BNB Paribas) and financing of subsidiaries is substantially managed by the mother or the holding company (e.g. JP Morgan), it may be sufficient to initiate the resolution at the holding level. Losses of subsidiaries could be transferred to the holding, which assumes them and haircuts its (long term) creditors. To cover capital needs, creditors of the holding can be converted into shareholders.

If the resolution plan concludes that the group structure is highly interlinked and entities are interdependent, authorities (working closely together in colleges, where appropriate) should have the power to request to group, in good times, to establish a holding company. The holding company should issue certain instruments (e.g. long term liabilities) in order to finance its subsidiaries. This would greatly improve the resolvability of integrated, large groups because:

- bail-in would become a much simpler and faster exercise as no effort would be needed to map and unwind the interlinkages within the group.

- it would not disturb the deposit taking subsidiaries thus reduce the risk of deposit and interbank run.

- the process would be clearer and more predictable for stakeholders, investors.

Bank resolution has many ties with insolvency procedures (e.g. bridge banks, debt write down). Liquidation under judicial insolvency procedure is not discussed in this impact assessment, as the current proposal does not aim to change insolvency procedures and legislation in the EU. Work on the insolvency phase of bank crisis management will be carried out in the next stage of the work stream starting in the second half of 2011.

5.2. Proportionality

Given the scale of impacts that the failure of a financial institution may cause to the economy, the proposed measures are the minimum necessary to achieve the objectives. Authorities that will eventually apply the bank recovery and resolution framework will need to strikes the right balance between financial stability, public interest and the rights of different stakeholders. The principle of proportionality implies that the requirements laid down by the framework as well as the tools and powers provided in it, have to be applied in a proportionate manner, having regard to the impact that the failure of the institution could have, due to the nature of its business, its size or its interconnectedness to other institutions or to the financial system in general, on financial markets, on other institutions, on funding conditions or on the economy in general. This means that the more an institution (or banking group) is large, complex and interconnected with other institutions and the financial system as a whole, the more it will be subject to stringent requirements and the more likely it is that, if it becomes insolvent, one or more resolution tools will apply to it, instead of liquidation under ordinary insolvency proceedings. For instance, a large and complex banking group will have to submit comprehensive information concerning all the entities affiliated to the group for the purposes of drafting the resolution plan for the whole group. A small local bank that carries out only retail business may submit much simpler information and it is more likely that its failure will be resolved through an ordinary liquidation process and the payment of the deposit guarantee scheme without any systemic consequence. However, as the systemic importance of a bank failure cannot be determined with full certainty in advance, the proposed framework should apply in principle to all banking institutions, irrespective of their size and complexity. The proportional application of the requirements and tools will be assessed on a case-by-case basis by the responsible authorities (supervisors or resolution authorities). It is important to leave discretion to the authorities in this respect. It is not desirable to pre-determine in an abstract and rigid way which institutions are systemic, as the systemic nature depends on the market conditions and evolutions. Harmonised application of the principle of proportionality at European level would be ensured by technical standards developed by the European Banking Authority (EBA) in order to assess the impact of institutions' failure. In addition, In addition, EBA shall take into account the criteria for the identification and measurement of systemic risk that it shall develop in accordance with Article 23 of Regulation (EU) No 1093/2010. These common criteria will contribute to guarantee a consistent interpretation of the principle of proportionality in the application of the resolution framework by national authorities.

5.3. Impacts on fundamental rights

This proposal has been scrutinised in order to verify whether its provisions are fully compatible with the Charter of Fundamental Rights and notably the right to property (Article 17) and the right to an effective remedy and to a fair trial (Article 47). In accordance with Article 52 of the Charter, limitations on these rights and freedoms are allowed. However, any limitation on the exercise of these rights and freedoms must be provided for by the law and respect the essence of these rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet the objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others. A detailed legal analysis concerning the impact of the proposal on the fundamental rights can be found in Annex XVI.

5.4. Safeguards

Safeguards need to be built in the framework in order to protect the interest of stakeholders if intrusive measures are implemented. Proposed safeguards fall into the following categories:

(i) triggers for resolution aim to ensure that resolution action is taken as late as possible before the point of actual insolvency. A trigger that requires the bank to be insolvent is too late for resolution because of the rapid and precipitous value destruction associated with insolvency. In particular, one of the trigger conditions requires that no viable private sector alternative is available to prevent the failure of the institution. This aims to ensure that resolution intervention is a last resort, and will not be made if there are other, less expropriating measures that could be taken that would be likely to redress the problem within a suitable timeframe. Moreover resolution can be triggered only in the overwhelming interest of the public.

(ii) safeguards for counterparties prevent authorities from splitting linked liabilities, rights and contracts: the 'no cherry picking' rule that is conventional in special resolution regimes. Arrangements covered by this safeguard will include those covered by close out netting agreements, security arrangements and structured finance arrangements.

(iii) application of the 'no creditor worse off' ('NCWO') principle to ensure that creditors whose claims are reduced as a result of resolution – for example, because they are left behind in the residual bank while assets are moved to another entity, or because of the application of the debt write-down tool – do not suffer a loss greater than they would have incurred in a whole bank insolvency.

(iv) rights for affected parties to judicial review of resolution actions, and compensation by way of damages if the action was ultra vires. The limited right to judicial review (only review of vires, and remedies restricted to pecuniary damages) maximises the effective use of resolution tools and powers because they ensure the legal certainty of actions by authorities. However, any further restriction on rights of challenge would be inconsistent with fundamental rights and the rule of law.

These safeguards aim to strike an appropriate balance between the public interest in fast and effective intervention, and fundamental rights to property and access to justice that are guaranteed by the European Convention on Human Rights ('ECHR') and embedded in MS constitutions. It is considered that the restrictions imposed strike the right balance between ensuring that authorities have sufficient flexibility to intervene quickly and effectively and protecting legitimate rights. If those rights are subject to excessive restrictions, this could make EU markets less attractive, bank funding more expensive, and might be inconsistent with fundamental rights.

5.5. Increased responsibility and powers for authorities

The framework proposes to empower authorities with new tools and responsibilities to manage banking failures. This approach has the advantage that problems can be assessed on a case by case basis and the most suitable solutions for each institution could be developed under given circumstances. It is not possible to design legislation that can take into account all possible future developments and emerging new risks and problems. Moreover, authorities during the crisis could not deliver because they lacked special powers and tools geared for managing banking failures in the interest of maintaining financial stability.

On the other hand, there may however be a risk that certain authorities will not be able to fully exploit their powers, which could lead to suboptimal solutions. The experiences of the financial crisis have evidenced that lax supervision and unjustified forbearance could lead to accumulation of financial problems and systemic risk. Forbearance is a risk that needs to be specifically addressed, but a framework whereby the use of specific tools would be automatic does not provide the degree of flexibility that is needed to cater for different situations. Resolution powers are expressed as an obligation to act when a trigger is reached. Legal obligation to act should address forbearance risk as stakeholders (that may be more strongly hit if a situation is not addressed at an early stage) may challenge the absence of decisions. The requirement for banks to submit a recovery plan, and for authorities to develop resolution plans would be key to both addressing the forbearance risk and banks' likely attempts to guard their effective independence.

5.6. Interaction of supervisors and resolution authorities

The division of functions between supervision and resolution is proposed to be clearly defined in order to ensure the smooth and effective function of the new system. In fact, it is important to create a resolution function in order to ensure that resolution and resolvability are given adequate importance in the overall regulatory framework. The proposal would suggest the following:

In normal times supervisors are proposed to improve their supervisory practices (preparation) while resolution authorities are proposed to prepare resolution plans in cooperation with banks and supervisors.

Recovery plans are to ensure that banks have strategies in place that enable them to take early action to restore their long term viability in the event of a material deterioration of their financial situation.

A resolution plan, prepared by the resolution authorities in cooperation with supervisors in normal times, will set out options for resolving the institution in a range of scenarios, including systemic crisis. Such plans should include details on the application of resolution tools and ways to ensure the continuity of critical functions.

If the resolution plans shows there impediments to the resolution of a bank , resolution authorities are proposed to have power, after consulting the supervisors, to require banks to restructure their business organisation or structure in order to remove such impediments. In the early intervention phase, supervisors are proposed to play a role and pre-empt deterioration of problems.

It is proposed that the assessment whether an institution meets the conditions for resolution should be made resolution authorities on request of the supervisor. . The request for commencing a resolution could also come from the concerned bank(s). The resolution authority shall then decide what resolution tool (if any) would be most appropriate in the light of the resolution objectives.

In an international context the college of supervisors and the college of resolution authorities will discuss and approve the group recovery and resolution plans and any measure to improve the resolvability of groups. The college will be led by the consolidating supervisor. The EBA will play a role in resolving the disputes irrespective of the national assignment of the resolution functions in Member States and under these circumstances its decision will be binding. National authorities will only be able to depart from the group approach for justified reasons of financial stability. EBA, in consultation with the ESRB, will issue guidelines on group recovery and resolution plans and on the resolvability assessments in order to converge national practices.

The resolution process would be managed by the resolution authority; the supervisors would be involved in the process. The decision on the use of funding (DGS and/or RF) would be made by the resolution authority. If eventually public funding proves to be necessary, the Ministries of Finance would need to be involved (if the Ministry of Finance is not a resolution authority). In the international context, resolution colleges with the mediation of EBA will decide about any resolution measures at group level, including the trigger events, tools to be applied and use of the financing arrangement and Deposit Guarantee Schemes . EBA will develop draft regulatory standards in order to specify the operational functioning of the resolution colleges.

44 supervisory colleges have been established so far. They are composed of supervisory authorities of each cross border bank or group. EBA has a mediating and coordinating role in the work of the colleges which ensures approximation of national supervisory practices and solutions of disputed situation. The resolution colleges will be established based on the best practice of supervisory colleges. Most of the participants will be identical in supervisory and resolution colleges, so they will have experience working under such arrangements. This ensures that the institutional set-up will be simple to follow for both participants and banks. EBA will also have adequate experience by the time resolution colleges will be set up, hence competing powers and objectives of various authorities can be effectively reconciled.

The ESRB would issue warnings about systemic problems, accumulation of excessive risk that could endanger financial stability. Resolution authorities, together with the supervisor and the EBA, are expected to take these warnings seriously into account when they decide about resolvability and actual resolution of financial institutions.

5.7. Cross border recovery and resolution

There is a misalignment between the responsibilities of national authorities and the cross border nature of the banking industry. First priorities of national supervisors and resolution authorities are financial stability within their own jurisdiction and protection of national creditors, depositors and taxpayers. In addition, host countries have strong interest in influencing decisions made by home countries concerning the whole banking group. The above misalignments can be experienced in all phases of the bank recovery and resolution process: e.g. approval of group recovery and resolution plans, measures to ensure resolvability of banking groups and single entities, early intervention measures and finally implementation of cross border resolution for a group.

The framework is proposed to be based on cooperation of national authorities but additionally it aims to establish strong incentives for cooperation. For the first time in European legislation there will be a group approach to resolution established in law. This means that since the moment of the preparation (resolution plans) the groups will be treated as such. Resolution plans will be prepared for the whole group. Resolution colleges are proposed to be established with clearly designated leadership (in this case the authority of the head office) and the EBA is proposed to participate and mediate. Cooperation in times of crisis should be well prepared in advance and thus the different problems that could arise when the bank fails should be already considered and risks mitigated during the preventative phase.

The college structure seems to be the most appropriate format for cross border resolution, based on the successful operation of supervisory colleges for cross border banks. The college structure allows direct exchange of information and coordination among all concerned authorities. EBA mediation and coordination can foster the decision making process.

The system cannot ensure that there would be no disagreement among national authorities but this does not necessarily mean that each of them can take its own decisions. National authorities should only be able to exclude themselves from the group approach if they have overarching and justified reasons of financial stability (a 'burden of proof'). The EBA would play a role in resolving the disputes irrespective of the national assignment of the resolution functions in a Member State. The EBA has been entrusted with responsibilities to ensure a coordinated approach to crisis management and prevention (articles 23-27 of the Regulation 1093/2010). These include, inter alia developing criteria for the measurement and identification of systemic risk, ensuring an on-going capacity to respond to the materialisation of systemic risks, contributing and participating actively in the development of recovery and resolution plans, and developing best practices for cross border resolution. The EBA will be able to bring together national authorities – both through its own management structure (board of supervisors, management board and sub committees) and within resolution colleges, to exchange best practices and ensure the highest standards. Additionally, the EBA's powers to coordinate both during and before a crisis, to develop best practices and technical standards, and if necessary mediate disputes, will contribute to ensuring a consistent and effective approach across Member States.

It should be acknowledged that the proposal does not address the fundamental underlying conflict of interest that arises in the EU from a disconnect between the pan-European nature of cross border group and national financial stability and fiscal responsibilities. This has been discussed in the October 2009 communication where the benefits of an integrated approach to resolution have been put forward. Only pan EU European Resolution/DGS Schemes backed by burden sharing arrangements between Member States would address the fundamental conflict of interest between national authorities. The initiative on bank resolution should only be seen as a first step towards a more integrated approach to resolution.

5.8. Benefits of the framework

Benefits of the framework arise firstly from the expected reduction in the probability of a systemic banking crisis and the avoidance of the fall in GDP that follows a banking crisis. Secondly, the bank resolution framework aims to avoid taxpayers' money being used again in a potential future crisis to bail out banks. The cost of banking crises, if they happen, should be borne by banks' equity and debt holders in the first instance. As a result funding cost of Member States' debt should also decrease reflecting the removal of the implicit state guarantee of banks' debt.

Of course improvement in financial stability also entails costs which need to be considered together with the benefits it creates. Macroeconomic costs of the framework derive from the increase in lending rates introduced by banks as a reaction to their higher overall funding cost due to tighter capital requirements, the introduction of ex-ante funds to finance resolution and the bank resolution framework especially the bail-in tool. This would entail an increase in the cost of capital in the macro economy that will be reflected in a decrease in firms' investments and a fall in GDP. A methodology also used by the Bank of England[80] was applied to estimate the net macroeconomic gains. The results of the model show (see Table 23) that the additional macro-economic benefits of introducing the framework is positive and can range between 0.7% and 1% of the EU GDP annually.

Table 23. Cumulative impact of Basel III, RF/DGS and Debt Write Down tool (bail-in) (costs and benefits as % of annual GDP.)

	Basel III	**DGS/RF**	**Bail-in**	**Sum**
Costs (% of EU GDP annually)	0.16%	0.04%	0.14% - 0.42%	0.34% - 0.62%
Benefits (% of EU GDP annually)	0.30%	0.32%	0.76%	1.38%
Net Benefits (% of EU GDP annually)	0.14%	0.28%	0.34% - 0.62%	**0.76% - 1.04%**

5.9. Impact on stakeholders and cost of preferred options

Table 24 presents the direct and indirect cost of the preferred policy options. Table 25 summarises the major impacts (both positive and negative) of the preferred options on the most important stakeholders.

80 The methodology and the detailed presentation of the results can be found in Annex XIII.

Table 24. Cost of preferred options

	Direct cost	Indirect cost
Preparation and Prevention		
Annual supervisory program	Cost of supervisors is not expected to increase materially as a result of this option.	No indirect cost.
Enhanced supervision	Some increase in the operational cost (e.g. due to increased on-site supervision) of the national supervisor is expected. Since respondents of the public consultation did not indicate either any significant one-off or on-going cost, the overall cost of this policy option is assumed to be immaterial.	Banks, especially those that are regarded as more risky, may bear some cost as a result of the increased supervisory activity especially if reporting requirements increase and on-site supervision becomes more frequent. This cost is expected to be negligible.
Stress test	Stress testing would increase costs for supervisors. The extent of the cost depends on the policy choice of whether all regulated entities would be examined or only those that may have systemic importance.	Published results would support trust in financial institutions. Positive results could decrease funding costs (lower risk premium) while negative results could increase it.
Voluntary group financial support agreement (approval and transfer by supervisor)	No direct cost. Banking groups should voluntarily decide on actual transfers based on analysis of pros and cons. In the case that supervisors oblige banks to transfer assets within the banking group under a group financial support agreement, this could mean financial costs for the healthy entity.	If asset transfer is possible or even enforceable by supervisors within a banking group in an emergency situation then the yields of debt of smaller subsidiaries might theoretically decrease, while that of larger entities might increase.
Recovery plans	Banks will incur cost in developing these plans and supervisors when validating them. Since respondents of the public consultation did not indicate either any significant one-off or on-going cost, the overall cost of this policy option is assumed to be immaterial.	The actual application of recovery plans in critical situations would entail cost for both the banks and supervisors.
Resolution plans	Resolution authorities would need to use resources for developing such plans. The cost depends on the policy choice of whether all regulated entities would be examined or only those that may have systemic importance. Since respondents of the public consultation did not indicate either any significant one-off or on-going cost, the overall cost of this policy option is assumed to be immaterial.	See next policy option.
Power for authorities to require change in business structure, operation and exposures	If resolution authorities require banks to change their operation, business structure or exposures (based on their resolution plans), banks will bear cost. This cost depends on the actual measures that Authorities have to contemplate and decide on. As an illustrative figure, the separation of the insurance and banking business at ING Group cost 85 million euros in the preparation phase and 200 million euros in the execution phase.	Changes in business operation and structures might be beneficial in a potential resolution but might weaken or eliminate business synergies. This could increase operational cost and result in increased prices of banking services and/or downsizing of employment, if no measures to increase efficiency are implemented in parallel.
Early intervention		
Triggers based on assessment of authorities (likely or actual breach of CRD)	No direct cost.	No indirect cost.
Expanded minimum set of tools	Additional direct cost compared to the normal course of supervisory activities occurs only in problematic situations when the implementation of early intervention measures is potentially implemented. Supervisory authorities need to examine and find a balance between the costs and benefits of each intervention.	Implementation of certain early intervention measures (e.g. limitation of exposures) might decrease profitability of banks. Limiting dividend pay-out might decrease shareholders' value.
Special management	Direct cost occurs only if supervisors decide to nominate a special manager. Cost benefit analysis needs to be based on the actual situation.	Measures decided by the special manager can have an impact on the profitability of the banks.
Shortened convocation period	No direct cost. Decision is made voluntarily by shareholders.	No indirect cost.

Bank resolution		
Triggers based on assessment of authorities	No direct cost.	Triggering the resolution process would impose the cost firstly on shareholders and secondly on bank debt holders. This cost should be lower than the potential cost of a failure of a bank and its impacts on the economy, social systems and taxpayers.
Minimum set of resolution tools	Direct cost occurs only if the resolution process is prompted. Resolution authorities need to examine the costs and benefits of each intervention.	Removed implicit state guarantee from the debt of even the largest and most important banks and possible consequent downgrades by credit rating agencies might increase the funding cost for banks. Using the existing Moody's ratings for a group of 55 European banks, J.P. Morgan estimated[81] an average downgrade of 3-4 notches, if the existing senior unsecured ratings are downgraded to the level of the stand-alone rating. If funding costs are maintained at a higher level than presently, banks could transmit this cost to their clients. Due to higher cost of loans, companies may decrease their investments, which may reduce the GDP by 0.1-0.4% annually.
Debt write down (bail-in)	Expected returns on newly issued debt that can be written down in a resolution will likely increase. J.P. Morgan estimated[82] that investors would demand an 87 basis point premium of a single A category bank if bail-in is possible. In Denmark, where the bail-in tool is already introduced, banks' debts are traded 100 bp higher than their Scandinavian peers. Overall funding cost of banks could increase by 5-15 basis points.	
Derogations from Company law to create legal certainty	No direct cost.	Under resolution shareholders will be the first to suffer losses.
Cross border crisis management		
Establishment of resolution colleges	National resolution authorities would bear the cost of cross border coordination (i.e. information exchange, meetings etc.). In normal times, this should be minimal, while in a crisis situation it might be more tangible, but still not material. EBA would also bear some cost if it takes part.	No indirect cost.
Financing		
Ex ante funds to finance resolution (DGS/RF)	According to the model the optimal target funding level for the ex-ante funds financing resolution would be 1% of covered deposits. This amount is calculated taking into consideration of the bail-in tool. The increased contribution of the banking sector to ex-ante funds would cost decrease their profitability.	If the optimal funds are collected ex-ante by banks its cost would partially be passed to banks' clients. The macroeconomic cost of an ex-ante fund would be around 0.04% of EU GDP annually.

[81] The Great Bank Downgrade, What Bail-In Regimes Mean For Senior Ratings? J.P. Morgan, January 2011

[82] European Bank Bail-In Survey Results, Investor Views on Bail-In Senior and Subordinated Debt, J.P. Morgan, October 2010

Table 25. Summary of impacts on stakeholder groups

Key Stakeholders / Policy options	Banking Industry	Bank debt holders	Bank shareholders	Bank employees	Depositors	Bank customers (borrowers, payment services clients)	Supervisors/ Resolution authorities	Taxpayers
No policy change	+/- Expectation that in the absence of alternatives, banks will be saved, but risks to financial stability (moral hazard)	+/- Legal uncertainty Implicit state guarantee (moral hazard)	+/- Continued protection of rights under EU and national legislation, but uncertainty about how resolution measures will be applied	+/- Uncertainty about how a banking group would be resolved and how it might impact employees If banks are bailed out, lay-offs are less likely	- Uncertainty about how cross-border deposits would be treated in event of bank failure	- Uncertainty around the continuity of the banking operation in a crisis situation.	- Lack of powers and tools, Absence of clear incentives to fully cooperate and coordinate	- Absence of clear framework tailored for ailing banks will result in increased fiscal burdens
Improved preparedness and prevention (enhanced supervision, contingency planning, increased preventative powers for authorities, intra-group financial support agreement)	+/- Better awareness of own risks, improved contingency planning (de risking possibilities) Increased supervision and control; possibility of reorganisation and downsizing to ensure resolvability of too big or complex or interconnected banks	+ More information about stress bearing capabilities of banks Higher control over the operation of banks	+/- More information about the risks of their own banks Possible restructuring obligations requested by supervisors might decrease shareholders' value	+/- Safer operation of employer Possible restructuring, divestments might render certain jobs redundant	+ Safer, more controlled operation, safer deposits	+ Safer, more controlled operation, safer bank relations, lower counterparty risk	+ More information about potential risk at banks, better knowledge about de risking possibilities, Powers to change operation of too complex, too interlinked, irresolvable institutions	+ Safer, more controlled operation, Lower likelihood of failure and need for bail out from taxpayers' money
Improved early intervention framework (earlier intervention, expanded set of supervisory powers, faster rebuilding of capital)	+/- Higher likelihood of pre-empting aggravation of deteriorating financial situation More intrusive intervention in the operation of banks	+ Supervisors' early, more effective intervention can pre-empt larger increase in the risk of debt instruments	+/- Supervisors' early, more effective intervention can pre-empt larger decrease in shareholders' value Suspension of dividends	+/- Pre-emption of deteriorating financial situation of employer Possible, divestments might render certain jobs redundant	+ Pre-emption of deteriorating financial situation of banks, safer deposits	+ Pre-emption of deteriorating financial situation of banks, safer bank relations, lower counterparty risk	+ Earlier possibility to intervene More effective tools to pre-empt aggravation of financial problems at supervised institutions	+ Pre-emption of deteriorating financial situation of banks, Lower likelihood of failure and need for bail out

Key Stakeholders Policy options	Banking Industry	Bank debt holders	Bank shareholders	Bank Employees	Depositors	Bank customers (borrowers, payment services clients)	Supervisors/ Resolution authorities	Taxpayers
Introduction of an EU bank resolution framework (special resolution tools + debt write down)	+/- Improved financial stability, but no bank would be too big to fail (decreased moral hazard) Higher cost of funding as implicit state guarantee disappears and bail-in becomes an option	+/- Increased prospects of continuous bank operation; better debt recovery than in insolvency Debt write down could decrease value of debt, eliminates implicit state guarantee	+/- First one to suffer losses in a resolution; forced measures, no bail out policy eliminates implicit state protection. Fundamental rights could be limited in public interest. Greater certainty about when and how authorities are allowed to act, backed, when necessary, by safeguards and compensation mechanisms	+/- Ability of authorities to resolve banks and groups would increase chances of continued operation but Allowing a bank to fail (resolution) may result in job losses.	+ More certainty about effective cross-border handling and focus on continuity of services should allow depositors to benefit from cross-border competition	+ Maintenance of continuous banking services. Increased financial stability	+ Effective powers to resolve banks and avoid financial meltdown Increased financial stability	+ A new framework to enable effective crisis management and bail-in should reduce or eliminate fiscal burdens
Improved cooperation (through resolution colleges)	+ Treatment of groups in cooperation would serve the interest of cross border banks	+ Improved prospects of equal treatment across the group	+ Resolution at group level increase the chances of optimal solutions for all shareholders of a group	+ Group level approach optimises outcomes for all entities of a group, hence for all employees as well.	+ Group level approach optimises outcomes for all entities of a group, hence for all depositors	+ Group level approach optimises outcomes for all entities of a group, hence also for all customers	+ Improved incentives and ability to cooperate. Better chances for optimal solutions (all interests taken into consideration and solutions optimised at EU level)	+ Group level resolution optimises results for all Member States, possible fiscal responsibilities will be decreased
Private financing (national resolution funds)	+/- Ex ante financing availability increases the success of resolution Resolution funds would be financed by banks	++ Higher probability of successful resolution and continuity of business. Lower expected losses falling on banks' debt holders.	+/- Ex ante financing availability increases the success of resolution Resolution fund would be financed by banks which decreases profits	+ Higher probability of successful resolution and continuity of business	+ Higher probability of successful resolution and continuity of business	+ Higher probability of successful resolution and continuity of business	+ Increased credibility and effectiveness of resolution	+ Higher probability of successful resolution and less likely fiscal liability

Legend: + overall positive effect, - overall negative effect, +/- overall mixed effect

5.10. Administrative burden

The preferred options do not lead to any significant administrative burden. Some elements of this proposal could be seen as implying administrative burden such as the obligations of banks and supervisory/resolution authorities to develop recovery and resolution plans. Under enhanced supervision, potentially increased reporting obligation of certain banks, bearing higher risk, could also increase administrative burden. However, this is not a regular obligation since they are incurred only in special cases.

Increased early intervention and resolution powers granted to authorities will not affect administrative burden per se. If authorities require banks to provide additional or more frequent reporting on their activities in an emergency situation, authorities need to examine whether the cost of reporting is in balance with the gravity of the situation and its potential negative spill over effects. Resolution colleges are not expected to increase administrative burden either. Banks would not need to provide additional information to current obligations and those mentioned in the preparation phase of the current proposal (e.g. recovery and resolution plans). The preferred option on financing arrangements will increase the cost of banks if a special ex-ante levy is introduced[83], but the effect on administrative burden is expected to be negligible. Based on the results of the latest public consultation, administrative burden is expected to be insignificant or respondents could not estimate it. Some perceived the policy options as too general to estimate the actual costs they might entail.

In Germany, the assessment prepared for the Bank Resolution Act[84] concluded that new information requirements would be rarely applied, mostly only if a bank gets into difficulties. The estimated cost is negligible. In the UK, the impact assessment prepared for the consultation on the new Banking Act[85] that introduced the special resolution regime concluded that many costs are non-monetised because they will only be incurred in the case of financial instability, a bank failure, or a bank getting into difficulties. Thus they are contingent on unpredictable and infrequent events. They will vary by institution, the financial climate etc. It also concluded that the impact on administrative burden is negligible.

5.11. Impact on EU budget

The above policy options will have implications for the budget of the Union.

The present proposal would require EBA to (i) develop around 23 technical standards and 5 guidelines (ii) take part in resolution colleges, mediate and make decisions in case of disagreement, and (iii) provide for recognition of thrid country resoltuion proceedings and conclude non-binging framework cooperation arrangements with third countries. The delivery of technical standards is due 12 months since the entry into force of the Directive which is estimated to be between june and december 2013. Since EBA will have to develop an expertise in a completely new area, it is estimated that 5 temporary and 11 national seconded experts will be needed for 2014 and 2015 to deliver the required technical standards and guidelines and other tasks as explained in (ii) and (iii) above.

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83 Detailed information can be found in Annex XIII.

84 Entwurf eines Gesetzes zur Restrukturierung und geordneten Abwicklung von Kreditinstituten, zur Errichtung eines Restrukturierungsfonds für Kreditinstitute und zur Verlängerung der Verjährungsfrist der aktienrechtlichen Organhaftung (Restrukturierungsgesetz) http://dipbt.bundestag.de/dip21/btd/17/030/1703024.pdf

85 Banking Bill: Impact Assessment, October 2008 http://webarchive.nationalarchives.gov.uk/20100407010852/http://www.hm-treasury.gov.uk/d/banking_bill_ia081008.pdf

5.12. Social impact

The proposed crisis management framework is expected to have a very positive social impact. The framework would ensure high level financial stability as enhanced supervision, more effective early intervention and bank resolution measures help economic development and jobs will be less at risk. The protection for depositors and bank customers would increase due to the lower probability of bank failure, and the specialised bank resolution process which would help maintain the continuity of key financial services and payment systems. Since the resolution of banks would put the burden on shareholders and debt holders (no bail-out policy), it would avoid putting the burden on taxpayers as happened in the latest crisis. This would alleviate concerns about the social welfare systems too.

With regards to jobs in banks, employees may be affected by restructurings required by resolution authorities if the banks prove to be too complex to resolve. In certain cases, such restructuring may decrease the necessary labour force, but in others it may even increase it. For example if a bank needs to disentangle certain operations, certain functions (e.g. IT, marketing, administration) need to be split up and total staff numbers may increase. Bank resolution might also lead to making certain employees redundant but this would not compare to the vast loss of employment as a result of a bank failure or economic recession prompted by a banking crisis.

5.13. Environmental impact

This proposal has no impact on the environment.

5.14. Impact on SMEs

The proposal aims to maintain financial stability in the EU as a whole. SMEs will benefit from the increased stability of financial institutions, the continuity of key banking services and the lower likelihood of a devastating financial crisis (like the recent one, when economies turned to recession). SME will probably see lending costs rise however this should be seen against the background of an overall safer financial system and reduced chances of a systemic crisis which very often produce a much tighter credit environment.

Smaller banks will also be part of the crisis management framework. If they fail, their resolution will also be managed by a specialised authority which is tasked to consider a wide range of national and EU interests. The contagion of problems will also be less likely which improves the economic environment of these banks.

The methodology used by the Commission to compute the impact of the new capital requirements under Basel III accord, the impact of the level of funding of DGS/RF as well as the impact of the minimum level of bail-in-able liabilities on non-financial firms costs of capital is based on assumptions that once banks are faced with new costs, they tend to pass these on to other non-financial firms via increasing lending spreads, which increase costs of capital for these firms.

The results of the model (see table 26) used indicate that as far as Basel III requirements are concerned, these would lead to increase of costs of capital for firms by 3.8bp. The employment of DGS in resolution should bring additional cost increase of 1bp and lastly the bail-in results in an increase between 3.29 – 10.5bp. The total combined effect of all three parameters impacting on cost of bank funding consequently lead to increase in costs of capital for firms in range of 8.08bp and 15.3bp (0.08% - 0.15%).

Table 26. Cumulative impact of Basel III, RF/DGS and Debt Write Down tool (bail-in) on cost of capital for firms/SMEs

	Basel III (10.5%)	DGS/RF	Bail-in	Sum
Variation in banks' funding costs (bps)	5.8	1.4	4.7 – 15.0	11.9 - 22.2
Variation in lending spreads (bps)	12.7	2.9	9.87 – 31.5	25.4 – 47.1
Variation in non-financial firms cost of capital (bps)	3.8	1.0	3.29 – 10.5	8.08 – 15.3

For more details on these calculations please consult Annex XIII Appendix V.

5.15. Coherence with other proposals

The crisis management framework is in strong relation with the **deposit guarantee scheme system** in the EU. The modification of the relevant Directive 94/19/EC is currently discussed in the Council and the Parliament. Synergies between DGS funds and bank resolution measures are significant, especially when it relates to financing issues. When a resolution framework that stops contagion is in place, the DGS fund will only finance a few banks that default initially. In contrast, when no resolution measures are available and contagion spreads through the financial system, the amount of money that the DGS needs to pay out in a MS is considerably higher.[86]

To ensure that the sector makes a fair contribution to public finances and for the benefit of citizens, enterprises and Member States, the European Commission on 28 September 2011 put forward a proposal for a **financial transaction tax (FTT)**. The revenues of the tax would be shared between the EU and the Member States. Part of the tax would be used as an EU own resource which would partly reduce national contributions. A part of the revenues could be channelled to national resolution funds that could finance the orderly resolution of EU credit institutions and investment firms.

The proposal also relates to the **Capital Requirements Directive (CRD)**, which sets prudential requirements for banks and investment firms. Recent amendments to the CRD aim to increase the quantity and quality of capital that banks hold, so that they could actually absorb potential losses. New liquidity requirements intend to make sure that banks remain liquid even in a stressed market period and develop a liability structure that provides further stability. All these measure will make the banking sector safer and decrease the chances of bank failure and the need for public interventions. Despite all these measures, the failure of banks in the future cannot be excluded. Hence there is a need to develop a complementary legal framework (bank recovery and resolution) that ensures that financial stability is maintained even in the negative scenarios.

[86] More information can be found in Annex XV.

Table 27. Coherence and complementary objectives of different proposals

	Capital Requirements Directive (CRD)	New Bank Recovery and Resolution Directive (present proposal)	Deposit Guarantee Scheme Directive (DGS)
Scope	Credit institutions and investment firms	Credit institutions and investment firms in a proportional way, as per the CRD	Credit institutions
Time of application	Normal course of business	Normal course of business Banks are failing or likely to fail	Banks are unable to repay deposits
Managing authorities	Supervisors	Resolution authorities	DGS
General objectives	Protect savings Ensure competition and sound management of banks Ensure that banks are adequately capitalised. Ensure equivalent supervision by Member States	Ensure financial stability Minimise losses for society and taxpayers Protect the single market	Protecting depositors Contributing to financial stability (by strengthening depositor confidence and avoiding bank runs)
Specific objectives of recent amendments to EU directives (independent of the Bank Resolution Directive)	CRD 4 proposal: Increase the amount and improve the quality of capital. Introduce liquidity requirements Limit leverage Better manage counterparty risk Enhanced supervision (annual supervisory programs, stress testing, intensified supervision)	N.A.	Decrease pay-out period Harmonisation of eligibility of deposits Harmonise financing (ex-ante and ex post) Improve cross border cooperation and depositor information Allow DGS funds to be used for resolution and early intervention purposes, however with the necessary safeguards to prevent the funds being depleted
Specific objectives of the Bank Resolution Directive that also amends other directives	Recovery planning by banks, approval by supervisors Extend early intervention powers of supervisors, ensure intervention as soon as financial difficulties arise Ensure coordinated action of supervisors in a crisis situation Mediation by EBA in cross border cases	Resolution planning Ensure resolvability by preventative powers Introduce administrative resolution process, special tools and powers (e.g. bridge bank, debt write down) to manage failure of banks Resolution colleges for cross border institutions with the assistance of EBA Ensure adequate level of financing for resolution from private sources taking into account CRD and DGS	

Table 28 below presents in detail the interaction of this proposal with the Capital Requirements and the Deposit Guarantee Scheme Directives. The shaded boxes show the measures that the current proposal addresses.

Chart 6 below presents how the different proposals of the European Commission concerning the financial sector pursue its objectives and contribute to the ultimate aim of financial stability. It shows how the current proposal fits in the range of legislative proposals prepared by the European Commission as a response to the financial crisis. The detailed presentation of Commission initiatives that aim to respond to the financial crisis and their relations can be found in Annex XIV.

Table 28. Relation of the Bank Recovery and Resolution proposal, the CRD and DGS

Timing	**Normal course of business**			**Problems arising**	**Near insolvency situation**	**Non viability**	
Actions	General supervision	Preparation	Prevention	Early intervention measures	Trigger for intervention	Bank resolution	Insolvency (liquidation)
Applicable legislation	Capital Requirements Directive	Capital Requirements Directive and Bank Resolution Directive	Bank Resolution Directive	Capital Requirements Directive and Bank Resolution Directive	Bank Resolution Directive	Bank Resolution Directive	National Insolvency law(s)
Responsible authority	Supervisors	Supervisors	Supervisors and Resolution authority	Supervisor	Supervisor informs about situation Resolution authority takes decisions	Resolution authority	National judges and insolvency administrators
Objectives	Ensure sound banking operation Protect savings Ensure competition and sound management of banks Ensure that banks are adequately capitalised. Ensure equivalent supervision by Member States	Improve supervisory practices to avoid problems at banks	Ensure that any bank could be resolvable within a short period of time (e.g. 48 hours) Protect the single market	Help the bank to solve problems and re-establish financial soundness	Ensure that authorities have the power to intervene before insolvency	Financial stability, protection of depositors and key banking functions Protection of taxpayers' money. Protect the single market	Protection of creditors and maximisation of their payout
Main tools	Capital requirements Liquidity regulation On-off site supervision Reporting Etc.	Supervisory programs Enhanced supervision Stress tests Recovery plans prepared by banks and approved by supervisors	Development of Resolution plans by resolution authorities If bank not resolvable change the business and legal structure, sell or limit business lines, exposures, etc.	Early intervention tools: Raise own funds by shareholders, Replace managers, Implement recovery plan, Divestment of activities, More frequent reporting, Special management	Decision by resolution authorities to place the bank either into administrative resolution or allow bankruptcy (liquidation)	Resolution authorities decide which tools to use in a resolution: Sale of business Bridge bank Asset separation Debt write down	Sale of assets and payout of creditors by insolvency administrators
Role of DGS	Acquire data from banks, collect levies, invest funds				Prepare for action	Financing of resolution measures (e.g. transfer of covered deposits to bridge bank)	Protecting depositors If eligible deposits are unavailable, pay them out up to €100.000
Cross border aspects	Supervisors cooperate in colleges with EBA mediation and coordination	Supervisors cooperate in colleges with EBA mediation and coordination and decide about acceptance of group recovery plans	Supervisors and Resolution authorities cooperate in colleges with EBA mediation and coordination and decide about resolution plans and actions to make banking groups resolvable	Supervisors cooperate in colleges with EBA coordination to implement early intervention tools at group level	Supervisors together with Resolution authorities cooperate in colleges with EBA coordination and decide about triggering resolution of part or all entities of banking groups	Resolution authorities cooperate in colleges with EBA coordination to decide about application of resolution tools in relation to a banking group	Judges and administrators cooperate based on international law and Directive 2001/24/EC about liquidation actions concerning cross border banks

Chart 6. Interaction of European Commission policies in financial services

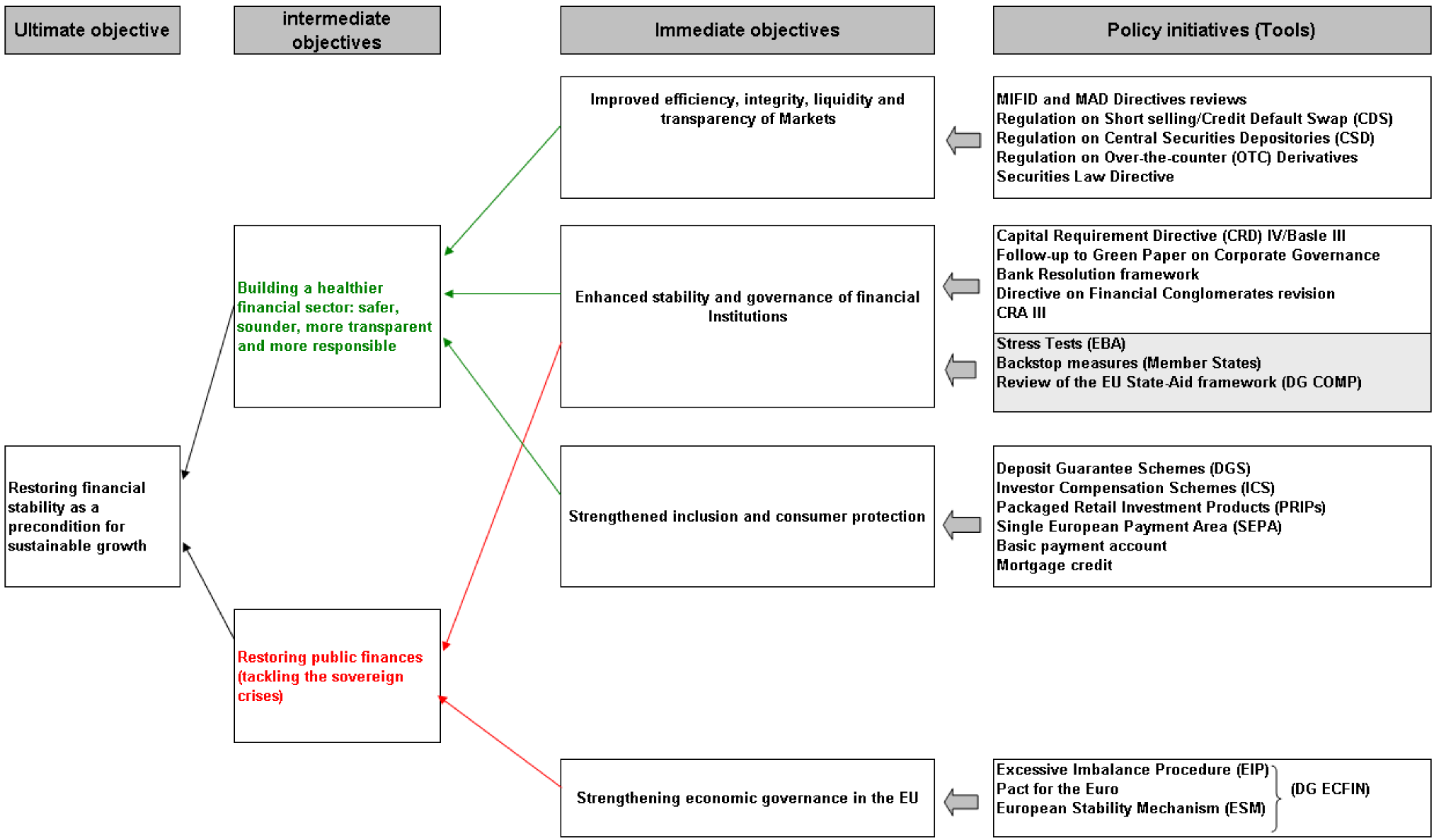


Table 29 gives an overview of how the different issues included in the proposal on bank recovery and resolution are discussed in the FSB/Basel negotiations and how the US has implemented related measures.

Table 29. International comparison of different issues included in the proposals

	US Regime	EU Commission proposal	FSB/Basel
Scope	Dodd-Frank applies to systemically relevant institutions (defined as those of more than 50bn assets). It also applies to holding companies. The general FDIC regime applies to all deposit taking institutions.	Applies to credit institutions and Investment Firms as defined by the CRD (includes systemically relevant and not).	Any financial institution that could be systemically significant or critical if it fails, not only banks
Authorities	Dedicated resolution authority: FDIC. Decision as to whether to enter into resolution is not left exclusively to the FDIC but is shared together with the FED and the Treasury (three key approach).	Establishment of a resolution authority but left to the member states how to institutionally implement it (could be at the same institution as the supervisory authority). In principle not explicit as to the involvement of treasury in the decision to enter into resolution.	Each jurisdiction should have a designated administrative authority or authorities responsible for exercising the resolution powers over firms within the scope of the resolution regime ("resolution authority").
Resolution plans	Obligation for systemically relevant firms to draw up a resolution plan that is to be assessed by the resolution authority.	Obligation for the resolution authority to draw up a resolution plan for all credit institutions and investment firms under the scope, on the basis of detailed information to be provided by the credit institutions and investment firms.	Obligation to draw up a resolution plan.
Preventative powers	As a result of the assessment of the resolution plan the resolution authority can impose preventative measures to the institution.	If the result of the resolution plan indicates that there are impediments to the resolvability of the institution the resolution authority can impose preventative measures to remedy them.	Establishes the criteria for determining the resolvability of an institution.
Early intervention – special manager	None	Possibility to appoint a special manager under early intervention powers.	None
Trigger for resolution	Close to insolvency trigger. Resolution tools can only be used if there is a public interest and no private sector solution is available.	Mixed trigger. Resolution tools can only be used if there is a public interest and no private sector solution is available.	Resolution should be initiated when a firm is no longer viable or likely to be no longer viable, and has no reasonable prospect of becoming so. The resolution regime should provide for timely and early entry into resolution before a firm is balance-sheet insolvent and before all equity has been fully wiped out.
Resolution tools	Only gone concern tools: bridge bank, purchase and assumption.	Going and gone concern tools: transfer of business, bridge bank, asset separation and bail-in.	Transfer of assets and liabilities Bridge institution Bail-in
Mechanisms	FDIC receivership	Mixed model: authorities can decide as to whether they want to use a receivership or they prefer to function through executive orders.	No definition
Bail-in/haircut to creditors	No bail-in, haircuts only possible on a gone concern basis at the discretion of the FDIC and applicable to all creditors (although the FDIC can discriminate amongst the different classes).	Haircuts possible on a going concern (bail-in) and a gone concern (bridge bank) basis.	Write down equity, unsecured and uninsured creditor claims to the extent necessary to absorb the losses; and to convert into equity all or parts of unsecured and uninsured creditor claims

5.16. Choice of legal instrument

It appears appropriate to ensure that crisis management powers and tools are available for national authorities in all Member States. Member States should have flexibility in adapting the principles established to their domestic legal order. Because the crisis management tools and powers are used at the point when an institution is failing or has failed, they inevitably interact with national insolvency regimes. Substantive insolvency law is not harmonised, and the measures proposed in the bank resolution framework need to be implemented in a way that is consistent with that national law. Furthermore, the application of the tools and exercise of the powers will almost certainly affect contractual and property rights, that are also rooted in national law. Subject to a further analysis of the actual provisions of the future proposal, a directive would seem therefore the appropriate legal instrument since transposition into Member State law is necessary to ensure that the framework is implemented in a way that achieves the intended effect, within the specificities of relevant national law. This would respect both the subsidiarity principle and the proportionality principle.

The crisis management framework would necessitate the modification of the CRD, especially concerning preparation, prevention and early intervention phases. The Directive on DGS would need to be amended in order to establish joint DGS and Resolution Funds to finance bank resolution. Discussions on the synergies of the two funds are on-going in the Council. Company law directive (2007/36/EC) would need to be amended to enable short convocation of general meetings for capital increase in emergency situations. Derogation from shareholders' procedural rights that might otherwise present a significant obstacle to the timely use of resolution tools would also be needed. The amendments to relevant provisions of company law directives (77/91/EEC,, 82/891/EEC, 2004/25/EC, 2005/56/EC,2007/36/EC and 2011/35) would be made through the bank recovery and resolution directive.

It is not expected that there would be any major problem in the transposition of the proposed directive because generally all Member States strongly support the adoption of a framework on bank recovery and resolution. The main policy options were discussed extensively in working groups with Member States and found their support. In addition, some Member States have already introduced, or have indicated their intention to introduce, mechanisms to resolve failed credit institutions that partially coincide with what the Commission intends to propose. The EU regime is broadly compatible with existing regimes, apart from the cross border framework, which will place additional obligations on Member States when undertaking a resolution of a cross border EU financial institution.

5.17. Experience of Member States with bank resolution

Some of the Member States (UK, Denmark, Germany, Netherlands, Greece, Belgium) have already introduced bank resolution systems as a response to the financial crisis. Some of them have already applied the new framework for a failing bank. Following the entry into force of the UK's special resolution regime in February 2009, it was used to manage the failure of Dunfermline Building Society. In Denmark in October 2011, Sparekassen Sjaelland A/S took over the healthy parts of Max Bank while the state assumed the bank's bad loans after it was declared insolvent. In early 2011, the senior creditors of the Danish Amagerbanken A/S had suffered losses first time in the EU within a resolution framework after authorities applied the bail-in tool. The resolution of failed banks entailed smaller cost for all stakeholders, including the state, than if the banks had been bailed out or liquidated.

6. MONITORING AND EVALUATION

Since bank failures are unpredictable and hopefully avoided, the functioning of bank resolution cannot be regularly monitored on the basis of how real bank failures are handled. However, the preparation and prevention phase, especially the development of recovery and resolution plans and the implemented measures of authorities based on these plans could be monitored using the following indicators.

- Number of resolution colleges set up
- Number of recovery and resolution plans submitted and approved by resolution authorities and resolution colleges.
- Number of cases where adjustments in the operation of banks (and banking groups) has been demanded by resolution authorities
- Number of intra-group financing agreements concluded
- Number of banks where minimum loss absorbing capacity (capital+bail-inable debt) is required
- Overall level of loss absorbing capacities of banks in Member states and the EU
- Number of banks undergoing resolution
- Number of application of different resolution tools and powers (e.g. P&A, bridge bank, bail-in)
- Cost of bank resolution on an individual MS and EU aggregated level (EUR million) (cost include bail-in cost, recapitalisation, contribution of DGS/RF, other costs)

The involvement of the EBA in all phases of the bank recovery and resolution framework is proposed and supported by the stakeholders, even if the EBA regulation presently does not give competence to EBA in a resolution process. Based on its involvement, the EBA could carry out related monitoring tasks. The transposition of any new EU legislation will be monitored under the Treaty on the functioning of the EU.

ANNEX I GLOSSARY

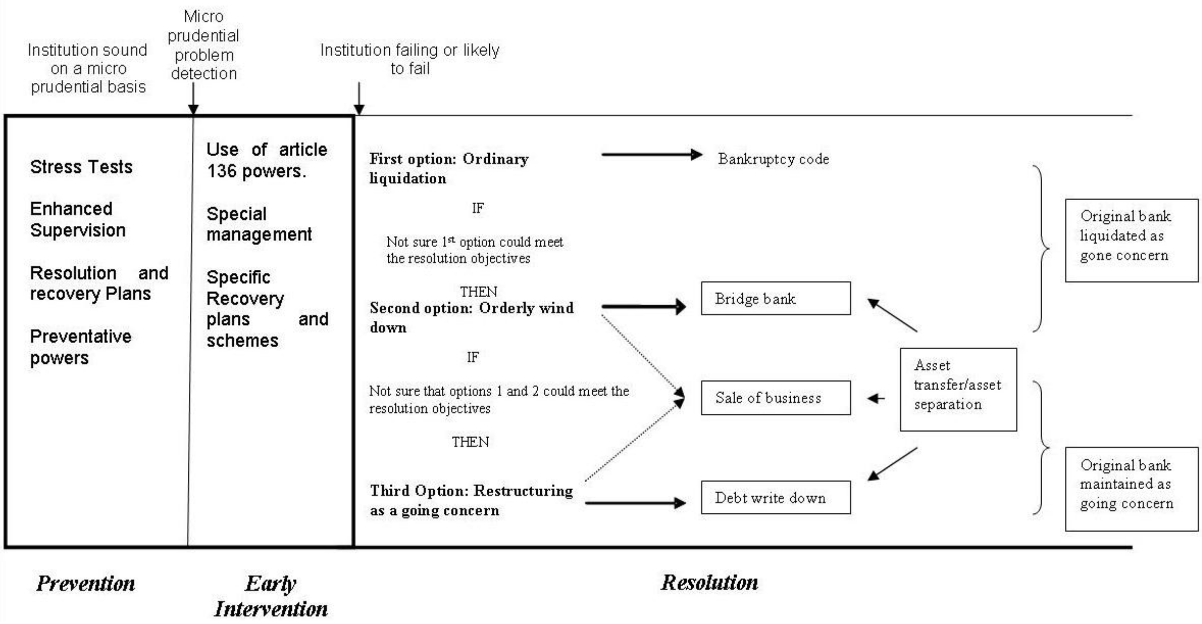
Administration	Under this resolution model, the resolution authority would appoint an administrator to the failing bank who would carry out the resolution and wind up the residual failed institution.
Bank resolution	Procedures and tools for the restructuring or managed dissolution of ailing banks while preserving insured deposits and the payment and infrastructure services which are essential for maintaining financial stability. Bank resolution uses specific tools (e.g. bridge banks, assisted acquisition, partial sale of assets, asset separation, debt write down, debt conversion to equity) to reach the above objectives. The process is managed by an administrative resolution authority (national bank, financial supervisor, deposit guarantee scheme, ministry of finance, special authority), defined by Member States.
Basel II	Basel II is the second of the Basel Accords, which are recommendations on banking laws and regulations issued by the Basel Committee on Banking Supervision. The purpose of Basel II, which was initially published in June 2004, is to create an international standard that banking regulators can use when creating regulations about how much capital banks need to put aside to guard against the types of financial and operational risks banks face. The Basel II framework has 3 pillars: Pillar I Minimum Capital Requirement, Pillar II Supervisory Review Process, Pillar III Market discipline.
Basel III	Basel III is a new global regulatory standards on bank capital adequacy and liquidity agreed by the members of the Basel Committee on Banking Supervision. The third of the Basel Accords was developed in a response to the deficiencies in financial regulation revealed by the financial crisis. Basel III strengthens bank capital requirements and introduces new regulatory requirements on bank liquidity and bank leverage.
Bridge bank	A 'bridge bank' is a temporary licensed banking institution created, and generally owned by or on behalf of, the national authority to take over the viable business of the failing institution and preserve it as a going concern while the authority seeks to arrange a permanent resolution, such as to a suitable private sector purchaser.
Capital adequacy ratio	Capital adequacy ratios ("CAR") are a measure of the amount of a bank's capital expressed as a percentage of its risk weighted credit exposures. A bank's capital is the "cushion" for potential losses, which protect the bank's depositors or other lenders.
Consolidating supervisor	The supervisor responsible for the supervision on a consolidated basis of a banking group. As a rule, this is the supervisor of the Member State where the parent bank of the group is based
Direct executive powers	Under this resolution model, the resolution tools would be applied and the resolution powers exercised through executive order or decree in accordance with national administrative competences and procedures, without control of the credit institution to the which the resolution tool is applied being assumed by the resolution authority or a person appointed by the resolution authority.
Early intervention	Early intervention: early remedial actions of banking supervisors (e.g. raising private capital, modification of business lines, divestiture of assets) which aim at correcting irregularities at banks and hence helping banks returning to normal course of business and avoiding that banks enter in a resolution stage.
European Banking Authority (EBA)	The objective of the Authority is to contribute to: (i) improving the functioning of the internal market, including in particular a high, effective and consistent level of prudential regulation and supervision, (ii) protecting depositors and investors, (iii) protecting the integrity, efficiency and orderly functioning of financial markets, (iv) maintaining the stability of the financial system, and (v) strengthening international supervisory coordination.

European Supervisory authorities (ESA)	ESA is created by transforming the European supervisory Committees[87] in a European Banking Authority (EBA), a European Securities and Markets Authority (ESMA) and a European Insurance and Occupational Pension Authority (EIOPA)
European System of Financial Supervisors (ESFS)	A network of national supervisors working in tandem with the new European Supervisory Authorities (ESA) thereby combining the advantages of an overarching European framework for financial supervision with the expertise of local micro-prudential supervisory bodies that are closest to the institutions operating in their jurisdictions.
Going concern	A going concern is a business that functions without the intention or threat of liquidation for the foreseeable future, usually regarded as at least within 12 months.
Good bank – Bad Bank	Bad or Good bank is created when authorities separate good from bad assets by selling non-performing loans and 'toxic' or difficult-to-value assets to a separate asset management vehicle (often referred to as a 'bad bank'). The aim is to sanitise the balance sheet of the failing bank in order to restore it to viability or with a view to facilitating a private sector solution
Memorandum of Understanding (MoU)	A set of principles and procedures for sharing information, views and assessments, in order to facilitate the pursuance by participating authorities of their respective policy functions
Pillar II	The second pillar of the Basel Framework that deals with the regulatory response to the first pillar, giving regulators much improved 'tools' over those available to them under Basel I. It also provides a framework for dealing with all the other risks a bank may face, such as systemic risk, pension risk, concentration risk, strategic risk, reputation risk, liquidity risk and legal risk, which the accord combines under the title of residual risk. It gives banks a power to review their risk management system.
Receivership	Under this resolution model, and in order to apply the resolution tools, resolution authorities would have the power to take control of a credit institution upon a decision that it is failing or likely to fail. Upon taking control of the credit institution, the resolution authority would manage its property and exercise all the powers of its shareholders and its management, exercise the transfer powers and wind up the residual failed institution.
Set-off / Netting	An agreement between two parties to balance one debt against another or a loss against a gain.
Tier 1 capital	Tier 1 capital is the core measure of a bank's financial strength from a regulator's point of view. It is composed of core capital, which consists primarily of common stock and disclosed reserves (or retained earnings), but may also include non-redeemable non-cumulative preferred stock.

[87] These are the Committee of European Banking Supervisors (CEBS), the Committee of European Insurance and Occupational Pensions Supervisors (CEIOPS) and the Committee of European Securities Regulators (CESR).

ANNEX II DIFFERENT STAGES OF BANK RECOVERY AND RESOLUTION

Three stages of bank recovery and resolution



Preparation starts in the normal course of supervision. Supervisory activity needs to be reinforced and enhanced in order to obtain better information on the risks at credit institutions. Contingency planning is crucial to prepare both banks and supervisors for stressed situations. **Preventative** powers could be needed in order ensure the applicability of the resolution tools and avoid the risk that banking structures develop in such a way as to complicate the application of the legal framework. For example, overly complex businesses can limit supervisors' ability to implement measures in a timely manner in crisis situation.

Early interventions can be prompted by financial supervisors when the bank is not threatened by immediate insolvency. In such situations supervisors can oblige the banks to undertake certain measures (to hold additional capital, improve governance, systems and strengthen internal control arrangements, increase reserves, limit business operations and risk exposures) to avert major problems. Such measures leave control of the institution in the hands of the management, and do not represent a significant interference with the rights of shareholders or creditors.

When banks are close to failure, actions and measures need to be more severe in order to pre-empt potential instabilities in the banking and the whole financial system resulting from bankruptcy. In such situations, public authorities (central banks, finance ministries, judicial and supervisory authorities) or other organisations (e.g. deposit guarantee schemes) might need to take over certain decisions on the business operation of a bank and implement far reaching **resolution** measures. It is key in bank resolution to enable authorities to intervene in an ailing bank already at an early stage. Determining the trigger mechanism is a sensitive and controversial issue. The optimal triggering point needs to fulfil double purpose. Firstly, it needs to be early enough, so that resolution measures could be executed with success and limited cost for stakeholders (shareholders, bondholders, depositors etc.). Secondly it needs to contribute to legal certainty, meaning that it needs to be clear for every stakeholder at what point authorities have the right to implement intrusive resolution measures without any hindrance or blockage by stakeholders.

In addition to the three stages of crisis management, two aspects deserve special attention. First: the crisis management measures of authorities need to work and reach results at EU/global level. Hence the **cooperation** of national authorities and the involvement of EU authorities need to be examined and addressed.

The second important aspect of crisis management is **financing**. It needs to be ensured that private financing is available for authorities to carry out resolution of credit institutions.

ANNEX III CONSULTATIONS WITH STAKEHOLDERS

The Commission stressed in its 4 March 2009 Communication the importance of strengthening the EU's crisis management arrangements. On the 20th of October 2009 the Commission issued a consultative Communication and an accompanying staff working document which sought views as to where essential changes are needed to make possible effective crisis management and resolution or orderly winding up of a failing cross-border bank. On the 19th of March 2010 the European Commission hosted a high level one-day conference on the construction of a new crisis management framework in the banking sector.

On the 26th of May 2010 the European Commission adopted a Communication on Bank resolution Funds that proposed that the European Union establishes an EU network of bank resolution funds to ensure that future bank failures are not at the cost of the taxpayer or destabilise the financial system. These ideas were also presented at the G-20 Summit in Toronto on 26-27 June 2010. On the 10th of September 2010, the Commission organised a seminar on the possibilities for decreasing the value of bank liability owners (debt write down) in the case of failing credit institutions.

On the 20th of October 2010 the Commission issued a Communication on an EU framework for crisis management in the financial sector. The Communication detailed the key aspects of the legal framework and outlined further work on the reform of insolvency law and the resolution of cross-border groups.

A working group on Early Intervention (EIWG) was set up in November 2008 which comprised of experts of all Member States, mostly representing Ministries of Finance. The working group provided important insight and opinion to the matters under examination. Experts commented in writing on the first Issues Paper that was circulated for consultation in January 2009. EIWG also met in December 2010 where the Staff Working Document for public consultation was discussed. Member State experts clearly support the Commission's work on early intervention and bank resolution, considering the issues to be of high importance and priority. EIWG met two times in February 2011 where all aspects of the crisis management framework, based on the public consultation, was discussed.

In the second half of 2008, the Committee of Banking Supervisors (CEBS) conducted a comprehensive survey among all banking supervisors in the EU and delivered its report to the Commission in March 2009[88]. The report summarises the objectives and powers, including early intervention measures and sanctioning powers of financial supervisors. The report is widely quoted in this impact assessment.

During technical meetings and continuous contacts, the issues were also discussed with the European Central Bank. Views were shared on the need for improved early intervention and bank resolution in the EU.

In July 2009, a high level Working Group of the Economic and Finance Committee published a paper entitled "Lessons from the financial crisis for European financial stability arrangements", containing 10 recommendations for improvements in the field of crisis management. The recommendations are in line with the analysis contained in this impact assessment.

88 http://www.c-ebs.org/getdoc/f7a4d0f8-5147-4aa4-bb5b-28b0e56c1910/CEBS-2009-47-Final-(Report-on-Supervisory-Powers)-.aspx

An external legal consultant (DBB Law) was hired in August 2008 to support the work with key inputs, data and legal analysis. The Consultant summarised the legal frameworks of 16 Member States regarding early intervention possibilities by supervisors, insolvency legislations for banks and banking groups, and special intervention possibilities by resolution authorities. The Consultant delivered its interim report in November 2008[89] and its final report in December 2009.

In May 2007, a public consultation[90] was launched to seek the views of stakeholders in relation to the Directive on the reorganisation and winding up of credit institutions (2001/24/EC).[91] The survey respondents broadly supported the development of a legal framework tailored to the winding up and re-organisation of cross-border banking groups. The consultation's result suggested that the current directive that deals with cross border branches might need also some adjustment (e.g. investment firms are not covered by the directive, home-host responsibilities can create problems in managing cross border branches: to determine which should be the applicable law and responsible authority).

The European Banking Federation[92] (EBF) set up a special working group to support the work of the Commission and provided their views on early intervention and bank resolution. They delivered their draft report in April 2009. EBF expressed its support for the work of the Commission on early intervention aiming at enhancing the effectiveness of cross-border crisis management. They also supported actions regarding coordinated approaches in groups' insolvency. EBF called for a clear policy around the different stages of a crisis: who the responsible competent authorities are and what tools are at their disposal at each stage.

In February 2010 a call for experts in insolvency was issued and in May 2010 the Insolvency Law Expert Group (ILEG)[93] was established in order to help the Commission Services in the field of re-organization, resolution and insolvency law in the banking and financial sector to assist in the preparatory work and development of an EU crisis management regime. The first meeting of ILEG took place on 14 July 2010, the second on 15 October 2010.

The Group of Experts in Banking Issues (GEBI), which consists of bankers, consultants, trade union and consumer representatives and industry associations, also discussed crisis management and bank resolution issues on its meeting in February 2011[94].

On October 2009, the Commission Services invited views in response to its public consultation regarding the establishment of an EU framework for crisis resolution in the banking sector. As part of the Consultation a Communication and a staff working document was issued.

89 http://ec.europa.eu/internal_market/bank/windingup/index_en.htm

90 The summary of the main findings can be found in Annex IV. All consultations documents can be found on the following website: http://ec.europa.eu/internal_market/bank/windingup/index_en.htm

91 See description of the Directive in Annex IV.

92 Set up in 1960, the European Banking Federation is the voice of the European banking sector (EU & EFTA countries). The EBF represents the interests of some 5000 European banks: large and small, wholesale and retail, local and cross-border financial institutions. www.fbe.be

93 Information about ILEG can be found on the following website: http://ec.europa.eu/internal_market/bank/crisis_management/index_en.htm

94 The presentation and minutes can be found on the following website: http://ec.europa.eu/internal_market/bank/group_of_experts/index_en.htm

On 6 January 2011, a public consultation was launched concerning all aspects of the crisis management framework. Until 4 March 2011, more than 120 responses arrived from national supervisors, ministries, banks, federations, law firms etc.

During April 2012, Commission engaged in additional discussion with key stakeholders focused on the debt write-down/bail-in tool as part of the resolution tool-kit. Several meetings were held with Member States, legal experts as well as the representatives of the banking industry. In addition, Commission received around 60 written comments concerning the bail-in tool and its key attributes.

ANNEX IV REGULATORY FRAMEWORK

The current EU financial stability framework is focused on ensuring banks are adequately capitalised. The Capital Requirements Directive (CRD)[95] contains provisions aimed at stabilising capital within banks, but it is not prescriptive in case the banks fail to meet the 8%[96] minimum capital threshold. The handling of situations when a bank does not meet the requirements of banking laws (8% CAR) but is still not insolvent is left to national legislation.

At EU level, currently the article 136 of the CRD deals with the early intervention powers and tools of banking supervisors in a crisis situation. This article enables the supervisors to oblige banks to implement measures that correct irregularities and restore capital requirements, e.g. by requiring them to hold additional capital, improve governance, systems and internal control arrangements, increase reserves, limit business operations and risk exposures, etc.

The CRD also establishes rules about alerting other authorities[97] (i.e. Central Banks and Ministries of Finance) in emergency situations, requiring coordination of supervisory activities and exchange of information in emergency situations[98] among Member States.

National banking legislations enable financial supervisors with different powers and tools to intervene at an early stage in the operation of a bank in a crisis situation.

In July 2008, agreement was reached on an EU wide Memorandum of Understanding ('MoU')[99] setting out cross-border crisis management arrangements and involving the commitment of all signatories (e.g. EU finance ministries, Central Banks and supervisory authorities) to cooperate across borders between relevant authorities with a view to enhancing preparedness for the management of potential cross-border crisis situations.

95 Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions and Directive 2006/49/EC on the capital adequacy of investment firms and credit institutions.

96 Capital Adequacy Ratio (CAR): bank's capital expressed as a percentage of its risk weighted assets.

97 Article 130 CRD

98 Article 129(1) CRD

99 Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross Border Stability (1 June 2008).

Relevant EU and national legislations and agreements

EU Competence		
Directive/agreement	**Description**	**Relevance for this topic**
Capital Requirements Directive (CRD, Directive 2006/48/EC and 2006/49/EC)	CRD establishes the authorisation and pursuit of business of credit institutions along with the principle of single passport and home country control and further sets out the applicable prudential requirements: supervision and disclosure by competent authorities, consolidated supervision, capital requirements, reporting of and limits to large exposures and non-financial holdings, suitability of managers and shareholders, standards for the internal risk management and public disclosure to achieve market discipline. Together, the Codified banking Directive and the Capital Adequacy Directive implemented the capital requirement framework based on the Basel II accord developed by the Basel Committee on Banking Supervision (BCBS).	Article 136 lists the minimum powers supervisors must have to correct irregularities at a bank. This list could be expanded in light of the current crisis as not all authorities had adequate tools to handle ailing banks. Article 129 and 130 established rules about alerting other authorities (i.e. Central Banks and Ministries of Finance) in emergency situations. New provisions on home/host supervision have recently been adopted (but not yet transposed into national legislation) which establish colleges of supervisors for internationally active banks.
Directive on the Reorganisation and Winding up of Credit Institutions (Directive 2001/24/EC)	The Directive establishes that the home administrative or judicial authorities are the empowered authorities to decide on reorganisation measures and winding-up proceedings for credit institutions that operate branches in other Member States. The measures are governed by a single bankruptcy law, that of the home state. It prohibits the application of separate insolvency measures to branches under the law of the host State. It ensures the mutual recognition and coordination of procedures under home country control, imposes a single-entity approach by which all the assets and liabilities of the 'parent' bank and its foreign branches are reorganised or wound up as one legal entity under, subject only to exceptions specified in the Directive, the law of the home State.	This directive does not provide for the consolidation of insolvency proceedings for separate legal entities i.e.: subsidiaries within a banking group, and makes no attempt to harmonise national insolvency laws.
Directive on Deposit Guarantee Schemes (Directive 94/19/EC) amended by Directive 2009/14/EC and Commission proposal COM(2010)368	The Directive aims at safeguarding deposits from bank customers. Each depositor is guaranteed a protection of at least € 100,000 since 31 December 2010. Member States are obliged to ensure that banks are members of a scheme. The schemes must also cover depositors at branches in other Member States. The latest proposal of 2010 introduced harmonised rules on financing of Deposit Guarantee Schemes (DGS). Under the proposal banks will have to pay on regular basis to the schemes in advance and such 'ex-ante funds' will make up 75% of the overall funds in DGS.	In certain Member States deposit guarantee schemes not only have the task to pay out deposits but also to actively take part in crisis management or even to finance a resolution.

EU Competence		
Directive/policy	**Description**	**Relevance for this topic**
Memorandum of Understanding 2008	Building on the existing national and EU legislation, the objective of the Memorandum is to ensure cooperation in financial crises between Financial Supervisory Authorities, Central Banks and Finance Ministries through appropriate procedures for sharing of information and assessments, in order to facilitate the pursuance of their respective policy functions and to preserve stability of the financial system of individual Member States and of the EU as a whole. Although not legally binding in nature, the MoU defines procedures for the involvement of all relevant parties in a crisis situation, based on the existing legal responsibilities and decentralised supervisory framework, and building on existing networks of authorities (Domestic Standing Groups, colleges of supervisors, and networks of Central banks). It also defines coordination mechanisms, relying on a national coordinator in charge of actions to be taken at a national level (who may vary according to the nature, the characteristics and stages of the crisis) and Cross-Border Coordinator which, as a rule, is one of the authorities of the home country and should efficiently use internal cooperation mechanisms of the country. The MoU stipulates that sufficient cross-border procedures in normal times between all relevant authorities are to be put in place to enhance the availability of tools for crisis management; addressing the issues of burden sharing between home and host countries; and ensuring preparedness for financial crisis situations.	Voluntary cooperation of authorities proved to be inadequate in the recent financial crisis despite the fact that the MoU was already in force.
Second Company Law Directive 77/91/EEC	The Directive on coordination of safeguards which, for the protection of the interests of members and others, are required by Member States of companies within the meaning of the second paragraph of Article 58 of the Treaty, in respect of the formation of public limited liability companies and the maintenance and alteration of their capital, with a view to making such safeguards equivalent.	Mandatory requirements on the shareholders' approval of any increase or reduction of capital as well as rules on shareholders' pre-emption rights may hinder effective resolution measures of public authorities in an ailing bank.
Directive 2011/35EC **Sixth Company Law Directive 82/891/EEC**	The Directive concerns mergers of public limited liability companies. The Directive concerns the division of public limited liability companies.	Mandatory requirements on the approval of the merger / cross-border merger / division by the general meeting of each of the merging companies / each company involved in the division together with other requirements imposed by the directives may

Directive 2005/56/EC	The Directive concerns cross-border mergers of limited liability companies.	hinder the use of effective resolution measures in an ailing bank.
Directive 2004/25/EC	The Directive on takeover bids provides a general regime for takeover bids within the EU.	Obligation of anybody having acquired control of a public company by holding a specific percentage of shares to make a mandatory bid for the remaining issued shares may hinder the use of effective resolution measures in an ailing bank.
Directive 2007/36/EC	The Directive on the exercise of certain rights of shareholders in listed companies establishes requirements for general meetings of shareholders and in particular the convocation periods and the form of the convocation.	Long convocation periods may slow down speedy actions of authorities aiming at resolving ailing banks.
DG Competition, State Aid policy	Since the beginning of the global financial crisis in the autumn of 2008, the Commission provided detailed guidance on the criteria for the compatibility of State support to financial institutions with the requirements of Article 107(3)(b) of the Treaty on the Functioning of the European Union. The Commission Communications on crisis-related aid to banks, as well as all individual decisions on aid measures and schemes falling within the scope of those Communications, are adopted on the legal basis of Article 107(3)(b) of the Treaty, which exceptionally allows for aid to remedy a serious disturbance in the economy of a Member State. The Communications in question are: -the Communication on the application of State aid rules to measures taken in relation to financial institutions in the context of the current global financial crisis (the Banking Communication); - the Communication on the recapitalisation of financial institutions in the current financial crisis: limitation of aid to the minimum necessary and safeguards against undue distortions of competition (the Recapitalisation Communication); -the Communication from the Commission on the treatment of impaired assets in the Community banking sector (the Impaired Assets Communication); -the Communication on the return to viability and the assessment of restructuring measures in the financial sector in the current crisis under the State aid rules (the Restructuring Communication) and	Public support must be analyzed in the light of state aid rules in order to limit competition distortion.

	-the Communication from the Commission on the application, from 1 January 2011, of State aid rules to support measures in favour of banks in the context of the financial crisis , which extended the applicability of Article 107(3)(b) of the Treaty and the Restructuring Communication for one year until 31 December 2011. This extension under changed conditions should also be seen in the context of a gradual transition to a more permanent regime of State aid guidelines for the rescue and restructuring of banks based on Article 107(3)(c) of the Treaty which should, market conditions permitting, apply as of 1 January 2012.)	

National Competence	
Legislation	**Relevance for this topic**
Banking laws on powers of supervisors	Beyond the minimum requirements of the CRD, early intervention by supervisors is defined by national supervisory/banking laws. These laws include widespread powers which may not be compatible across Member States and may complicate cross-border supervisory cooperation.
Insolvency laws	Bank resolution depends in most Member States on national insolvency provisions. Re-organisation of different entities of the same cross-border banking group will take place according to different national insolvency laws. There is no coordinated operation of these laws on a cross border level.
Special bank resolutions laws	Special laws on bank resolution are aimed at optimising the response to a banking crisis, allowing intervention at a stage before formal insolvency has been reached. Such laws only exist in very few Member States hence the absence of special reorganisation techniques for banks can complicate cross-border coordination.

ANNEX V ON-GOING DEVELOPMENTS

On the 2nd of September 2010 the European Parliament, the Council and the European Commission reached a political consensus on the creation of new financial supervisory framework for Europe.

Europe has three new **European Supervisory Authorities (ESAs)** for: (i) banking, (ii) insurance and occupational pensions and (iii) securities. These Authorities work in tandem with the existing national supervisory authorities to safeguard financial soundness at the level of individual financial firms and protect consumers of financial services ("micro-prudential supervision"). In the case of adverse developments which may seriously jeopardise the orderly functioning and integrity of financial markets or the stability of the whole or part of the financial system in the Union, EBA shall actively facilitate and coordinate any actions of national supervisory authorities. Where the Council has adopted a decision determining the existence of an emergency situation and in exceptional circumstances where coordinated action by national authorities is necessary, EBA may adopt individual decisions requiring supervisors to take the necessary action to address any negative developments. Where a competent authority does not comply with the decision of EBA, EBA may, under certain conditions, adopt an individual decision addressed to a financial institution requiring the necessary action to comply with its obligations.

Moreover the **European Systemic Risk Board (ESRB)** was established which monitors and assesses potential threats to financial stability that arise from macro-economic developments and from developments within the financial system as a whole ("macro-prudential supervision"). To this end, the ESRB would provide an early warning of system-wide risks that may be building up and, where necessary, issue recommendations for action to deal with these risks. The creation of the ESRB addresses one of the fundamental weaknesses highlighted by the crisis, which is the vulnerability of the financial system to interconnected, complex, sectoral and cross-sectoral systemic risks.

In emergency situations, the new Authorities have an important co-ordinating role and are able to adopt decisions requiring supervisors to take jointly action. An example of how this power might be used would be to adopt harmonised bans on short selling on EU securities markets, rather than uncoordinated actions in different Member States, as witnessed over the past years.

At international level, the G20 has been discussing crisis management and resolution among a host of other issues aimed at addressing shortcomings in the international financial regulatory system.

A number of work streams are currently underway in international fora to address one particular resolution measure, namely the possibility to write down the debt of banks (haircut of creditors). These include, in particular, the work of the Basel Committee on Banking Supervision on capital instruments that absorb losses at the point of non-viability, and the Financial Stability Board (FSB) work stream on 'bail-in' in the context of improving the resolvability of systemically important financial institutions (SIFIs). The FSB has been working on the issue of SIFIs, in particular on how to identify SIFIs and how to overcome the moral hazard of too big to fail institutions with implicit bail outs through public money. It is important that EU policy in this area should take proper account of the outcome of such work, and aim for international consistency as far as possible.

ANNEX VI DESCRIPTION AND ANALYSIS OF PROBLEM DRIVERS AND PROBLEMS

Preparation and Prevention

Driver: Lack of contingency planning by banks and authorities for crisis situations Problem: Suboptimal level of preparedness of supervisors and banks for potential crisis situations

Both banks and supervisors were unprepared for the crisis situation that started in 2008. Firstly, as regards banks, levels of contingency planning (recovery plans[100]) available that would have helped banks to decrease the risk they face were insufficient. According to the Financial Supervisory Authority (FSA)[101] in the UK, there was, for example, too little focus on the effects of ratings downgrades on collateral calls and on the availability of lines of credit and too little attention was paid to core liquidity holdings. Banks did not know exactly what assets they held in which securities-depository systems; how long it would take to deploy them; and which are eligible in which central banks' routine facilities. Too few banks had that information readily to hand.

Secondly, as regards contingency planning carried out by authorities for banking failures (resolution plans[102]), it requires a lot of details on how a bank's business is structured and run and that information needs to be available for authorities at an early stage. The lack of resolution planning also made increasingly likely decisions to bail-out several banks in Member States. Authorities did not only lack adequate tools for resolving banks but they were not prepared either to resolve complex entities in a sufficiently short period of time (due to the lack of information about their organisation), which is crucial in bank crisis situations. Thus large sums of taxpayer's money were rather used to keep banks running.

Conceptually, recovery plans should make it less likely that a bank will require intervention, and resolution plans should lower the impact on society, if intervention is required.

Driver: Lack of EU rules for intra group financial support Problem: Suboptimal level of preparedness of supervisors and banks for potential crisis situations

Currently, while supervisory authorities in all Member States have a power to limit or prohibit intra-group transfers and transactions[103], no framework currently exists to facilitate (cross-border) intra-group asset transfers. The transfer of assets (provision of loans or collateral) between different companies of the same group can be very useful in crisis situation, when it is difficult (high cost) or impossible to obtain financing on the markets. Asset transfers from one entity of a cross-border group to another are currently restricted by a number of different safeguarding provisions laid down by national laws. These provisions based on the principle of the separate legal personality are designed to protect the creditors and shareholders of

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100 Recovery plans set out the arrangements that banks have in place or the measures that it would adopt to enable it to take early action to restore its long term viability in the event of a material deterioration of its financial situation in foreseeable and conceivable situations of financial stress.

101 Paul Tucker: The crisis management menu; see on http://www.bis.org/review/r091118d.pdf

102 A resolution plan sets out options for applying the resolution tools to the credit institution in a range of conceivable scenarios, including circumstances of systemic instability.

103 CEBS, Mapping of supervisory objectives and powers, including early intervention measures and sanctioning powers, January 2009

individual entities located and registered in the given country. Only in few national legal systems the concept of group interest has been developed through jurisprudence[104] and legal rules[105]. Instead of the immediate interest of each entity, this concept takes into account the indirect interest that each entity affiliated to a group has in the prosperity of the group as a whole. When this concept is applied it differs from country to country and consequently does not provide the necessary legal certainty. Lack of clarity and legal certainty detains companies within a group from supporting each other in case of financial distress. A clarification of the circumstances and conditions under which financial support could be mutually provided among entities of a banking group would therefore be useful in the phase of early intervention in crisis management.

The main legal problem with the transfer of assets[106] from subsidiaries to parents or other affiliates within a financial group in a financial crisis scenario is that national legal frameworks are oriented towards the stability of each separate legal entity within a financial group. The interest of a foreign parent undertaking and/or other companies belonging to the same group find less (if any) consideration, with the competent national authorities legally bound to act in the interest of the domestic legal entity which, in particular cases, may be contrary to the interest of the group as a whole. In the case of cross border branches, the asset transfer is however less problematic since they are part of the same legal entity.

First, under banking law, intra-group transfers may be capable of triggering supervisory actions according to the national mandates of the competent supervisory authorities. Supervisors must indeed safeguard the financial soundness of banks in their jurisdiction. This results in ring fencing[107] of a local bank's assets. An intra-group transfer of assets is also normally considered to be a transaction with a connected party which is subject to additional regulatory conditions, e.g. application of the principles of arm's length dealing. Additionally, supervisory authorities have the duty to impose any relevant corrective measure on supervised subsidiaries or affiliates of foreign credit institutions to ensure that they comply with regulatory requirements, including the duty to prevent or challenge a potentially detrimental action.

Second, under company law, the influence and liability of a parent company over its subsidiary is usually limited, and the group-wide interest cannot prevail to the detriment of the subsidiary or has to be balanced by appropriate compensation to the subsidiary. The board of directors' fiduciary duties and duty of loyalty are usually to the individual company, rather than the group as a whole. Depending on the relevant State, company laws differ on the extent to which parent companies may instruct their subsidiaries to engage in certain transactions[108].

Third, adverse tax implications can be expected in many cases. In regard to intra-group transfers of funds, not all Member States allow the transferor to deduct the sums in question from his taxable base. Moreover, even Member States that allow such deduction in purely

[104] For instance in France, Cour de Cassation Criminelle 4 fèv. 1985, Rozenblum, Rev. Soc. 1985, p. 665.

[105] For instance, the German Companies Act (Aktiengesetz) of 6 September 1965

[106] In the public consultation launched by the European Commission in May 2007 on the reorganisation and winding-up of credit institutions, 21 respondents against 2 confirmed that asset transferability in a crisis situation was critical for both host and home countries: European Commission, Summary of the public consultation on the reorganisation and winding-up of credit institutions, December 2007.

[107] Prohibiting the transfer of assets from that jurisdiction to others.

[108] In Germany, a majority owned enterprise is presumed to be controlled by the enterprise with a majority shareholding in it (Section 17, §2 of the German Stock Corporation Act). In the absence of a control agreement, the dominant company may not cause the controlled stock corporation or association limited by shares ("Kommanditgesellschaft auf Aktien") to enter into transactions or arrangements that are detrimental to it, except the dominant company provides compensation for the resulting disadvantages (Sec. 311 seq. AktG; liability in case of omission: Sec. 317; 318 AktG).

domestic cases are not obliged to extend this treatment to cross-border (outbound) intra-group transfers.[109].

Fourth, under insolvency law, some transfers of assets executed in a suspect period[110] before the opening of the insolvency proceedings of the transferor might be latter found retroactively void or ineffective vis-à-vis other creditors[111](claw-back rules).

As a consequence, cross-border banking groups are unable to mobilise available assets in one part of the group in support of another part of the group which may be encountering liquidity shortfalls.

Driver: Too large, too interconnected and too complex banks to fail Problem: Irresolvable banking operations and structures

During the financial crisis it became inevitable that not only the "too big to fail" ("TBTF") but also the "too complex to resolve" "too inter-connected to fail" approach contributed to the moral hazard of large complex institutions. If banks seem non-resolvable in a timely manner by authorities and if their failure might have systemic implications, decision makers would go down the route of bail-out rather than risk a resolution. This was evidenced during the crisis in several instances. In September 2008, the US authorities concluded that AIG was too big and too inter-connected to be allowed to fail due to its huge volume of outstanding derivative contracts with a wide range of counterparties. Based on the same considerations, several banks were bailed out in the UK, Germany, Belgium, and Ireland.

As regards their size, EU-headquartered banks are comparatively larger than their US counterparts, especially when measured by assets. International Financial Services London research[112] reports that of the worldwide assets of the 1,000 largest banks in 2008–09, EU banks had the largest share at 56 percent versus 13 percent for US banks and 14 percent for Asian banks. In terms of assets to home country GDP, the largest EU banks are much larger, and thus even more likely to be considered TBTF, than their largest US counterparts.

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109 Cf. Case C-231/05 *Oy AA* [2007] ECR I-6373.

110 See e.g. Belgian insolvency law (art. 17, 3° of the law of 8 August 1997 relating to bankruptcy), according to which the collateral securities granted during the "période suspecte" relating to a previous debt are ineffective. The "période suspecte" starts at a date fixed by the Tribunal de Commerce which corresponds to the moment when the insolvent was not yet able to pay its debts (this date being at the earliest 6 months before the judgment pronouncing the bankruptcy).

111 However, if the collateral was given by a credit institution to another credit institution that are participants into a system - according to the definition given by the Settlement Finality Directive (SFD) - or to a central bank, Article 9,1 of the Settlement Finality Directive 98/26/EC provides that the security right cannot be challenged. The question if Article 9,1 SFD applies to collateral provided by a third party (e.g. a subsidiary for the debts of the parent company) is nevertheless controversial.

112 Source: Too Big to Fail: The Transatlantic Debate, Morris Goldstein and Nicolas Véron, January 2011, http://www.iie.com/publications/wp/wp11-2.pdf

Combined assets of the largest three and five banks compared to GDP[113]

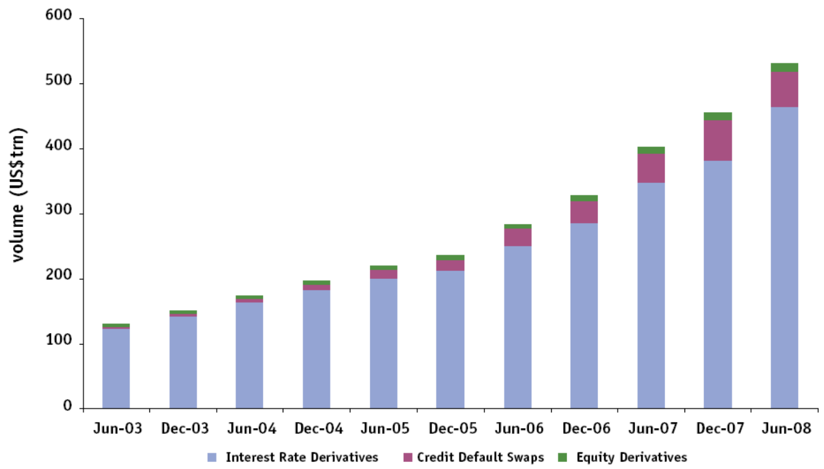
	Top three banks			Top five banks		
Country	1990	2006	2009	1990	2006	2009
Germany	38	117	118	55	161	151
United Kingdom	68	226	336	87	301	466
France	70	212	250	95	277	344
Italy	29	110	121	44	127	138
Spain	45	155	189	66	179	220
Netherlands	154	538	406	159	594	464
Sweden	89	254	334	120	312	409
Japan	36	76	92	59	96	115
United States	8	35	43	11	45	58

Source: Bank for International Settlements

Another aspect is the complexity of financial institutions. Due to the non-transparent extensive trading activity and the large number of group entities, the winding down of the Lehman brothers is estimated to take more than ten years[114]. The complex corporate structure of Lehman Brothers, which substantially hinders its on-going liquidation, can be found in Annex VIII.

The importance of inter-connectedness via trading relationships has hugely increased over the last ten to fifteen years. The soaring total volume of OTC derivative contracts is a good indicator for the high interconnectedness and interdependence of banks, which is a major source of contagion (see next chart).

OTC derivative volume by product type[115]



Source: ISDA

Although Article 136 of the CRD provides supervisors with the possibility of restricting or limiting the business, operation or network of banks, in case of non-compliance with the CRD, in contrast, resolution authorities do not have similar powers. Even if certain banks are too complex or interrelated to undergo a resolution process, should they get close to failure,

113 Source: Too Big to Fail: The Transatlantic Debate, Morris Goldstein and Nicolas Véron, January 2011, http://www.iie.com/publications/wp/wp11-2.pdf

114 "Based on industry experience, including cases like Polly Peck, Enron and [Robert] Maxwell, it could take a decade or more to close this administration, not least because it threatens to become bigger and more complex that any of these previous cases," Tony Lomas, chairman of business restructuring at PwC, source: http://app1.hkicpa.org.hk/APLUS/0811/Institute_news.pdf

115 Source: Turner Review Conference Discussion Paper, October 2009; see: http://www.fsa.gov.uk/pubs/discussion/dp09_04.pdf

currently it is not possible to force banks to reduce such impediments. If managers and shareholders are aware that their bank cannot undergo a resolution (too big or complex to fail), where they lose their control and ownership over a bank, their approach towards excessive risk taking (moral hazard) will not change.

Early intervention

Driver: Divergence and lack of effective early intervention triggers for supervisors Problem: Sub-optimal early intervention arrangements for supervisors

All Member States operate some form of pre-intervention mechanism in order to handle a crisis in an ailing bank. Divergence in national approaches to early intervention arises in all phases of the process. Early warning indicators and their threshold levels that prompt supervisors to take appropriate measures vary across Member States as they are embedded in the Pillar 2 process. In this regard, CEBS[116] has observed that currently there is no minimal common set of early warning indicators and no commonly agreed definition for each of them.

Effective prevention of crisis situations is conditional on accurate and early detection of stress situations. Results of a CEBS survey shows that only a few Member States' domestic legal frameworks specify triggers that lead to automatic corrective action, which means that supervisors are obliged to act if an indicator hits a threshold.[117] However, CEBS acknowledges that such threshold levels for above indicators are too low for remedial measures to be considered true early intervention measures and supervisory action will need to be taken long before the situation of an individual institution deteriorates to such a level.

The events of 2008 have demonstrated that effectiveness of early warning systems employed by the supervisory community at the time was sub-optimal. Certain risks were underestimated because smaller-than-warranted importance had been assigned to them while the signalling capacity of some risk indicators has been erroneously overlooked. This may have interfered with a timely undertaking of appropriate actions and in turn necessitated more intrusive and costly - for many stakeholders involved - intervention measures.

More specifically, the crisis has demonstrated that current approaches focus too narrowly on capital ratios[118] while underestimating the effects of leverage and liquidity on the 'soundness' of an institution as perceived by market participants. In this regard, the predictive power of certain market-based indicators has not been given due attention. The amendments of the CRD (CRD 2 ,3 and 4), which require banks to hold better quality and more capital and fulfil liquidity requirements will substantially reduce the risks at banks. The application of the new rules for prompting early intervention measures however remains unsolved.

[116] CEBS, Mapping of supervisory objectives and powers, including early intervention measures and sanctioning powers, January 2009 http://www.c-ebs.org/getdoc/f7a4d0f8-5147-4aa4-bb5b-28b0e56c1910/CEBS-2009-47-Final-(Report-on-Supervisory-Powers)-.aspx

[117] For instance, in Czech Republic, the supervisory authority must impose remedial measures (e.g. capital increase, acquisition of assets having a risk weighting of less than 100%, prohibition to acquire any interest in any other legal entity, prohibition to grant a loan to a person having a special relation with the institution) if it becomes aware that an institution's capital is lower than two thirds of the minimum required capital; in Hungary, the supervisory authority shall use corrective measures if the own funds are less than 75% or less than 50% of the capital requirements; while in Slovakia, the supervisory authority shall place a credit institution under forced administration if the own funds of the institution concerned fall below 50% of the minimum requirement.

[118] Tier 1 capital ratio (ratio of a bank's core equity capital to its total risk-weighted asset) at Fortis, Dexia and Hypo Real Estate Holding were at 9.1%, 11.3% and 8.6%, respectively, at the time when their share price was experiencing a precipitous decline, eventually prompting national governments to take action in late September 2008.

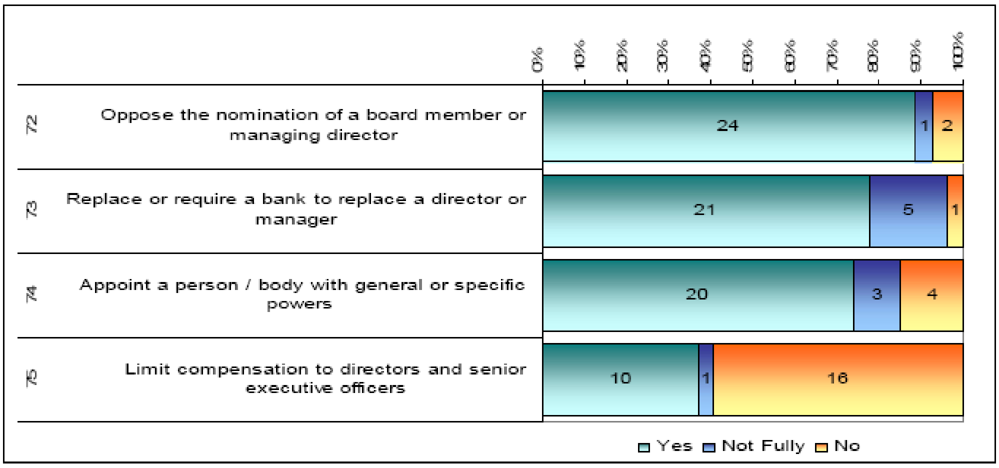
Driver: Divergence and lack of effective early intervention tools for supervisors

Problem: Sub-optimal early intervention arrangements for supervisors

With regard to the toolkit of early intervention measures and powers available to supervisors, Article 136 of the CRD already specifies some of these. It stipulates that in order to address a distress situation at an early stage, supervisory authorities should be able to require banks to hold additional capital, improve governance, systems and internal control arrangements, increase reserves, limit business operations and risk exposures stemming therefrom. The stocktaking of supervisory objectives and powers conducted by CEBS[119] revealed that several Member States implemented this Article differently, hence supervisory authorities have slightly different tools, and that a number of authorities lacked certain powers. Further convergence might be needed in this respect if such differences have the potential to complicate cross-border cooperation between authorities.

In order to intervene effectively and promptly to restore the soundness of a bank, supervisors might also need to resort to additional domestic measures that go beyond the legal requirements of the EU legislation. However, a number of supervisors either cannot achieve certain measures through general powers or do not have access to the same specific powers that are available to the supervisory authorities in other Member States (see next Chart).

Supervisory authorities' access to selected powers and measures



Source: CEBS

Given that a speedy action is often critically important to the survival of an institution and to the ability for supervisors to minimise costs associated with its failure[120], differences in national pre-intervention approaches have the potential to complicate or impair efficient and coordinated cross-border crisis handling.

Driver: Too long time required to increase capital in emergency situation

Problem: Sub-optimal early intervention arrangements for supervisors

In the early intervention phase, the shareholders' rights as guaranteed by the EU legislation, apply. However, there may be a need to create a mechanism for a rapid increase of capital in the early intervention phase for emergency situations when the credit institution does not meet

[119] CEBS, Mapping of supervisory objectives and powers, including early intervention measures and sanctioning powers, January 2009

[120] This was particularly evident during the resolution of Fortis.

or is likely not to meet the requirements of the Capital Requirements Directive and an increase of capital is likely to restore the financial situation and avoid a resolution.

Article 25.1 of the Second Company Law Directive requires that any increase in capital in a public limited liability company must be decided upon by the general meeting. This applies to the issue of all securities which are convertible into shares or which carry the right to subscribe for shares. Following the rules of the Shareholders' Rights Directive, in listed companies this meeting has to be convened at least 21 days before the meeting. Restoring the financial situation of a credit institution rapidly by means of capital increase in an emergency situation is therefore not possible.

Bank resolution

There is currently no EU framework which deals with problems in a bank once it approaches failure as this stretches beyond the sphere of supervisory competence. Consequently Member States have adopted very different approaches to bank resolution, both with respect to the tools available and the conditions determining their application. The diversity of national crisis intervention arrangements and gaps in the tools provided under Member States' legal frameworks makes cross-border management of intervention measures particularly challenging in an increasingly integrated Internal Market. Any inadequacies in cooperation arrangements, different crisis management toolkits and conditions under which tools may be applied, lacking financing arrangement have the potential to complicate or even compromise effective crisis management.

Driver: Divergence and lack of resolution triggers Problem: Inefficient bank resolution process and suboptimal outcomes

A study carried out on behalf of the Commission services[121] present the differences in national systems in this regard. Not all Member State authorities have the power to intervene, stabilise and reorganise an ailing bank at an early stage before the formal point of insolvency is reached. Where it is possible (UK, Italy, France) the responsibility to judge the crisis situation is entrusted to the supervisory authorities which can have a relatively large room for manoeuvre.

In Italy a special administration can be implemented in the case of illiquidity of solvent banks, whose "serious crisis situation" poses a threat to the stability of the financial system. In France, the Banking Commission may appoint a provisional administrator to a credit institution, if the management of the institution can no longer be carried out in normal conditions. In the UK, a special resolution regime can be implemented if the bank is failing, or is likely to fail and if it is not reasonably likely that action will be taken by or in respect of the bank that will enable the bank to satisfy the threshold conditions.

The lack of clearly defined triggering mechanism makes resolution problematical. If authorities can not intervene at an early enough point in time, administrative resolution may not be possible to carry out any more and expensive bail outs or liquidation can just be implemented. The lack of legal clarity around the triggering mechanism can delay or obstruct

[121] DBB Law "Study on the feasibility of reducing obstacles to the transfer of assets within a cross border banking group during a financial crisis and of establishing a legal framework for the reorganisation and winding-up of cross border banking groups", 2009.

http://ec.europa.eu/internal_market/bank/windingup/index_en.htm resolution measures, which again could lead to much higher cost for stakeholders and society as a whole.

Diverging threshold conditions in Member States for bank resolution may also prevent coordinated action at cross border level. The diverging conditions for prompting resolutions may reduce the chances of immediate actions at group level, and thus favour national solutions.

Driver: Divergence and lack of resolution tools and powers Problem: Inefficient bank resolution process and suboptimal outcomes

The study of DBB Law (see above) also describes the extent to which Member States' arrangements differ: they are based on different approaches, pursue different goals and have been designed to fit with the different wider legal systems of each country (e.g. provisions governing areas such as commercial and contract law, ownership law, labour law, netting and set-off,[122] tax law, etc.).

As regards reorganisation tools, general insolvency frameworks enable the use of certain tools to be applied to banks. These include:

– mergers or acquisitions (transfer of all shares to the third party on an on-going basis)

– agreements with creditors, concerning reduction of debt, debt restructuring, debt-equity conversion

– assets sales

– closure of non-viable part of the business

In certain Member States, more specific techniques for bank restructuring may also be available:

– purchase-and-assumption transactions (transfer of assets and liabilities to a purchaser; the transfer may include all the assets and liabilities or part of the assets with certain liabilities)

– "Good-Bank/Bad-Bank" separation and bridge banks[123] (selling of non-performing loans and other substandard assets for collection or transferring viable assets to a newly set up bank)

– Nationalisation.

In the EU, only the UK Banking Act 2009[124] explicitly lists specific bank restructuring techniques which can be applied by the authorities without the consent of the shareholders under the Special Resolution Regime. In other Member States, although specific tools may not be explicitly prescribed in the legislation, specific restructuring techniques may also be available either under administrative or judicial proceedings applied to banks.

[122] See Glossary in Annex I.

[123] See Glossary in Annex I.

[124] http://www.opsi.gov.uk/acts/acts2009/pdf/ukpga_20090001_en.pdf

– In Italy, for example, the law does not specify which techniques the appointed special administrator may use, but the powers are set more broadly with the law stipulating that the administrator must *promote helpful solutions in the interest of depositors*. Possible wide interpretations may include a merger, acquisition or partial sales of assets. However an important difference compared to the UK system is that shareholders retain the right for final approval of any reorganisation measure.

– In France, the provisional administrator nominated by the banking supervisor may conclude transactions in the ordinary course of business. However a more intrusive intervention entailing a transfer of shares without the shareholders' authorisation, requires the administrator to obtain a court order. Settlements with creditors may be achieved through various types of proceedings at the initiative of the debtor[125]. Specific bank restructuring techniques may only be used under an insolvency proceeding.

– In Germany, the legal framework does not provide a bank specific administrative reorganisation, however under the corporate insolvency law certain techniques (e.g. asset sales) are possible subject to the approval of creditors.

– In Sweden, no formal reorganisation proceedings are possible for banks – they can only be reorganised on a voluntary basis through negotiations with shareholders and creditors. Under a judicial insolvency, only liquidation is possible.

In certain Member States however, reorganisation of banks is not an option at all, as only liquidation is possible under insolvency proceedings.

Differences in the availability of tools, the extent of powers held by authorities and the conditions under which they can be exercised is likely to give rise to tensions in a cross-border resolution and hamper efficient cooperation:

– If national authorities are equipped with **different tools and powers**, certain measures can be impossible to implement. As a basic example, if one national authority has the power to transfer part of the business to a third party purchaser by executive order, while another cannot do so, a rapid and coordinated intervention by those two authorities to deal with affiliated banks in their respective jurisdictions might be difficult. If cross border reorganisation measures are impossible to implement, national authorities are left with limited choices, among which the very expensive bail-out is the most likely outcome.

– **Different types of procedure** can slow down the overall crisis resolution process for a group. Where the necessary measures require judicial approval, or have to be taken within the framework of court-directed insolvency proceedings, they may not necessarily lend themselves to a quick handling of a crisis situation (e.g. in France). In other countries, administrative processes, managed by the supervisor or central bank can implement measures more rapidly. The interaction of judicial and administrative processes implemented in different countries can thus harm efficiency and risk losing value during a prolonged resolution process.

Until recently, cross-border banking failures were extremely rare events, and consequently many Member States' crisis resolution arrangements have never been tested. However experiences during the crisis have exposed a number of serious shortcomings in certain

[125] For instance, France has three types of proceedings provided by the commercial code and applicable to banks, aimed at a settlement with creditors: the "ad hoc mandate", the composition procedure and safeguard procedure.

Member States and demonstrate how damaging the absence of adequate EU arrangements can be.

Resolution tools that can be applied with high effectiveness for small or mid-sized banks may not be adequate for large or systemically important banks. Resolution powers to tackle such banks are missing in almost all Member States.

The examples (Fortis, Lehman, Icelandic banks) listed in Annex VI also show how diverging and lacking tools can undermine optimal results.

Driver: Legal obstacles to effective and efficient bank resolution Problems: Lack of legal certainty in bank resolution and inefficient bank resolutions process and suboptimal outcomes.

The current crisis has shown that legislation does not always strike the right balance between achieving objectives such as financial stability and adequate safeguarding of different stakeholders' rights. This issue has given rise to substantial legal uncertainty for many stakeholders in the crisis and has the potential to cause further uncertainties in the future.

The financial crisis has shown that interventions by public authorities to ailing banks need to be implemented in a very short period of time (within 24-72 hours). If interventions need to be delayed due to constraints in the legislation (e.g. need to obtain shareholders' approval at a general meeting) there is a risk that banks might already fail before the necessary procedures have been complied with[126]. Banks, and especially large systematically important banks, are susceptible to bank-runs, and the in view of the degree of interconnectedness of financial markets, the knock-on effects could lead to the collapse of other institutions and hence to a general banking crisis. Public authorities and many analysts[127] argue that due to the special nature and high importance of the banking sector in the broader economy, financial stability must take precedence over shareholders' rights in such situations[128]. There needs to be a balance found between shareholders' right and the common interest of financial stability. The Fortis case has demonstrated that resolution-measures of authorities can be attacked by shareholders through courts and in the absence of a clear legal framework they can be ruled retroactively void.

The EU Company Law Directives contain mandatory rules for the protection of shareholders and creditors. Some of these rules relating especially to the shareholders' decision making powers in the public limited liability companies and shareholders' participatory rights in the listed companies may hinder rapid actions by the resolution authorities in a crisis situation. Without modifications to the Company Law Directives, increase and decrease of capital, mergers and divisions are all subject to shareholders' agreement. Furthermore, whenever the capital is increased by consideration in cash, the shares must be offered on a pre-emptive basis to shareholders in proportion to the capital represented by their shares. Shareholders' meeting in listed companies normally has to be convened at least 21 days before the meeting. Moreover, the takeover bids directive regulates that any person who acquires shares in a listed company above the control threshold (set by Member States, usually 30-50%) must make a

126 Convocation of the general meeting of a company shall be issued not later than on the 21st day before the day of the meeting

127 E.g.: An Overview of the Legal, Institutional, and Regulatory Framework for Bank Insolvency, Staff of IMF and World Bank, April 17, 2009.

128 If the bank fails and undergo an insolvency proceeding, shareholders would immediately loose their rights in any case. In a situation when banks need public intervention, they are technically insolvent (imminent insolvency).

mandatory bid for all other shares of the company, in order to protect minority shareholders in case of change of control. The Directive also applies when control is acquired by the State. The mandatory bid rule may cause a burden for the acquiring party in the resolution phase. Furthermore there may be national company law rules not harmonised by the EU law that can hinder the use of resolution powers. Example of this is a rule that the transfer of significant part of company's asset should be decided by the general meeting.

In addition, different national resolution or insolvency systems would probably have encounter difficulties to cooperate. Any reorganisation or liquidation would necessarily be carried out in accordance with national insolvency procedures. Hence, certain targeted modifications to national insolvency regimes may be necessary to ensure a smooth resolution process. It should be ensured for instance that bank resolution proceedings take precedence over ordinary corporate bankruptcy proceedings. This could be achieved by making the filing of applications for bankruptcy against credit institutions subjected to the previous authorization of the supervisor. Appropriate rules should also ensure that when a part of a bank's business is transferred to a bridge bank, the residual part of the bank which undergoes liquidation is permitted under national bankruptcy law, to continue to operate and provide services to the bridge bank, to the extent and for the time necessary to ensure the continuation of essential functions.

Driver: Lack of authorities responsible for bank resolution

Problem: Suboptimal level of cooperation between authorities responsible for bank resolution

As bank resolution frameworks are missing in many Member States, the authorities responsible for special bank resolution are not defined either. Resolution authorities are national authorities that apply the resolution tools and exercise the powers. Resolution authorities should have the expertise, resources, operational capacity and independence to implement resolution measures, and be able to exercise their resolution power with the speed and flexibility that is necessary to achieve the resolution objectives. In contrast with early intervention, bank resolution is not necessarily managed by banking supervisors; and for various reasons they may not be best placed for this, either. This task can be fulfilled by the Central Bank, the Deposit Guarantee Scheme, the ministry of finance or by other bodies.

The lack of attribution of resolution task to a certain authority in all Member states makes cross border cooperation more difficult, too. Even though the 2008 Memorandum of Understanding ('MoU')[129] set up cross border stability groups (comprising of supervisors, central banks and ministries of finance), in practice these groups never worked even during the crisis.

In order to ensure that resolution tools are applied effectively, the power to make decision in bank resolution need to be attributed to a specific authority in each Member State. The nomination of a single authority responsible for bank resolution could notably facilitate cross border cooperation, where authorities with similar powers could manage the resolution of a group together.

[129] Memorandum of Understanding on Cooperation between the Financial Supervisory Authorities, Central Banks and Finance Ministries of the European Union on Cross Border Stability (1 June 2008).

International cooperation

The de Larosière report[130] concluded that: "*The regulatory response to this worsening situation was weakened by an inadequate crisis management infrastructure in the EU, both in terms of the cooperation between national supervisors and between public authorities." "These [crisis management] actions, given the speed of events, for obvious reasons were not fully coordinated and led sometimes to negative spill-over effects on other Member States."*

"Existing supervisory arrangements proved incapable of adequately preventing, managing and resolving the financial crisis. Nationally-based supervisory models had lagged behind the integrated and interconnected reality of today's European financial markets, in which many financial firms operate across borders. The crisis exposed serious failings in the cooperation, coordination, consistency and trust between national supervisors."

Driver: Misalignment between national accountability and mandate of supervisors and cross-border nature of the industry Problem: Sub-optimal level of supervisory cooperation impairing the effectiveness of supervisory intervention in crisis situation of cross border banks

As a result of industry consolidation over the recent years, large cross-border banks now dominate the European banking landscape. Given the degree of banking market integration, it has been argued for some time that the key hurdle in developing a functional and effective EU financial stability framework is rooted in the fact that fiduciary responsibilities of national authorities are towards national governments limiting their incentives to work towards a common EU stability framework[131]. Before the crisis, national authorities were reluctant to develop commonly binding EU principles and procedures for cross-border financial crisis prevention and resolution and often resorted to introducing their own national legislation to achieve home Member State-oriented objectives. As a result, the behaviour during the financial crisis has tended to be nationally focused.

Recent changes to the legislative framework have resulted in some important progress to put in place cooperation arrangements aimed at enhancing EU-wide financial stability. The CRD[132] already requires that supervisory authorities coordinate in gathering and dissemination of relevant information and, more generally, coordinate their supervisory activities in both going concern and emergency situations. However, the Directive does not specify how joint assessment should be conducted. If national law or national supervisors interpret conditions differently, coordinated action by supervisors of different group entities might be difficult.

Driver: Misalignment between national responsibility, accountability of resolution authorities and cross-border nature of the industry Problem: Suboptimal level of cooperation between authorities responsible for bank resolution

Resolution measures that concentrate only on one entity, without taking into account the interests of the broader group, risk the possibility of value loss for certain parts of the group.

130 The high level group on financial supervision in the EU – Report, 25 February 2009; http://ec.europa.eu/internal_market/finances/docs/de_larosiere_report_en.pdf

131 IMF Country Reports No. 07/260, July 2007, and No.08/262, August 2008

132 Article 129 (1)

The value of synergy, goodwill and certain immaterial assets could decrease leaving creditors and shareholders with lower collateral against their claims. Disruption of information technology systems and business procedures integrated at group level could seriously block the operation of different legal entities in the same group.

At EU level and in most of the Member States' company laws, there is no concept of 'group interest' which might otherwise facilitate the resolution of cross-border banking groups. As the legal basis of group treatment is missing, it is very problematic to handle banking groups as a single economic entity during a resolution. Such limitations might undermine a universal approach which has the potential to reach a more optimal result at EU level.

Despite the agreement of July 2008 on an EU wide MoU setting out cross-border crisis management arrangements, as mentioned above, events have highlighted the limits of a framework based on voluntary cooperation between national authorities. There has been inadequate transmission of information to other interested parties in other Member States and the agreement to open, full, constructive and timely cooperation is weakened by a legal framework that militates towards national approaches. In times of crisis, national interest has proved much stronger than the broader general interest.

Different insolvency procedures are also a significant obstacle to the ability of, or the incentives for, Member States to adopt resolution measures in respect of a cross-border banking group. Any reorganisation or liquidation will necessarily be carried out in accordance with national insolvency procedures, and any coordination must be based on the voluntary cooperation between different national insolvency authorities and officers.

The Fortis case provided a good example how the lack of cooperation structures can result in a suboptimal solution for both Member States. The failure of joint reorganisation resulted in separation of the group along geographical borders (ignoring coherence of business lines) and costly bailout by the governments involved.

Financing of resolution

Driver: Lack of arrangements for financing resolution from private sources in most Member States Problem: Use of public funds in crisis situation

The financial crisis was of such severity that Member States needed to take exceptional measures, such as capital injections and guarantees of banks' debt, to protect financial stability and to combat the economic downturn.[133] As effective arrangements for financing crisis management were missing in almost all Member States, the massive use of taxpayers' money was unavoidable. In a number of countries, this has notably increased government debt and sovereign risk. At the time of the crisis, no special fund existed in the EU or in Member States which would be tasked to finance the cost of bank resolution.

[133] Such measures have been assessed under the EU rules on state aid.

Driver: Diverging national policies concerning financing of crisis situations (where available) Problem: National systems not calibrated to ensure an optimal and level protection of financial stability across Member States (cumulatively with other prudential measures)

In certain Member States, funds of the deposit guarantee scheme (DGS) could and can be used not only to pay out depositors when a bank fails but also to finance restructuring, reorganisation of an ailing bank. Currently, in 11 Member States DGS have varying powers beyond the mere pay-out of depositors ('pay box' function) such as liquidity support, restructuring support or liquidation role Such transactions may be rational if the cost of financing - taking into account the probability of successful reorganisation - is smaller for the DGS than the total pay-out to all depositors of the same bank in the event of bankruptcy. The 2010 Commission proposal[134] to amend the DGS Directive proposes to allow, at the discretion of Member States, all DGS to also be able to finance resolution measures[135].

Recently a number of Member States have introduced bank levies (that is transferred to a special fund) or bank taxes (ending up in the public general budget). They differ across Member States in many aspects. Some of them use the raised funds for general budgetary expenditures (e.g. UK), while others set them aside in a special fund (e.g. Germany, Sweden), which can only finance specific purposes. There are also important differences in the calibration of the levies/taxes: the method of calculation, the rate and the base. A further key difference is the scope of the levy/taxes: some Member States impose the levy only on credit institutions while others on other segments of the financial sector too. For further details please see the table below and Annex IX. However, it should be noted that any provision of financing in support of resolution must comply with the EU Treaty in particular, with the State aid framework where it involves the use of state resources and where an advantage that could distort competition and effect intra EU trade is provided to an economic entity that continues to operate in the market even in a limited way.

[134] On 12 July 2010, the Commission adopted a legislative proposal for a thorough revision of the Directive on Deposit Guarantee Schemes. It mainly deals with a harmonisation and simplification of protected deposits, a faster pay-out, and an improved financing of schemes. The proposal was under negotiation in the European Council and Parliament at the time of drafting this impact assessment. Further information can be found on the following website:

http://ec.europa.eu/internal_market/bank/guarantee/index_en.htm

[135] It is possible under the safeguard that the use of DGS funds is permitted for bank resolution only up to the amount that would have been necessary to pay out covered deposits in the even of a bank failure.

Scope of systems of levies and taxes across Member States[136]

	Scope	Domestically				Abroad		Destination of levies/taxes
		Parent	Foreign subsidiaries	Branches of foreign banks		Parent's		
				Non-EU	EU	subsidiaries	branches	
BE [137]	All Banks Stock-broking firms Life insurance Companies	X X X	X X X				X X X	Treasury
DE	All banks	X	X	X			X	Banking fund
FR	All banks[138]	X	X			X	X	Treasury
CY	Banks CCI's	X X	X X	X X			X X	Treasury
AT [139]	All banks (*above 1 bn of liabilities)*	X	X	X	X		X	Treasury
PT	Credit Institutions	X	X	X			X	Treasury
DK	All banks	X	X				X	Banking fund
HU	Credit institutions, Insurers, Other financial organizations	X	X	X	X		X	Treasury
SE	All banks, Other credit institutions	X	X				X	Banking fund[140]
UK	Banks with *aggregate liabilities above £20 bn*	X	X	X	X	X	X	Treasury

Levies/taxes that have been recently introduced by Member States, while suitable for national purposes, are unlikely to be calibrated in an optimal way for Europe as a whole. First of all, they might not take into account how bank regulatory capital requirements reduce residual risk in the financial system and in particular the effects of Basel III in that respect. Second, they are unlikely to have fully catered for the on-going review of DGS rules in the EU, and in particular of the synergies that can be obtained when both DGS and RF are jointly considered as tools of the banking safety net. Third, their present calibration might not be coordinated across Member States and therefore does not ensure an optimal and equal level of protection of financial stability across all Member States.

Driver: Conflicting interests of Member States concerning financing of crisis situations

Problem: National systems not calibrated to ensure an optimal and even level of protection of financial stability across Member States (cumulatively with other prudential measures)

The existence of separate funds to finance bank resolution in certain Member States but the lack of them in others renders group resolution less coordinated and effective. This can encourage resolution authorities to ring fence institutions located in their jurisdiction and not to participate in a group level resolution, in spite of this being beneficial for a wider range of stakeholders at EU level.

136 Source: Economic and Financial Committee, last column inserted by Commission Services. A more detailed table can be found in Annex IX.

137 In the case of Belgium contributions levied in the context of Deposit Guarantee Schemes have been substantially modified, but no system of financial levy, similar to what is currently being discussed in the EFC AHWG, has been introduced.

138 Except the ones holding less than €500 mn in RWAs

139 The law has not yet introduced, but the draft law of the financial levy is now in consultation with stakeholder and will then be submitted by the Austrian Government to the Parliament

140 The Swedish proposal is said to be bank fee, but from the description in http://www.sweden.gov.se/sb/d/574/a/147426 it behaves more as a tax.

Financing a resolution of a cross-border bank raises particular challenges compared with domestic banks, and the first real experiences of cross-border bank failures (Fortis, Icelandic banks) have confirmed serious shortcomings in this area. While the general EU interest may entail maintaining different parts of a banking group together as a coherent whole, action by national authorities, who are accountable to their own national taxpayers, may be dictated by narrower domestic considerations.

In the absence of cross border financing and aligned incentives to cooperate, the likely outcome to a cross-border intervention will be a series of uncoordinated and potentially competitive actions taken by authorities with a view to minimising losses for their own taxpayers, but with no – or at best limited – regard to the consequences for citizens outside their jurisdiction. This may raise the overall cost of a resolution, and limit the possible spectrum of stabilisation measures involving public financing as a result of ring fencing and national solutions.

ANNEX VII CASES ILLUSTRATING PROBLEMS OF CRISIS MANAGEMENT IN THE EU

Fortis

In the case of Fortis, authorities from different Member States were unable to rapidly agree on a rescue plan which could have maintained the operation of the group structure. As a consequence the group was split up along geographical boundaries and not along a more logical and cost effective division between business lines. The situation is described in the Fortis 2008 Annual Review[141] as follows: *The global financial situation continued to deteriorate. Alarmist rumours affected Fortis's interbank market access, while it had to contend with an extremely substantial liquidity requirement. During the weekends of 27–28 September and 4–5 October, Fortis had to conclude a number of transactions that ultimately led to the sale of its main banking and insurance activities to strong parties. On 29 September 2008, Fortis announced that the Belgian government would invest EUR 4.7 billion in Fortis Bank SA/NV, that the Dutch government would invest EUR 4.0 billion in Fortis Bank Nederland (Holding) N.V., and that the Luxembourg government would invest EUR 2.5 billion in Fortis Banque Luxembourg SA. These investments represented 49.9 % of the common equity of the respective entities. The parties concerned expected that a solution had been found and that matters would resume their normal course. In the days that followed, the parties negotiated the implementation of these agreements with both the Luxembourg government and the Dutch government. A term sheet was signed on 30 September 2008 with the Luxembourg government. The agreement with the Dutch state, by contrast, could not be implemented. Despite hopes at the beginning of the week, the situation continued to deteriorate, due to tensions in the interbank market. Fortis found it extremely difficult to regain the confidence of the market and its share continued to decline, reaching a closing price on 29 September 2008 of EUR 3.97. In terms of liquidity, the situation was extremely uncertain and it was necessary to negotiate new conditions with the Belgian central bank and to obtain an Emergency Liquidity Agreement with the Dutch central bank. Withdrawals by institutional clients and by companies had increased substantially. This situation led on 3 October to the sale of Fortis Bank Nederland (Holding) N.V., Fortis Verzekeringen Nederland N.V. and Fortis Corporate Insurance N.V. to the Dutch state for a total consideration of EUR 16.8 billion, which was allocated as follows :*

- *EUR 12.8 billion received for the Dutch banking activities (including ABN AMRO) remained within Fortis Bank;*
- *EUR 4 billion received for the Dutch insurance activities went to the Fortis holding company.*

Following the transfer of the operations in the Netherlands to the Dutch state, Fortis was obliged to review its options:

- *Continue on a stand-alone basis with the Belgian state as a minority shareholder in the bank;*
- *Find a strategic partner for Fortis Bank and for all or part of Fortis's other operations;*
- *Sell the remaining 50 % of the Belgian bank to the Belgian state, prior to a possible resale to a private investor"*

[141] http://www.holding.fortis.com/shareholders/media/pdf/EN_AnnualReview_2008_1.pdf

How does this example illustrate the issues highlighted in the problem definition?

The Fortis case is a clear illustration of many of the problems which can arise during a cross border banking crisis. It shows the tendency of authorities to adopt territorial approaches in crisis resolution and how the consequent competition for assets can lead to sub-optimal results. Absence of complete information, exacerbated by the complex business structure of Fortis, compromised the early burden sharing arrangement, and ultimately resulted in the splitting of the group. The misalignment of responsibilities between authorities gave rise to tensions which further compromised cooperation. The absence of a clear legal framework under which resolution measures could be taken resulted in legal challenges from shareholders which created a protracted period of legal uncertainty.

Iceland

In the case of the Icelandic banks, the inability to deal with problems at an early stage in a cooperative manner led to the subsequent disorderly resolutions and disputes between national authorities, in particular about who should bear the costs which were incurred. "*After five years of brisk expansion, the country's three main banks, representing 85% of the banking system, all collapsed during the same week in October 2008 […] Upon their failure, the three banks were put into receivership and new banks were formed to enable the domestic payment system to continue to function smoothly. Complex negotiations between the new banks and the creditors of the old banks were needed to reach a final settlement. With hindsight, it appears that the Icelandic financial supervisory authorities had become overwhelmed by the complexity of the national banking system, and had been unable to stop their expansion. […] An important cross-border banking issue raised by the financial crisis was that national deposit guarantee systems may not have enough resources to honour the minimum EU deposit guarantee obligations. The government was obliged to stand behind Iceland's Depositors' and Investors' Guarantee Fund (DIGF) to enable it to meet these obligations, thus exposing Icelandic taxpayers to a large cost*."[142]

How does this example illustrate the issues highlighted in the problem definition?

An absence of cooperation mechanisms and early intervention tools prevented an early and possibly less costly resolution to the Icelandic Banking Crisis. There was also a clear problem associated with financing the resolution, and the cross-border arrangements were limited to a Deposit Guarantee Scheme which was inadequately financed. Assets of the Icelandic banks were ring fenced in the absence of satisfactory cooperative arrangements – with counterproductive effects for the Icelandic banks and their creditors.

Lehman Brothers

The chaotic way in which Lehman Brothers was placed into bankruptcy led to a significant loss of value for unsecured creditors, and highlighted the extreme market disruption caused by uncertainties about the location and return of client assets held by Lehman as prime broker, and about the contractual positions of Lehman's counterparties and the status of their outstanding trades. The administrators overseeing the winding down of Lehman Brothers, have described the complexity of the task they are faced with as follows[143]: *"Lehman Brothers was a very significant and complex global organisation, operating in multiple territories and across most areas of financial services. Its collapse also coincided with a period of unprecedented turmoil in financial markets. The US operations of Lehman Brothers, and the*

[142] OECD Policy Brief, September 2009, Economic survey of Iceland 2009, http://www.oecd.org/dataoecd/29/8/43455728.pdf

[143] www.pwc.co.uk/eng/issues/lehman_faq_1008.html

UK and European Lehman Brothers' entities in administration, are now being dealt with through separate legal procedures and it is as if they are no longer part of the same group. This has significant practical consequences for the Administrators in meeting their objectives. As with most global financial services organisations, on a day to day basis Lehman Brothers was previously managed and run mainly along global product lines. Following Lehman Brothers' bankruptcy in the US, and the UK and European Lehman Brothers' entities being placed into insolvency proceedings, a legal entity focus is now paramount and all information relating to the group's activities now has to be captured and assessed on a legal entity basis instead. Funding, and other interdependencies, existed between the US and various UK and European Lehman Brothers' entities and these links are now broken. These factors add further complexity to the administration. The sale of the North American investment banking and capital markets business of Lehman Brothers to Barclays also complicates the situation faced by the Administrators."

How does this example illustrate the issues highlighted in the problem definition?

Lehman was an internationally active bank, with a highly complex organizational structure and was supervised by a number of different authorities. The case is a good illustration of the failure of cooperation and information sharing at a critical moment prior to and during insolvency. It also illustrates how difficult ring fencing of assets can be in practice – as liquidity was moved rapidly around the organization it was impossible for authorities to keep track of. The challenge to wind up the organization in the wake of a disorderly failure provides evidence of the inadequacies of the current territorial approach to cross-border resolution and winding up rules. Finally, the chaos caused by the collapse of Lehman is a strong illustration of the disruptive impact of the failure of a highly connected financial institution and the potential damage disorderly resolutions can have on market confidence.

Anglo Irish Bank

Anglo Irish Bank Corporation is currently a state-owned bank based in Ireland with its headquarters in Dublin. The company mainly deals in commercial property lending business and commercial banking.

Anglo Irish Bank's heavy exposure to property lending, with most of its loan book being to builders and property developers, meant that it was badly affected by the downturn in the Irish property market in 2008. In January 2009, the Irish government nationalised Anglo Irish Bank.

Between June and September 2009, the Minister for Finance provided €4 billion in capital. On 31 March 2010, Anglo Irish Bank reported results for the 15 months to December 2009. Loss for the period were €12.7 billion, with an operating profit before impairment of €2.4 billion and an impairment charges of €15.1 billion driving the overall result. It is the largest loss in Irish corporate history. Total assets declined to €85.2 billion at the end of 2009 from €101.3 billion in September 2008.

The European Commission allowed the Irish Government on 31 March 2010 to grant up to €10.44 billion into Anglo (of which €10.3 billion were effectively granted).). On 10 August, The Commission allowed the Irish Government to temporarily grant €10.054 billion to Anglo Irish Bank (of which €8.58 billion was effectively granted). On 21 December 2010, the Commission allowed the Irish Government to inject a further €4.964 billion into Anglo Irish Bank (at this time the remaining €1.474 billion of the capital injection approved on 10 August 2010 were also injected). The bailout took government debt to around 100% of GDP.

In his statement to the Irish Parliament on 30 March 2010, the Minister of Finance stated: *"Finding a long-term solution for Anglo Irish Bank is by far the biggest challenge in resolving the banking crisis. The sheer size of the bank means there are no easy or low cost options.* In September 2010, the government announced that it would separate the bank into two entities, an "asset recovery bank" to manage existing loans, and a separate "funding bank" holding deposits. On 29 November, an agreement was reached between the Irish Government, the IMF and the EU on a Programme for Support for Ireland. In the Memorandum of Understanding it is stated that "a specific plan for the resolution of Anglo Irish Bank will be established and submitted to the European Commission in line with EU competition rules.

How does this example illustrate the issues highlighted in the problem definition?

Systemically large financial institutions - if they fail - pose a special problem for authorities: they can drag down the whole country into severe debt and recession. While certain resolution tools might be applied with great effectiveness for mid-sized or small bank (assisted sale), they might be inefficient for SIFIs. Such institutions however should also be resolved and not always bailed out by public funds. Solutions like debt write down (haircuts of creditors) seem to be a viable option for such large institutions. (See how bail-in could have been used in this case in Annex XIII)

Restructuring of ING[144]

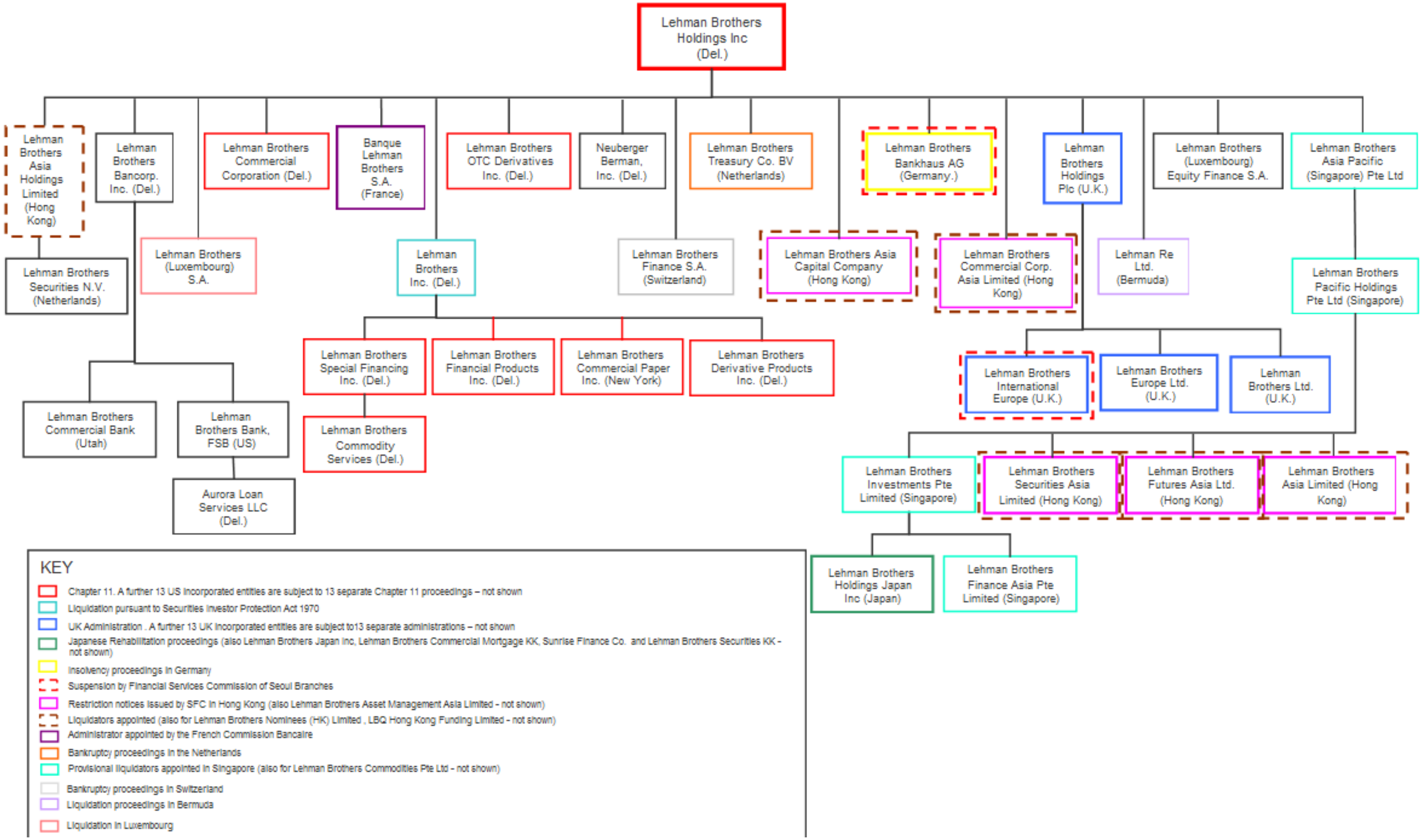
Following repeated State support measures and as part of the restructuring plan approved by the European Commission, ING Group has been working on separating its Banking and Insurance/Investment Management (IM) operations. In preparation for the divestment of the Insurance/IM business by the end of 2013 at the latest, ING worked towards a self-imposed deadline of 1 January 2011 to achieve operational separation. As of that date, ING's Bank and Insurance/IM businesses (circa 100 business units in over 40 countries) are operationally separate. This means that all ties between Bank and Insurance/IM have been formalised and that these businesses operate at arm's length from each other. In 2011, ING will seek to replace the interim solutions that enabled operational separation with permanent solutions to achieve physical separation. In 2010 ING Group spent 85 million euros after tax to achieve operational separation, while the implementation of the full separation is expected to cost around EUR 200 million after tax. In total, the separation project has involved around 1500 employees worldwide (out of 105.000)."

[144] Although the restructuring of ING served a different purpose (i.e. to prevent distortion of competition as a result of State aid), the following calculation shows the scale of the costs that a change in operation and business structure could entail.

ANNEX VIII CORPORATE STRUCTURE OF LEHMAN BROTHERS

Summary Corporate Structure

Please note that this summary is provided by Clifford Chance LLP and is for illustrative purposes only. There are other Lehman entities which are not included below. This summary is designed to indicate which of the main Lehman Brothers entities are subject to insolvency/moratoria/regulatory intervention as at 10 January 2011. No reliance should be placed upon this chart and no warranties are provided in relation to its accuracy.



ANNEX IX BANK LEVIES AND TAXES IN MEMBER STATES

Country		Single entity (S)/consolidated (C)	Intra-group exposures	Rate	base	Ceiling	Rendez-vous clause
1.	**BE**		N.R	0.15 % of the deposit base of the preceding year	deposits	NO	NOT in law but poss. revision of base/rate
2	**DE**	S	NOT deducted	**Progressive FEE for liabilities** • 0.02 percent for liabilities under €10bn • 0.03 percent over €10bn; and • 0.04 percent above €100bn **Flat FEE for derivatives** • 0.00015 percent **Capped at 15% of credit institution's annual profit (after tax)**	• **LIABILITIES** excluding capital and deposits **and** • **Derivatives** (nominal value)	NO € 1 bn p.a.	NOT needed in law as revision to accommodate for EU developments is both common practice and poss.
3	**FR**	C	Not specified.	0.25 percent of the capital requirements (based on RWA)	Risk weighted assets (**RWA**)	NO €500 mn - €1 bn per year	YES
4	**CY**	S	Not specified.	0.05% of liabilities as defined (see base) at year-end	Liabilities, excluding covered deposits and capital	NO	YES

Country		Single entity (S)/consolidated (C)	Intra-group exposures	Rate	base	Ceiling	Rendez-vous clause
5	**AT** [145]	S	Not specified.	NO LEVY < € 1 bn 0,055% € 1 bn <Base> € 20 bn; and 0,085% Base > € 20 bn + 0,015% on the volume of all financial derivatives	Unconsolidated balance sheet total excluding subscribed capital and reserves, secured deposits and certain liabilities to banks, provided they are necessary to fulfil liquidity provisions + add on for financial derivatives on trading book	NO	YES
6	**PT**	S	Not specified.	Progressive rates depending on the base amount from 0,01% to 0,05% on liabilities from 0,0001% to 0,0002% on off-balance-sheet derivatives (the thresholds will detailed in the secondary legislation)	liabilities excluding tier 1 and tier 2 capital and insured deposits. The national value of off-balance-sheet derivatives will also be "levied"	NO Around € 120 mn p.a.	possibly
7	**DK**		N.R.	Ex post levy depending on the need but capped at 0.2% of covered deposits and securities	Covered deposits and securities	N.A.	YES in the context of DGS
8	**HU**	S	Not specified.	0.15 % below and 0.5% above HUF 50 bn	BS corrected for interbank loans	NO HUF 200 bn p.a.	NO

[145] The Austrian levy will be deductible as operating expense.

Country		Single entity (S)/consolidated (C)	Intra-group exposures	Rate	base	Ceiling	Rendez-vous clause
9	**SE**	S	(see base)	0.036% after 2010 0.018% for 2010-2011	Liabilities excluding equity capital, debt securities included in the capital base, group internal debt transactions between those companies paying the fee and debt issued under the guarantee program	Stability fund targeted to reach 2.5% of GDP over the next 15 years.	NO but revisions possible
10	**UK**	C	Intra-group exposures fall out for UK groups as well as intra-group liabilities relevant to the levy for non-UK groups	In 2011: 0.04% After 2011: 0.07% Reduced rate for longer-maturity wholesale funding (> 1 year remaining to maturity) to be set at 0.02% rising to 0.035% after 2011.	Liabilities excluding Tier 1 capital, insured deposits, policy holder liabilities and assets qualifying for FSA liquidity buffer	NO £2 bn annually, but only £1.5 bn for 2011	No but review of effectiveness in 2013

Source: Economic and Financial Committee

ANNEX X CONDITION FOR INTRA GROUP FINANCIAL SUPPORT AGREEMENT

Financial support may only be provided under a group financial support agreement if the following conditions are met:

there is a reasonable prospect that the support provided will redress the financial difficulties of the entity receiving the support;

(a) the provision of financial support has the objective of preserving or restoring the financial stability of the group as a whole; the financial support is provided for consideration

(b) it is reasonably certain, on the basis of the information available to the management body at the time when the decision to grant financial support is taken, that the loan will be reimbursed or the consideration for the support will be paid by the entity receiving the support;

(c) the financial support does not jeopardize the liquidity or solvency of the entity providing the support;

(d) the entity providing the support complies at the time the support is provided, and will continue to comply after the support is provided, with the own funds requirements and any requirements imposed pursuant to Article 136(2) of Directive 2006/48/EC.

ANNEX XI RECOVERY AND RESOLUTION PLANS

Recovery plans developed and maintained by banks would set out the arrangements that banks have in place or the measures that they would adopt to enable them to take early action to restore their long term viability in the event of a material deterioration of its financial situation. These recovery plans (firm specific or group plans) should be based on realistic assumptions, should not assume any access to public financial support, and, at least, include:

(a) A summary of the key elements of the plan, strategic analysis, and summary of overall recovery capacity;

(b) a summary of the material changes to the institution since the most recently filed recovery plan;

(c) a communication and disclosure plan outlining how the firm intends to manage any potentially negative market reactions;

(d) a range of capital and liquidity actions required to maintain operations of, and funding for, the institution's critical functions and business lines;

(e) an estimation of the timeframe for executing each material aspect of the plan;

(f) a detailed description of any material impediment to the effective and timely execution of the plan, including consideration of impact on the rest of the group, customers and counterparties;

(g) identification of critical functions;

(h) a detailed description of the processes for determining the value and marketability of the core business lines, operations and assets of the institution;

(i) a detailed description of how recovery planning is integrated into the corporate governance structure of the institution as well as the policies and procedures governing the approval of the recovery plan and identification of the persons in the organisation responsible for preparing and implementing the plan;

(j) arrangements and measures to conserve or restore the institution's own funds;

(k) arrangements and measures to ensure that the institution has adequate access to contingency funding sources, including potential liquidity sources, an assessment of available collateral and an assessment of the possibility to transfer liquidity across group entities and business lines, to ensure that it can carry on its operations and meet its obligations as they fall due;

(l) arrangements and measures to reduce risk and leverage;

(m) arrangements and measures to restructure liabilities;

(n) arrangements and measures to restructure business lines;

(o) arrangements and measures necessary to maintain continuous access to financial markets infrastructures;

(p) arrangements and measures necessary to maintain the continuous functioning of the institution's operational processes, including infrastructure and IT services;

(q) preparatory arrangements to facilitate the sale of assets or business lines in a timeframe appropriate for the restoration of financial soundness;

(r) other management actions or strategies to restore financial soundness and the anticipated financial effect of those actions or strategies;

(s) preparatory measures that the institution has taken or plans to take in order to facilitate the implementation of the recovery plan, including those necessary to enable the timely recapitalisation of the institution.

Credit institutions would submit the recovery plans to supervisors. The supervisors would need to review those plans and assess the extent to which the plan satisfies certain criteria[146]. EU parent credit institutions or EU parent financial holding companies could draw up a group recovery plan, which could include recovery plans for each group entity, and submit it to the consolidating supervisor.

Resolution authorities, in consultation with supervisors, would be required to draw up and maintain **resolution plans** for each credit institution for which they are resolution authority. A resolution plan would include:

(a) a summary of the key elements of the plan;

(b) a summary of the material changes to the institution since the most recently filed resolution information;

(c) a demonstration of how critical functions and core business lines could be legally and economically separated, to the extent necessary, from other functions so as to ensure continuity on the failure of the institution;

(d) an estimation of the timeframe for executing each material aspect of the plan;

(e) a detailed description of the assessment of resolvability carried out in accordance with Article 20;

(f) a description of any measures required pursuant to Article 21 to address or remove impediments to resolvability identified as a result of the assessment carried out in accordance with Article 20;

(g) a description of the processes for determining the value and marketability of the critical operations, core business lines and assets of the institution;

(h) a detailed description of the arrangements for ensuring that the information required pursuant to Article 17 is up to date and at the disposal of the resolution authorities at all times;

[146] (a) whether the arrangements proposed in the plans are credible, realistic and sufficient to the extent that their implementation would be likely to restore the viability of the credit institution or prepare for an orderly winding-down of the problematic activities; and

(b) whether the plans could be implemented without causing systemic disruption, including in the event that a number of firms implemented recovery plans within the same period.

(i) an explanation by the resolution authority about how the resolution options would be financed without the assumption of any extraordinary public financial support;

(j) a detailed description of the different resolution strategies that could be applied according to the different possible scenarios;

(k) a description of critical interdependencies;

(l) an analysis of the impact of the plan on other institutions within the group;

(m) a description on options for preserving access to payments and clearing services and other infrastructures;

(n) a plan for communicating with the media and the public.

ANNEX XII RESOLUTION TOOLS

The sale of business tool enables resolution authorities to effect a sale of the credit institution or the whole or part of its assets and liabilities to one or more purchasers on commercial terms, without requiring the consent of the shareholders or complying with procedural requirements that would otherwise apply.

The bridge bank tool is a tool that enables resolution authorities to transfer all or part of the business of the credit institution to a bridge bank. A "bridge bank" means a company or other legal person which is wholly owned by one or more public authorities (which may include the resolution authority.

The purpose of the asset separation tool would be to enable resolution authorities to transfer certain assets of a credit institution to an asset management vehicle for the purpose of facilitating the use or ensuring the effectiveness of another resolution tool. In this context, an "asset management vehicle" refers to a legal entity which is wholly owned by one or more public authorities (which may include the resolution authority).

In order to apply the resolution tools, resolution authorities would need the following resolution powers:

(a) the power to take control of an institution under resolution and exercise all the rights conferred upon the shareholders or owners of the institution;

(b) the power to transfer shares and other instruments of ownership issued by an institution under resolution;

(c) the power to transfer debt instruments issued by an institution under resolution;

(d) the power to transfer to another undertaking or person specified rights, assets and liabilities of an institution under resolution;

(e) the power to transfer to another undertaking or person claims for the return of assets (including money) belonging to clients of the institution under resolution;

(f) the power to reduce, including to reduce to zero, the principal amount of or outstanding amount due in respect of eligible liabilities of an institution under resolution;

(g) the power to convert eligible liabilities of such an institution into ordinary shares or other instruments of ownership of that institution, a relevant parent institution or a bridge institution to which liabilities of an institution under resolution are transferred;

(h) the power to cancel debt instruments issued by an institution under resolution;

(i) the power to cancel shares or other instruments of ownership of an institution under resolution;

(j) the power to require an institution under resolution to issue new shares (or other instruments of ownership);

(k) the power to require the conversion of debt instruments which contain a contractual term for conversion on an official action or decision that an institution is failing or that intervention by resolution authorities is or is likely to be necessary;

(l) the power to amend or alter the maturity of debt instruments issued by an institution under resolution or amend the amount of interest payable under such instruments, including by suspending payment for a temporary period;

(m) the power to remove or replace the senior management of an institution under resolution;

(n) the power to require an institution under resolution to issue new shares or other capital instruments (including preference shares and contingent convertible instruments).

ANNEX XIII DEBT WRITE DOWN (BAIL-IN) AND EX-ANTE FUNDING

This Annex presents analysis about the appropriate joint calibration of two tools that can support bank resolution: ex-ante funding and debt write-down (bail-in). It shows the impact of these two tools on banks' funding costs. The analysis also presents for the two tools their macroeconomic costs, benefits and net benefits.

1. How big a crisis should the resolution framework be able to tackle?

This section discusses the possible crisis scenarios the resolution framework could be required to withstand. Table 1 below shows three possible crisis scenarios obtained by means of simulations generated with the SYMBOL model (under the new Basel III accord).[147]

Table 1: Aggregated losses in EU banking sector simulated with the SYMBOL model under Basel III 10.5% RWA Minimum Capital Requirements (no contagion) and aggregated EU state aid (asset relief and recapitalisation only) used in recent crisis between 2008-2010 (€ billion)

	Simulated Severe crisis (99.90%[148])	Simulated Very severe crisis (99.95%)	State aid used in recent crisis (Data 2008-2010)	Simulated Extremely severe crisis (99.99%)
Extra-Losses (not absorbed by regulatory capital)	36.2	79.9	121.2	266.7
Extra-Losses (not absorbed by regulatory capital) + Recapitalisation funding needs to meet Basel III Minimum Capital Requirements	295.6	466.7	409	668.3

The first simulated crisis scenario is a severe crisis, where losses would exceed the total regulatory capital of banks by around €36 billion. Considering also banks' recapitalisation funding needs, the resolution framework would need to be able to cope with aggregated losses of around €296 billion;[149]

The second simulated crisis scenario is a very severe crisis where losses would exceed the total regulatory capital of banks by around €80 billion. Considering also banks'

[147] The SYMBOL model, (SYstemic Model of Banking Originated Losses), has been jointly developed by the JRC, DG MARKT, and experts of banking regulation. For technical details see: De Lisa R, Zedda S., Vallascas F., Campolongo F., Marchesi M. (2011), *Modeling Deposit Insurance Scheme Losses in a Basel 2 Framework*, Journal of Financial Services Research, 40(3), 123-141. See also Appendix 4.

[148] The three SYMBOL-simulated crises can, according to the SYMBOL model, be exceeded but with a very low probability: between 0.1% (99.9% simulation) and 0.01% (99.99% simulation). Under the first simulation there is 0.1% chance that the crisis will be bigger than estimated and the resolution framework will not be able to cope with it. In the second and third case the chances are 0.05% and 0.01% respectively. These probabilities are dependent on the SYMBOL model specifications, based on the Basel FIRB formula. Due to its calibration, SYMBOL tends to show large losses only for events in the tail of the distribution.

[149] When banks generate losses, they are absorbed by their regulatory capital first. If losses are higher than banks' regulatory capital, they can spread across in the financial system and create contagion and financial instability. When banks are systemic, due to their interconnections with the rest of the financial system, their size, or any other relevant reason, they cannot be simply liquidated (as, in fact, it did not happen in the recent crisis started in 2008). In this case, not only losses in excess of regulatory capital need to be absorbed, but banks also need to be recapitalised so that their systemic functions can be preserved. It follows that the need to absorb excess losses materialises not only when banks' regulatory capital is fully wiped out by losses, but much before that, i.e. any time losses erode regulatory capital under a threshold considered of non-viability for banks. In the present analysis, this non-viability threshold is set equal to banks' Minimum Capital Requirements (8%) under Basel III.

recapitalisation funding needs, the resolution framework would need to be able to cope with aggregated losses of around €467 billion.

The third simulated crisis scenario is an extremely severe crisis where the resolution framework would need to cope with €267 billion for loss absorption and €668 billion including banks' recapitalisation needs.[150]

The recent crisis that started in 2008 falls between the very severe and the extremely severe crisis scenario: aggregated used state aid amounted to €121 billion without recapitalisation and €409 billion with funds needed for recapitalising banks[151].

2. What tools are available to absorb extra-losses and recapitalise banks?

In order to absorb extra-losses and recapitalise banks, if taxpayers and public finances are to be protected, there are two main tools left that can be used. The first tool is to use (ex-ante) funded schemes such as Deposit Guarantee Schemes or Resolution Funds (DGS/RF) to absorb extra-losses and recapitalise banks. The second tool is to have banks' creditors absorb extra-losses and provide capital so as to preserve the systemic operations of the bank and restore its viability: the bail-in tool (also referred sometimes as debt write-down and/or debt conversion[152]) tool.

In the following, the analysis presents how these two tools perform in isolation or when used jointly.

3. Resolution with ex-ante funds only

In this section a methodology for evaluating the ex-ante funding needs of bank resolution beside banks' Minimum Capital Requirements is presented. The focus is on Deposit Guarantee Schemes (DGS), aimed at protecting depositors, and Resolution Funds (RF), aimed at supporting the orderly resolution of defaulted banks and blocking spill-over/contagion effects. The goal is to provide an estimate of the total funding needs for these tools to absorb, with a determined level of confidence, aggregated extra-losses hitting the banking sector due to banks failing/becoming non-viable. In this section, the possible use of the bail-in tool for resolution purposes is not (yet) taken into consideration.

3.1 Arguments favouring ex-ante vs. ex-post financing

Regarding the choice of ex-ante vs. ex-post financing of resolution, the arguments in favour of ex-ante vs. ex-post funding are the following.

Ex-post financing is pro-cyclical, and raising resources from banks in the midst of a crisis can be expected to be especially difficult, as it would drain resources from the banking sector at a time where they are most needed. Accordingly, this might further accentuate a financial crisis.

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[150] In the current SYMBOL simulations, recapitalization funding needs refer only to situations where at least one bank fails (losses higher than regulatory capital) and they are obtained as the total funds necessary to bring all undercapitalized banks, including also those which are failing, to their Minimum Capital Requirements.

[151] Source: DG COMP. See used state aid for asset relief and recapitalisation aid in Table: State aid approved (2008 – Oct 2011) and state aid used (2008 – 2010) in the context of the financial and economic crisis to the financial sector (2008 - 2010), http://ec.europa.eu/competition/state_aid/studies_reports/expenditure.html#II. It should be kept in mind that the crisis started in 2008 under Basel II capital adequacy rules, where regulatory capital of banks was lower than what will be the minimum regulatory capital required under Basel III rules. It should be also noticed that part of used state aid, i.e. used guarantees that possibly triggered expenditures for Member States has not been considered as not available.

[152] By converting debt to capital, banks Minimum Capital Requirements can be re-established.

Ex-post financing can also be regarded as an unfair practice, as contributions would exclusively be paid by other banks, and not by the failed/non-viable bank. This would also negatively affect incentives: raising funds after a bank default has occurred is too late to provide any incentives to the defaulted bank and would also create a free-rider/moral hazard problem on all other banks.

Ex-ante financing would have all the advantages listed above as disadvantage for ex-post financing. Its disadvantage is, however, that depending on the method of collection it increases banks' costs of funding and it therefore can negatively affect macroeconomic growth.

On the basis of these considerations, in the following of this annex we will analyse DGS/RF as ex-ante fully financed funds.

3.2. Estimation of ex-ante funding needs for bank resolution purposes

It is assumed that when no other tools are available, including public finances and bail-in, the joint target funding size for DGS and RF is calibrated to only cover extra-losses and (possibly also) provide recapitalisation funding needs, as a sort of bail-out fund. It is in fact considered that it is in any case beyond the scope of DGS/RF to fully cover banks' liquidity needs.[153]

Funding needs of DGS/RF can then be obtained from the distribution of losses (losses in excess of regulatory capital or losses in excess of regulatory capital plus banks' recapitalisation needs) of defaulted (failed or failed and non-viable) banks, estimated via the SYMBOL model according to various regulatory scenarios (see Table 2 below)[154]

[153] Liquidity provision is the prerogative of central banks and Commission services believe that it is not for the Commission to determine how liquidity should be provided to banks.

[154] For details on procedures followed to estimate capital ratios in the various regulatory scenarios, see Appendix 5 (third footnote).

Table 2: SYMBOL scenarios for estimating DGS/RF funding needs when resolution is supported by funded schemes only

	Definition of regulatory capital and of RWA	**Minimum Capital Requirements**			**Contagion**	
Regulatory Scenarios[155]		*Basel* II	*Basel* III 8%	*Basel* III 10.5%	***Yes***	***No***
1. Basel II	Basel III	X			X	
2. Basel III 10.5% Contagion	Basel III			X	X	
2.bis Basel III 10.5% No Contagion	Basel III			X		X

In the worst scenario (Scenario 1, Basel II), banks are assumed to satisfy Minimum Capital Requirements according to the rules of Basel II. However, the more stringent definition of regulatory capital and RWA as of Basel III are applied when determining the effective level of regulatory capital which can be used to absorb losses. Contagion between banks via the interbank market can occur.

In the intermediate scenario (Scenario 2., Basel III 10.5%, contagion), banks are assumed to satisfy Minimum Capital Requirements equal to 10.5% of RWA (representing the fact that a capital conservation buffer is introduced on top of the 8% Minimum Capital Requirements), with regulatory capital and RWA considered according to the more stringent definition of Basel III. Contagion via the interbank market can occur between banks.

Finally, the best scenario (Scenario 2.bis, Basel III, no contagion) is like the intermediate scenario, but contagion between banks is assumed not to occur (due to the introduction of an effective legal framework that allows the prompt and ordered resolution of banks).

The losses potentially hitting public finances that need to be absorbed by DGS/RF operating as a bail-out fund are presented in Table 3 for Scenario 1 to Scenario 2.bis and for the severe to the extremely severe crisis. In order to facilitate the readability of the results, DGS/RF funding needs are expressed as percentage of 2009 EU GDP.[156]

[155] Regulatory scenario numbering is chosen so as to be aligned as much as possible with that of the Commission Staff Working Paper "Comprehensive Evaluation of Financial Market Regulatory Reforms".

[156] GDP estimates are from the DG ECFIN AMECO Database, the annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN), available at 'http://ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm. EU GDP for 2009 is in particular 10.989 billion EUR for the 19 MS considered in the SYMBOL simulations, and 11.751 billion EUR for the EU as a whole.

Table 3: Potential losses for public finances, estimated with SYMBOL (% of GDP)

	No recapitalisation[157]			Recapitalisation[158]		
Regulatory Scenarios	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**
Scenario 1 Basel II Contagion	8.70%	12.81%	17.22%	15.91%	22.27%	27.96%
Scenario 2. Basel III 10.5% Contagion	1.25%	8.03%	13.81%	3.94%	14.08%	22.58%
Scenario 2.bis Basel III 10.5% No Contagion	0.31%	0.68%	2.27%	2.51%	3.97%	5.69%

After Basel III is fully implemented, if extra-losses or extra-losses and recapitalisation funding needs are to be covered only by ex-ante funded schemes, funding needs would mainly depend on the severity of the crisis that schemes would be asked to withstand. If the schemes need to finance loss absorption only, then funds equal to 0.31% to 2.27% of EU GDP would be needed to protect public finances (once an effective legal framework that allows the prompt and ordered resolution of banks is introduced). If the schemes need also to provide new capital when needed to banks, the funding needs would be between 2.51% and 5.69% of EU GDP.[159]

3.3 Macroeconomic costs of ex-ante funded schemes (no bail-in)

The macroeconomic costs of introducing a DGS/RF able to operate as bail-out funds and cover extra-losses and/or recapitalise banks, and funded as shown in Table 3 above is now analysed in this section on the basis of a simple and effective methodology first introduced by the Bank of England[160].

Table 4 reports the costs of introducing various levels of DGS/RF funding on top of Basel III Minimum Capital Requirements (i.e. 10.5% of RWA), so as to be able to cope with the three analysed types of simulated crisis.

157 In the banks' no recapitalisation scenario, only extra-losses (not absorbed by regulatory capital) must be absorbed by DGS/RF.

158 In the banks' recapitalisation scenario, both extra-losses (not absorbed by regulatory capital) and banks' recapitalisation funding needs to meet Basel III Minimum Capital Requirements must be provided by DGS/RF.

159 It goes without saying, however, that DGS/RF funding be reduced if a bail-in tool is introduced in addition to the funding of these schemes.

160 Bank of England (2010), "Financial Stability Report", (Issue 27) Box7, http://www.bankofengland.co.uk/publications/fsr/2010/fsr27.htm , see Appendix 5 for details.

Table 4: Macroeconomic costs of introducing DGS/RF as bail-out funds on top of Basel III 10.5% RWA Minimum Capital Requirements without contagion (Scenario 2.bis).

	No recapitalisation			**Recapitalisation**			
	Severe crisis	**Very severe crisis**	**Extremely severe crisis**	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**	**Δ1% Cov Dep**
DGS/RF Funding needs (% of covered deposits)[161]	0.47%	1.03%	3.43%	3.80%	6.00%	8.59%	1%
Variation in banks' funding costs (bps)[162]	0.6	1.4	4.7	5.2	8.2	11.7	1.4
Variation in lending spreads (bps)	1.4	3.0	10.0	11.1	17.6	25.1	2.9
Variation in non-financial firms' cost of capital (bps)	0.5	1.0	3.4	3.7	5.9	8.5	1.0
Yearly costs (%GDP)	0.02%	0.04%	0.14%	0.16%	0.25%	0.36%	0.04%
NPV of costs (%GDP)	0.81%	1.78%	5.93%	6.56%	10.37%	14.85%	1.72%

The introduction of DGS/RF as bail-out funds, which would be able to cope with an extremely severe crisis and to both cover losses in excess of regulatory capital and recapitalise banks would require 8.59% of covered deposits, and it would cost annually 0.36% of EU GDP. These costs are significant, especially when compared to those, for example, of Basel III which are estimated (by means of the same methodology – see Appendix 5) equal to 0.16% of EU GDP annually.

4. Resolution with bail-in only

This section examines how the bail-in tool could absorb losses of defaulted banks (failed banks in the no recapitalisation scenario or failed and non-viable banks in the recapitalisation scenario) and (only in the recapitalisation scenario) allow banks to re-establish their Minimum Capital Requirements without recurring neither to ex-ante funded schemes (DGS/RF) nor to taxpayers' money.

4.1 What does bail-in mean?

With bail-in resolution authorities can write-down (in full or in part) the principal amount of, or convert to capital, certain liabilities owed by a defaulted bank. Authorities could apply bail-in in order to absorb losses, to recapitalise a defaulted bank which would thence be viable in the long run; or to reduce the liabilities transferred to a 'bridge bank', thus effectively increasing the latter's capital ratio above the required minimum.

Bail-in should be applicable to any bank which is systemically important, including to a bank which, while normally not systemically important, may have become so at the point of non-

[161] DGS/RF funding needs previously presented in Table 3 have been expressed here as percentage of covered deposits, estimated for EU-27 at 7.776 billion EUR in 2009.

[162] In this analysis, the costs of DGS/RF are evaluated on the basis of the opportunity cost of banks' return on capital.

viability, given market conditions at that time. Thus, bail-in is potentially applicable to any bank, although it can be expected to be applied in practice only to a subset of the bank population.

4.2 Rationale of bail-in

First, bail-in provides a means for resolution authorities to address the challenges of resolving defaulted banks without creating financial instability. In particular, bail-in prevents forced asset sales and therefore, especially in a weak market, it reduces the scope of contagion across banks.

Furthermore, bail-in can prevent exacerbating losses – as it can easily happen via a regular liquidation procedure - as it occurred with, for example, the failure of Lehman Brothers. (presented in Appendix 1).

Finally, bail-in enables authorities to negate the current market assumption that defaulting systemically important banks will automatically be rescued using government funds (no bail-out), as occurred in the recent crisis. This is desirable since the expectation of such automatic state support can reduce market and especially creditors' discipline, thus increasing banks' risk taking and moral hazard. Automatic state support can also reduce systemic banks borrowing costs relative to those of other banks, distorting competition between systemically important and other banks.

4.3 What should be the scope of bail-in?

As regards the scope of liabilities eligible for bail-in, there is a wide number of alternative ways of defining the liabilities subject to bail-in. Two policy options have been considered for this analysis:

- Comprehensive bail-in in which unsecured debt, uncovered deposits and unsecured interbank exposures with more than 1 month original maturity are eligible for bail-in;
- Restricted bail-in, in which only unsecured long term debt and uncovered deposits (with more than 1 year original maturity) are eligible for bail-in.

The choice between these two options should be made by ensuring a balance between the need to keep as stable as possible banks' short-term funding (and thus prevent liquidity crisis as much as possible)[163]; the need to ensure that a bank has sufficient overall loss absorbing capacity for the authorities to be able to attain their resolution objectives[164], and the need to contain as much as possible the increase on banks' funding costs due to bail-in.

Table 5 below shows the estimated composition of liabilities for the average EU bank at end 2009 and for of an average EU large banking group at the end of 2010.[165] These estimates are

[163] Holders of those liabilities which are redeemable on demand (such as deposits) or within a short time period (such as short-term debt) might, in case they believe bail-in would be imminent, withdraw their funding. Such an action would possibly cause a banking failure which through 'contagion' might also damage other parts of the banking and more generally of the financial system.

[164] A large base of liabilities for bail-in purposes ensures in principle that liabilities can be written down when needed. On the other hand, certain categories of liabilities might be systemic or too complex to write down and could be considered for exclusion from the regime. Such exclusions may be justified where one or more of the following conditions apply: (i) the net value of the liabilities is unstable, uncertain or difficult to ascertain in a timely manner; (ii) they are transactional counterparty exposures where the transaction would need to continue following resolution (such as IT suppliers); (iii) they are essential for the franchise value or continued operation of the firm (e.g. employees, contractors, trade suppliers); and (iv) they are tied to specific assets as security.

[165] Separate estimates are presented for a stylized EU average bank and an average large consolidated banking group, as the balance sheet structures of large groups could be rather different than the structure of an average stand-alone bank.

obtained combining balance sheet data from Bankscope with the breakdown of liabilities into relevant instruments and maturity classes from various sources as detailed in Appendix 3.[166]

[166] The balance sheet structure for the average EU bank is based on 2009 data for a sample of EU banks extracted from Bankscope (see Table 1 in Appendix 4 for details). This sample includes 2949 solo banks from 19 EU countries, representing on average 78% of total assets in those countries. The breakdown for 16 among the largest EU Groups is based on the data sample described in Appendix 2 and refers to 2010 consolidated balance sheets obtained from Bankscope. . As banks' balance sheet data don't provide a full split into categories by maturities, splits are estimated on the basis of data from the ECB, Moody's and Fitch Ratings. Covered deposits are estimated based on updates to figures contained in past reports on Deposit Guarantee Schemes by Commission Services.

Table 5: Estimated breakdown of liabilities for an average EU bank and for an average EU large banking group.

			Average EU bank (2009)	**Average EU large banking group (2010)**
Deposits	Covered (by DGS)		20.59%	19.29%
	Uncovered	up to 1 month	7.60%	7.92%
		over 1 month up to 3 months	3.36%	3.50%
		over 3 months up to 6 months	0.21%	0.22%
		over 6 months up to 1 year	2.74%	2.85%
		over 1 year	4.84%	5.05%
	Total Deposits		**39.34%**	**38.83%**
Interbank Debt	Secured Interbank		4.77%	1.87%
	Unsecured	up to 1 month	4.55%	1.59%
		over 1 month up to 3 months	2.11%	0.74%
		over 3 months up to 6 months	2.40%	0.84%
		over 6 months	3.95%	1.38%
	Total Interbank		**17.78%**	**6.41%**
Wholesale Debt	Short-term Unsecured	up to 1 month	1.27%	4.01%
		over 1 month up to 3 months	0.59%	1.86%
		over 3 months up to 6 months	0.67%	2.11%
		over 6 months up to 1 year	1.10%	3.48%
	Long-term	Unsecured	16.52%	8.25%
		Secured	7.08%	3.54%
	Total Wholesale Debt		**27.24%**	**23.25%**
	Total Central Bank Repos		**0.91%**	**0.40%**
	Total Other Liabilities[167]		**14.73%**	**31.12%**
Total			**100%**	**100%**

167 For the average EU large banking group the class "Other Liabilities" includes total non interest-bearing liabilities, other funding and a statistical residual. For the average EU bank the class "Other Liabilities" is a statistical residual.

On the basis of the two options defined above and on the breakdowns shown in the previous table, shares of non bail-inable deposits, non bail-inable debt and bail-inable debt and deposits on total liabilities are obtained and presented in Table 6 below.[168]

Table 6 Shares of bail-inable and non-bail-inable liabilities for an average EU bank and for an average EU large banking group.

	Average EU bank			**Average EU large banking group**		
	Non bail-inable Deposits	**Non bail-inable Debt**	**Bail-inable Debt and Deposits**	**Non bail-in-able Deposits**	**Non bail-inable Debt**	**Bail-inable Debt and Deposits**
Comprehensive Bail-in	28.19%	33.32%	38.49%[169]	27.21%	42.52%	30.27%[170]
Restricted Bail-in	34.50%	44.13%	21.36%[171]	33.78%	52.92%	13.30%[172]

Under the comprehensive bail-in, the share of bail-inable liabilities ranges between 30% and 38%. Under the restricted bail-in, the share of bail-inable liabilities is obviously more limited, and it ranges between 13% and 21%.

4.4. Estimation of bail-inable liabilities needs for bank resolution purposes

SYMBOL allows estimating (see Table 7) the levels of bail-inable liabilities, as a share of total liabilities, that would be needed to absorb losses and recapitalise banks according to the severity of the simulated crisis scenario.

[168] The share of bail-inable liabilities is needed to estimate the effect of bail-in on banks' funding costs.

[169] Of which 18.89% is unsecured debt, 8.45% are unsecured interbank exposures and 11.15% are uncovered customer deposits.

[170] Of which 15.70% is unsecured debt, 2.95% are unsecured interbank exposures and 11.62% are uncovered customer deposits.

[171] Of which 16.52% is unsecured debt and 4.84% are uncovered customer deposits

[172] Of which 8.25% is unsecured debt and 5.05% are uncovered customer deposits

Table 7: Share of total liabilities needed to absorb extra-losses and provide banks' recapitalisation funding needs[173] in the three considered SYMBOL simulated crisis scenarios

Regulatory Scenario	No recapitalisation			Recapitalisation		
	Severe crisis	**Very severe crisis**	**Extremely severe crisis**	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**
Scenario 2.bis Basel III 10.5% No Contagion	3%	6%	10%	12%	17%	17%

Comparing results from Table 7 with bail-inable liabilities of Table 6, it is possible to calculate – as shown in Table 8– the implied Loss Given Default (LGD) ratio on bail-inable liabilities for the three different simulated crisis scenarios, within the Basel III 10.5% regulatory scenario (Scenario 2.bis).

Table 8: Implied LGD on bail-inable liabilities in the three considered SYMBOL simulated crisis scenarios

Scenario 2.bis Basel III 10.5% No Contagion	No recapitalisation			Recapitalisation		
	Severe crisis	**Very severe crisis**	**Extremely severe crisis**	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**
Comprehensive Bail-in Average EU bank	8%	16%	26%	31%	44%	44%
Restricted Bail-in Average EU bank	14%	28%	47%	56%	80%	80%
Comprehensive Bail-in Average EU large Banking Group	10%	20%	33%	40%	56%	56%
Restricted Bail-in Average EU large Banking group	23%	45%	75%	90%	>100%	>100%

From these LGD, it can be concluded that both bail-in options would be effective (bail-inable liabilities could absorb all losses and provide adequate new capital) for the average EU bank, although the restricted bail-in would naturally imply a higher LGD. For the average EU large

173 Extra-losses and recapitalization needs not absorbed/provided are less than 0.1% of EU GDP

banking group, however, the restricted bail-in option would not be sufficient in the two most extreme crisis scenarios when banks need to be recapitalised.

This confirms, generally speaking, that the restricted bail-in option presents a theoretical risk of not providing a sufficient amount of bail-inable liabilities, especially when large banking EU groups default and they need to be recapitalised for resolution purposes. In such cases, additional ways of absorbing losses and/or provide capital to banks would be needed.

4.5 Macroeconomic costs of bail-in (without ex-ante DGS/RF funds)

4.5.1 Impact of bail-in on banks' cost of funding

This section analyses the consequences on banks' funding costs of introducing bail-in. Presented results are to a large extent based on a JP Morgan survey[174] that estimates a 87 basis point increase in funding costs of bail-inable liabilities due to the introduction of bail-in. This cost increase is largely consistent with the 80 basis points that constitute the central value in the formula used by the European Commission when establishing the minimum guarantee fees that must apply when State guarantees are granted to banks in the course of the recent crisis.[175] The consequences of greater and lesser increases (100, 200 and 55 basis points) are however also explored in this section.

Based on the stylized balance sheets presented above in Table 5, and the share of bail-inbale liabilities shown in table 6, it is possible to compute the increase in banks' funding costs due to the introduction of bail-in, which is shown in Table 9 below.

[174] JPMorgan survey (The Great Bank Downgrade, January 2011) estimates that the removal of implicit state support would entail for a group of 55 European banks a 3-4 notches rating downgrade on Moody's ratings scale. The impact on an individual bank is likely to vary depending on creditors' assessment of the risk for that bank of entering resolution and bail-in thence having to be applied. The JPMorgan survey also indicates that investors would demand an additional 87 basis points premium for a single A bank if bail-in were introduced, compared to a situation when bail-in does not apply. Respondents' estimates appear to relate to long-term bonds rather than total senior debt including shorter maturities. It is not evident from the survey what premium creditors in the 1-12 month maturity category might demand due to the introduction of bail-in.

[175] Communication from the Commission on the application, from 1 January 2012 , of State aid rules to support measures in favour of banks in the context of the financial crisis, Official Journal C 356, 6.12.2011, p. 7

Table 9 Overall change in banks' costs of funding (in basis points) due to the introduction of bail-in under Basel III 10.5% RWA Minimum Capital Requirements

		Average EU bank	**EU large banking group**
Policy option	**Δ in cost of bail-inable liabilities**	**Δ in overall cost of funding**	**Δ in overall cost of funding**
Comprehensive bail-in	**55**	**20.0**	**15.6**
	87	**31.6**	**24.7**
	100	**36.3**	**28.4**
	200	72.7	56.9
Restricted bail-in	55	11.1	6.9
	87	**17.6**	**10.9**
	100	**20.2**	**12.5**
	200	**40.4**	**25.0**

The increase in the costs of funding of the bail-inable liabilities (in basis points) can be expected to be realistically higher when passing from the comprehensive to the restricted approach, as the haircut/LGD (Loss Given Default) that investors might expect on bail-inable liabilities increases when restricting the share of liabilities subject to bail-in.[176] That is why it can be realistically expected that the increase in yields of bail-inable liabities would be more limited with the comprehensive approach (for instance 55-100 bp) and more significant with the restricted approach (for instance 87-200 bp). [177]

On the basis of this consideration, for the case of the comprehensive bail-in, the overall change in banks' costs of funding can be expected to realistically range between 15 and 36 bp. For the case of the restricted bail-in, instead, the overall change in banks' costs of funding can be realistically expected to range between 10 and 40bp.

4.5.2 Macroeconomic costs of bail-in

The macroeconomic costs of introducing bail-in are now investigated using a simple methodology first used by the Bank of England. Table 10 reports the costs of introducing bail-in according to various options on top of Basel III Minimum Capital Requirements, i.e. 10.5% of RWA, for an average EU bank.

[176] As seen above in Table 8, on the basis of the extremely severe crisis scenario with recapitalisation, the implied LGD for an average EU bank in case of comprehensive bail-in is 17/38.49 = 44%, and 17/21.36=80% in case of restricted bail-in. These LGD are loosely compatible with the presently assumed by the market average LGD on senior unsecured bonds and CDS of 60%.

[177] The analysis on macroeconomic costs of bail-in in this and in the following sections is obviously built upon the implicit assumption that banks can finance themselves after the introduction of bail-in, even though with an increase costs of funding for bail-inable liabilities as specified in the analysis. Should not be the case, macroeconomic costs could be higher than those of the analysis.

Table 10: Costs of introducing bail-in on top of Basel III 10.5% RWA Minimum Capital Requirements for an average EU bank, considering various increases on costs of bail-inable liabilities

Policy option	Δ in cost of bail-inable liabilities	Variation in banks' funding costs (bps)	Variation in lending spreads (bps)	Variation in non-financial firms cost of capital (bps)	Yearly Macroeconomic costs (%GDP)	NPV of Macroeconomic costs (%GDP)
Comprehensive bail-in	**55**	**20.0**	**41.7**	**14.0**	**0.60%**	**24.58%**
	87	**31.6**	**65.9**	**22.1**	**0.95%**	**38.84%**
	100	**36.3**	**75.7**	**25.4**	**1.09%**	**44.62%**
	200	72.7	151.6	50.9	2.18%	89.36%
Restricted bail-in	55	11.1	23.1	7.8	0.33%	13.64%
	87	**17.6**	**36.7**	**12.3**	**0.53%**	**21.63%**
	100	**20.2**	**42.1**	**14.1**	**0.61%**	**24.83%**
	200	**40.4**	**84.2**	**28.3**	**1.21%**	**49.66%**

Yearly macroeconomic costs tend to be significant with both approaches, and not presenting importance differences, with annual costs ranging between 0.6% and 1.1% of GDP per annum for the comprehensive approach and between 0.5% and 1.2% of GDP per annum for the restricted approach.

Since cost ranges result to be similar, but the comprehensive approach is more effective in absorbing losses as shown above in Section 4.4, a preference for the comprehensive approach should be given.

4.6 Factors leading to more limited increases in both banks' funding costs and macroeconomic costs due to bail-in

There are a few important considerations that mitigate the above preliminary conclusion that bail-in could generate significant increases in banks' funding costs and therefore significant costs on the economy. In this paragraph we look at the most important of them.

4.6.1 The "no creditor worse-off" clause: bail-in as a creditors' value enhancing tool

The no creditor worse-off clause is a principle that states that if bail-in is applied to a class of liabilities, the haircut suffered by creditors due to the intervention of authorities cannot be higher than what would be the loss ratio on their exposure (LGD ratio) in a normal insolvency procedure. This principle is extremely important, as it acts as a reassurance for creditors that the bail-in will not penalise them compared to the outcome of a normal insolvency procedure.

A fortiori, investors might even perceive that the haircut/LGD authorities will apply to them under the no creditor worse-off clause will not be as high as they would expect in a normal insolvency procedure as some important costs linked to it will be saved (lawyers, receivership and other legal expenditures, etc). Therefore, thanks to the introduction of the no creditor worse off principle, the market might price in a much more limited way the increase in banks' funding costs linked to the introduction of bail-in.

The LGD normally assumed by markets when pricing loans, bonds and CDS in case of bank defaults normally is, as confirmed by economic research, around 60%. If the LGD assumed by markets in case of bail-in under a no creditor worse-off clause were less than this reference value, the result would be a (loosely) proportional reduction in the ex-ante increase in banks' costs of funding (and therefore on macro-economic costs) shown in Table 10 in the previous section.

In a recent article published on Risk Magazine[178], the possibility is discussed that markets' expected LGD might decrease down from 60% even to 20%. This would be consistent with the final LGD (15.6% and 26%) applied by Danish authorities when resolving Amagerbanken and Fjordbank Mors in 2011.[179] On the basis of this important, even if limited evidence, a reduction by 50% of the results presented in Table 10 could be prudentially assumed.[180]

4.6.2 Proportionality principle: limited application of bail-in only to systemic banks

Bail-in is one of the tools that authorities have at their disposal to deal with distressed banks and to resolve them. These tools have in general to be applied respecting the proportionality of actions taken with problems/issues to be tackled and solved.

When banks are not systemic, it is rather improbable that authorities will choose to use bail-in due to the absence of consequences for financial stability the use of other resolution measures might have. In the case of defaulted small banks, the possibility that they are merged with other banks or simply subject to an ordered wind-down process are, as a conclusion, both more realistic and probable options than the use of bail-in by resolution authorities.

The markets could anticipate these considerations and believe that as bail-in is probable only for systemic banks, pricing should fully incorporate bail-in only for these institutions. Although it is difficult to judge what regulators and the market will consider as systemic banks, a first indication might come from the following.

A first possible methodology for deciding whether banks qualify as systemically important can be based on SYMBOL model-based losses and size criteria, as detailed in the following. First, the top 30 banks across the EU with the largest individual contribution to SYMBOL simulated loan losses that hit public finances[181] have been considered to be systemically important. The list of these banks has then been enlarged in order to include all top 30 largest EU banks in terms of total assets if not already included. The final list of systemically important banks obtained in this way includes 43 banks, that approximately represent 57.5% of the EU banking sector total assets (in the considered sample).

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178 "Resolution regimes rule, OK?", published on Risk Magazine (June 2011), Vol. 24, N. 6.

179 See Appendix 1 for details.

180 Further LGD reductions could result from the intervention of DGS/RF. See discussion in section 5. Higher LGD reductions have also been advocated by the FDIC that estimates that in case bail-in had been available in the Lehman default case, LGD would have been as low as 3% instead of the 21% LGD estimated for bankruptcy. See http://www.fdic.gov/news/news/press/2011/pr11076.html and for the full report http://www.fdic.gov/bank/analytical/quarterly/2011_vol5_2/lehman.pdf.

181 Individual bank's contributions are defined as the expected average yearly losses of individual banks (over the whole set of SYMBOL simulations within a given scenario).

A second possible methodology for deciding whether banks qualify as systemically important is based on the FSB/BIS definition of Group 1 and Group 2 banks. Group 1 banks are defined by the BIS as those that are active internationally and with a Tier 1 above €3 billion (with Basel II definitions of capital) on a consolidated basis. Notwithstanding the difficulty that the Bankscope database used for our analyses is on a solo basis and that it is not possible to track in it whether banks are internationally active, it is at least possible to identify banks with a Tier 1 higher than €3 bn. They are 73 banks and they approximately represent 70% of the EU banking sector total assets (in the considered sample).

On the basis of these considerations, it could be concluded that the results presented in Table 10 in the previous section might be reduced by some 35%.

4.6.3 Macroeconomic costs of bail-in when cost reduction factors are considered

On the basis of the above considerations, the results presented in Table 10 for the comprehensive scenario are modified as shown in the following Table 11.

Table 11: Costs of introducing bail-in on top of Basel III 10.5% RWA Minimum Capital Requirements for an average EU bank, considering a 87bp cost increase on bail-inable liabilities and various cost reduction factors

Comprehensive bail-in	**Δ in cost of bail-inable liabilities**	**Variation in banks' funding costs (bps)**	**Variation in lending spreads (bps)**	**Variation in non-financial firms cost of capital (bps)**	**Yearly Macroeconomic costs (%GDP)**	**NPV of Macroeconomic costs (%GDP)**
Full effect	87	31.6	65.9	22.1	0.95%	38.84%
Reduced LGD 50% Reduction	43.5	15.8	32.9	11.1	0.48%	19.42%
Proportional bail-in application 35% reduction	56.5	20.5	42.8	14.4	0.62%	25.25%
Both reductions	28.3	10.3	21.4	7.2	0.31%	12.62%

The increase in banks' cost of funding is reduced from 32 bp down even to 10 bp when costs reduction factors are considered. The macroeconomic costs per year decrease instead from 0.95% even to 0.31% when cost reduction factors are considered.

4.7 Reactions and adjustments by banks and regulators to bail-in

The above results do not consider the possibility that banks and regulator modify their behaviour due to the introduction of bail-in. Behavioural changes might modify results. In this section we consider therefore how in particular results presented so far on bail-in could be modified by reactions and adjustments of banks and regulators.

4.7.1 Banks' incentive to modify their funding structure to reduce their cost of funding by means of issuing additional subordinated instruments

After the introduction of bail-in, banks will have an incentive to modify their funding structure in order to limit as much as they can the increase in their cost of funding due to the introduction of bail-in.

Banks could, in particular, see that it is convenient for them to issue more Additional Tier 1, or more Tier 2, or more of other types of subordinated debt in order to protect fully / to a larger extent their unsecured senior funding from losses in case of distress and of authorities applying bail-in, as this might decrease their overall cost of funding.

Should banks decide to increase Additional Tier 1, or Tier 2 or other types of subordinated debt, this would create a sort of sequential bail-in, for which additionally introduced subordinated instruments are bailed-in "first", i.e. before the need to proceed to bail-in more senior unsecured debt.

Because of this possibility banks have, funding costs for banks cannot be expected to increase after the introduction of bail-in more than what it would cost them the issuance of additional subordinated instruments to a level that the market considers as providing a sufficient cushion for absorbing losses and recapitalisation funding needs so that when bail-in will be exercised it will not affect senior unsecured debt and other pari passu bail-inable liabilities.

An analysis is then required on what a minimum loss absorbing capacity might be necessary to reassure markets that the bail-in, if applied, will not materially affect senior unsecured debt and other pari pasu bail-inable liabilties.

4.7.2 Banks' incentive to modify their funding structure to reduce their costs of funding by means of issuing non bail-inable liabilities

As mentioned above, after the introduction of bail-in, banks will have an incentive to modify their funding structure in order to limit as much as they can the increase in their cost of funding.

It is possible that that does not happen via the issuance of additional subordinated instruments, but rather through the reduction of the share of liabilities subject to bail-in (for example increasing the share of secured funding, or of liabilities that could create systemic consequences when bailed-in and that would therefore be prudentially excluded from bail-in by authorities). This represents a potential moral hazard problem for banks, with detrimental consequences for financial stability as bail-in might become ineffective should banks behave like this.

An analysis is then required on what minimum loss absorbing capacity might be needed to be maintained by regulators in order to avoid that bail-in becomes ineffective due to the substitution by banks of bail-inable liabilities with non-bail-inable liabilities.

4.8 Loss Absorbing Capacity Analysis

On the basis of the considerations of the previous section, we now proceed to an analysis of banks' Loss Absorbing Capacity. This analysis is in fact needed both for understanding: (i) the additional cushion of subordinated instruments banks might want to issue as bail-inable "first" liabilities to limit as much as possible the impact of bail-in on their funding costs, and (ii) for understanding the minimum level of bail-inable liabilities authorities will want to ensure is always available to guarantee that bail-in is effective.

For this (double) analysis, we define banks' *Loss Absorbing Capacity (LAC)* as follows:

LAC = (Total Regulatory Capital + bail-in-able[182]/ bail-inable "first" liabilities[183]) / total liabilities[184]

The percentage of bail in-able liabilities (or of bail-inable "first" liabilities, according to the type of analysis being performed) banks will need to have / meet a certain loss absorbing capacity clearly changes depending on the LAC threshold considered, as detailed in Table 12 below.

Table 12 Average minimum bail in-able ("first") liabilities, as percentage of total liabilities, necessary to meet various LAC thresholds (banks' regulatory capital set according to Scenario Basel III 10.5% RWA Minimum Capital Requirements)

	Scenario Basel III 10.5%	
LAC threshold	**Average EU bank**	**Average EU large banking group**
10.0%	4.67%	3.93%
12.5%	7.04%	6.43%
15.0%	9.50%	8.93%
17.5%	11.98%	11.43%
20.0%	14.47%	13.93%

The corresponding changes in funding costs for selected LAC thresholds are presented in Table 13 when an increase in cost of 350 bp for bail-inable ("first") liabilities is considered. Such increase in the cost of bail-inable liabilities represent a worst case scenario and is compatible with an LGD of 100% on bail-inable ("first") liabilities, as presently assumed by markets on Tier 2 and subordinated debt.

[182] When looking at the minimum LAC authorities should ensure to guarantee that bail-in is effective.

[183] When looking at the incentive for banks to issue additional subordinated instrument so as to create a minimum LAC that ensures that in case of bail-in senior unsecured creditors would not be affected.

[184] Total Liabilities = Total Assets – Total Regulatory Capital

Table 13 Overall change in banks' cost of funding (in basis points) for various LAC thresholds with a 350 bp increase in the cost of bail-inable ("first") liabilities, under Basel III 10.5%RWA Minimum Capital Scenario

	Change in overall cost of funding (in bp)	
LAC threshold	**Average EU bank**	**Average EU large banking group**
10.0%	15.4	13.0
15.0%	31.5	35.4
20.0%	48.7	60.6

When comparing the overall increase in costs of funding emerging from Table 13 in the full effect case with those emerging from Table 9 in the case of a comprehensive approach (87bp), it appears that <u>both an average EU bank and a large banking group would have a clear incentive to issue subordinated instruments up to a 10% LAC, while they would be approximately indifferent (in the case of an average EU bank) or worse off (in the case of a large banking group) with a 15% LAC.</u>

Table 14 reports the costs for an average EU bank of introducing bail-in according to the 10% and the 15% LAC thresholds for a 350bp increase in cost of bail-inable ("first") liabilities.

Table 14: Costs for an average EU bank of introducing bail-in with 10% and 15% LAC thresholds on top of Basel III 10.5% RWA Minimum Capital Requirements

	10% LAC	**15% LAC**
Variation in bail-inable liabilities funding costs	350bp	350bp
Variation in banks' funding costs (bps)	15.4	31.5
Variation in lending spreads (bps)	32.3	66.2
Variation in non-financial firms cost of capital (bps)	10.8	22.1
Yearly costs (%GDP)	0.46%	0.95%
NPV of costs (%GDP)	18.94%	38.75%

From these results it emerges that both the increase in the cost of funding for an average EU bank and the corresponding macroeconomic costs generated by bail-in could be substantially reduced should banks issue subordinated instruments up to a 10% LAC, compared to the case (see Table 10) of comprehensive approach with 87bp. With a 15% LAC, instead, results would be equivalent.

It follows that <u>if the market is convinced that a 10% LAC is sufficient to isolate from bail-in unsecured more senior liabilities, the incentive for banks to issue bail-inable subordinated debt could substantially reduce (from 31 to 15 bp) the increase in banks' costs of funding due to the introduction of bail-in.</u>

4.9 Bail-inable / Bail-inable "first" liabilities: what LGD could market expect on bail-inable ("first") liabilities with a 10% LAC on the basis of the recent crisis?

Losses that took place in the recent crisis can be used to estimate the LGD that would have applied on bail-inable / bail-inable "first" liabilities with a 10% LAC should bail-in have been in place.

Various sources have been used to estimate the losses that took place during the recent crisis:

- The report from the Independent Commission on Banking, where losses cumulated by these 23 banks and banking groups in years 2007-2010 are reported as a percentage of their 2006 RWA.[185]
- A proprietary study from Credit Swiss on bail-in which reports losses cumulated by banks in 2008-2009.[186]
- Data from European Commission on public interventions in support to banks occurred between 2008 and 2010.[187]
- Bloomberg WDCI database
- Data from Bankscope on profits and losses between 2007 and 2010.[188]

Combining data from all these sources, an estimate of the losses for each bank has been prudentially obtained as the maximum value for that specific bank among all available sources.

The estimated losses and recapitalisation funding needs can be compared with the amount of banks' Minimum Capital Requirements under Basel III, as shown in Table 15.

185 http://bankingcommission.s3.amazonaws.com/wp-content/uploads/2010/07/ICB-Final-Report.pdf

186 Of the 23 considered banks, this study covers 7 banks and banking groups.

187 This data cover recapitalisation, guarantees on bank liabilities, asset relief interventions and liquidity support. For the purpose of the present exercise we have considered only recapitalisation and asset relief interventions. Of the 23 considered banks, ECFIN database covers 11 banks and banking groups.

188 Data on banks’ balance sheets are 2010 consolidated data from Bankscope.

Table 15: Comparison between historical losses in recent crisis (suffered by 23 banks between 2008 and 2010) with Basel III Minimum Capital Requirements

		Average	Median	Maximum	Minimum	First quartile	Third quartile
A	**Total losses/ total liabilities**	2.5%	3.2%	46.4%	0.2%	1.3%	**6.3%**
B	**Total losses + recapitalisation funding needs (8% RWA) / total liabilities**	5.9%	6.4%	50.7%	2.6%	4.6%	**9.7%**
C	**Minimum Capital Requirements under Basel III 10.5%**	4.4%	4.0%	6.2%	7.2%	4.3%	**5.0%**
D = B-C	**(Extra – Losses + Recapitalisation funding needs)/ total liabilities**	1.5%	2.4%	44.5%	0%	0.3%	**4.7%**

On the basis of results shown in row D, the implied LGD on bail-inable liabilities can be calculated, for the 10% LAC threshold, as shown in Table 16 below.

Table 16: Implied LGD on bail-inable ("first") liabilities with a 10% LAC threshold with historical losses in recent crisis (suffered by 23 banks between 2008 and 2010)

LAC	Average	Median	Maximum	Minimum	First quartile	Third quartile
10%	27%	40%	>100%	0%	5%	94%

From the above table, it can be concluded that only in less than 25% of cases, with defaults happened during the last crisis and being bail-in available, the LGD would have been equal to 100% on bail-inable ("first") liabilities, should just a 10% LAC thresholds had been in place for all banks. In the median case, the LGD would have been much lower: 40%. And in the average case, the LGD would have been even lower: 27%.

The conclusion can therefore be drawn that on the basis of average and median extra-losses and recapitalisation needs occurred in the recent crisis, markets might consider a 10% LAC sufficient to isolate from bail-in unsecured more senior liabilities. Even more, markets might even expect substantially reduced LGD (down at least to 50%) on bail-inable "first" liabilities compared to presently expected LGD (100%) in case of normal insolvency procedures for Tier2 and other subordinated debt, should a 10% LAC threshold be in place for all banks subject to bail-in.

On this basis, it is possible to conclude that both banks and regulators might consider a minimum 10% LAC threshold as appropriate to absorb losses and recapitalise banks in a crisis comparable to the recent one.[189]. Furthermore, it can be concluded that as important factors leading to a reduction of the increase in banks' cost of funding and therefore also of

[189] For an analysis based on SYMBOL simulated crisis scenarios, and that also consider the interaction between bail-in and DGS/RF funds, see section 6.

the macroeconomic costs of bail-in would be applicable, the results shown in Table 14 for a 10% LAC would be modified as shown in Table 17

Table 17: Costs of introducing bail-in with a 10% LAC threshold on top of Basel III 10.5% RWA Minimum Capital Requirements, considering various cost reduction factors

10%LAC	Full Effect	50% LGD Reduction	35% SIFIs reduction	Both reductions
Variation in bail-inable liabilities funding costs	350bp	350bp	350bp	350bp
Variation in banks' funding costs (bps)	15.4	7.7	10.0	5.0
Variation in lending spreads (bps)	32.3	16.2	21.0	10.5
Variation in non-financial firms cost of capital (bps)	10.8	5.4	7.02	3.51
Yearly costs (%GDP)	0.46%	0.23%	0.30%	0.15%
NPV of costs (%GDP)	18.94%	9.47%	12.31%	6.16%

On the basis of this analysis and results we conclude that there is the possibility to consider an upper limit for the effect of bail-in on banks' cost of funding equal to 15 bp, with an annual macroeconomic cost around 0.46% of EU GDP, which is substantially in line with the annual costs (0.36% of EU GDP as shown in Table 4) of introducing DGS/RF operating as bail-out funds. But banks' increase in costs of funding could be lower than 15bp, and as low as 5bp, with an annual macroeconomic cost around just 0.15% of EU GDP[190]

4.10 Conclusion on applying bail-in only

On the basis of the whole discussion in section 4, it can be concluded that the comprehensive approach to bail-in has the advantage that it is able to absorb in principle almost any losses banks potentially could occur during a systemic crisis. The restricted approach risks instead not being always sufficient to absorb losses for all types of banks. On this higher effectiveness basis, the comprehensive approach is to be preferred.

The comprehensive approach has the disadvantage that it can significantly increases the cost of funding for banks even with the lower expected increases in yields for bail-inable liabilities. Since the expected increase in yields can be quite high even with the restricted approach, the increase in overall cost of funding for banks can be very significant also in this case. Both approaches can therefore produce significant annual macroeconomic costs.

There are, however, important factors to be considered that modify substantially this conclusion. The most important of these factors are:

[190] These costs are substantially in line with the costs of considering for a 10% LAC an increase in the cost of bail-inable ("first") liabilities of 100bp without any inclusion of cost reduction factors: an increase of 100 bp for bail-inable ("first") liabilities might then be considered to be already inclusive of the various effects introduced by the possible cost reduction factors.

- that markets might consider bail-in as a value enhancer tool for creditors, as LGDs might be substantially reduced compared to those presently assumed by markets in case of insolvency procedures;
- that regulators will apply bail-in proportionally, and therefore normally only to systemic banks;
- that banks will have an incentive to substitute bail-inable liabilitites with non bail-inable liabilitites ot reduce their costs of funding;
- that banks will have an incentive to issue Tier 2 and other subordinated instruments in order to reduce their funding costs.

These factors can substantially reduce the costs of introducing bail-in compared to the results presented in Table10, as shown in Table 17. Banks costs of funding can therefore be expected to rise due to the introduction of bail-in (with no ex-ante funded schemes) between 5 and 15 bp, with an annual macroeconomic cost comprised between 0.15% and 0.46% of EU GDP.[191]

5. Combination of ex-ante funding schemes with bail-in

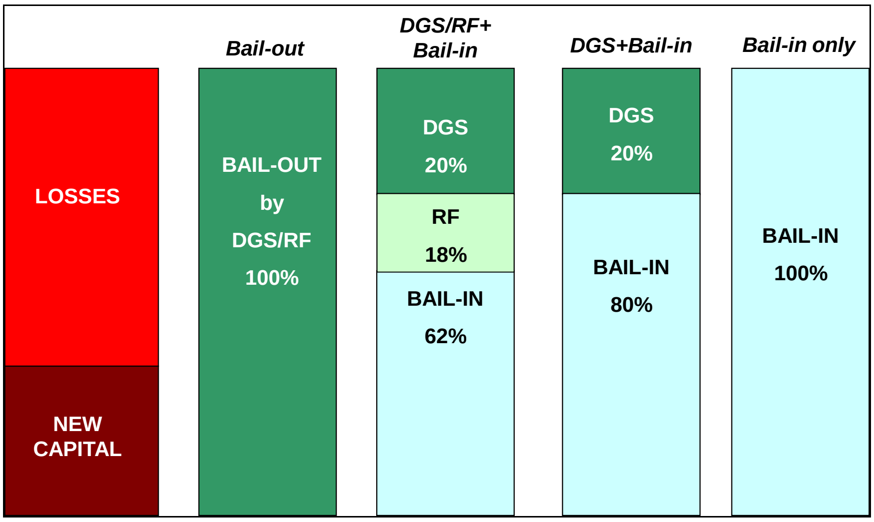
In order to increase the effectiveness of the resolution framework and in order to reduce its impact on banks' cost of funding and on the macro-economy compared to what analysed so far, this and the following sections analyse the possibility of applying both bail-in and the ex-ante schemes to absorb banks' losses and provide funds to recapitalise them during resolution.

In Figure 1 below, it is shown how between the two situations described so far (i.e. on the right of the figure a situation where resolution is 100% supported by bail-in only, and on the left of the figure a situation where resolution is 100% supported only by DGS/RF (that act as bail-out funds), two other intermediate situations can be considered.

In both, DGS is assumed to cover a percentage of losses equal to the share of insured deposit on total liabilities. This percentage, as shown in Table 5 above, is around 20% of total liabilities for an average EU bank. In only the first intermediate situation, a RF is funded in addition to DGS to assist the resolution of failing banks, avoiding that their failure creates contagion effects. To achieve this goal, it is assumed that RF will need to absorb a pre-determined percentage of losses equal to the share of systemic exposures (here approximated with interbank exposures) on total liabilities. This percentage, as shown in Table 5, is around 18% of total liabilities for an average EU bank. In the first intermediate situation, then, bail-in only needs to absorb/provide 62% of losses/recapitalisation funding needs. In the second intermediate situation, RF is not funded (as only DGS and bail-in play a role) and bail-in needs to absorb 80% of losses / recapitalisation needs.

[191] This statement depend on the assumptions that supervisors will impose a minimum LAC threshold for banks of 10% or that banks can issue Tier 2 or other subordinated debt to reduce their cost of funding, and that the market considers a 10% LAC sufficient to isolate in case of bail-in more senior unsecured creditors. For the analysis of the conditions under which this assumption can be considered to be justified, see section 4.9 for data from the recent crisis and section 6 for the SYMBOL simulated crisis scenarios.

Figure 1: Possible splits of losses and recapitalisation needs in various operational combinations of DGS/RF funding and bail-in



5.1 Ex-ante resolution funding needs if bail-in is introduced

On the basis of the assumptions about how losses and recapitalisation needs will be split in resolution specified above, it is possible to calculate the funding needs of DGS/RF if the bail-in tool is also available at the same time, as shown in Table 18 below.

Table 18: DGS/RF funding (as % of covered deposits) when combining ex-ante funding and bail-in to cover extra-losses and recapitalise banks

		Extra-losses	Extra-losses and Recapitalisation
Bail Out by DGS/RF	Severe Crisis	0.47%	3.80%
	Very Severe Crisis	1.03%	6.00%
	Extremely Severe Crisis	3.43%	8.59%
DGS/RF+Bail-in	Severe Crisis	0.18%	1.45%
	Very Severe Crisis	0.39%	2.28%
	Extremely Severe Crisis	1.30%	3.26%
DGS+Bail-in	Severe Crisis	0.10%	0.76%
	Very Severe Crisis	0.22%	1.20%
	Extremely Severe Crisis	0.72%	1.72%

From Table 19, it is immediate to see how the amount of funding needed for ex-ante funded schemes is substantially decreased if bail-in is introduced to operate at the same time.

5.2 Reduced LGD with bail-in when ex-ante funding is introduced.

If part of the losses and of the recapitalisation needs are provided for by DGS/RF ex-ante funds, the minimum level of bail-inable liabilities needed to absorb losses decreases, as shown in Table 19 for the case where bail-in must absorb 62% of the losses).

Table 19: Share of total liabilities needed to absorb extra-losses and recapitalisation needs[192] in the three considered SYMBOL simulated crises

Regulatory Scenario	**No recapitalisation**			**Recapitalisation**		
	Severe crisis	**Very severe crisis**	**Extremely severe crisis**	**Severe crisis**	**Very severe crisis**	**Extremely severe crisis**
Scenario 2.bis Basel III 10.5% No Contagion	2%	4%	6%	7%	11%	11%

It follows that the potential haircut/LGD on bail-inable liabilities can be expected to decrease.[193] This means that the cost of bail-in can be expected to be reduced compared to the case where no ex-ante funds are available to support resolution.

5.3 Macroeconomic costs of combining ex ante funding with bail-in

This section presents results concerning the macroeconomic impacts of the bail-in tool (absorbing 62% of the losses) and of the DGS/RF ex-ante funds (absorbing 38% of the losses) when they operate at the same time. In the no recapitalisation scenario, an ex-ante fund of 1.30% of covered deposits is assumed, as that is needed in addition to the bail-in tool in order to absorb all losses in an extremely severe crisis.[194] In the recapitalisation scenario, instead, an ex-ante fund of 3.26% of covered deposits is assumed, as that is needed in addition to the bail-in tool in order to absorb all losses and recapitalise defaulted banks in an extremely severe crisis. The effects on banks' costs of funding are presented in Table 20 for the case in which the increase in the cost of bail-inable liabilities is 55 bp under a comprehensive bail-in, and it is 87 bp under a restricted bail-in. These two values are considered coherent with the assumption that a restricted bail-in will in general impact more the costs of bail-inable liabilities, and that the costs of bail-in can be moderated by the introduction of DGS/RF funds as these reduce the LGD investors expect in case of use of the bail-in powers by resolution authorities.

[192] Extra-losses and recapitalization needs not absorbed/provided are less than 0.1% of EU GDP.

[193] On the basis of the extremely severe crisis scenario with recapitalisation, the implied LGD for an average EU bank in case of comprehensive bail-in decreases for example from 17/38.49 = 44% to 11/38.49=29%, and from 17/21.36=80% to 11/21.36=51% in case of restricted bail-in.

[194] When DGS/RF are ex-ante funded up to 1.30% of covered deposits, DGSRF can absorb all losses in an extremely severe crisis in an average EU MS. When applied member State by Member States, DGS/RF ex-ante funding needs to increase to be able to cope with those member States that present losses higher than the average. The corresponding value that absorbs all losses in an extremely severe crisis in all Member States is obtained by means of a so-called "simple rule", according to which DGS/RF funding is equal in each member States to the higher between 1.5% of covered deposits and 0.3% of total liabilities. See Appendix 6 for how this funding "simple rule" is derived.

Table 20: Costs of introducing bail-in and DGS/RF funding on top of Basel III 10.5% RWA Minimum Capital Requirements for an average EU bank, considering various increases on costs of bail-inable liabilities

	No recapitalisation Extremely Severe Crisis		**Recapitalisation Extremely Severe Crisis**	
	Comp. Bail-in	**Rest. Bail-in**	**Comp. Bail-in**	**Rest. Bail-in**
DGS/RF Funding needs (% of covered deposits)	1.30%		3.26%	
Increase in cost of bail-inable liabilities (that absorb 62% of losses)	55 bp	87 bp	55 bp	87 bp
Variation in banks' funding costs (bps)	21.8	19.4	24.5	22.1
Variation in lending spreads (bps)	45.5	40.5	51.2	46.2
Variation in non-financial firms cost of capital (bps)	15.3	13.6	17.2	15.5
Yearly costs (%GDP)	0.65%	0.58%	0.74%	0.67%
NPV of costs (%GDP)	26.83%	23.88%	30.22%	27.27%

Even when sided by ex-ante funding, if it affects simultaneously a very large pool of bank liabilities (comprehensive bail-in), bail-in can turn out to be costly both for banks and the economy. A bail-in affecting a more restricted set of liabilities (restricted bail-in) can in principle produce more limited costs. It can however happen that if the haircut/LGD expected by investors is higher with the restricted bail-in, the costs of the bailable-in instrument will also be higher as in the case presented, so that the overall effect on banks' funding costs might turn out not to be materially different from the case of the comprehensive bail-in.

Both bail-in approaches can therefore produce, even if coupled by DGS/RF ex-ante funds, significant annual macroeconomic costs. However, costs can be expected to be slightly lower than in the case where only bail-in is used, as in appears from a comparison between results in Table 20 and in Table 10. Furthermore, these costs can be expected to be substantially lower as those presented in Table 20, as the cost reducing factors considered in section 4 (50% reduction for lower LGD expected by the market and 35% reduction for application only to SIFIs) can also expected to apply when bail-in is coupled by DGS/RF ex-ante funds.

6. Loss Absorbing Capacity analysis when bail-in and DGS/RF funds sequentially interact

In this section we now explore the effects of combining bail-in LAC thresholds (to consider banks and regulators reaction/adjustments to bail-in) and ex-ante funded DGS/RF in various different sequential ways, to check whether there are any advantages in sequencing in one way or another the intervention of bail-in and of DGS/RF ex-ante funds.[195] We also

[195] In this section, losses are considered to be absorbed by ex-ante funded DGS/RF and by bail-inable ("first") liabilities. Other liabilities are not normally considered, as the purpose of the analysis if the calibration of bail-inable ("first") liabilities in various possible sequenced interactions with DGS/RF.

investigate on the basis of the SYMBOL model what a correct calibration of the LAC threshold might be (after the analysis shown above on the basis of the losses banks had in the recent crisis).

6.1 Five considered options

There are various ways in which bail-inable ("first") liabilities and funded schemes can interact in absorbing losses (and recapitalising banks). Their interaction determines when/in which order (sequencing) bail-inable ("first") liabilities, DGS and RF absorb losses and participate to banks' recapitalisation, and therefore which part of losses (and of banks' recapitalisation costs) they assume.

Five options have been analysed:

1. The bail-in tool is used first to absorb losses and if needed DGS and RF assumes the rest of the losses;
2. All three tools absorb losses at the same time (DGS: losses falling on covered deposits; RF: losses falling on systemic liabilities, here assumed to be interbank liabilities; bail-in: losses falling on the rest of the liabilities);
3. DGS and bail-in absorb losses first. If losses are higher than what bail-in can absorb, RF absorbs the rest of the losses (as suggested by the Financial Stability Board);
4. DGS/RF absorb losses first. If losses are higher than what DGS/RF can absorb, the bail-in tool is activated to assume the rest of the losses;
5. DGS and bail-in absorb losses at the same time and RF does not exist.

6.2 What amount of bail-in-able ("first") liabilities and DGS/RF funding should be available?

The need of how many bail-in-able ("first") liabilities and of how much funding for DGS/RF depend on the decision of how severe a crisis the resolution framework should withstand. Furthermore, and in general terms, it can be expected that the more ex-ante funds are available to schemes, the fewer bail-in-able ("first") liabilities banks need to hold to cope with a given type of crisis, and vice versa.

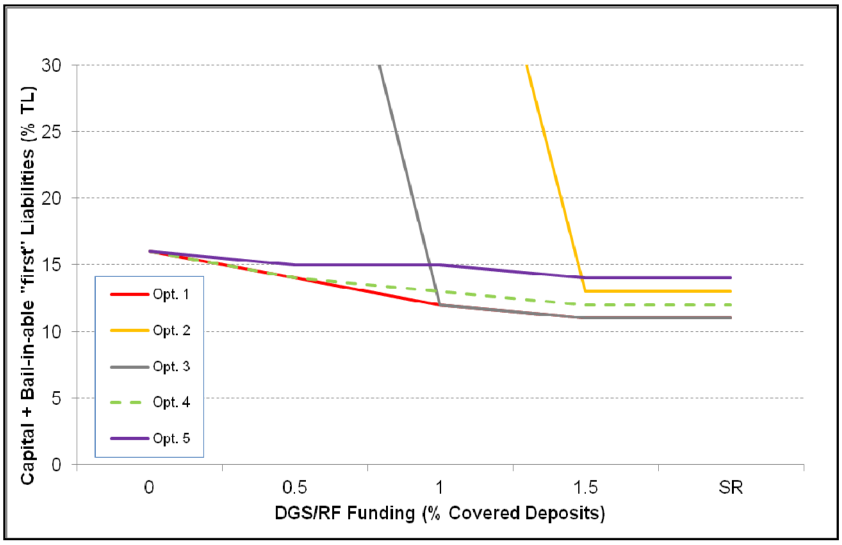
Calibration under the extremely severe crisis scenario

The following Figure 2 and Figure 3 present, for the five analysed options, how in the extremely severe crisis scenario the interaction between bail-in-able ("first") liabilities and funding available to the DGS/RF schemes creates a safety net that avoids material impacts on public finances.[196]

Figure 2 shows, in particular, all combinations of DGS/RF funding and banks LAC that can absorb all material losses in excess of bank capital (<u>no recapitalisation scenario</u>) in an extremely severe crisis.

[196] Losses on public finances are lower than 0.1% of the GDP.

Figure 2: Combinations of banks LAC and DGS/RF funds ensuring a loss for public finances smaller than 0.1% of GDP, extremely severe crisis scenario, only loss absorption (no banks recapitalization)

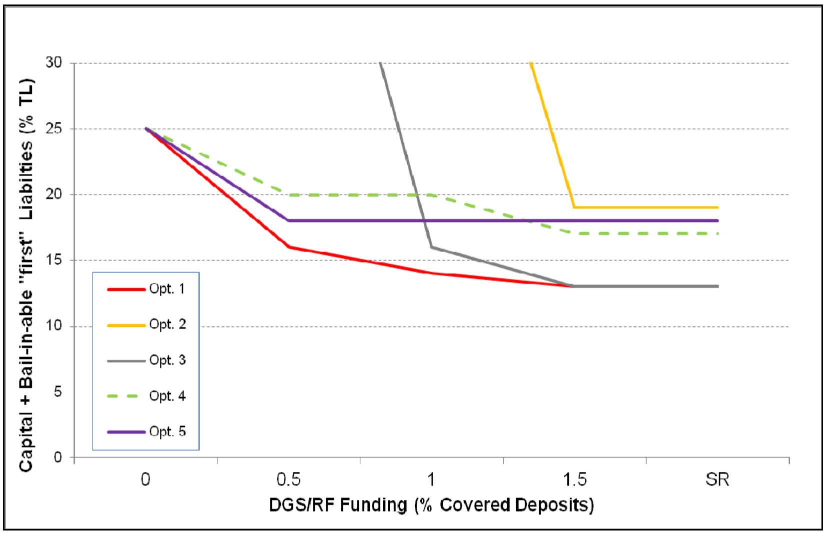


* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

For the resolution framework to be able to absorb any material losses in an extremely severe crisis scenario, banks should have a LAC of around 11-16% of total liabilities, depending on the considered option and on the level of ex-ante funding available to DGS/RF.

Figure 3 shows instead all combinations of DGS/RF funding and banks LAC that can absorb losses in excess of bank capital and also recapitalise banks (recapitalisation scenario) in an extremely severe crisis scenario.

Figure 3: Combinations of banks LAC and DGS/RF funds assuring a loss for public finances smaller than 0.1% of GDP, extremely severe crisis scenario, loss absorption plus banks recapitalization



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

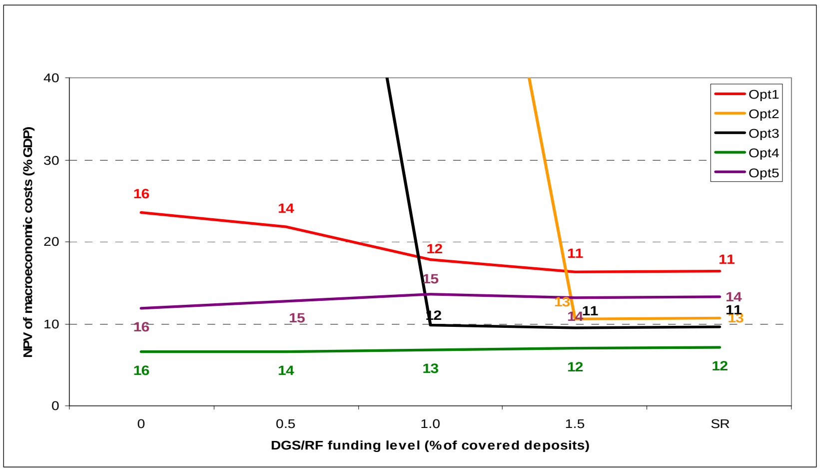
If the resolution framework is to cater also for banks' recapitalization, banks should have a LAC of at least 13-25% of total liabilities, depending on the considered option and on the level of ex-ante funding available to DGS/RF.

From these two graphs and comparing Option 2 and Option 5 with the other options, it is in general possible to see that introducing appropriate sequencing between bail-inable ("first") liabilities and ex-ante funds allows to absorb losses and provide recapitalisation funding needs either reducing ex-ante funding, banks' LAC being kept equal, or reducing banks' LAC, ex-ante funding being kept equal.

<u>There is therefore the possibility to maintain the effectiveness of the resolution framework, while reducing its requirements thanks to an appropriate sequencing between the various instruments of the financial safety net.</u>

The macroeconomic cost of a resolution framework that could tackle an extremely severe crisis scenario without any material recourse to public finances would be comprised between 0.2% and 0.6% of EU GDP annually (as it can be inferred from Figure 4) when the resolution framework is calibrated only to absorb losses. The macroeconomic costs could instead be comprised between 0.3% and more than 1% of EU GDP annually (as it can be inferred from Figure 5) should the resolution framework be calibrated to absorb all material losses and recapitalise banks.[197]

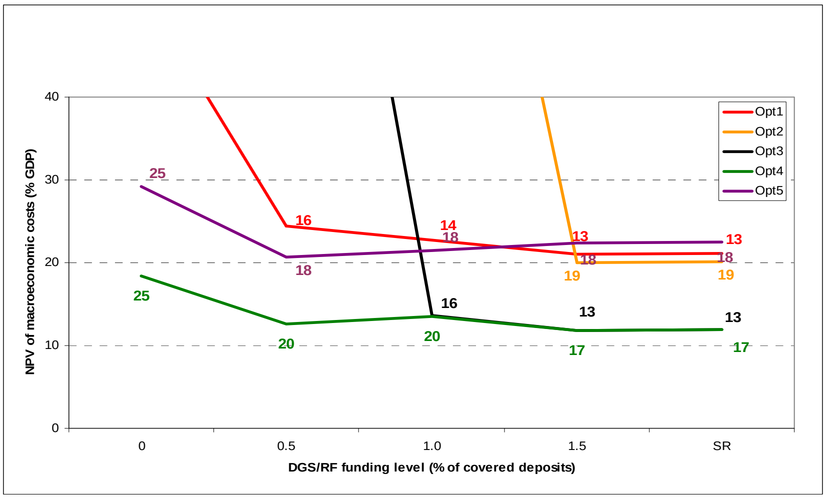
Figure 4: Macroeconomic costs (in NPV) as a % of EU GDP for combinations of banks LAC and DGS/RF funds assuring a loss for public finances smaller than 0.1% of GDP, extremely severe crisis scenario, only loss absorption (no banks recapitalization)



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

[197] Figure 4 and Figure 5 show macroeconomic costs in Net present Value terms (NPV). Annual costs can be obtained simply dividing NPV values by 41. For details on how annual and NPV macroeconomic costs are calculated, see section 8.2.1 and Appendix 5.

Figure 5: Macroeconomic costs (in NPV) as a % of EU GDP for combinations of banks LAC and DGS/RF funds assuring a loss for public finances smaller than 0.1% of GDP, extremely severe crisis scenario, loss absorption and banks recapitalization



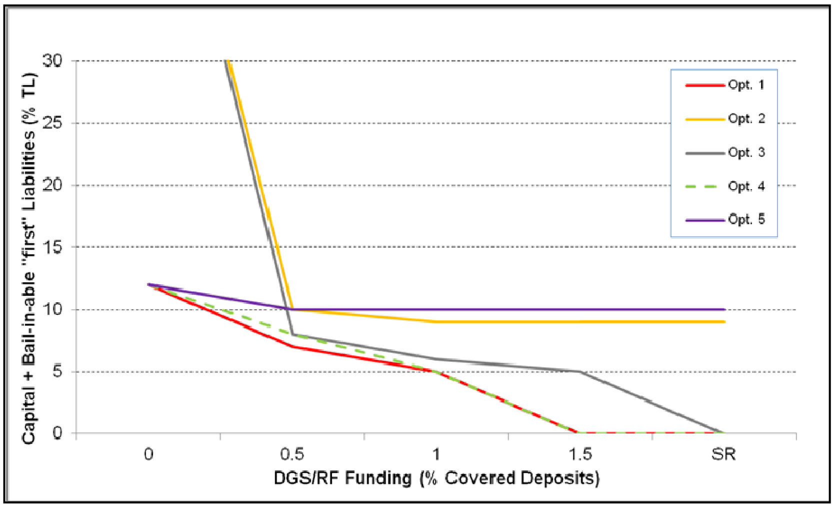
* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

On the basis of these results, and in order to reduce macroeconomic costs coming from the resolution framework, <u>Commission Services believe that it is appropriate to calibrate the resolution framework on the very severe crisis scenario (SYMBOL 99.95% simulation)</u>. The outcomes of this scenario are in fact very similar to those of the past crisis and should therefore guarantee a sufficient level of confidence in the real effectiveness of the framework, should a new crisis occur.

<u>Calibration</u> under a very severe crisis scenario

If the resolution framework is to be able to absorb losses in a very severe crisis scenario, which can be considered similar to the recent crisis, as shown in Figure 6 banks need to have a LAC of 0-12% of total liabilities depending on the considered option and on the level of available DGS/RF funds.

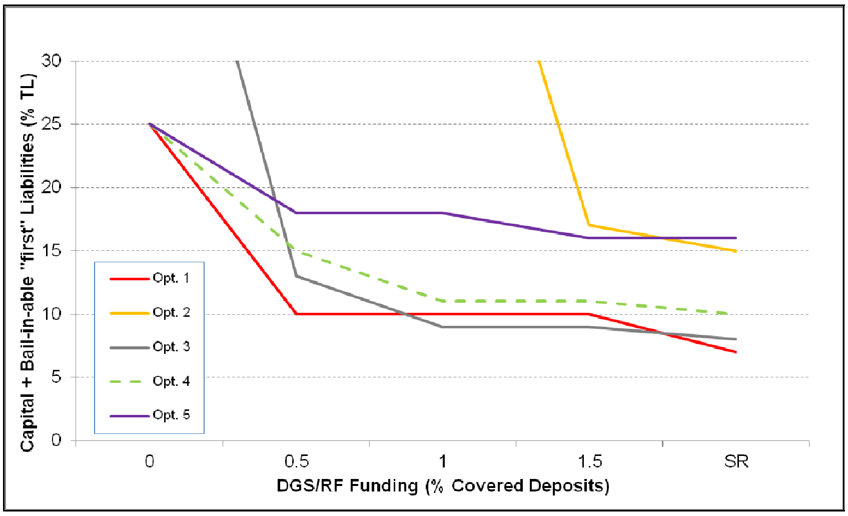
Figure 6: Combinations of banks LAC and DGS/RF funds assuring a loss for public finances smaller than 0.1% GDP, Very severe crisis scenario, only loss absorption (no banks recapitalisation)



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

If the resolution framework is to be able to recapitalise banks as well, as shown in Figure 7 banks need to have a LAC of 7-25% of total liabilities, depending on the level of available DGS/RF funds.

Figure 7: Combinations of banks LAC requirements and DGS/RF funds assuring a loss for public finances smaller than 0.1% GDP, Very severe crisis scenario, loss absorption plus banks recapitalisation



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

7. Analysis of the proposed bail-in and ex-ante funding calibration

The calibration of the resolution framework for Impact Assessment purposes is proposed as follows: a 10% minimum Loss Absorbing Capacity (regulatory capital + bail-in-able ("first") liabilities / total liabilities) under Option 3 with a 1% of covered deposits funding of DGS/RF.[198]

According to this option, resolution authorities shall ensure that banks always have an adequate amount of bail-inable liabilities. At the very minimum, the sum of (i) each bank's regulatory capital and (ii) its bail-inable liabilities must be 10% of its liabilities (the '10% minimum LAC rule').

The 10% minimum LAC rule is to be applied at the level of each bank as the analysis has been performed at solo level. However, and consistent with the principle of proportionality, the 10% minimum LAC rule could be waived by resolution authorities where there is minimal likelihood of bail-in having to be applied in order to maintain financial stability. Specific conditions could be met for waivers to be given, to minimise the risk of financial instability when banks default and to ensure a level playing field for banks.

Within this framework, banks may decide to issue additional subordinated instruments so as to meet the 10% minimum LAC requirement, so as to ensure a sequential bail-in within an otherwise (by default) comprehensive bail-in, should this be convenient for them and reduce their funding costs, creating in this way bail-inable "first" liabilities.

When the bail-in tool is applied, authorities first write down equity, then subordinated debt, then bail-inable "first" liabilities if relevant, then all other bail-inable liabilities, if any is available.

7.1 How effective would the proposed calibration be in an extremely severe crisis scenario?

The proposed calibration allows for public finances to cover some costs in the most extreme crisis scenario. The possible fiscal burden needs, however, to be consistent with the provisions of the new stability and growth pact in all cases, i.e. even under a extremely severe crisis Two conditions have been, in particular, analysed to be complied with:

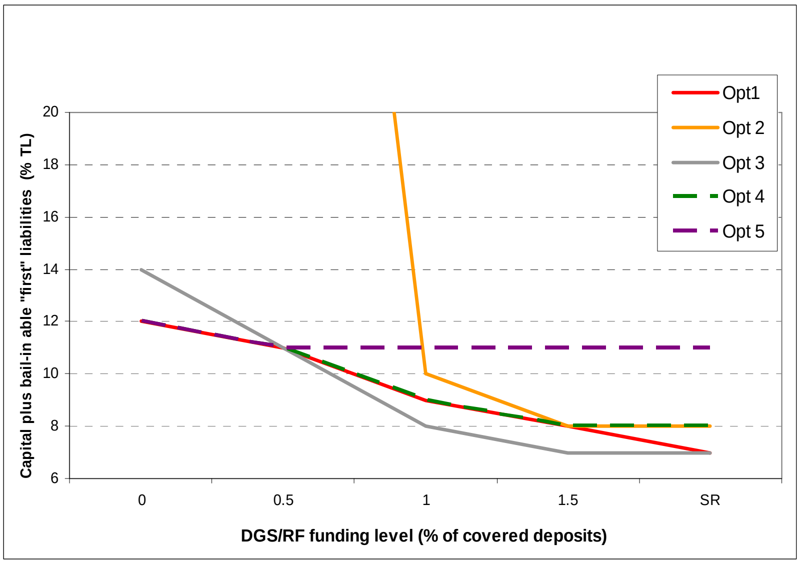
1 – should banks not need to be recapitalised (no recapitalisation scenario), public finances should not substantially deviate (0.5% of GDP) from the required 0% deficit in the new stability and growth pact;

2 – should banks need to be recapitalised (recapitalisation scenario), public finances would have to participate in that, but at least without entering into an excessive deficit procedure (3% of GDP).

Figures 8 and 9 present the combinations of banks LAC and DGS/RF funding that can fulfil the two criteria above.

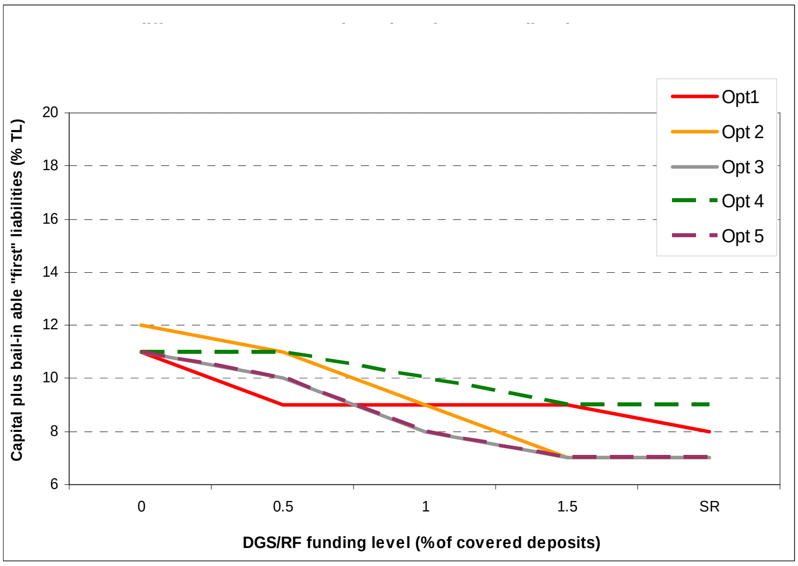
[198] This calibration of the resolution framework proposed for Impact Assessment purposes must be intended as in addition to the implementation of Basel III, including its more stringent definitions of capital and minimum capital requirements equal to 10.5% of Risk-Weighted Assets (RWA)).

Figure 8: Combinations of banks minimum LAC requirements and DGS/RF ex-ante funds assuring a loss for public finances smaller than 0.5% GDP, extremely severe crisis scenario, only loss absorption (no banks recapitalisation



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

Figure 9: Combinations of banks minimum LAC requirements and DGS/RF ex-ante funds assuring a loss for public finances smaller than 3% GDP, extremely severe crisis scenario, loss absorption and banks recapitalisation



* SR = 'Simple Rule' = max (1.5% covered deposits, 0.3% total liabilities)

As figures above show, <u>the proposed calibration is able to respect the two above criteria, and it can be therefore considered to be consistent with the new stability and growth pact in all relevant crisis scenarios.</u>

7.2. Macroeconomic cost/benefit analysis of the proposed bail-in and DGS/RF funding calibration

7.2.1 Macroeconomic Costs

The macroeconomic costs of introducing sequenced bail in and DGS/RF ex-ante funding according to the proposed calibration is now investigated.

The five different options can be considered to increase differently the cost of bail-in-able ("first") liabilities. This is due to the differences in seniority of bail-in-able ("first") liabilities vis-à-vis other liabilities such as deposits covered by DGS and other systemic liabilities (such as very short term or interbank liabilities) covered by the RF. Table 21 presents the increase in the yields on bail-in-able "first" long term liabilities which have been assumed in the analysis.

Table 21 Assumed increase in the yields of bail-in-able "first" liabilities in the various considered options.

Option 1	200bp
Option 2	87bp
Option 3	100bp
Option 4	55bp
Option 5	100bp

On the basis of these assumptions, calculations have been undertaken relating to banks' funding cost increases (see Table 22).

Table 22: Impact of different levels of minimum LAC on banks cost of funding (Scenario Basel III 10.5%) in basis points

Minimum LAC (% of total liabilities)	Option 1	Option 2	**Option 3**	Option 4	Option 5
4	1.1	0.5	0.5	0.3	0.5
6	2.9	1.3	1.4	0.8	1.4
8	5.8	2.5	2.9	1.6	2.9
10	9.3	4.1	**4.7**	2.6	4.7
12	13.1	5.7	6.6	3.6	6.6
15	19.2	8.4	9.7	5.4	9.7
20	30.6	14.2	16.1	9.6	16.1

The effect on macroeconomic costs and other macroeconomic variables due to how bail-in affect banks' costs of funding can be obtained on the basis of the following Table 23, simply multiplying its values times the bp increase in banks' cost of funding as shown in Table 22 above.

Table 23: Macroeconomic impact of introducing bail-in per unit increase in banks cost of funding.

Variation in banks' funding costs (bps)	1bp
Variation in lending spreads (bps)	2.1
Variation in non-financial firms cost of capital (bps)	0.7
Yearly costs (%GDP)	0.03%
NPV of costs (%GDP)	1.23%

The macroeconomic costs of bail-in must be considered always jointly with those of DGS/RF funding introduced at the same time. Table 24 below presents the macroeconomic costs of bail-in, in addition to macroeconomic costs of funding DGS/RF for 1% of covered deposits. For completeness sake, macroeconomic costs of introducing Basel III are also shown. Costs are presented both in NPV and annual terms.

Table 24: Macroeconomic costs of Basel III 10.5%, funding DGS/RF for 1% of covered deposits, and bail-in (provisionally proposed according to option 3 and 10% Minimum LAC), as % of 2009 GDP.

	Basel III 10.5%	**DGS-RF funding (1% of covered deposits)**	6% Minimum LAC	8% Minimum LAC	**10% Minimum LAC**	12% Minimum LAC	20% Minimum LAC
Option 1 - NPV			3.56%	7.13%	11.43%	16.10%	37.61%
Option 2 - NPV			1.60%	3.07%	5.04%	7.01%	17.45%
Option 3 - NPV	**6.72%**	**1.72%**	1.72%	3.56%	**5.78%**	8.11%	19.79%
Option 4 - NPV			0.98%	1.97%	3.20%	4.42%	11.80%
Option 5 - NPV			1.72%	3.56%	5.78%	8.11%	19.79%
Option 1 - Annual			0.09%	0.17%	0.28%	0.39%	0.92%
Option 2 – Annual			0.04%	0.07%	0.12%	0.17%	0.43%
Option 3 – Annual	**0.16%**	**0.04%**	0.04%	0.09%	**0.14%**	0.20%	0.48%
Option 4 – Annual			0.02%	0.05%	0.08%	0.11%	0.29%
Option 5 - Annual			0.04%	0.09%	0.14%	0.20%	0.48%

7.2.2 Sensitivity Analysis on Macroeconomic Costs

In this section, we consider alternative effects on the costs of bank liabilities that could determine higher increases in banks' costs of funding. Considered situations shown in Table 25 present an effect on banks costs of funding in the worst cases close to 15 bp, which has therefore been chosen as a prudential three times bigger effect than what estimated as central scenario..

Table 25: Macroeconomic costs of funding DGS/RF for 1% of covered deposits, and bail-in.

DGS/RF Recapitalization needs (% of covered deposits)	1%	1%	1%	1%
Δ in cost of bail-inable "first" liabilities	100bp	100bp	200bp	350bp
Δ in cost of bail-inable "second" liabilities	0bp	35bp	20bp	0bp
Δ in banks' funding costs due to RF req (bps)	1.4	1.4	1.4	1.4
Δin banks' funding costs due to Bail-inable bonds (bps)	**4.7**	**15.6**	**15.2**	**15.4**
Δ in banks' funding costs – total (bps)	6.1	17.0	16.6	16.8
Δ in lending spreads, total (bps)	12.1	32.5	31.7	32.1
Δ in non-financial firms cost of capital (bps)	4.1	11.9	11.6	11.8
Yearly costs (%GDP)	0.18%	0.51%	0.50%	0.50%
NPV of costs (%GDP)	7.5%	20.90%	20.41%	20.66%

7.3 Benefits

7.3.1 Benefits for public finances

Different scenarios are built with the aim of investigating the effects on public finances of the various regulatory measures aimed at strengthening the financial safety net (See Table 26).

In the worst scenario (Scenario 1), banks are assumed to satisfy at least capital requirements according to the rules of Basel II but the more stringent definitions of capital and RWA of Basel III are applied when determining the level of capital which can be effectively used to absorb losses. Ex-ante funded DGS/RF are considered not to be in place, contagion occurs and *no bail-in* is considered.

After two intermediate ones, in the best scenario (Scenario 4), banks are assumed to satisfy a minimum capital requirement of 10.5% (representing the fact that a capital conservation buffer is introduced on top of the 8% capital requirement), with capital and RWA considered according to the more stringent definitions of Basel III, DGS/RF are assumed to be funded for 1% of covered deposits (according to the proposed provisional calibration of the resolution framework), the legal framework for resolution is able to block contagion effects between banks; part of the losses is absorbed by *bail-in* according to Option 3, the Loss Absorbing Capacity of banks is equal to 10% of their total liabilities.

Table 26: SYMBOL scenarios for benefits on public finances

	Definition of capital and of RWA	Capital Requirements		DGS/RF 1% of Cov. Dep.		Bail in Option 3 10% min LAC		Contagion	
Regulatory Scenarios[199]		***Basel II***	***Basel III 10.5%***	***Yes***	***No***	***Yes***	***No***	***Yes***	***No***
1	Basel III	X			X		X	X	
2	Basel III		X		X		X	X	
3	Basel III		X	X			X		X
4	Basel III		X	X		X			X

Scenario 1 represents the situation at the beginning of the financial crisis; Scenario 2 represents a situation with banks that satisfy Basel III more stringent requirements, but without a functioning resolution framework that can stop contagion. Scenario 3 represents the situation in which an effective resolution framework is introduced and contagion between banks is effectively stopped. Scenario 4 is like Scenario 3, but bail-in is implemented according to the proposed calibration.

All scenarios are then also evaluated for both the “no recapitalisation” and “recapitalisation” cases. These can be thought of as representing the polar cases where no undercapitalized (but not failed) banks produce any systemic consequences, and where all undercapitalized banks produce instead systemic consequences.

Losses potentially hitting public finances are presented in Table 27 for two SYMBOL simulations: the very severe and the extremely severe crisis scenarios. Both the no recapitalisation and the recapitalisation scenarios have been considered. In order to facilitate the reading of the results, costs for public finances have been expressed as percentage of 2009 GDP.

[199] Regulatory scenario numbering is chosen so as to be aligned with that of the Commission Staff Working Paper "Comprehensive Evaluation of Financial Market Regulatory Reforms"

Table 27: Losses for public finances in different crisis scenarios, as % of 2009 GDP

Regulatory Scenario	No recapitalisation		Recapitalisation	
	Very Severe crisis	Extremely severe crisis	Very severe crisis	Extremely severe crisis
Scenario 1	12.81%	17.22%	22.27%	27.96%
Scenario 2	8.03%	13.81%	14.08%	2258%
Scenario 3	0.22%	1.58%	2.32%	5.45%
Scenario 4	0.00%	0.25%	0.18%	1.76%

The benefits of the improved bank regulatory framework can be measured in terms of a decrease in potential *costs to public finances* from defaulted (failed or failed and undercapitalised) banks. The introduction of Basel III reduces in an extremely severe crisis scenario the losses for public finances from 17.22% to 13.81% of GDP in the no recapitalisation scenario and from 27.96% to 22.58% of GDP when banks recapitalisation is considered. The introduction of the resolution framework further decreases these losses to 1.58% in the no recapitalisation scenario and to 5.45% of EU GDP if recapitalisation is considered. The introduction of bail-in as calibrated further reduces these losses down to 0.25% of EU GDP in the no recapitalisation scenario and to 1.76% of EU GDP when banks recapitalisation is considered.

7.3.2 Macroeconomic benefits

Macroeconomic benefits arise from the fact that individual banks' increased capital, higher DGS/RF funding and increased LAC due to the introduction of bail-in are able to absorb losses originated by banks to a higher extent; and this determines a reduction in the probability of a systemic banking crisis (*SystemicPD* henceforth).[200]

In particular, macro-economic benefits are calculated by multiplying the reduction in the *SystemicPD* obtained under any given regulatory scenario times the total (avoided) costs of a systemic banking crisis, and then computing the net present value.

Total (avoided) costs of a systemic banking crisis are in particular estimated on the assumption that the banking crisis is going to cause an initial reduction in GDP, which can be split between a part which has a temporary effect and a part whose effect is permanent. In particular in this analysis, 67% of the initial GDP reduction due to the crisis is assumed to be reabsorbed in 5 years , while the remaining 33% is assumed to be a permanent loss.[201,] Total

[200] A systemic banking crisis is defined as a situation where aggregate liquidity shortfalls due to defaulted banks exceed a certain threshold, beyond which public authorities find it difficult to intervene by injecting liquidity and therefore would have a hard time in trying and avoiding that the crisis spreads further. The threshold for a systemic banking crisis in any country is assumed to be equal to 3% of its GDP. The SystemicPD under any regulatory scenario is obtained using the SYMBOL model. See infra and Appendix 4 for details.

[201] In other words, a systemic banking crisis is assumed to induce a permanent level shift in the growth path of GDP. The split (67% and 33%) between temporary and permanent effects is in line with the median result of the models analysed by the Basel Committee on

(avoided) costs of the crisis are defined as the net present value of the sum of the of these two components. The real interest rate used for the discount factor to calculate this present value is $i = 2.5\%$.[202]

The initial reduction in GDP due to a systemic banking crisis is estimated on the basis of the observed shortfalls on trend GDP in the countries considered in the analysis.[203] Results of the estimates of total (avoided) costs of a crisis are presented in Table 28.

Table28: GDP change in 2009, estimated initial (avoided) cost of a systemic banking crisis, and estimated total (avoided) cost of a systemic banking crisis.

Country	**2009 GDP change**	**Initial cost of a systemic banking crisis (% GDP)**	**Total (avoided) cost of a systemic banking crisis (% GDP)**
GDP weighted average	-4.26%	-5.49%	91.88%

The SYMBOL model is employed to calculate how the probability of a systemic banking crisis in 19 European countries would change as a result of the new regulation. SYMBOL simulates aggregate loan loss distributions for the banking sector in each country.

Banks in default are those where simulated loan losses are higher than the amount of actual capital, in the no recapitalisation scenario. Banks in default are instead those where losses reduce capital under minimum capital requirements in the recapitalisation scenario.

On the bases of this information, it is possible to derive the distribution of the amount of deposits held by failed banks (in the no recapitalisation scenario) or by banks with capital under minimum capital requirements (in the recapitalisation scenario) and covered by the DGS in each country ("liquidity shortfalls"). **Given this distribution, a systemic financial crisis is defined as one in which a country specific liquidity shortfall (the total amount of insured deposits of failed or undercapitalised banks in each country) exceeds 3% of the country's GDP.**

The SYMBOL model can therefore be used to estimate how the probability of a systemic banking crisis is reduced by changes in the regulatory scenario, as shown in Table 29 below.[204]

Banking Supervision (2010), An assessment of the long-term economic impact of stronger capital and liquidity requirements, http://www.bis.org/publ/bcbs173.pdf). The split used by the Bank of England is, instead, 75% and 25%..

202 It is important to note that the present analysis assumes that the reduction in GDP and its shortfall on trend GDP are solely due to the systemic banking crisis. The GDP variation at 2000 market prices (2009 versus 2008) is taken from AMECO, the annual macro-economic database of the European Commission's Directorate General for Economic and Financial Affairs (DG ECFIN), available at http://ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm

203 The initial cost of a systemic banking crisis is considered as the 2009 shortfall on trend GDP. Trend GDP is the GDP that would have been observed in 2009 if economies would have grown at their potential growth rate for this period. This rate is currently estimated at an average equal to 1.2% for western European countries (for more details on the estimation procedure, see D'Auria F., Denis C., Havik K., Mc Morrow K., Planas C., Raciborski R., Röger W. and Rossi A. (2010), *The production function methodology for calculating potential growth rates and output gaps*, Economic Papers 420, European Commission Directorate General for Economic and Financial Affairs).

204 It is worth noticing how, although obtained with a different methodology, these changes in the probability of a systemic crisis are compatible with those obtained by the Basel LEI Group. See Table 8 on page 29, http://www.bis.org/publ/bcbs173.pdf.

Table 29: Probabilities of a systemic banking crisis (Systemic PD) and its variation across three Scenarios estimated via SYMBOL (weighted averages over the considered countries)

	Scenario 1	**Scenario 2**	**Scenario 3**	**Scenario 4**
	Basel II ***no DGS/RF*** ***Contagion*** ***No Bail-in***	*Basel III, 10.5%* *no DGS/RF* *Contagion* *No Bail-in*	*Basel III, 10.5%* *DGS/RF* *1% Cov. Dep* *No Contagion* *No Bail-in*	*Basel III, 10.5%* *DGS/RF* *1% Cov. Dep* *No Contagion* *Bail-in*
SystemicPD – NO RECAP	0.49%	0.16%	0.12%	0.03%
SystemicPD – RECAP	5.20%	1.66%	1.31%	0.48%
Absolute decrease in the *SystemicPD* from previous Scenario – NO RECAP		**-0.33%**	**-0.04%**	**-0.09%**
Absolute decrease in the *SystemicPD* from previous Scenario – RECAP		**-3.54%**	**-0.35%**	**-0.83%**

Macro-economic benefits coming from the reduction in the probability of a systemic banking crisis are therefore as shown in Table 30.

Table30 Macroeconomic benefits of different regulatory scenarios, % of 2009 GDP

	Basel III 10.5% RWA[205]	DGS/RF 1% Cov. Dep.	Bail-in	Sum
	Scenario 2 vs Scenario 1	Scenario 3 vs Scenario 2	Scenario 4 vs Scenario 3	Scenario 4 vs Scenario 1
No recapitalisation – NPV	12.45%	1.51%	3.39%	17.35%
Recapitalisation - NPV	133.53%	13.20%	31.31%	178.04%
No recapitalisation – Annual	0.30%	0.04%	0.08%	0.42%
Recapitalisation - Annual	3.26%	0.32%	0.76%	4.34%

7.3.3 Net benefits

Net benefits are obtained as the difference between benefits and costs. Table 31 below shows the separate and joint net benefits of imposing Basel III, introducing DGS/RF ex-ante funded for 1% of covered deposits and bail-in introduced according to Option 3 and with the requirement for all banks to have a 10% Minimum LAC. The effect is clearly positive for Basel III when banks do not need to be recapitalised and can be liquidated (no recapitalisation scenario). In this situation, the macroeconomic effect of funding DGS/RF and introducing bail-in is substantially neutral. Funding of DGS/RF and introducing bail-in show instead important benefits when the recapitalisation scenario is considered.

205 NPV of net benefits of imposing different levels of minimum capital requirements are presented in Appendix V.

Table 31 Cumulative and marginal net benefits of introducing higher minimum capital requirements for banks, DGS/RF and bail-in (weighted average of the PV of costs and net benefits as %GDP).

	Basel III 10.5% RWA[206]	DGS/RF 1% Cov. Dep.	Bail-in	Sum
No recapitalisation NPV	5.73%	-0.21%	-2.39%	3.13%
Recapitalisation - NPV	126.81%	11.48%	25.53%	163.82%
No recapitalisation - Annual	**0.14%**	-0.01%	-0.06%	0.08%
Recapitalisation - Annual	3.09%	**0.28%**	**0.62%**	4.00%

Benefits from Basel III can be prudentially considered only limited to what they emerge in the no-recapitalisation scenario. This, due to the fact that Basel III is a prudential tool aimed at avoiding that bank fail, and not that bank become undercapitalised.

Benefits from ex-ante scheme funding and bail-in can instead be considered in the recapitalisation scenario as these instruments can be expected to be particularly used during a systemic banking crisis, where (possibly all) banks become systemic and they need to be kept as going concerns, i.e. in a situation comparable to what happened during the recent crisis that started in 2008.

On this basis, the net cumulative benefits of Basel III, DGS/RF ex-ante funded for 1% of covered deposits and bail-in (according to option 3 with 10% minimum LAC) can be expected to be around 1% of GDP annually.

7.3.4 Sensitivity analysis on net benefits

If costs from bail-in turn out to be higher, analysis shows that banks funding costs might increase not only 5 bp, but up to 15 bp due to bail-in. In this case macroeconomic annual costs and benefits become higher as presented in Table 32. Net benefits decrease but they are still positive and equal to 0.76%.

Table32: Cumulative and marginal net benefits of introducing Basel III, DGS/RF and bail-in (as % of 2009 GDP).

	Basel III 10.5% RWA	DGS/RF 1% Cov. Dep.	Bail-in	Sum
Costs – Annual	0.16%	0.04%	0.14%-0.42%	0.34%-0.62%
Benefits – Annual	0.30%	0.32%	0.76%	1.38%
Net Benefits - Annual	**0.14%**	**0.28%**	**0.34%-0.62%**	**0.76%-1.04%**

206 NPV of net benefits of imposing different capital requirements are presented in Appendix V.

8. How does 10% LAC compares to the Vicker's rule?

The minimum level of bail-in-able liabilities (regulatory capital and bail-inable ("first") liabilities) is set in the analysis as a percentage of total liabilities (excluding regulatory capital). Another option would be to define this minimum level in terms of Risk Weighted Assets (RWA) instead, as proposed by the UK Independent Banking Commission report[207].

Regarding the choice of total liabilities or of RWA, it should be noted the following. Although RWA provide a measure of risks, they may underestimate the risks associated with particular assets (e.g. sovereign bonds). Risk weighted assets also tend to differ across Member States, banks and banking groups.

Table 33 presents average data for an average EU bank and EU large banking group. After the implementation of Basel III, average RWA will be around 50%.

Table 33.Risk Weighted Assets compared to Total assets of EU banks under Basel II and Basel III

	RWA/TA under Basel II rules	RWA/TA under Basel III rules
Average EU large banking group consolidated data, 2010	44%	56%
Average EU banks non consolidated data, 2009	37%	47%

Table 34 presents how much more or less bail-in-able liabilities EU banks would need to hold if the level used by the UK Independent Banking Commission (the so-colled Vicker's rule, set at 17-20% of banks' RWA) rather than the minimum LAC rule (10-15% of total liabilities) were used.

In the case of average banks with RWA to total assets of 50%, the 10% minimum LAC rule would demand 11% more bail-in-able liabilities than if the Vicker's rule were set at 17% of RWA. The 10% minimum LAC rule would instead demand 5% less bail-inable liabilities if the Vickers rule were set at 20% of RWA. A 10% minimum LAC rule is therefore slightly more onerous on average than the Vicker's rule, but would help reduce the risk of shortfalls in eligible liabilities or capital arising on account of overly low risk weights.

[207] http://bankingcommission.s3.amazonaws.com/wp-content/uploads/2010/07/ICB-Final-Report.pdf

Table 34 Comparison between the effects of setting a minimum amount of 'bail-in-able ' "first" liabilities on Total Liabilities compared to setting it on Risk Weighted Assets.

Bank RWA/TA	Total liability coefficient (Minimum LAC rule, L)	RWA coefficient (Vicker's rule, V)	Difference in the amount of bail-in-able liabilities (L/V -1)	Total liability coeff. (Minimum LAC rule, L)	RWA coeff. (Vicker's rule, V)	Difference in the amount of bail-in-able liabilities (L/V -1)
20%	15%	17%	332%	15%	20%	267%
30%	15%	17%	185%	15%	20%	142%
40%	15%	17%	111%	15%	20%	80%
50%	15%	17%	67%	15%	20%	42%
60%	15%	17%	38%	15%	20%	17%
70%	15%	17%	17%	15%	20%	-1%
20%	12.5%	17%	260%	12.5%	20%	206%
30%	12.5%	17%	137%	12.5%	20%	102%
40%	12.5%	17%	76%	12.5%	20%	50%
50%	12.5%	17%	39%	12.5%	20%	18%
60%	12.5%	17%	15%	12.5%	20%	-2%
70%	12.5%	17%	-3%	12.5%	20%	-17%
20%	10%	17%	188%	10%	20%	145%
30%	10%	17%	90%	10%	20%	61%
40%	10%	17%	41%	10%	20%	20%
50%	**10%**	**17%**	**11%**	**10%**	**20%**	**-5%**
60%	10%	17%	-8%	10%	20%	-22%
70%	10%	17%	-22%	10%	20%	-34%

9. Comparison of DGS/RF funding with the existing taxes (levies) applied in various Member States

In the following we consider eight known proposals on taxes (levies) from BE, CY, DE, FR, AT, PT, SE and UK, which we apply to the bank structures of 19 Member States. Most taxes (levies) are based primarily on total balance sheets subtracting customer (or covered) deposits and some parts of bank's capital. Only the Belgian tax is based on customers' deposits, the French on risk weighted assets.[208]

Estimations are based on 2009 unconsolidated data from Bankscope, on the same sample of banks that have been used to estimate the needs of DGS/RF funds via the SYMBOL model (see Table 1 in Appendix 4).

Table 35 shows the present values of the amount of collected funds when applying for 10 consecutive years the proposed taxes (levies).[209] Each column refers to a different tax (levy), while in the rows one can read the present value of the amount of cumulated funds for each of the 19 MS. The estimates are extrapolated for the full banking sector assuming that all banks have the same balance sheet structure as that of the banks in the sample for the respective country. Tax revenues are discounted at 2.5% interest rate per annum. Table 36 shows the same amounts as a percentage of each country 2009 GDP, highlighting that the present value of cumulated funds would range on average between 0.2% (FR levy) to around 1.7% (AT levies) of the GDP.

Tables 37 and 38 compare the estimated taxes (levies) with the amount of DGS/RF funding needs (1% of covered deposits) obtained using the SYMBOL model as described in the previous sections. Table 37 presents the ratio between the estimated taxes (levies) and the amount of funds for DGS+RF purposes. Table 38 shows the same ratio considering funds for resolution purposes only.[210]

In Table 37 colours are used to emphasize which levies are in line with DGS+RF needs (yellow cells), which are below (red cells) and which levies over-perform compared to the

[208] A detailed description of the taxes (levies) is provided in Annex IX.

[209] The analysis assumes a constant revenue for each year, equal to the one collected for 2009.

[210] It is assumed that the amount of funds for resolution purposes is 1/2 of the total amount of DGS+RF funds, which is loosely in line with the relative weight of covered deposits and interbank exposures shown in Table 5 for an average EU bank. As rules on the determination of the total amounts of DGS funds in each MS are still under negotiation in the Council and the European Parliament and the amount of RF funds is part of the present proposal, any rule adopted in this study cannot reflect the final form of the rule as it will eventually be implemented.

funding needs (green cells). The same criterion has been applied to Table 38 in order to highlight how levies perform compared to RF funding needs only.

Table 35: Present value of collected tax (levies) revenues over a time period of 10 years (mill. €).

	BANK LEVIES/TAXES (See Annex IX for definition)								DGS + RF Funding needs	RF Funding needs (1/2 of DGS+RF)
Country	**BE**	**DE**	**FR**	**CY**	**AT**	**PT**	**SE**	**UK**		
BE	**6,266**	1,560	570	2,830	4,827	1,662	2,908	2,264	2,039	1,020
BG	270	28	71	69	111	39	90	55	157	79
DK	3,943	2,144	669	3,364	5,769	1,997	2,876	2,691	2,035	1,017
DE	40,211	**11,277**	3,912	21,059	35,678	12,431	19,830	16,847	20,872	10,436
IE	3,401	2,726	867	4,027	6,825	2,378	3,269	3,221	2,282	1,141
GR	3,139	489	470	910	1,575	538	1,193	728	1,411	705
ES	20,092	4,121	3,128	9,161	15,467	5,347	8,531	7,329	7,098	3,549
FR	28,414	13,705	**4,781**	20,768	34,909	12,332	19,154	16,615	14,849	7,424
IT	13,091	6,510	2,384	10,462	17,407	6,105	9,007	8,370	6,369	3,185
CY	615	234	121	**383**	646	231	358	307	443	221
LV	148	35	31	74	126	43	68	59	53	27
LU	3,094	1,246	336	1,992	3,387	1,190	1,864	1,594	1,289	644
MT	285	43	35	86	142	51	107	69	88	44
NL	8,593	4,280	1,203	6,675	11,333	3,961	5,914	5,340	4,350	2,175
AT	5,151	1,645	982	2,922	**4,888**	1,696	2,724	2,337	1,918	959
PT	2,577	746	533	1,331	2,258	**775**	1,289	1,065	1,125	562
FI	1,067	842	204	1,162	1,966	695	1,014	930	871	436
SE	3,403	1,690	629	2,732	4,711	1,601	**2,339**	2,186	1,673	837
UK	20,630	12,232	3,012	19,936	33,915	11,785	15,960	**15,949**	11,097	5,549
Total	**164,387**	**65,552**	**23,939**	**109,946**	**185,940**	**64,858**	**98,497**	**87,957**	**80,017**	**40,009**

Table 36: Present value of collected tax (levies) revenues over a time period of 10 years (% 2009 GDP).

	BANK LEVIES/TAXES							
Country	**BE**	**DE**	**FR**	**CY**	**AT**	**PT**	**SE**	**UK**
BE	**1.85%**	0.46%	0.17%	0.83%	1.42%	0.49%	0.86%	0.67%
BG	0.77%	0.08%	0.20%	0.20%	0.32%	0.11%	0.26%	0.16%
DK	1.77%	0.96%	0.30%	1.51%	2.59%	0.90%	1.29%	1.21%
DE	1.68%	**0.47%**	0.16%	0.88%	1.49%	0.52%	0.83%	0.70%
IE	2.13%	1.71%	0.54%	2.52%	4.28%	1.49%	2.05%	2.02%
GR	1.34%	0.21%	0.20%	0.39%	0.67%	0.23%	0.51%	0.31%
ES	1.91%	0.39%	0.30%	0.87%	1.47%	0.51%	0.81%	0.70%
FR	1.49%	0.72%	**0.25%**	1.09%	1.83%	0.65%	1.00%	0.87%
IT	0.86%	0.43%	0.16%	0.69%	1.15%	0.40%	0.59%	0.55%
CY	3.63%	1.38%	0.71%	**2.26%**	3.81%	1.36%	2.11%	1.81%
LV	0.80%	0.19%	0.17%	0.40%	0.68%	0.23%	0.36%	0.32%
LU	8.13%	3.27%	0.88%	5.23%	8.90%	3.12%	4.90%	4.19%
MT	4.86%	0.73%	0.59%	1.47%	2.43%	0.87%	1.82%	1.18%
NL	1.50%	0.75%	0.21%	1.17%	1.98%	0.69%	1.03%	0.93%
AT	1.88%	0.60%	0.36%	1.07%	**1.78%**	0.62%	0.99%	0.85%
PT	1.53%	0.44%	0.32%	0.79%	1.34%	**0.46%**	0.76%	0.63%
FI	0.62%	0.49%	0.12%	0.68%	1.15%	0.41%	0.59%	0.54%
SE	1.17%	0.58%	0.22%	0.94%	1.62%	0.55%	**0.80%**	0.75%
UK	1.32%	0.78%	0.19%	1.27%	2.17%	0.75%	1.02%	**1.02%**
Average	**1.50%**	**0.60%**	**0.22%**	**1.00%**	**1.69%**	**0.59%**	**0.90%**	**0.80%**

Table 37: Ratio between estimated taxes (levies) - present value of revenues collected in 10 years – and funding needs for DGS+RF purposes.

	BANK LEVIES/TAXES							
Country	**BE**	**DE**	**FR**	**CY**	**AT**	**PT**	**SE**	**UK**
BE	**308%**	77%	29%	140%	237%	81%	143%	111%
BG	171%	18%	45%	44%	71%	26%	57%	36%
DK	194%	105%	33%	165%	284%	98%	141%	132%
DE	192%	**54%**	18%	101%	171%	60%	95%	81%
IE	149%	120%	38%	177%	299%	104%	144%	141%
GR	222%	35%	33%	65%	111%	38%	84%	51%
ES	284%	59%	44%	129%	218%	75%	120%	104%
FR	192%	93%	**32%**	140%	236%	83%	129%	113%
IT	206%	102%	38%	165%	273%	96%	141%	132%
CY	140%	53%	27%	**87%**	146%	53%	81%	69%
LV	278%	66%	59%	140%	236%	81%	128%	111%
LU	240%	96%	26%	155%	263%	93%	144%	123%
MT	324%	48%	39%	98%	162%	59%	122%	78%
NL	198%	99%	27%	153%	261%	92%	137%	123%
AT	269%	86%	51%	153%	**255%**	89%	143%	122%
PT	230%	66%	48%	119%	201%	**69%**	114%	95%
FI	123%	96%	24%	134%	225%	80%	117%	107%
SE	204%	101%	38%	164%	282%	96%	**140%**	131%
UK	186%	110%	27%	180%	306%	107%	144%	**144%**
Average	**206%**	**83%**	**30%**	**138%**	**233%**	**81%**	**123%**	**110%**
St Dev	**56%**	**27%**	**12%**	**38%**	**63%**	**23%**	**26%**	**30%**

Table 38: Ratio between estimated taxes (levies) - present value of revenues collected in 10 years – and funding needs for RF purposes.

	BANK LEVIES/TAXES							
Country	**BE**	**DE**	**FR**	**CY**	**AT**	**PT**	**SE**	**UK**
BE	**615%**	153%	56%	278%	473%	163%	285%	222%
BG	343%	36%	90%	88%	142%	50%	115%	71%
DK	388%	211%	66%	331%	567%	196%	283%	265%
DE	385%	**108%**	37%	202%	342%	119%	190%	161%
IE	298%	239%	76%	353%	598%	208%	287%	282%
GR	445%	69%	67%	129%	223%	76%	169%	103%
ES	566%	116%	88%	258%	436%	151%	240%	207%
FR	383%	185%	**64%**	280%	470%	166%	258%	224%
IT	411%	204%	75%	329%	547%	192%	283%	263%
CY	278%	106%	55%	**173%**	292%	104%	162%	138%
LV	554%	132%	117%	278%	471%	162%	254%	223%
LU	480%	193%	52%	309%	526%	185%	289%	247%
MT	647%	97%	79%	196%	323%	116%	243%	157%
NL	395%	197%	55%	307%	521%	182%	272%	246%
AT	537%	172%	102%	305%	**510%**	177%	284%	244%
PT	458%	133%	95%	237%	402%	**138%**	229%	189%
FI	245%	193%	47%	267%	451%	159%	233%	213%
SE	407%	202%	75%	327%	563%	191%	**280%**	261%
UK	372%	220%	54%	359%	611%	212%	288%	**287%**
Average	**411%**	**164%**	**60%**	**275%**	**465%**	**162%**	**246%**	**220%**
St Dev	**111%**	**55%**	**23%**	**74%**	**127%**	**44%**	**50%**	**59%**

The following conclusions can be drawn. In the countries where tax (levies) are already set, they fulfil apparently different scopes: the DE, FR and PT taxes (levies) cover the needs of financing resolution, whereas the CY, SE and UK taxes (levies) cover both DGS+RF needs.

The revenues raised with the Belgian and Austrian taxes (levies) are much higher (more than the double) than those required to finance DGS and RF combined.

Assuming to extend each already existing levy (tax) in all MS, it can be seen that values are quite volatile, as it is summarized by standard deviation values in Table 39 and 40.

Appendix 1: Case studies

(1) Lehman's case under bail-in[211]

According to market estimates, Lehman's balance sheet was under pressure from perhaps $25 bn unrealised losses on illiquid assets. But bankruptcy expanded that shortfall in practice, to roughly $150 bn of shareholder and creditor losses.

With bail-in, officials could have proceeded as follows. First, the concerns over valuation could have been addressed by writing assets down by $25 billion, roughly wiping out existing shareholders. Second, to recapitalise the bank, preferred-stock and subordinated-debt investors would have converted their approximately $25 billion of existing holdings in return for 50% of the equity in the new Lehman. Holders of Lehman's $120 billion of senior unsecured debt would have converted 15% of their positions, and received the other 50% of the new equity.

The remaining 85% of senior unsecured debt would have been unaffected, as would the bank's secured creditors and its customers and counterparties. The bank's previous shareholders would have received warrants that would have value only if the new company rebounded. Existing management would have been replaced after a brief transition period.

The equity of this reinforced Lehman would have been $43 billion, roughly double the size of its old capital base. To shore up liquidity and confidence further, a consortium of big banks would have been asked to provide a voluntary, multi-billion-dollar funding facility for Lehman, ranking ahead of existing senior debt. The capital and liquidity ratios of the new Lehman would have been solid. A bail-in like this would have allowed Lehman to open for business on Monday.

(2) Application of bail-in in Denmark

In the autumn of 2008 the Danish parliament passed a legislative package which included a two-year government guarantee of all unsecured, senior liabilities issued by (almost) all Danish banks. The total amount guaranteed was approximately double Danish GDP. when this general guarantee expired, a new set of rules for winding up defaulted banks came into force on 1 October 2010, with a view to ensuring that failing Danish banks would no longer receive state financial aid. Under this new winding-up scheme, unsecured creditors are therefore no longer guaranteed full coverage of their claims.

Two failures of Danish banks have been handled under the scheme, each leading to significant haircuts on senior creditors:

1. Amagerbanken on 6 February 2011 - the initial haircut for subordinated creditors whose claims were not covered by the DGS was set at 41%, but after a subsequent assessment the final payout was increased from 59% to 84.4%.

2. Fjordbank Mors on 26 June 2011—holders of senior unsecured claims reportedly faced a 26% loss.

(3) Application of winding-up scheme: Amerbanken failure

[211] See article "From bail-out to bail-in" published on the Economist of 28/01/10, http://www.economist.com/node/15392186?story_id=E1_TVPJNTRG

The bank failed to meet the solvency requirement set by the Danish FSA. During the weekend, the bank entered into an agreement with the financial stability company (FSC), the public body in charge of winding-up, under which it transferred all of its assets to a newly formed subsidiary bank under the FSC. Customers' normal banking business (e.g. use of credit and debit cards) was not affected during the weekend. The bank opened as usual on Monday morning with no apparent difference for the customers, since the bank continued to provide services critical to the wider economy.

However, shareholders and subordinated creditors were wiped out. The bank's unsubordinated creditors were paid a preliminary amount of DKK 15.2 billion (€2bn), corresponding to about 59% of their prior claims. Payment was effected by the new bank taking over liabilities of the same amount. Unsubordinated creditors (including depositors whose net deposits exceeded €100,000) thus had to anticipate losses of about 41%. The final valuation was made within three months of resolution and resulted in a supplementary dividend of 25.6%, thus 84.4% in total.

The FSC injected capital (and liquidity) into the newly formed subsidiary bank, which earns a market return. The risk is borne by the new winding-up section of the depositor and investor guarantee fund, which is funded by the members of the fund (i.e. Danish banks). Thus, the fund provides a loss guarantee to the FSC, such that there is no immediate financial risk to the Danish state.

(4) Aims and effects

While it was recognised that weaker banks could be confronted by increased financing costs, the introduction of the bail-in framework affected a wider group of Danish banks, which experienced credit ratings downgrades to reflect the reduction in the 'systemic state support uplift' to their stand-alone ratings. Some Danish banks lost such support altogether, while it was reduced to one notch for the largest of them. This rating impact has affected and increased their cost of funding.

(5) Subsequent measures

Partly in response to the unintended consequences of the bail-in framework in the form of funding problems for Danish banks, on 25 august 2011, Denmark introduced the 'consolidation package'. among other measures, the package aims to incentivise healthy institutions to take over defaulted financial institutions, thereby reducing the likelihood of a winding down taking place which entails debt-write down for senior creditors. The new regime was tested recently in the case of a small Danish bank. This tool can only be applied if the compensation from the FSC does not exceed the loss to the FSC were it to apply the bail-in framework instead. The bail-in framework remains in operation, thus providing a 'last resort' option. it may be applied when it is estimated to be more expensive to take over a bank with compensation, than wind it up through debt write-down and a bridge bank.

(6) Conclusions

First, on both occasions when it was applied, the bail-in framework facilitated the rapid resolution of the failing bank, without triggering financial stability or requiring actual or contingent financial support from the state. However, neither bank could be viewed as a major systemically important bank, so their experience cannot necessarily be extrapolated to all other banks.

Second, the 'prudent' valuation of the failing bank's assets, such that the initial haircut erred on the high side with creditors reimbursed the excess later, ensured that the counterparties of the bridge bank could be confident that it would remain solvent even after thorough subsequent valuations had been undertaken. This too contributed to financial stability.

Third, creditors may face lower costs when their liabilities are written down under the bail-in framework, than under liquidation.

Fourth, it is important to ensure that liquidity issues are addressed where necessary, when debt write-down is applied.

Fifth, the funding of bank resolution needs to be arranged. in the Danish scheme, funding is provided by an extension of the (largely industry-funded) DGS that provides a loss guarantee to the FSC.

Appendix 2: Description of the sample of the 16 large EU banking groups

Data on balance sheets of 16 large banking groups are presented in the Table below and refers to end 2010.[212]

Description of the Bankscope sample for the 16 large EU banking groups used in the analysis

Bank Name	Total Assets (m€)	Total Liabilities (m€)	Total Interbank Debt (m€)	Total Interbank Credit (m€)	Total Covered Deposits (+) (m€)	Total Capital (m€)	RWA (m€)
Banco Bilbao	552,738	517,810	40,856	15,815	108,375	34,928	334,633
Banco Santander SA	1,217,501	1,152,993	53,386	43,135	250,190	64,508	646,017
BNP Paribas	1,998,158	1,932,786	170,108	62,718	353,526	65,372	795,123
Commerzbank	754,299	720,378	93,610	41,916	124,570	33,921	298,340
Crédit Agricole	1,593,529	1,558,446	155,338	363,843	320,295	35,083	491,759
Deutsche Bank AG	1,905,630	1,865,208	92,377	92,377	271,807	40,422	387,402
Dexia	566,735	554,924	98,490	53,379	63,833	11,811	168,437
HSBC	1,837,089	1,742,708	87,748	160,414	339,229	94,381	1,141,763
ING Bank	933,073	888,818	72,852	51,828	292,190	44,255	441,928
Intesa Sanpaolo	658,757	639,465	35,181	36,012	118,248	19,292	385,968
Lloyds Group	1,161,700	1,107,191	59,004	35,466	169,362	54,509	658,438
Nordea Bank	580,839	562,398	40,736	7,963	90,172	18,441	242,464
Rabobank Group	652,536	620,357	23,476	33,511	168,100	32,179	259,969
Royal Bank of Scotland	1,702,968	1,645,397	115,740	67,847	219,728	57,571	754,242
Société Générale	1,132,072	1,102,092	64,492	42,391	198,450	29,980	455,005
UniCredit	929,488	904,094	91,789	56,656	215,164	25,393	528,535

Source: Bankscope

[212] For the analysis referred to average banks, the sample used is the one presented in Appendix 4 and refers to 2009.

Appendix 3: Breakdown of liabilities categories into relevant security and maturity classes

Split of Uncovered Deposits (as percentage of total non-equity liabilities).

	Uncovered Deposits				
	up to 1 month	**over 1 month and up to 3**	**over 3 months and up to 6**	**over 6 months and up to 1 year**	**over 1 year**
% of Total Uncovered Deposits (Source ECB[213])	*41%*	*18%*	*1%*	*15%*	*26%*

Split of Interbank Liabilities (as percentage of total non-equity liabilities).

	Interbank Debt				
	Secured Interbank	**Unsecured Interbank**			
		up to 1 month	**over 1 month and up to 3**	**over 3 months and up to 6**	**over 6 months**
% of Interbank Debt (Source Moody's[214])	*26.8%*	*73.2%*			
% of Total Unsecured Interbank (Source ECB)	-	*35%*	*16%*	*18%*	*30%*

Split of Other Liabilities (as percentage of total non-equity liabilities).

	Wholesale Debt					
	Unsecured Short-term Debt			**Long-term Debt**		
	up to 1 month	**over 1 month up to 3 months**	**over 3 months up to 6 months**	**over 6 months up to 1 year**	**Unsecured**	**Secured**
% of Total Wholesale Debt (Source: Moody's)	*13.4%*			*86.6%*		
% of Total Short term (Source: ECB)	*35%*	*16%*	*18%*	*30%*	-	-
% of Total Long term (source FitchRatings[215])	-	-	-	-	*30%*	*70%*

213 ECB MFI statistics

214 Moody's "Bank Debt liability and Maturity Profiles -2011 Update"16 June 2011.

215 FitchRatings “Banks` use of Covered Bonds Funding on the Rise" 10 march 2011

Appendix 4: The SYMBOL Model

1 Introduction

The SYMBOL model (Systemic Model of Banking Originated Losses) has been developed by the Commission's Joint Research Centre (JRC), the Directorate General Internal Market and Services, and experts on banking regulation[216].

The model estimates the aggregated losses deriving from bank defaults, explicitly linking Basel capital requirements to the other key tools of the banking safety net, i.e. Deposit Guarantee Schemes (DGS), bank Resolution Funds (RF).

SYMBOL estimates the benefits of the new bank regulatory framework both as a decrease in ***costs to public finances*** in case of bank defaults, and as a decrease in ***probabilities that bank defaults generate costs to public finances***.[217]

The model operates in two steps: the first step is the estimation of an average default probability for the assets of any individual bank,[218] by means of the features of the Basel FIRB (Foundation Internal Ratings Based) loss distribution function; the second step is the estimation – via a Monte Carlo simulation - of the distribution of aggregate (systemic) losses by country on the basis of individual banks' asset default probabilities.

The aggregate country-level distributions of bank losses are estimated according to different regulatory scenarios, covering the introduction of Basel III, the setting up of DGS/RF and of bail-in. It is thus possible to provide an assessment of the relevance of potential bank losses on public finances in the various scenarios.

1.1 Estimation of individual bank assets' default probability

The first running step of SYMBOL is the estimation of the distribution of individual bank losses mainly on the basis of two inputs: i) publicly available bank financial statements; and ii) publicly available regulatory capital requirements imposed by regulators, from which a probability of default of the bank asset/loan portfolio is estimated.

The main data source is *Bankscope*, a proprietary database of banks' financial statements produced by Bureau van Djik. The dataset covers a representative sample of banks in most EU countries. When needed and when possible, *Bankscope* data have been integrated with public information on bank financial statements released by Supervisory Authorities and/or Central Banks.[219] European Central Bank (ECB) data have also been used to complete or correct the dataset.[220] Table 1 presents aggregated information about the variables relevant for SYMBOL simulations for the considered samples of banks.

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216 For technical details see: De Lisa R, Zedda S., Vallascas F., Campolongo F., Marchesi M. (2011), Modeling Deposit Insurance Scheme Losses in a Basel 2 Framework, Journal of Financial Services Research, 40(3), 123-141.

217 The methodology used in this section has also been applied in the Commission's Public finances in EMU - 2011, European Economy Series, Vol 3, 2011, Directorate General Economic and Financial Affairs. Public Finances Report 2011. In Chapter 5 of this report SYMBOL is also used in the estimation of the macro-economic benefits by estimating "liquidity shortfalls" originated by bank defaults.

218 The current version of SYMBOL considers banks at unconsolidated level.

219 The European Commission asked for data to the Member States Supervisory Authorities and/or Central Banks. Among the considered Member States, only Bulgaria, Cyprus, Ireland and Latvia provided the requested information.

220 Data from ECB have been used for various purposes. For instance, in the *Bankscope* sample some values of key variables were missing for some banks. In some cases missing values have been filled in using estimations obtained starting from ECB aggregated data on banks' ratio such as the minimum capital ratio, the solvency ratio or the Tier I ratio. Moreover ECB data have been applied to estimate

Banks operate within the Basel regulatory framework, which imposes that banks satisfy minimum capital requirements for credit risk. In particular, these minimum capital requirements are expected to allow banks to cover losses with capital in at least 99.9% of the cases.

The distribution of losses is computed by loan category according to a regulatory statistical model of credit risk. The assessment made by banks of the default probability of each loan class is not publicly available.

The regulatory model is known[221], as well as all relevant parameters used for the calculation, except for the default probabilities of the banks' assets/obligors which are assessed by the banks themselves and validated by the regulators.

SYMBOL estimates the average implied default probability of the obligors as assessed by the banks - based on the assumption that banks' assets are entirely made of loans[222] - consistently with the publicly available data on capital requirements and on the values for the other parameters of the credit risk model set by the regulator.[223]

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the size of the *Bankscope* sample and to rescale SYMBOL result on the entire population of banks in each country. Finally, ECB data have been employed to check the reliability of interbank data in *Bankscope*.

221 For the purposes of the SYMBOL model, unexpected losses are computed according to the Basel FIRB formula, which is a specifically calibrated version of the Vasicek model for portfolio losses. Basel III has modified some of the parameters of the FIRB formula and raised the standards banks' capital must satisfy in order to meet minimum capital requirements. On the Vasicek model: see Vasicek (1991). On the Basel FIRB approach, see Basel Committee on Banking Supervision (2006). On the Basel III Accord, see Basel Committee on Banking Supervision (2010).

222 Banks must comply with capital requirements not only for their lending activity and credit risk component. Banks assets are in fact not only made of loans, and there are capital requirements that derive from for market risk, counterparty risk, and operational risk, etc. The main assumption currently behind SYMBOL is that banks assets consist entirely of loans, so that all capital requirements are considered are for credit risk. However, except for very large banks with extensive and complex trading activities, this simplifying assumption that banks assets are made only of loans and, as a consequence, that capital requirements only derive from these, is not excessively distortive as the credit risk usually accounts for a very large share of banks' total capital requirements.

223 The other parameters, set at their default values, are: Loss Given Default (LGD), correlation between banks' assets, maturity and other correction parameters.

Table 1: Description of the Bankscope samples used in SYMBOL simulations, data as of end 2009[224].

	Number Group 1 Banks	Number Group 2 Banks	Sample % Population[225]	Total Assets (m€)	Total Liabilities (m€)	Total Interbank Debt[226] (m€)	Total Interbank Credit[227] (m€)	Total Covered Deposits (+) (m€)	Total Capital Requirements (8% RWA) (m€)	Total Capital (m€)
BE	3	20	82.26%	878,336	829,934	184,888	160,678	260,890	23,413	48,401
BG(*)	0	24	92.68%	33,624	28,960	6,377	6,377	13,763	2,190	4,664
DK	3	96	71.05%	756,678	708,878	143,362	92,279	118,179	23,749	47,800
DE	6	1476	64.19%	4,648,331	4,415,620	1,086,016	790,975	1,093,841	125,452	232,711
GR	3	13	71.42%	322,714	295,667	43,441	20,313	135,758	16,781	27,047
ES	8	135	73.95%	2,370,807	2,188,636	348,780	226,113	542,332	115,565	182,171
FR	17	178	102.59%	7,191,608	6,817,107	842,666	779,727	1,550,504	245,024	374,500
IE(*)	5	19	101.91%	1,221,181	1,155,789	276,738	148,729	147,145	44,121	65,392
IT	8	465	81.81%	2,827,051	2,556,174	188,375	195,958	476,963	97,416	270,876
CY (*)	0	15	80.80%	107,446	100,436	53,067	53,067	22,661	4,883	7,011
LV(*)	0	21	72.65%	19,088	17,037	5,943	2,609	3,995	1,127	2,050

224 Year 2009 is the latest year available in Bankscope and, even more importantly, 2009 is the year on which the Basel and the CEBS committee have based their Quantitative Impact Study exercises for the foreseen change on banks' capital and RWA when moving from Basel II to Basel III.

225 The sample of banks covered in each Member States represents the indicated percentage of total assets for any Member State as shown for 2009 in the 2010 ECB EU banking structures publication, computed as the amount of total assets for all banks minus total assets of branches from abroad. European Central Bank (2010), EU banking structures, http://www.ecb.int/pub/pdf/other/eubankingstructures201009en.pdf

226 A correction factor for the volume of the interbank debt/credit has been applied to the following MS, to correct for the inclusion of some classes of debts certificates: GR (56.5%), FR (39.1%), IT (26.9%), LU (79.8%), and AT (48.4%). The correction factors employed have been estimated using the 2010 ECB Banking Sector Stability, Table 11a.

227 Data on interbank credits was not available for BG and CY so equality of interbank debits and credits has been assumed.

LU	1	55	68.35%	465,539	441,916	169,984	161,827	103,441	11,485	23,622
MT	0	10	43.83%	18,076	16,225	5,222	2,689	6,893	760	1,851
NL	4	17	78.02%	1,680,455	1,600,687	319,699	398,659	314,059	46,903	79,768
AT	1	172	29.88%	306,457	282,380	50,382	39,692	71,381	14,656	24,077
PT	3	11	66.49%	323,762	297,421	43,561	34,505	82,952	17,704	26,342
FI	1	8	78.36%	290,500	275,621	54,361	79,820	48,998	7,968	14,879
SE	3	63	52.37%	455,355	422,301	97,604	122,872	75,383	16,356	33,054
UK	7	78	73.97%	4,278,074	4,074,946	743,978	691,049	464,241	110,757	203,129

1.2 Computation of aggregate bank losses across different regulatory scenarios

Individual banks' losses can be simulated on the basis of the estimated average implied probability of default of each bank's obligors and the shape of the distribution of losses assumed in the Basel FIRB approach.

In particular, SYMBOL generates individual bank losses via a Monte Carlo simulation,[228] taking into account the correlation between the assets of different banks due to the presence of common shocks in the economy. Banks simulated losses are then compared with the banks' capital: whenever losses exceed capital, banks are considered to fail.[229]

Losses are also compared with Excess Capital (i.e. total capital minus the Minimum Capital Requirements) to determine if a bank, even if not failed, would need to be recapitalised in order to continue its operations. In the first case, a "no recapitalisation scenario" distribution of losses is obtained (i.e. only losses in excess of capital are considered in need of being covered by the safety net), in the second case a "recapitalisation scenario" distribution is obtained, representing a case where the safety net should also provide the capital necessary to avoid that undercapitalized banks go out of operations (i.e. because of a credit market freeze or due to the systemic importance of defaulted banks).[230]

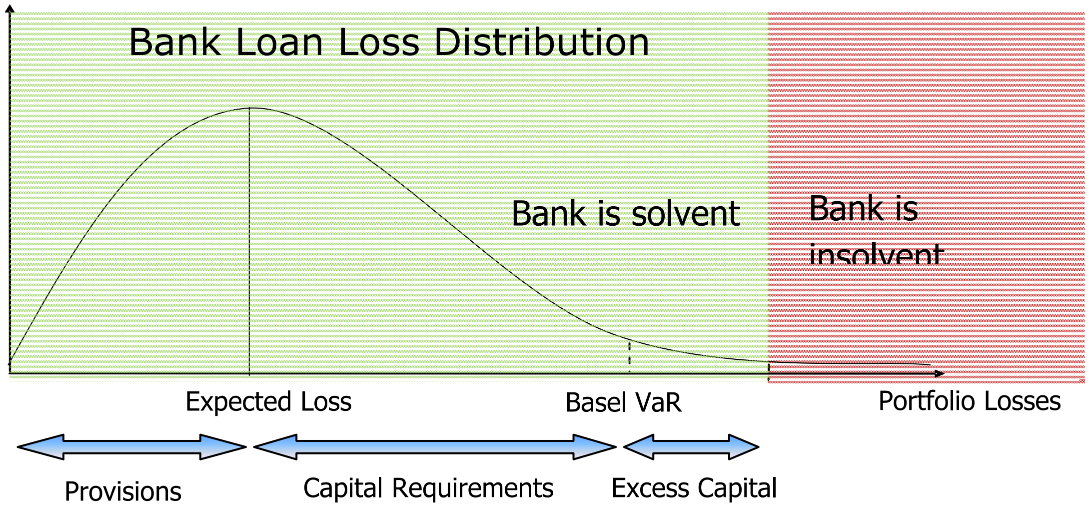
Figure 1 shows for the "no recapitalisation scenario" a density function of bank loan losses as an example of the Basel treatment of credit risk.

[228] A test on the stability of results has been conducted, see footnote 86 for details.

[229] Although related, the probability of individual bank default is different from the probability of default of its obligors, because the former also depends on, among other things, i) the possibility that other banks fail and transmit their losses to the bank via the interbank market and ii) the functioning and the capacity of intervention of the regulatory system at large.

[230] In the current SYMBOL simulations, recapitalization funding needs refer only to situations where at least one bank fails (losses higher than regulatory capital) and they are obtained as the total funds necessary to bring all undercapitalized banks, including also those which are failing, to their Minimum Capital Requirements.

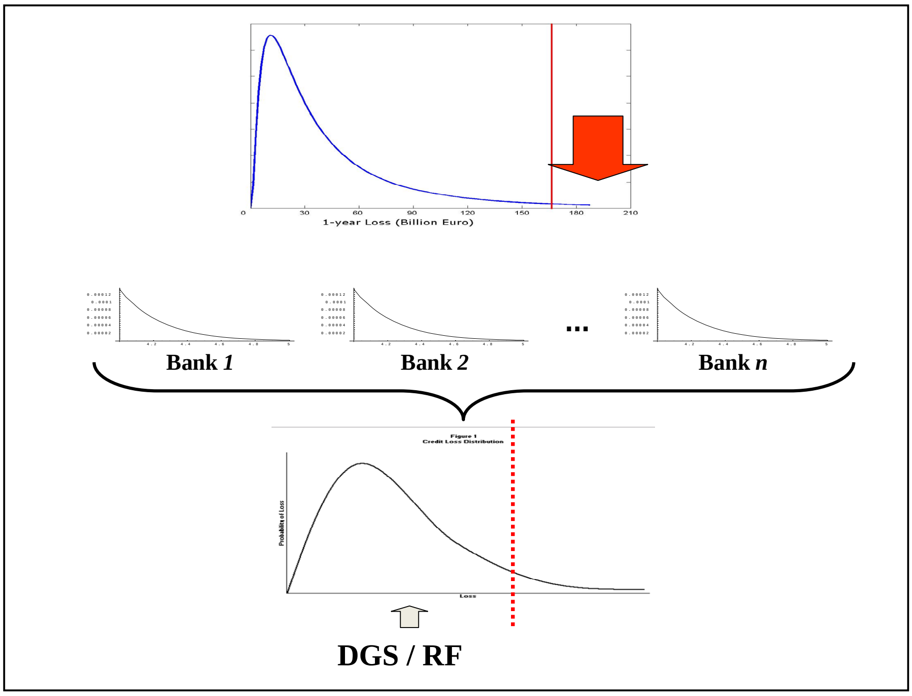
Figure 1: Individual bank loss distribution (no recapitalisation scenario)



The function plots the probability of occurrence of bank loan losses, measured on the vertical axis against the size of the losses, measured on the horizontal axis. Note that the distribution is skewed to the right; there is a much smaller probability of extremely large losses and a higher probability of losses that are closer to the mean and median loss.

Figure 2 sketches the various steps of the methodology. SYMBOL estimates losses not covered by bank's capital (the red tail of the individual bank' loss distribution in Figure 1), as illustrated in the top panel of the figure, and the losses that could be covered or not by the other financial safety net tools - Deposit Guarantee Scheme and Resolution Funds – as illustrated in the bottom panel on Figure 2.

Figure 2: Steps of the methodology. Estimation of the loss distribution of individual banks; estimation of the tail risk above available capital; estimation of the aggregated systemic risk; inclusion of DGS/RF effect.



The probability distribution of aggregate losses is computed under two cases. The first case is named "no-contagion": banks are considered to default orderly without possibly creating contagion with the other banks to which they are connected via the interbank market. The second case is named "contagion": banks are considered to default with the possibility of creating contagion effects on the other banks to which they are connected via the interbank market, in order to capture systemic linkages between banks besides the fact that their assets are correlated.[231]

In the "contagion" case, whenever a bank defaults, it is assumed that 40% of the amounts of its interbank debts are passed on as losses to creditor banks and distributed among them. Losses are distributed following a criterion of proportionality: the portion of loss absorbed by each bank is proportional to the share of its creditor exposure in the interbank market[232]. A default driven by contagion effects takes place whenever this additional loss results in any new bank defaulting. The contagion process is considered until no new additional bank defaults.[233]

231 Only contagion via the domestic market is modelled in the current version of SYMBOL.

232 Also creditor banks that are already defaulted continue accumulating further losses until contagion stops.

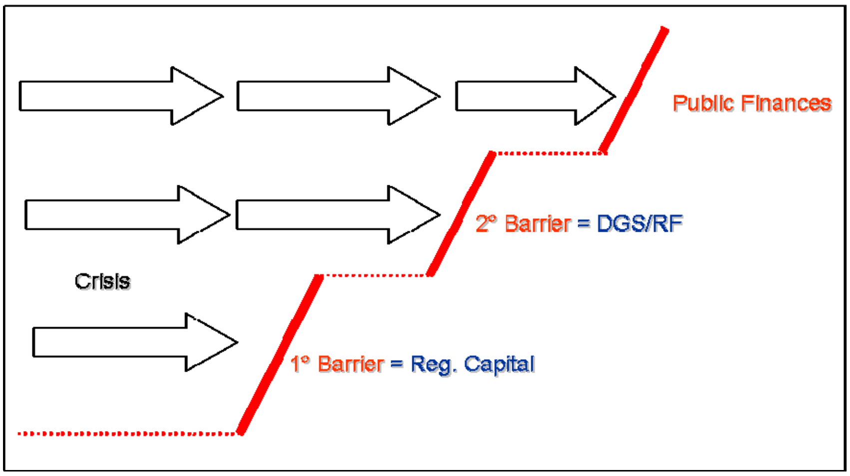
233 The magnitude of contagion effects partially depends on the two assumptions made: first the 40% percentage of interbank debits that are passed on as losses to creditor banks in case of failure, and, second, the criterion of proportionality used to distribute these losses across banks, which derives from the fact that a bank-to-bank interbank lending matrix is not yet available to the Commission services. A loss of 40% on the interbank exposure is coherent with the upper bound of economic research on this issue. See e.g.: James C. (1991), Mistrulli P.E. (2007), Upper C., Worms A. (2004). Concerning the fact that the model distributes extra losses according to a criterion of proportionality, a sensitivity test has been developed which demonstrated that results of SYMBOL are not relevantly affected by this assumption.

Aggregate (systemic) losses with and without contagion are finally obtained and are computed as the sum of the losses in excess of banks' capital over the entire bank sample. Losses are then divided by the sample size to obtain the aggregated loss distribution for the entire bank population of a country.

1.3 The impact of aggregate bank losses on public finances

SYMBOL can be used to analyse how losses produced by the banking system can potentially impact the conditions of a country's public finances. The methodology proceeds as follows. Losses generated in the banking system are first covered by banks' capital and, when this is insufficient, by the various tools present in the regulatory financial safety net, which act progressively as barriers to absorb bank losses (see Figure 3). It is then assumed that the losses that cannot be absorbed or prevented with instruments such as DGS and RF (and bail-in, where available) hit government finances, as it happened during the last financial crisis.[234]

Figure 3: Banking system safety net tools.



Given simulated losses hitting individual banks and data on banks' capital and the funds available to safety net tools, the model estimates the probability that public finances are hit by bank losses. It also estimates the amount of funds that should be injected in the banking system by public interventions when the protection given by all existing tools of the financial safety net have been exhausted.

[234] DGS and RF are assumed to cover all or part of the excess losses (i.e. losses in excess of banks' capital) deriving from banks defaults in order to protect depositors and block spill-over/contagion effects respectively. Liquidity effects deriving from banks defaults are assumed to be neutralized by the intervention of a third party liquidity provider such as a central bank.

Appendix 5: A simple methodology to compute macroeconomic costs and benefits applied to the Basel III framework

A simple methodology first proposed by the Bank of England[235] has been used, after adapting it to multiple safety net tools and to an EU setting, to estimate the macro-economic costs of:

- setting banks minimum capital at 10.5% of the Risk-Weighted Assets (RWA), under the Basel III definition of capital;
- introducing a Deposit Guarantee Scheme / Resolution Fund (DGS/RF) on top of MCR set at various levels of funding
- introducing bail-in according to one of the five considered options ;

The methodology employed allows estimating macro-economic costs and benefits on the basis of - essentially – four pieces of information:

- first, the level of recapitalization implied by the introduction of the new Basel III definition of capital and RWA, and the application of increased levels of MCR;
- second, the level of funding of DGS/RF;
- third, the minimum level of bail-inable bonds required by regulation, that depends on the level of capital banks would have in a fully implemented Basel III scenario;
- fourth, how different levels of capitalization modify the probability of a systemic banking crisis (*SystemicPD*).[236]

The first three pieces of information are needed to obtain the macroeconomic costs of regulation. The fourth piece of information is needed to obtain the macroeconomic benefits of regulation.

Recapitalization estimates are obtained combining information on the 2009 levels of capital from publicly available banks' balance sheets with information on the impact of introducing Basel III contained in the Quantitative Impact Study conducted by CEBS (now EBA) and the Basel Committee.[237] As far as minimum capital requirements (MCR) are concerned: banks are considered as obliged to meet Basel II MCR, which are satisfied by their 2009 capital without any need for recapitalization,[238] or they can be considered as obliged to recapitalize in order to meet 10.5% Risk Weighted Assets (RWA) MCR based on new and stricter definitions of RWA and eligible capital as set under Basel III.

The level of funding of GDSRF is assumed to be 1% of covered deposits.

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235 Bank of England (2010), "Financial Stability Report", (Issue 27) Box7, http://www.bankofengland.co.uk/publications/fsr/2010/fsr27.htm

236 See section 4.1 for the definition of *SystemicPD* used in the analysis.

237 We estimate banks' capital ratios under Basel III stricter definitions of eligible capital and RWA by using official balance sheet data for each bank and applying some corrective factors representing the average changes in RWA and capital for each country and banks' group. The Basel Committee and CEBS have published average variations in bank capital ratios due to the implementation of Basel III. In this report, we have used the country-level confidential data on the estimated variation in banks' capital ratios which underlie published figures. See Basel Committee of Banking Supervision (2010), *Results of the comprehensive quantitative impact study*, http://www.bis.org/publ/bcbs186.pdf and Committee of European Banking Supervisors (2010), *Results of the comprehensive quantitative impact study*, http://www.eba.europa.eu/cebs/media/Publications/Other%20Publications/QIS/EU-QIS-report-2.pdf

238 In this case banks' capital is calculated based on the 2009 publicly reported capital by banks and on the basis of an estimate of the effects of applying the new Basel III definitions of capital and Risk Weighted Assets (RWA), without any recapitalization by banks.

On the basis of the level of capital banks reach in a Basel III 10.5% scenario, the minimum level of bail-inable bonds to comply with a minimum loss absorbing capacity is simply obtained by difference.

The analysis has been developed for 7 EU Member States[239] using 2009 data for a large sample of banks contained in *Bankscope* and augmented by further analysis of Commission Services, as well as integrations from Supervisory Authorities.[240] Moreover, ECB data has been used to complete or adjust the dataset.[241]

<u>Macroeconomic Costs</u>

The methodology adopted to compute the costs from banks' recapitalisation is composed of the following steps and assumptions:

1) Total recapitalization needs are estimated. In particular, first the level of capital under the new Basel III definitions of eligible capital and of RWA is estimated. Then, it is assumed that only banks that, under the new definitions, possess a capital ratio lower than the minimum required need to recapitalize, and that they raise just enough capital to reach the MCR. For each level of MCR considered, aggregate required recapitalisation per country is calculated as the sum of all additional capital required by those banks that need to recapitalize in the country.[242]

2) When banks need to raise additional capital to meet newly introduced higher MCR, they are assumed to substitute debt with equity. Costs generated by this change in the composition of banks' liabilities are obtained by multiplying the increase in capital due to the need to recapitalise times the difference between the cost of equity and the average cost of debt for banks.[243]

3) Banks pass on to non-financial firms the newly generated costs they have to face on their funding. This is achieved by increasing lending spreads.

4) The increase in the cost of capital for non-financial firms face can be estimated based on their current levels of leverage and corporate taxation.

5) The increase in the cost of funding for non-financial firms results, in a decrease in their investments and thus into a permanent reduction in GDP. A calibrated Cobb-Douglas production function is used to transform increased funding costs for non-financial firms into a decline in GDP.[244]

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239 Analyzed countries are Germany, Ireland, Spain, France, Italy, Portugal and the United Kingdom. Results are presented on an aggregate basis using weighted averages on GDP.

240 The EC requested data to Supervisory Authories and/or Central Banks of all involved MS. Data have been provided only by Ireland.

241 Appendix 4 contains aggregated data on samples of banks used in the analysis for each relevant member State (in particular: DE, IE, ES,FR, IT,PT,UK).

242 The original Bank of England methodology, as well as other analyses in the literature, does not rely on micro-level data on banks' capital. As a consequence, it implicitly assumes that banks always hold exactly the minimum required level of capital. On the contrary, in this analysis banks that have a capital ratio higher than the minimum required are considered for their <u>actual</u> level of capital.

243 The Modigliani-Miller theorem does not hold in the considered specification as the cost of equity and debt are not considered to change due to a modification in banks' leverage. The introduction (even partly) of the Modigliani-Miller theorem reduces the increase in banks' funding costs due to higher MCR. For how the partial or total application of the MM theorem affects costs, see Equation 2.

244 The Bank of England methodology is basically that of a static framework, where reactions by banks and firms to increased capital costs are not taken into consideration.

Costs are in particular given by the equation:

(7) Equation 1

$$Costs = \Delta WACC\ of\ Banks \cdot \frac{Assets}{TotLoans} \cdot \left[(1 - tax_{firm}) \cdot leverage\right] \cdot \frac{\varepsilon_{CoC}^{y}}{CostOfCapital} \cdot DF_{\infty}$$

Variation in banks' funding costs

Variation in banks' spreads
(due to change in WACC of banks)

Variation in non-financial firms' cost of capital

where:

$\Delta WACC$ of banks = Variation in the banks' Weighted Average Cost of Capital

Assets = banks' assets

TotLoans = Loans of banks to non-financial firms;

tax_{firm} = non-financial firms' tax rate;[245]

leverage = banks' lending share of firms financing;

CostOfCapital = current cost of capital/funding for non-financial firms;

ε_{CoC}^{y} = elasticity of GDP to cost of capital, based on a Cobb-Douglas specification with 30% elasticity of GDP to capital

DF_{∞} = permanent rent discount factor, defined as $DF_{\infty} = \frac{1+i}{i}$, (*i* being the discount rate equal to 2.5%, leading to a discount factor of 41).

The first ratio in Equation 2 is the variation in the funding costs (i.e. the variation in the WACC, the Weighted Average Cost of Capital) for banks due to the need to recapitalise to reach any required MCR level. The multiplication between the first and the second ratio estimates the variation in banks' lending spreads due to their need to recapitalise. The multiplication by the term in square brackets allows transforming this variation into an increase in non-financial firms' cost of capital/funding. The elasticity of GDP to non-financial firms' cost of capital, given by ε_{CoC}^{y}, divided by non-financial firms cost of capital translates this increase in non-financial firms costs of capital into a decline in

245 Tax rates for banks and firms are set equal to estimated corporate tax rates in each country.

GDP. The last term, DF_{∞} is used to pass from an annual cost (as GDP declines) to the net present value of an infinite stream of such annual costs.

Table 1 presents the calibration of model parameters used for the estimation of macro-economic costs and benefits.

Table 1: Model parameters used applying the Bank of England cost-benefit framework.

Country	Banks' required return on equity	Bank's average interest rate on debt	Cost of capital for firms	Corporate tax rates[246]	Discou nt factor	Output GDP elasticity of capital	Leverage (bank lending share of firms' financing)[247]	Bank loans to firms in 2008 (billion €)[248]
DE	10%	5%	10%	30.00%	2.5%	30%	56.8%	3,229
IE				7.60%			47.4%	481
ES				34.00%			46.6%	1,986
FR				29.10%			31.5%	2,290
IT				31.50%			57.8%	1,808
PT				22.60%			47.4%	282
UK				22.20%			52.6%	5,118

The analysis is performed for 7 different recapitalisation scenarios. In the first and baseline scenario, called Basel II, banks are considered to be obliged to meet Basel II MCR, which are satisfied by their 2009 capital without any need for recapitalization. Their capital and RWA are, however, considered according to the new Basel III Accord definitions of eligible capital and RWA.[249] In the six other scenarios, MCR are introduced where banks recapitalise (if needed) to respect the various MCR levels considered, as detailed in Table 2.

[246] For the applied tax rates see country chapters of European Commission European Commission (2010), *Taxation trends in the European Union*, http://ec.europa.eu/taxation_customs/taxation/gen_info/economic_analysis/tax_structures/index_en.htm.

[247] For a study on leverage performed on six EU MS see De Socio A. (2010), *La situazione economico-finanziaria delle imprese italiane nel confronto internazionale*, Questioni di Economia e Finanza n.66, Banca d'Italia (http://www.bancaditalia.it/pubblicazioni/econo/quest_ecofin_2/QF_66/QEF_66.pdf). For IE, and PT the EU average has been used. It should be noted that data refer to overall leverage, not just bank debt leverage. As we currently have no access to the share of bank loans in total corporate debts we take the most unfavourable hypothesis and assume that non-bank debt is negligible. This has the effect of amplifying the impact of increases in banking spreads on firm's cost of capital, resulting in a higher estimate of costs of increases in banks' cost of capital.

[248] See Table 6 in ECB *EU Banking Structures* 2010,

http://www.ecb.int/pub/pdf/other/eubankingstructures201009en.pdf

[249] In other words, while banks do not need to recapitalize under Basel II rules, they might result to be under-capitalized under the new definitions of capital of Basel III

Table 2: MCR scenarios.

Scenario name	**BII**	**BIII 6.5%**	**BIII 8%**	**BIII 10.5%**	**BIII 12%**	**BIII 13.5%**	**BIII 15%**
Capital and RWA definition	Basel III	Basel III	Basel III	Basel III	Basel III	Basel III	Basel III
Minimum capital requirement (% RWA)	none	6.50%	8%	10.50%	12%	13.50%	15%

Table 3 describes the costs of the introduced scenarios. Each column refers to a different scenario while the last column describes costs implied by an increase in capital equal to 1% of RWA.

The first row shows average total recapitalization needs (i.e. compared to the Basel II baseline scenario). Recapitalization needs are obtained as the sum of recapitalisation needs for individual banks with a level of capital below the minimum required according to the Basel III definitions of eligible capital and RWA. Banks holding a capital above the MCR do not need to recapitalise and, therefore, do not change their level of capital.[250]

Using information in the last column of the first row allows to express the recapitalization needed in the different scenarios considered as a percentage of banks' RWA (second row).

These recapitalization needs produce the variations in banks' cost of funding, lending spreads and in non-financial firms' cost of capital shown in rows 3-5 (see Equation 2 above for details on calculations).

<u>The yearly costs</u> in the various recapitalization scenarios, as presented row 6, are obtained by multiplying the variations in the cost of capital by the constant elasticity of GDP to the cost of capital and dividing by non-financial firms cost of capital.

From yearly costs it is possible to obtain, as shown in the last row of Table 4, the net present value of an infinite stream of these yearly costs.

[250] To obtain recapitalization needs for the entire banking system in each country, total recapitalization needs for the sample of banks in each country are rescaled on the basis of the share of total assets in the sample relative to the entire population (see Appendix 4 for detailed figures on samples used in each country).

Table 3: Costs of the various recapitalization scenarios. All figures are a GDP-weighted average over the analyzed MS.

		BIII 6.5%	**BIII 8%**	**BIII 10.5%**	**BIII 12%**	**BIII 13.5%**	**BIII 15%**	**Δ1%**
1	**Recapitalization needs** when moving from the baseline scenario to the other MCR scenarios. (**billion €**)	2.63	11.84	46.90	76.03	109.84	144.81	21.75
(8)	**(9)** *Recapitalization needs* ***when moving from the baseline scenario to the other MCR scenarios*** ***(% of RWA)***	0.15%	0.56%	2.17%	3.49%	5.03%	6.62%	n.a.
3	**Variation** in banks' **funding costs** when moving from the baseline scenario to the other MCR scenarios (**bps**)	0.4	1.5	5.8	9.3	13.4	17.7	2.67
4	**Variation** in **lending spreads** when moving from the baseline scenario to the other MCR scenarios (**bps**)	1.0	3.7	12.7	20.2	28.8	37.7	5.57
5	**Variation** in **non-financial firms cost of capital** when moving from the baseline scenario to the other MCR scenarios (**bps**)	0.3	1.1	3.8	6.1	8.9	11.7	1.8
6	**Yearly costs** when moving from the baseline scenario to the other MCR scenarios (**%GDP**)	0.01%	0.05%	0.16%	0.26%	0.38%	0.50%	0.08%
7	**NPV of costs** when moving from the baseline scenario to the other MCR scenarios (**%GDP**)	0.55%	1.93%	6.72%	10.78%	15.59%	20.57%	3.22%

Other recent studies have performed a costs-benefit analysis of increasing the level of MCR for banks.[251] In Table 4 we report available results, for comparison purposes.

[251] For reviews see, for instance EEAG (2011), *The EEAG Report in the European Economy* "Taxation and Regulation of the Financial Sector", CESifo, 147-169. http://www.cesifo-group.de/portal/page/portal/ifoHome/B-politik/70eeagreport, and Independent Commission on Banking (2011) *Interim Report: Consultation on Reform Options (Vickers report),* http://s3-eu-west-1.amazonaws.com/htcdn/Interim-Report-110411.pdf

Table 4: Estimated impacts of a 1% increase in banks' capital ratios, literature overview.

	Area of analysis	Δ banks' funding costs (bps)	Δlending spreads (bps)	Δfirms' cost of capital (bps)	Yearly costs (% GDP)	Costs NPV (% GDP)
This study	EU-7	2.7	5.6	1.83	0.08%	3.22%
This study, calibrated using parameter values as in the Cumulative Impact Assessment.[252] 0%MM (50%MM)	EU-7	5.2 (2.5)	10.8 (5.4)	3.6 (1.8)	0.15% (0.08%)	6.25% (3.13%)
Cumulative Impact Assessment, 0%MM (50%MM)	EU-27		10.0 (5.2)	2.8 (1.6)	0.21% (0.11%)	8.61% (4.57%)
BCBS (2010b), median effect [253]	World	13			0.09%	3.69%
Bank of England[254]	UK				0.10%	4.10%
Barrell et al.[255]	OECD-14		18		0.08%	3.28%
Kashyap et al. 100% MM[256]			2.5		0.01%	0.45%
Miles et al.[257] 45%MM			6	3.4	0.05%	2.1%
Slovik, Cournède (2011)[258]	Euro Area	9.4	14.3	1.6	0.06%	2.46%
EU Parl study[259]	EU-27	6			0.18%	7.38%

252 QUEST III model with the following parameters. Banks' RoE = 14.3%, Average cost of banks' debt = 2.5%, see the Commission Staff Working Paper "Comprehensive Evaluation of Financial Market Regulatory reform" for details.

253 BCBS (2010), *An assessment of the long-term economic impact of stronger capital and liquidity requirements*, Basel Committee on Banking Supervision, Bank for International Settlements, Basel 2010, www.bis.org/publ/bcbs173.pdf.

254 Bank of England (2010), *Financial Stability Report*, London 2010, www.bankofengland.co.uk/publications/fsr/2010/fsrfull1006.pdf.

255 Barrell, R., David, E.P., Fic, T., Holland, D., Kirby, S. Liadze, I. (2009), *Optimal regulation of bank capital and liquidity: how to calibrate new international standards*: http://www.fsa.gov.uk/pubs/occpapers/op38.pdf

256 Kashyap, S. and S. Hanson (2010), *An Analysis of the Impact of "Substantially Heightened" Capital Requirements on Large Financial Institutions*, University of Chicago.

257 Miles D., Yang J., Marcheggiano G. (2011), *Optimal Bank Capital*, External MPC Unit Discussion paper No. 31: revised and expanded version, Bank of England, http://www.bankofengland.co.uk/publications/externalmpcpapers/extmpcpaper0031revised.pdf

258 Slovik P., Cournède B. (2011), *Macroeconomic Impact of Basel III*, OECD Economic Department Working Papers, No 844, OECD Publishing, http://www.oecd-library.org/docserver/download/fulltext/5kghwnhkkjs8.pdf?expires=1311763661&id=id&accname=guest&checksum=B2A5654CA0003A5337E702720D080C92

259 European Parliament (2011), *CRDIV – Impact Assessment of the Different Measures within the Capital Requirements Directive IV*, http://www.europarl.europa.eu/activities/committees/studies/download.do?language=en&file=41211#search=%20CRD%20IV%20

Estimation of the probability of a systemic banking crisis with the SYMBOL model

The SYMBOL model is used to estimate the variation in the *SystemicPD* due to the introduction of different MCR levels.

Starting from micro data on banks' MCR and total capital, SYMBOL allows estimating the aggregated distribution of losses[260] and liquidity shortfalls[261] originated by defaults in the banking system and potentially hitting society and the economy. Liquidity shortfalls are defined as the total amount of insured deposits held by defaulted banks.

To this aim, SYMBOL operates in two steps: the first step is the estimation of a average default probability for the assets of any individual bank, by means of the features of the Basel FIRB (Foundation Internal Ratings Based) loss distribution function; the second step is the estimation – via a Monte Carlo simulation - of the distributions of aggregate losses and liquidity shortfalls by country, on the basis of individual banks' portfolio average default probabilities and total capital. SYMBOL simulations are run by allowing for contagion effects between banks.[262]

In order to estimate the variation in the *SystemicPD*, a definition of systemic banking crisis is needed. In the present work a systemic banking crisis is defined as a situation where aggregate liquidity shortfalls due to bank defaults exceed a certain threshold, beyond which public authorities find it difficult to intervene by injecting liquidity and therefore would have a hard time in trying and avoiding that the crisis spreads further.

The threshold for a systemic banking crisis in any country is assumed to be equal to 3% of its GDP.[263] This threshold is loosely in line with the average effective expenditures faced by EU countries in the last financial crisis. It also coincides with the deficit limit in the European Stability and Growth Pact. This threshold is finally also a prudent estimation for 2009 of the "fiscal space" that was available to EU governments before public finances would get under tension according to financial analysts.[264]

260 Losses are defined as losses in excess of banks' capital, i.e. as (extra-)losses of defaulted banks.

261 Liquidity shortfalls represent the liquidity problem potentially caused by a reimbursement of depositors of defaulted banks and of a bank run. Insured deposits are defined as deposits which are entitled to be repaid by a Deposit Guarantee Scheme in case of a bank failure. Insured deposits are obtained for each bank by considering total deposits from non-banking customers, and then applying two correction factors at country level: one to obtain the share of deposits eligible for coverage (equal to the share of non-banking financial corporations deposits in each country, based on ECB and Eurostat statistics) and one to obtain from this amount the total of deposits which are entitled to coverage (equal to the share of eligible deposits which are estimated to be under the minimum coverage threshold, set at € 100.000. Based on updates to the statistics presented on Deposit Guarantee Schemes by the Commission.)

262 Whenever a bank defaults, it is in particular assumed that 40% of the amounts of its interbank debts are passed as losses to creditor banks and distributed among them. The hypothesis of a 40% loss in the interbank exposure is coherent with the upper bound of economic research on this issue. See (i) James C. (1991), The Loss Realized in Bank Failures, *Journal of Finance*, 46, 1223-42; (ii) Mistrulli P.E. (2007), Assessing Financial Contagion in the Interbank Market: Maximum Entropy versus Observed Interbank Lending Patterns, *Bank of Italy Working Papers* n. 641; (iii) Upper C., Worms A. (2004), Estimating Bilateral Exposures in the German Interbank Market: Is there Danger of Contagion?, *European Economic Review*, 8, 827-849.

Losses are distributed following a criterion of proportionality: the portion of loss absorbed by each bank is proportional to the share of its creditor exposure in the interbank market. A default driven by contagion effects takes place whenever with this additional loss any new bank default. The contagion process continues until no new additional bank defaults. Concerning the fact that the model distributes extra losses according to a criterion of proportionality, a sensitivity test has been developed which demonstrated that results of SYMBOL are not relevantly affected by this assumption.

263 The GDP is taken from the AMECO dataset by the European Commission Directorate for Economic and Financial Affairs, http://ec.europa.eu/economy_finance/db_indicators/ameco/index_en.htm

264 Market analysts commonly identify a condition of tension on public finances when the ratio of government interest payments on government tax revenues, gets beyond 10%. In 2009, the average "fiscal space" before hitting this 10% threshold was some 2% of GDP for EU Member States. See for example the article "The grim rater" of 4th May 2010 issue of The Economist.

Table 5 summarizes average results. The first row shows the average *SystemicPDs*, obtained first applying the 3% threshold to the distribution of liquidity shortfalls for the considered countries and then averaging over the MS. The second row reports the reduction in the *SystemicPD* when moving from the baseline scenario Basel II to any of the other scenarios The last row presents results in marginal terms, i.e. the reduction in the *SystemicPD* normalised per point of RWA recapitalisation in each scenario is reported.

Table 5: Impact of the various recapitalization scenarios on the probability of systemic banking crisis. All figures are a GDP-weighted average of the effect in the analyzed MS.

		BII	**BIII 6.5%**	**BIII 8%**	**BIII 10.5%**	**BIII 12%**	**BIII 13.5%**	**BIII 15%**
1	**Probability of systemic banking crisis** (*SystemicPD*) under the various MCR scenarios	0.62%	0.55%	0.42%	0.20%	0.13%	0.09%	0.06%
(10	***(11)*** *Reduction in the* SystemicPD ***when moving from the baseline scenario BII to the other MCR scenarios*** *(percentage points)*	-	0.07%	0.20%	0.42%	0.49%	0.54%	0.56%
3	**Reduction in the *SystemicPD*** normalised **per point of RWA** recapitalisation in the various MCR scenarios	-	0.32%	0.30%	0.15%	0.05%	0.03%	0.02%

Macroeconomic benefits under different minimum capital requirements

Following the approach proposed by the Bank of England, benefits are estimated multiplying the reduction in the *SystemicPD*, moving from the baseline scenario Basel II to any of the other MCR scenarios, times the total (avoided) costs on the economy when a systemic crisis hits it (presented in Table 1), and then computing the net present value. The first row of Table 6 presents the net present value of benefits as a percentage of GDP. Corresponding yearly benefits are reported in the second row of the table while corresponding yearly marginal benefits normalised per point of RWA recapitalisation are reported the last row.

Table6: Benefits of the various recapitalization scenarios. All figures are a GDP-weighted average over the analyzed MS.

		BIII 6.5%	**BIII 8%**	**BIII 10.5%**	**BIII 12%**	**BIII 13.5%**	**BIII 15%**
1	**Net present value of benefits** when moving from the baseline scenario BII to the various MCR scenarios (**% GDP**).	3.14%	7.22%	14.34%	16.75%	18.41%	19.42%
(12	***(13)*** *Yearly benefits* ***when moving from the baseline scenario BII to the various MCR scenarios.*** *(% GDP****)***	0.08%	0.18%	0.35%	0.41%	0.45%	0.47%
3	**Yearly marginal benefits** normalised per point of RWA recapitalisation (**% GDP**)	0.28%	0.25%	0.13%	0.05%	0.03%	0.02%

These results can be compared with results obtained by the Basel Committee, which are presented in Table 7.

Table7: Estimated yearly marginal benefits of increasing banks' capital ratio, literature overview.

Capital as % of RWA	**Marginal reduction in the *SystemicPD***	**Implied marginal benefit of increasing capital ratio, % of GDP, BCBS (2010b)**	
		Based on mean avoided losses of 106% of GDP	**Based on median avoided losses of 63% of GDP**
7%	2.60%	2.76%	1.64%
8%	1.60%	1.70%	1.01%
9%	1.10%	1.17%	0.69%
10%	0.50%	0.53%	0.32%
11%	0.40%	0.42%	0.25%
12%	0.30%	0.32%	0.19%
13%	0.20%	0.21%	0.13%
14%	0.10%	0.11%	0.06%
15%	0.10%	0.11%	0.06%

Source: EEAG (2011)[265] table 5.2, based on BCBS LEI report,[266] table A2.2

Comparing the figures, it can be observed that our approach results in lower reductions in the *SystemicPD* per point RWA recapitalisation, and consequently lower yearly benefits. This difference can be explained considering that the definition of what constitutes a systemic banking crisis is very different in the two studies.

Macroeconomic costs-benefits analysis

Comparing costs and benefits as presented in the last two sections, it is possible to estimate net benefits of increasing MCR and determine MCR optimal levels.

Net benefits when moving from the baseline scenario Basel II to any of the considered other MCR scenarios are obtained subtracting costs of Table 3 (last row) from benefits of Table 7 (first row). They are presented in the first row of Table 8.

Table 8: Average net benefits when moving from the baseline scenario BII to the various MCR scenarios (%GDP). All figures are a GDP-weighted average over the analyzed MS.

	BIII 6.5%	**BIII 8%**	**BIII 10.5%**	**BIII 12%**	**BIII 13.5%**	**BIII 15%**
Net present value of net benefits when moving from the baseline scenario BII to the various MCR scenarios (**%GDP**)	2.59%	5.29%	7.62%	5.97%	2.82%	-1.15%
Yearly marginal net benefits normalised **per point of RWA** recapitalisation (**% GDP**)	0.21%	0.17%	0.05%	-0.03%	-0.05%	-0.06%

The MCR increase scenario optimizing the amount of net benefits can be seen to correspond to the 10.5% MCR (i.e. an 8% MCR plus a capital conservation buffer).

The second row of Table 8 shows yearly marginal net benefits (i.e. net yearly benefits normalised per point of RWA recapitalisation). It is possible to see from this table that marginal net benefits go to zero somewhere between the 10.5% and 12% recapitalization scenarios, pointing to the fact that the marginal benefits and marginal costs curves cross somewhere between these two points.

265 See EEAG (2011), "Taxation and Regulation of the Financial Sector", in EEAG Report on the European Economy 2011, 147-169

266 See The Basel Committee on Banking Supervision (BCBS – LEI Group), *An assessment of the long-term economic impact of the stronger capital and liquidity requirements* August 2010.

Appendix 6: A "simple rule" for DGS and RF calibrated on SYMBOL results (no recapitalisation scenario)

We investigate the possibility to determine DGS/RF funding needs using a simple rule calibrated on the SYMBOL systemic losses in the no recapitalisation scenario.

We focus the analysis on the 99.995th percentile, meaning that the funding needs for DGS+RF are to cover losses in 99.995% of the cases. For this analysis, we work under Scenario 2.bis (Basel III with 10.5% RWA capitalisation, no contagion between banks).

Funding needs at the 99.995th percentile are first regressed against an estimate of covered deposits as of 2009. [267,268] Results show that the fit is extremely good and the coefficient for covered deposits is **1.41%**.

Regressing SYMBOL funding needs at 99.995% against 2009 total liabilities[269] gives instead a coefficient roughly equal to **0.34%**.

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[267] The estimated amount of 2009 covered deposits is obtained combining data from two different sources: 2007 data on deposits estimated by JRC on the basis of a survey among EU DGS held in 2010 (see *JRC Report under Article 12 of Directive 94/19/EEC*) and 2007/2009 data on deposits from ECB (*EU banking structures*, October 2008 and *EU banking structures*, October 2010). The estimation procedure ensures that the proportion of covered deposits does not change from one year to another if the level of coverage remains unchanged, i.e. covered deposits increase proportionally to eligible deposits.

[268] The regression is forced to have no intercept.

[269] The estimated amount of 2009 liabilities used in the analysis is obtained from ECB data in *EU Banking Structures* (October 2010) and in the ECB *EU Banking Sector Stability* (September 2010).

Table 1: Results of the regressions performed to calibrate the simple rule on SYMBOL results.

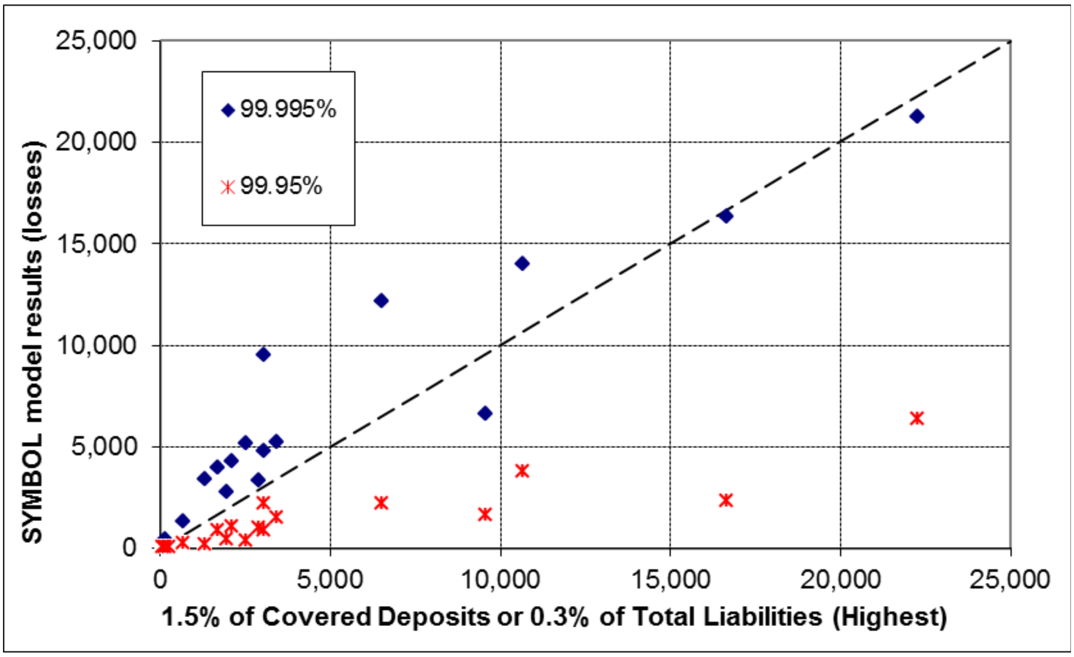
		Regression on covered deposits	**Regression on non-equity liabilities**
Statistics	Multiple R	0.95083019	0.96429716
	R Square	0.90407805	0.92986902
	Adjusted R Square	0.84852249	0.87431346
	Standard Error	3178.71629	2717.98924
	Observations	19	19
Results	Intercept coefficient	0	0
	X Variable coefficient	**1.41%**	**0.34%**
	X Variable Standard Error	0.11%	0.02%
	X Variable Lower 95%	1.18%	0.29%
	X Variable Upper 95%	1.63%	0.39%

On the basis of the regression results, the DGS+RF funding needs are considered according to the following "simple rule":

DGS/RF funding needs = 'simple rule' = max[*1.5% covered deposits, 0.3% total non-equity liabilities*].

As it can be seen from Figure 1 below, while not always coinciding with SYMBOL results at 99.995%, fund sizes based on such a rule would never be smaller than those calculated by SYMBOL at 99.95%.

Figure 1: Results of the simple rule (x-axis) versus SYMBOL results (y-axis).



The dashed line is y=x. Whenever a MS lies above this line it means that funding needs estimated via SYMBOL for this MS are higher than the funding needs estimated using the simple rule. Vice versa, if a MS is below the diagonal, funding needs of the simple rule are higher than those estimated via SYMBOL.

In Table 2 the DGS/RF funding needs for all EU MS, based on the simple rule are presented. The third last column shows the funding needs for DGS+RF, further split following the 54%-46% split rule obtained in SYMBOL results (see Table 2) into the parts of them for DGS (second last column) and RF (last column) purposes respectively.

Table 2: Estimated DGS/RF funding needs based on the simple rule calibrated on SYMBOL losses at 99.995th percentile (data for 2009, m€)

Country	Total Liabilities	Covered Deposits [270]	1.5% covered deposits A	0.3% non-equity liabilities B	DGS + RF C = Higher of [A, B]	DGS 54% of C	RF 46% of C
BE	1,019,685	195,582	2,934	3,059	**3,059**	1,652	1,407
BG	31,471	15,701	236	94	**236**	127	108
CZ	129,698	59,630	894	389	**894**	483	411
DK	1,017,226	126,664	1,900	3,052	**3,052**	1,648	1,404
DE	6,970,615	2,087,206	31,308	20,912	**31,308**	16,906	14,402
EE	14,684	4,711	71	44	**71**	38	33
IE	1,140,899	175,665	2,635	3,423	**3,423**	1,848	1,574
GR	420,895	141,089	2,116	1,263	**2,116**	1,143	974
ES	3,010,189	709,771	10,647	9,031	**10,647**	5,749	4,897
FR	6,671,434	1,484,843	22,273	20,014	**22,273**	12,027	10,245
IT	3,184,578	449,133	6,737	9,554	**9,554**	5,159	4,395
CY	125,249	44,291	664	376	**664**	359	306
LV	24,289	5,330	80	73	**80**	43	37
LT	20,387	8,308	125	61	**125**	67	57
LU	644,367	104,396	1,566	1,933	**1,933**	1,044	889
HU	109,571	33,256	499	329	**499**	269	229
MT	36,972	8,797	132	111	**132**	71	61
NL	2,060,855	435,011	6,525	6,183	**6,525**	3,524	3,002
AT	958,961	159,563	2,393	2,877	**2,877**	1,554	1,323
PL	232,477	88,046	1,321	697	**1,321**	713	608
PT	456,709	112,445	1,687	1,370	**1,687**	911	776
RO	73,263	30,357	455	220	**455**	246	209

[270] Based on DGS and ECB data, as total covered deposits are not available in *Bankscope* for all EU Member States. The weighted average difference (in absolute terms) between this data and the corresponding column of Table 1 in Appendix 4 is 18.9%.

SI	48,783	17,495	262	146	**262**	142	121
SK	45,843	21,692	325	138	**325**	176	150
FI	348,619	87,124	1,307	1,046	**1,307**	706	601
SE	836,518	159,175	2,388	2,510	**2,510**	1,355	1,154
UK	5,548,517	1,010,592	15,159	16,646	**16,646**	8,989	7,657
EU	**35,182,754**	**7,775,873**	**116,638**	**105,548**	**123,979**	**66,949**	**57,030**

ANNEX XIV A COMPREHENSIVE STRATEGY TO RESTORE FINANCIAL STABILITY TO UNDERPIN SUSTAINABLE GROWTH IN THE EU

As soon as the crisis broke in 2007, the EU acted promptly adopting a series of urgent measures to prevent the crisis spreading and limit its extent and impact. In particular the focus was on coordinating the European economic stimulus package to promote recovery, applying the state aid regime firmly but flexibly so as to avoid distortions of competition while allowing banks to restructure, and increasing the amounts guaranteed by Deposit Guarantee Schemes (DGSs) up to €100,000 per account.

Following this wave of “emergency” measures, the Commission launched a programme of reforms which implements the commitments taken by the G20 and aims at tackling more structural issues in the EU financial sector and address the main sources of its vulnerability as unveiled by the crisis:

- The low levels of high quality capital and insufficient liquidity in the banking sector, partly reflecting inadequate and pro-cyclical prudential requirements and failures in risk assessment and management;
- Supervisory shortcomings, particularly with regard to the supervision of individual institutions operating in a cross-border context and to the unregulated financial sector;
- Corporate governance failures which contributed to excessive risk taking practices in financial institutions;
- Insufficient market transparency and inadequate disclosure of information to the authorities including supervisors, particularly with reference to complex structured financial products;
- Lack of adequate regulation and supervision of Credit Rating Agencies;
- Insufficient macro prudential surveillance of the financial sector as a whole to prevent macro-systemic risks of contagion;
- The absence of a harmonised framework to facilitate the orderly wind-down of banks and financial institutions which has contributed to put pressure on Member States to inject public money into banks to prevent a general collapse

The building blocks of this programme were illustrated in the Communication of 4 March 2009, Driving European Recovery, and the Communication of 2 June 2010 'Regulating financial services for sustainable growth" which set out the details of the financial reform package.

The first elements were put in place in the period 2009-2010. The most important is represented by the **new architecture for financial supervision** which involved the establishment of the European Systemic Risk Board, which will ensure that macro-prudential and macro-economic risks are detected at an early stage, and three new European Supervisory Authorities responsible for banking (European Banking Authority or EBA), insurance (.European Insurance and Occupational Pensions Authority or EIOPA) and securities markets (European Securities Markets Authority ESMA) to ensure reinforced supervision and better co-ordination among supervisors.

An important gap in regulation has been plugged through the **Regulations on credit rating agencies ('CRA I'** and **'CRA II')** introducing strict authorisation requirements and supervision for CRAs, and entrusting ESMA with the supervision on CRAs. Moreover the Capital Requirements Directive (CRD) was amended ('**CRD III**') to reinforce capital rules for the trading book and for complex derivatives and to introduce binding rules on remuneration and bonuses in financial institutions. A further regulatory and supervisory gap has been plugged with the Directive on managers of alternative investment funds, including hedge funds (**AIFM Directive**) providing robust and harmonised regulatory standards for all managers and enhancing transparency towards investors.

The interplay between the persisting fragilities of the financial sector, particularly due to the funding conditions for the banking sector, and pressures on governments' public finance and sovereign debt markets, the so called twin crisis', became of mounting source of concern in the end of 2010 and during the first half of 2011.

In order to tackle effectively the twin crisis and to restore the EU economy to sustainable long term growth, the Commission and Member States have developed a coordinated and gradual approach to address both dimensions, i.e. the structural fragilities of the financial sector and the vulnerabilities of sovereign markets, in parallel. This requires bringing to completion the on-going reform programme to achieve a healthier financial sector along a series of measures to deliver a new quality of economic policy coordination to reduce the contagion risks from the vulnerable Member States to other sovereign markets and ensure public-debt sustainability.

The first component is articulated along three dimensions:

I. Improving stability and governance of financial institutions

– Improved stability of financial institutions will be achieved through the new European Supervisory Authorities which will coordinate the work of national supervisors, ensuring coherent supervisory practices and contributing to the establishment of a common rulebook for financial institutions. In the summer 2011, the **Capital Requirements Directive** (CRD) will be revised again **in order to implement the “Basel III” agreement**, which significantly increases the levels of capital which banks and investment firms must hold to cover their risk-weighted assets. The proposal will include provisions to improve risk control and oversight as well as enhance supervisory review of risk governance in financial institutions.

– At the end of 2011, a new legislative proposal on CRAs ('**CRA III**') will tackle further risks related to the functioning of the rating business, such as the "issuer-pays" model, the overreliance on ratings, the lack of competition in the sector, and the specificities of sovereign debt. In that respect the initiative will contribute also to reducing the pressure on sovereign markets.

– A proposal for a review of the **Directive of financial conglomerates** has been adopted to simplify and clarify the Directive with respect to a number of current problems (inadequacy of thresholds, complexity of supervisory tools etc.), and harmonise its application.

– The publication of the results of the 2011 **EU-wide stress test**, based on stricter requirements, better coordination and peer review and a significantly higher degree of transparency, will provide the right incentives for banks to restructure their operations, strengthen their capital base, and regain viability. Coordinated back-stop measures, with market based recapitalisation in the first place, will be set-up to take remedial action for banks failing the stress test. In last resort case of public interventions, the EU State aid rules will provide the appropriate framework to ensure financial stability and a level playing field.

– New **State Aid control measures** based on Article 107(3)(c) TFEU will be introduced as of 1 January 2012 with a gradual tightening of conditions towards a new permanent State Aid Regime. The continuation of the crisis regime under Article 107(3)(b) could be envisaged for those Member States that would be subject to a macroeconomic adjustment programme accompanying financial assistance.

– The legislative proposal for a **new EU bank resolution regime** will establish a series of legal arrangements that allow the relevant authorities to more easily restructure or resolve a distressed credit institution without recourse to public financial support. The new regime will include certain tools ("bail-in") to ensure that the objective of making shareholders and creditors of the credit institutions contribute to the restructuring and resolution of the banks. The approach of increasing market discipline by clearly setting the rules for burden sharing between public and private sector in crisis situation will be a common element also in the State aid framework and in the European Stability Mechanism created for the sovereign, which foresees some private sector involvement.

II. Enhancing efficiency, integrity, liquidity and transparency of markets

– The review of the **Markets in Financial Instruments Directive (MiFID)** will improve transparency, efficiency and integrity of securities markets in several ways. For example, the scope of MiFID will be extended to new types of trading platform and financial products, thus removing some opaque areas of securities markets. Some derogations will be also removed, and transparency requirements will be extended to all kinds of securities, not just shares.

– The **Market Abuse Directive (MAD)** will also be revised to provide for a more effective prevention, detection and sanctioning of market abuses.

– A Regulation has been proposed **on Over-The-Counter (OTC) derivatives markets** implementing the G20 commitment that standardised OTC derivative transactions be cleared via central counterparties (CCPs). If a party to a transaction fails in mid-transaction, the existence of a CCP would remove the risk and uncertainty as to whether the transaction will be completed. A further obligation for OTC derivatives to be registered in trade repositories, with access for supervisors in the EU, will provide a better overview of who owes what and to whom and to detect any potential problems, such as accumulation of risk, early on.

– A proposed **Regulation regarding short selling and Credit Default Swaps (CDSs)** will increase transparency via a requirement for flagging of short orders on trading venues, and notification or disclosure of significant short positions relating to shares and sovereign debt (including through the use of CDSs). This will enable supervisors to detect when such transactions are reaching dangerous levels and consider intervention on markets.

– Further security will be provided by a planned **Securities Law Directive (SLD)**, which will ensure that intermediaries always possess the securities which they maintain for the account of their customers. In addition, envisaged **legislation on Central Securities Depositories (CSDs)** will further secure the post trading handling of securities till their final settlement.

III. Achieving a greater protection and inclusion of consumers and investors

– The Commission has brought forward **proposals to reform Deposit Guarantee Schemes (DGS) and Investor Compensation Schemes (ICS)**, on top of recently agreed increase of the guaranteed amount (to € 100,000 under DGS, € 50,000 under ICS). The proposed revised Directives include improved payout times, better funding of schemes, and a proposal for interlinkages and a mutual support mechanism between schemes (both deposit guarantee and investor compensation), to ensure that schemes in difficulties do not fail, to the detriment of consumers.

– A **legislative proposal on fair practices relating to mortgage credits** will improve the way in which mortgages are sold to consumers, analogous to existing obligations in place for consumer credit; and ensure that all mortgage lenders and intermediaries are properly regulated and supervised.

– The Commission has proposed a Regulation setting an end-date for the completion of the **Single European Payments Area (SEPA)** for direct debits and credit transfers to speed up the process that will make payments all over the Euro zone as easy and quick as domestic payments.

– For **packaged retail investment products (PRIPs)**, a proposal is planned to make sure that all consumers in Europe will in the future be able to get short, focused, and plainly-worded information about investments in a common format, with risks and costs made much clearer and easier to understand, aiding comparisons. In addition, EU rules governing those selling the products will be made more consistent and standardised where necessary.

– To enhance financial inclusion the Commission will table a proposal to ensure EU citizens might have **access to a basic bank account** with electronic payment instruments.

On a macro-financial level, the positive impact on public debt sustainability of these initiatives will be backed by implementing the decisions taken by the European Council in March 2011 on delivering a new quality of economic policy coordination through reinforced economic governance, including the excessive imbalance procedure (EIP), the "Pact for the Euro" and the new European Stability Mechanism (ESM).

ANNEX XV DETAILS ON THE NECESSARY DEROGATIONS FROM STAKEHOLDERS' RIGHTS UNDER EU COMPANY LAW RULES IN THE RESOLUTION PHASE

Directive	Article	Content	Justification for derogations
Second Company Law Directive on the formation of public limited liability companies and the maintenance and alteration of their capital (77/91/EC)			
Serious loss of capital	17(1)	In the case of a serious loss of the subscribed capital, a general meeting of shareholders must be called within the period laid down by the laws of the Member States, to consider whether the company should be wound up or any other measures taken.	In the resolution phase a mandatory convocation of shareholders' meeting can hinder rapid actions by resolution authorities.
Increase of capital	25(1)	Any increase in capital must be decided upon by the general meeting. Both this decision and the increase in the subscribed capital shall be published in the manner laid down by the laws of each Member State, in accordance with Article 3 of Directive 68/151/EEC.	In the resolution phase a mandatory convocation of shareholders' meeting can hinder rapid actions by resolution authorities. Also, shareholders potential negative decision on the increase can be detrimental for the process.
	25(3)	Where there are several classes of shares, the decision by the general meeting concerning the increase of capital referred to in paragraph 1 or the authorization to increase the capital referred to in paragraph 2, shall be subject to a separate vote at least for each class of shareholder whose rights are affected by the transaction.	A separate vote at least for each class of shareholder can hinder rapid actions by resolution authorities.
Expert report when shares are issued for a consideration other than in cash	27 (2)	The consideration referred to in paragraph 1 shall be the subject of a report drawn up before the increase in capital is made by one or more experts who are independent of the company and appointed or approved by an administrative or judicial authority. Such experts may be natural persons as well as legal persons and companies and firms under the laws of each Member State.	The requirement for an expert's valuation is usually time-consuming and can hinder rapid action by resolution authorities.
Pre-emption right	29	(1) Whenever the capital is increased by consideration in cash, the shares must be offered on a pre-emptive basis to shareholders in proportion to the capital represented by their shares. (2) The laws of a Member State:	A pre-emption right allows a shareholder to participate in any new share issue for cash. Member States have to be able to remove the pre-emption rights in situations where it is in the public interest that the bank is

		a) need not apply paragraph 1 above to shares which carry a limited right to participate in distributions within the meaning of Article 15and/or in the company's assets in the event of liquidation; or b) may permit, where the subscribed capital of a company having several classes of shares carrying different rights with regard to voting, or participation in distributions within the meaning of Article 15 or in assets in the event of liquidation, is increased by issuing new shares in only one of these classes, the right of pre-emption of shareholders of the other classes to be exercised only after the exercise of this right by the shareholders of the class in which the new shares are being issued. (3) Any offer of subscription on a pre-emptive basis and the period within which this right must be exercised shall be published in the national gazette appointed in accordance with Directive 68/151/EEC. However, the laws of a Member State need not provide for such a publication where all a company's shares are registered. In such case, all the company's shareholders must be informed in writing. The right of pre-emption must be exercised within a period which shall not be less than 14 days from the date of publication of the offer or from the date of dispatch of the letters to the shareholders. (4) The right of pre-emption may not be restricted or withdrawn by the statutes or instrument of incorporation. This may, however, be done by decision of the general meeting. The administrative or management body shall be required to present to such a meeting a written report indicating the reasons for restriction or withdrawal of the right of pre-emption, and justifying the proposed issue price. The general meeting shall act in accordance with the rules for a quorum and a majority laid down in Article 40. Its decision shall be published in the manner laid down by the laws of each Member State, in accordance with Article 3 of Directive 68/151/EEC. (5) The laws of a Member States may provide that the statutes, the instrument of incorporation or the general meeting, acting in accordance with the rules for a quorum, a majority and publication set out in paragraph 4, may give the power to restrict or withdraw the right of pre-emption to the company body which is empowered to decide on an increase in subscribed capital within the limit of the authorized capital. This power may not be granted for a longer period than the power for which provisions is made in Article 25(2). (6) Paragraphs 1 to 5 shall apply to the issue of all securities which are convertible into shares or which carry the right to subscribe for shares, but not to the conversion of such	recapitalised promptly by the issuance of new shares to a specific new shareholder.

		securities, nor to the exercise of the right to subscribe. (7) The right of pre-emption is not excluded for the purposes of paragraphs 4 and 5 where, in accordance with the decision to increase the subscribed capital, shares are issued to banks or other financial institutions with a view to their being offered to shareholders of the company in accordance with paragraphs 1 and 3.	
Reduction of capital	30	Any reduction in the subscribed capital, except under a court order, must be subject at least to a decision of the general meeting acting in accordance with the rules for a quorum and a majority laid down in Article 40 without prejudice to Articles 36 and 37. Such decision shall be published in the manner laid down by the laws of each Member State in accordance with Article 3 of Directive 68/151/EEC. The notice convening the meeting must specify at least the purpose of the reduction and the way in which it is to be carried out.	A capital reduction may be needed to absorb losses prior to recapitalisation. In the resolution phase a mandatory convocation of shareholders' meeting can hinder rapid actions by resolution authorities. Also, shareholders potential negative decision on the reduction can be detrimental for the resolution process.
	31	Where there are several classes of shares, the decision by the general meeting concerning a reduction in the subscribed capital shall be subject to a separate vote, at least for each class of shareholders whose rights are affected by the transaction.	A separate vote at least for each class of shareholder can hinder rapid actions by resolution authorities.
Creditor protection in the event of reduction of capital.	32	(1) In the event of a reduction in the subscribed capital, at least the creditors whose claims antedate the publication of the decision on the reduction, shall at least have the right to obtain security for claims which have not fallen due by the date of that publication. Member States may not set aside such a right unless the creditor has adequate safeguards, or unless such safeguards are not necessary having regard the assets of the company. Member States shall lay down the conditions for the exercise of the right provided for in the first subparagraph. In any event, Member States shall ensure that the creditors are authorised to apply to the appropriate administrative or judicial authority for adequate safeguards provided that they can credibly demonstrate that due to the reduction in the subscribed capital the satisfaction of their claims is at stake, and that no adequate safeguards have been obtained from the company. (2) The laws of the Member States shall also stipulate at least that the reduction shall be void or that no payment may be made for the benefit of the shareholders, until the creditors have obtained satisfaction or a court has decided that their application should not be	The right to obtain security for claims which have not fallen due by the date of antedate the publication of the decision on the reduction and the rules and conditions accompanying it may hinder the necessary and swift reply by the resolution authorities to counter the crisis.

		acceded to. (3) This Article shall apply where the reduction in the subscribed capital is brought about by the total or partial waiving of the payment of the balance of the shareholders' contributions.	
Directive 2011/35/EC concerning mergers of public limited liability companies		Whole directive	The requirements of the Directive , especially the approval of a merger by the general meeting may hinder the effective use of resolution powers by the resolution authorities. There is a possibility already foreseen for Member States not to apply the directive in cases where the company or companies which are being acquired or will cease to exist are the subject of bankruptcy proceedings, proceedings relating to the winding-up of insolvent companies, judicial arrangements, compositions and analogous proceedings (Art. 1(3)).
Sixth Company Law Directive concerning the division of public limited liability companies (82/891/EEC)		Whole directive	As above, in the context of a domestic division.
Directive 2005/56/EC on cross-border mergers of limited liability companies		Whole directive	As above, in the context of a cross-border merger.
Directive 2004/25/EC on takeover bids	5(1)	Where a natural or legal person, as a result of his/her own acquisition or the acquisition by persons acting in concert with him/her, holds securities of a company as referred to in Article 1(1) which, added to any existing holdings of those securities of his/hers and the holdings of those securities of persons acting in concert with him/her, directly or indirectly give him/her a specified percentage of voting rights in that company, giving him/her control of that company, Member States shall ensure that such a person is required to make a bid as a means of protecting the minority shareholders of that company. Such a bid shall be addressed at the earliest opportunity to all the holders of those securities for all their holdings at the equitable price as defined in paragraph 4.	The mandatory bid rule may cause a burden for the acquiring party in the resolution phase and may thus hinder the necessary measures by the resolution authorities.
Directive 2007/36/EC on the exercise of certain		Whole directive	The Directive focuses on the procedural shareholder rights related to the general meeting.

rights of shareholders in listed companies			They should not be applicable in the resolution stage.

ANNEX XVI IMPACTS ON FUNDAMENTAL RIGHTS

In accordance with Article 52 of the Charter, limitations on these rights and freedoms are allowed. However, any limitation on the exercise of these rights and freedoms must be provided for by the law and respect the essence of these rights and freedoms. Subject to the principle of proportionality, limitations may be made only if they are necessary and genuinely meet the objectives of general interest recognised by the Union or the need to protect the rights and freedoms of others.

Bank resolution measures may interfere with shareholder rights, for instance by suspending or restricting the corporate governance rules that would otherwise apply in troubled banks or by depriving shareholders of their property. The power of a resolution authority to transfer the shares or all or part of the assets of a bank to another entity (using the sale of business tool, the bridge bank tool or the asset separation tool) interferes with the property rights of shareholders as these transfers would be effected without the consent of the shareholders that are normally be required in a pre-insolvency phase. These powers also involve possible disruptions to the property rights of the bondholders that are left with the residual part of the bank, which will be wound down. In addition, the authorities would have the power to decide which liabilities to transfer out of a failing bank, based upon the objectives of ensuring the continuity of services and avoid adverse effect on financial stability. As a result, the bank debt holders may be subject to different treatment.

From the perspective of the Charter of Fundamental Rights and the European Convention for the Protection of Human Rights and Fundamental Freedoms the most relevant provisions concern the protection of property (Article 17 of the Charter and Article 1 of the First Additional Protocol to the Convention). All Member States have signed and/or ratified the European Convention, including the First Additional Protocol. In respect of Article 1 of the First Additional Protocol to the ECHR, the European Court of Human Rights has held that a share in a company's basic capital is a property of the shareholder. A share is capable of being economically valued as any other possession. Therefore, Article 1 of the First Additional Protocol protects bank owners' property interests in their shares. The Court therefore protects shareholdings against deprivation and certain forms of governmental control and interference. However, this right is not granted without any limitation. The State may (only) deprive shareholders of their shares subject to conditions provided by law and to general principles of international law, when there is a public or general interest justifying the measures and against the payment of 'fair' compensation.

The objective pursued by the measures in question is the preservation of financial stability in the European Union. A pre-requirement for the use of these powers is in fact that the bank cannot be wound up under normal insolvency proceedings because this would destabilize the financial system. The measures are designed to ensure the rapid transfer and continuation of systemically important functions (particularly payment transactions, the deposit business and the lending business) in the event of failure of a systemically important bank and at the same time ensure that the non-viable part of the bank can be wound up. If the authorities had to seek the shareholders' and creditors' consent before effecting the transfer, they would not be able to act with the required speed and certainty and thus preserve public confidence in the financial system. The measures furthermore reduce the need to use public funds to rescue banks. If the authorities cannot rapidly transfer the essential bank functions, they are forced to support the whole business including the non-viable part.

The Court of Justice has recognised in a number of judgments that the protection of the banking and financial system is a general interest pursued by EU law and national laws governing banks and financial institutions and that the protection of this interest may constitute a justification for restrictions to the fundamental freedoms of the Treaty under national law, provided that the restrictions are proportionate and suitable to reach the objectives they pursue (see case C 110/84, paragraph 27 and case C 101/94, paragraphs 10 and 26). In another judgement, the Court has considered that maintaining the good reputation of the national financial sector may constitute an imperative reason of public interest capable of justifying restrictions on the freedom to provide financial services (Case C-384/93). Accordingly, the measures in question are in conformity with an objective of general interest pursued by the European Union.

It remains to be assessed whether the restrictions on the right to property resulting from those measures constitute a disproportionate and intolerable interference impairing the very substance of the right to property.

The interference with the right of property is not disproportionate because the framework provides for a right to compensation for the affected shareholders and creditors. Shareholders and creditors are entitled to be compensated for the value of their shares or credits that they would be entitled to under normal liquidation of the company. A further safeguard is the requirements that the amount of compensation should be determined by reference to the value of the business as assessed by an independent valuer. Furthermore, compensation should ensure that shareholders and creditors do not receive less favourable treatment as a result of the application of the resolution tool or use of the resolution power than they would have received if this tool or power had not been used and the entire credit institution had instead entered insolvency under the applicable national law. In particular, where a creditor's claim remains with a credit institution from which assets, rights or liabilities have been transferred to another entity and the residual credit institution is wound up, the creditor should be compensated if the amount received in that winding up is less than the creditor would have received in the insolvency of the institution if the transfer had not been made.

The above rules concerning compensation preserve the essence of the right to property. In fact if the resolution powers were not exercised, the failing company would undergo insolvency proceeding. Under bankruptcy law, the creditors are entitled to a proportional distribution of the proceeds obtained from the sale of the banking assets and the shareholders are entitled to the distribution of what assets remain after the payment of all creditors. This essence is preserved under the principles governing compensation. Therefore the restrictions do not disproportionally restrict the right to property.

As the resolution of banks also involves administrative and judicial procedures, the provisions concerning related rights such as due process and having an effective remedy against the measures are also relevant (Article 47 of the Charter and Article 1 of the First Additional Protocol, and Articles 6 and 13 of the European Convention).

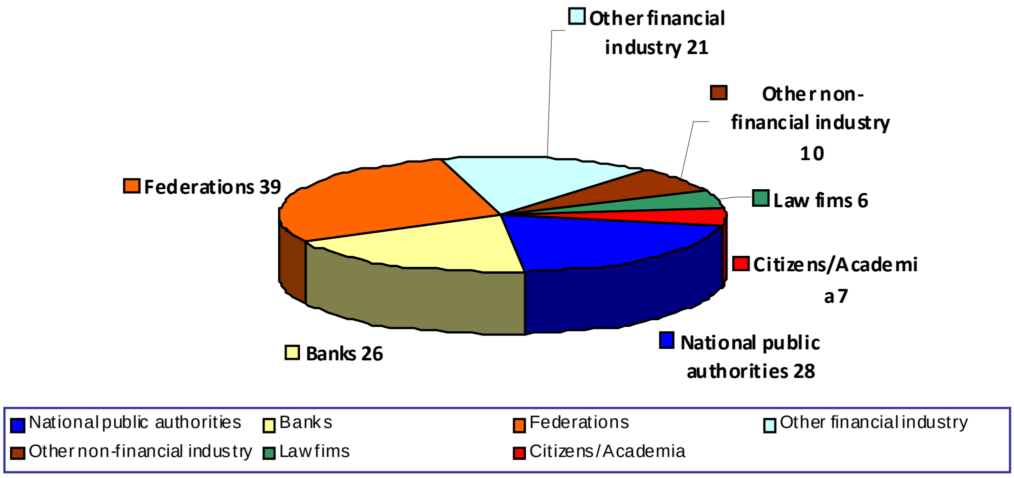
The case law of the European Court of Human Rights indicates that it will give Contracting States wider scope for restricting shareholders' right to due process if they can show that it is an emergency and that the crisis requires expedited procedures. The restriction must not be disproportionate to the task the authorities have set themselves. Articles 6 and 13 of the European Convention, furthermore, set out the shareholder's right to due process and to an "effective remedy". An effective remedy implies that national laws must afford to the individual or entity concerned procedural guarantees allowing a reasonable opportunity for presenting its case and effectively challenging the measures interfering with the rights guaranteed by that provision. Shareholders are thus entitled to have their grievance against the restructuring measures heard, even if the measures alleged to have violated the European Convention are taken by a competent authority and are justified in the public interest.

ANNEX XVII OVERVIEW OF THE RESULTS OF THE PUBLIC CONSULTATION ON TECHNICAL DETAILS OF A POSSIBLE EU FRAMEWORK FOR BANK RESOLUTION AND RECOVERY (JANUARY - MARCH 2011)

Who responded to the public consultation?

The Commission received 140 responses from a variety of stakeholders:

- 28 responses from national public authorities, from 22 EU Member States and 1 EEA Member State
- 3 responses from EU/international organisations (EBA, IMF and ECB).
- 86 responses from industry stakeholders (26 banks, 39 federations and 21 other financial industry)
- 10 contributions from non-financial industry and 6 responses from law firms
- 7 private individuals/academic committees



Scope and authorities

Scope

The majority of respondents agree with the Commission that there is a sound case for applying a resolution regime to all credit institutions and investment firms, but that any decision on what type of institutions to be included must be taken on the basis of a proportionality test; the systemic relevance of the institution concerned is the option favoured by most contributions. The Commission is called upon following the CRD line when defining the categories of investment firms to be covered.

In order to achieve an effective group resolution, respondents suggest that bank holding companies be included in the framework as well. Aware that this option brings along problems (such as the risk that the resolution of the financial part of the group is done at the expense of the non financial), some respondents recommend the creation of sub-holdings for the financial part only (in the context of preventative powers). Some respondents also point out that a clear definition of financial holding is necessary. Some are worried that, by applying resolution at holding level, the groups might engage in a strategy of moving their assets to third countries. Resolution authorities should be able to include bank holding companies even if the holding company does not itself meet the conditions for resolution

Authorities

The main view within the contributions favours leaving the choice of authorities responsible for resolution to each Member State's national discretion, provided that it is clear who the authority in charge is. Banks express their preference to have the same responsible authority in all Member States, as this would facilitate cross border resolution. However, most respondents suggest that contact points or an adequate composition of resolution colleges be defined in the framework.

A considerable amount of contributions consider it more effective to combine resolution and supervision in the same institution, but establish functional separation. Another possibility, as expressed by some of the respondents, would be to establish a differentiation between decision (trigger) and execution. The risk of forbearance should not thus imply the creation of a separated resolution authority.

Even if resolution authorities are a matter of national choice, respondents believe that the EU framework should require that any action take account of the possible impact in other Member States.

Supervision, Preparation and Prevention

Supervision

National authorities found it difficult to estimate the need for increased resources at this stage. Some federations anticipated considerable costs, but without specifying any amounts; other expressed their wish to have the employee dimension taken into account. Only Santander made a quantitative estimation, divided into a one-off cost (spread over 2 years) of 6 million Euros and an additional on-going annual cost of 2.7 million Euros.

Recovery Planning

There is general agreement with the content of the preparatory recovery plans suggested by the Commission. A number of additional elements were suggested by supervisory authorities and banks (such as the identification of potential legal, operational and regulatory implementation barriers; the governance and ownership of the institution; the assessment of the credibility of the recovery plan, including probability of success in response to both idiosyncratic and market wide stress). Federations call for minimal harmonisation and proportionality, while law firms consider that additional criteria must be taken into account (such as equal treatment for creditors).

In case of banking groups, most respondents opt for a group preparatory recovery plan. If entity-specific recovery plans are to be drafted, Member States consider that both host and consolidating supervisors should be allowed to require changes to recovery plans, while the industry believes that only the consolidating supervisor should have such powers.

The proposed mediation role given to EBA in case of disagreement between competent authorities was welcomed by the respondents. However, public authorities and federations do not always mention if the decision issued by EBA should be binding or not for the supervisors involved in the disagreement. Banks are divided: some accept EBA's implication, while others believe that any disagreement should be solved by the consolidating supervisor.

Intra-group financial support

In general, respondents are split on the issue of intra-group asset transfer. Some Member States believe that a framework for asset transferability would improve the ability of groups to prevent financial difficulties and to increase the overall legal certainty and transparency; others fear that it would blur the boundaries of the limited liability of individual companies and become a source of contagion within a group. The main concern from host countries is the provision of up-stream financial support, thus they propose that the supervisor of the subsidiary should have the power to veto each individual transfer on grounds of protection of financial stability. The banking industry is mainly in favour of the framework with the exception of a few respondents, who think that banks are already able to transfer assets within groups under the current rules and are concerned that the framework might reduce flexibility.

To Commission's proposal of limiting the support to loans, guarantees and the provision of collateral to a third party for the benefit of the group entity that receives the support, MS give their support, while the vast majority of the industry respondents would prefer a broader scope. Most respondents believe that any kind of intra-group support should be possible (down-stream, up-stream or cross-stream) and that a mediation role of EBA is necessary; however, on this last issue, again the views are split regarding whether this should imply a binding decision or not. Host MS generally object to a legally binding decision of consolidating supervisor or of EBA.

If the remuneration is fixed within the agreement, respondents consider that only its parameters should be determined, while the price should be established at the moment when the financial support is granted. According to most respondents, a review should not be required.

There is broad acceptance across the board of the conditions proposed by the Commission for the provisions of intra-group financial support. All respondents agree that the decision should be reasoned; only 2 contributions from law firms suggest leaving the matter to national law.

National supervisory authorities agree to grant the power to prohibit or restrict a transaction under a group financial support agreement to the supervisor of the transferor, but the industry is less supportive on the ground that supervisors might use this power for protectionist or ring-fencing purposes. Regarding the deadlines for reaction, the vast majority of respondents indicate that maximum 48 hrs is an appropriate time limit for the competent authority to make a statement and that the supervisor of the beneficiary should also be imposed a time limit for reply.

On the matter of insolvency protections for the transferor and its creditors, the majority of responses coming from supervisory authorities demonstrate a preference for having in place both a priority claim for the transferor and a claw back regime. The industry side is divided between either accepting both mechanism as appropriate, or giving preference to the priority claim, as long as certain conditions are respected (the financial support should be capped at a certain amount, the priority claim ranks below all claims that enjoy priority according to national law, etc). Law firms, on the contrary, tend to reject both legal instruments. MS consider that, if adopted, each instrument should be subject to a time limit, although they tend not to mention the exact amount of months. The industry is more specific, establishing a 12 months maximum limit. A small number of banks and federations consider that no time limit should be imposed whatsoever.

Answers from Member States on the disclosure of agreements for intra-group financial support reflect a general positive approach. Some respondents call for a case-by-case evaluation of the disclosure needs or a limited disclosure only to the interested parties. Banks are divided. The majority of federations do not opt for disclosure.

Resolution Planning

Individual resolution plans

As for the scope, Member States consider that resolution plans should be required for all credit institutions, provided that such an obligation is proportionate to the size and systemic nature of the entity covered. The industry, on the other hand, expresses mixed views: some prefer to have all institutions covered by the framework in order to circumvent the difficulties of establishing the systemic relevance of a firm on an ex ante basis, whereas others prefer that small firms, which are not interconnected, to be carved out.

As for the content, the elements suggested by the Commission are considered to be adequate in order to prepare for resolution. However, some respondents are concerned about too much auto-complacency it is almost impossible to foresee all possible scenarios. As for the additional elements, the following were suggested:

- key dependencies of economic functions on the central functions of the group and the proposed solutions to these in a resolution scenario,
- exposures to other financial institutions,
- details of the governance process for the preparation and implementation of the plan (for example cooperation between authorities),
- specific resources for the execution of resolution within the required timescale,
- information about key contracts, guarantees and safeguards.

Group resolution plans

With the exception of the ECB, IMF, four Member States and three industry organizations, all the other respondents consider that preventative powers would be an unjustified interference in the freedom of the firm to organise its business. In relation to the proposed powers, most respondents particularly oppose to: requiring the credit institution to limit or cease certain existing/proposed activities; restricting or preventing the development or sale of new business lines or products and requiring changes to legal and operational structures of the entity for which the resolution authority is responsible.

Authorities that oppose reason that such powers will conflict with the powers already granted under Pillar 2 of the CRD. Some respondents could accept them as long as they were to be used at the early intervention stage. Some contributions also warn about their impact on the single market.

General principles

Asked if resolution planning achieve an appropriate balance between ensuring the effective resolvability of credit institutions and groups and preserving the Single Market, respondents generally qualify the suggested powers as rather intrusive and thus able to interfere with the normal functioning of the Single Market. In this direction, different points were raised:

- the power to require changes to the legal or operational structure of a banking group raises concerns given its potential effects on the Single Market;
- the procedure foreseen at group level is partly inconsistent with the procedure proposed at the entity specific level;
- the "public interest" notion in D5 is not clear enough;
- the proposed powers conflict with the freedom of institutions to structure their own organisation.

A scenario where only the group resolution authority is entitled to require changes did not receive any support amongst Member States: they opt either for involving both home and host resolution authorities. Banks are split: some consider that no resolution authority should be given such power on the basis of perceived future impediments to resolution; those that accept to grant such decision only to the group level resolution authority require either that (i) the organizational structure of a firm be taken into account in day to day supervision and demands for changes as a result of recovery or resolution planning be kept to an absolute minimum, or that (ii) possible requests pass through the home regulator and when necessary, the College of Supervisors and the EBA. Federations think that, in order to avoid the mistakes of the recent financial crisis, changes to legal or operational structures should not be decided by a single authority; it would be fairer and more effective to confer such a power to the resolution college as a whole with a decisive mediation role played by EBA.

In terms of safeguards, answers are divided: on one hand, there are those who believe that the proposed safeguards are adequate and, on the other, those that suggest adding extra guarantees beyond the right of appeal and judicial review, such as:

- greater clarity on the determination of significant impediments;
- an appeal and mediation process as an initial phase before legal appeal/judicial review – perhaps the EBA or a college of resolution authorities, subject to suitable safeguards around confidentiality;
- the implementation of the powers should be stayed pending a finally binding judicial decision being handed down;
- any proceedings should be held in private with no public disclosure;
- clarification of the conditions under which a right to challenge rises: where the affected entity can challenge such a decision; who has the right to challenge the decision; if a Court declared such a change unjustified, how is the bank compensated for the damages suffered.

Early Intervention

Early intervention powers

The revised trigger for supervisory intervention under Article 136(1) CRD is welcomed by Member States, who consider it sufficiently flexible to allow supervisors to promptly and effectively address a deteriorating situation. The industry respondents and some MS are concerned that the wording 'likely breach' gives too much discretion to supervisors; this trigger is considered to be too vague and subjective and might lead to contradictory interpretations across jurisdictions.

Many respondents pointed out that a number of early intervention powers are already available to supervisors under Pillar 2. The industry also expressed concern about maintaining confidentiality, as market awareness of the use of early intervention tools could exacerbate a firm's problems and lead to financial instability. Some respondents pointed out that certain powers that are too visible to the market - such as requiring the institution to negotiate restructuring of debts or requiring the replacement of the management – should be withdrawn from the list. Two respondents suggested that, before an early intervention phase is triggered, there should a period of confidential or 'silent' intervention where supervisors can impose measures when a firm is likely to fail to meet the CRD requirements.

When consulted on whether the additional powers proposed for Article 136 are sufficient to ensure that competent authorities take appropriate action to address developing financial problems, Member States agree, but call for flexibility as to decide on the use of additional tools. Most of the industry considered that the powers are too far reaching, especially if they are linked to 'likely breaches'. The main suggestion is there should be a clear distinction between early intervention and resolution. Certain powers seem to mix the two phases. Further suggestions are made:

- the replacement of the management or special management should be linked to specific conditions such as suspect of fraud or inability to ensure prudent management;
- the early intervention should be dived in 2 phases: a first phase of intervention of supervisor with the management of the firm, with the possibility to appoint a special management at a much later stage.

Law firms consider that there should be clear rules in the framework ensuring creditors' engagement in early intervention. They made the point that early intervention measures designed to restore capital will be embedded in the Basel 3 capital buffers anyway, so there is no more need to include them in the EU framework.

Special management

Most public authorities support the special manager tool. However, some Member States either express reservations or are clearly against it. They consider that, if made public, the appointment of a special manager risks creating a loss of confidence in the distressed bank and thus has negative financial consequences. Several suggestions were maid by those in favour:

- the mandate of the special manager should be enlarged and not limited to preparing a restructuring plan;
- the triggers should be more stringent than those for early intervention powers, as this measure is more intrusive (e.g. it should be linked to actual breaches of the

CRD requirements, to the risk of suspension of payments or of insolvency or to the inability of the bank managers to ensure a sound and prudent activity, etc.);
- the liability of the special manager should be addressed;
- early intervention powers should include, in addition to the power to appoint a special manager in the terms proposed by the Commission, the possibility to appoint a manager to assist the board of directors and veto their decisions.

The industry expresses mixed views on the proposal to appoint a special manager. Many banks and federations suggest using it as a resolution tool instead of an early intervention one, thus only making it available when a firm is very close to failure. Other industry respondents - especially from the MS who already use "special management" -, although in favour, pointed out that this measure should be used only as a last resort.

Public authorities prefer that the supervisor appoints one or more special managers only when the management of the credit institution is not willing or able to take the required measures based on Article 136 CRD; in other words, the triggers should not be linked to the failure of a firm's recovery plan, as this could delay the appointment of a special manager. All the industry respondents were in favour of a proportionality restriction.

Group treatment

Some respondents agree that the assessment and implementation of the recovery plans should be done by the consolidating supervisor, while others state that the appointment of a special manager is a matter for the consolidated supervisor. The majority of Member States concur that the decisions as to whether a specific group recovery plan, or the coordination at group level of measures under Article 136(1) CRD or the appointment of special managers should be taken by the consolidating supervisor, provided that all other relevant supervisors of the group are consulted. Banks follow the same line. While some federations agree that the consolidating supervisor should take these decisions, others prefer to grant this power to the consolidating supervisor in coordination with the supervisory college.

Regarding the binding or non-binding character of the consolidating supervisor's decision, there is a clear division between Member States. Those that agree with such binding decision (as well as the big majority of banks and federations) also consider that, in case of disagreements, the EBA should be able to mediate. Arguments for denying the binding character include:
- risk on real conflict of administrative law of different member state, plus the issue of applicability of foreign administrative law and right to appeal such decisions in domestic courts;
- these decisions should be taken as joint decisions consistent with the approach taken in relation to group financial support; and
- the national supervisory authorities of subsidiaries should have the legal responsibilities for the stability of the national financial systems.

Assessment of group level recovery plans

Most contributions reflect the idea that the assessment of group level recovery plans should be done by the consolidating supervisor. Federations suggest that the consolidating supervisor be assisted by the supervisory college. Where disagreements rise, EBA should intervene as a mediator.

Resolution tools, powers and mechanisms and ancillary provisions

Conditions for resolution

The Commission proposes three different sets of trigger conditions for resolution. While the EBA and the IMF state their preference for Option 2 (a condition based on supervisory assessment of continued compliance with the conditions for authorisation), Member States are split between either considering Option 1 alone (which focuses on conditions that are similar to those for insolvency but, by including cases where the institution is *likely to* meet the conditions specified, allows intervention before actual balance sheet insolvency), option 2 alone or the two of them combined. Few Member States propose different triggers, such as:

- the use of two categories: one trigger to reflect that the credit institution did not manage to restore its solvency in a certain period and another one to reflect the probability: (i) that circumstances leading to the exhaustion of the own funds occur; (ii) that the market value of the credit institution's assets is lower than the liabilities; (iii) that the entity is no longer able to fulfil its contractual obligations.
- the new common equity Tier 1 ratio;
- the going-concern risk.

Industry respondents indicate their preference for Option 1, mentioning that Option 3 (which is a purely quantitative, capital trigger) is included in Option 1 anyway. The following conditions should be applied to triggers:

- only be used after all other alternatives have been explored to keep the bank in going concern;
- not automatic and as objective as possible;
- aligned with the triggers for bail-in;
- harmonised across EU and internationally;
- easy to understand for investors.

Law firms favour a combination of quantitative conditions, supplemented by Option 3. Representatives of the non-financial industry support the Option 2 trigger.

A significant amount of respondents manifest a clear concern about the use of the term "*likelihood*", which might create legal uncertainty.

Asked to evaluate the resolution objectives put forward by the Commission, all respondents consider them as sensible. Those contributions coming from public authorities express mixed views as half of respondents considered that financial stability should be given precedence over all the other objectives and the other half responded that all the objectives should be equally considered. Some respondents suggested that we include the following objectives:

- protection of client assets held by the institution;
- minimisation of costs of resolution;
- protection of shareholders and creditors regardless of the jurisdiction and
- protection of financial stability in countries other than the one of the resolution authority.

As for the general principles governing resolution, the overwhelming majority of respondents consider them acceptable. The main view from the authorities is that creditors of the same class should be treated equally, the only exceptions accepted being those based on public interest concerns. By contrast, the industry does not envisage any possible derogation. Besides, some respondents specifically require that the legal framework spells out the ranking of creditors. On the matter of valuation, there is general acceptance of independent valuation, leaving open the possibilities of (i) doing it ex post and (ii) including it in the living wills.

Resolutions tools and powers

General

The resolution tools recommended by the Commission are considered by the respondents as sufficiently comprehensive to allow resolution authorities to deal effectively with failing banks; very few contributions suggest including partial nationalisation and/or capital injection within the options available, provided that they are properly restricted in order to avoid moral hazard. However, the authorities call for "minimum" harmonisation in this area, while some industry respondents disagree, mentioning that the tools are comprehensive and that Member States should not be allowed to add more.

The sale of business tool

Respondents agree with the conditions suggested by the Commission for the application of the sale of business. As for the marketing, most of the respondents believe that it should be transparent and done at a fair price (if marketing takes place under stressful market conditions or in a weekend, confidentiality should apply).

Bridge bank tool

There is general agreement that an express requirement that the residual bank be wound up should be included; only a minor number of contributions consider that the framework should remain silent on this possibility. The Commission is asked to consider the prospect of maintaining the bank temporarily alive in order to provide services to the bridge bank. The bridge bank must comply with the CRD requirements and, regarding its duration in time, half of the respondents consider that no time limit should be established, whilst the other half agreed with the limits proposed by the Commission.

Asset separation tool

The majority of the respondents believe that the asset management tool should only be used in combination with the other tools.

Resolution powers

In general, authorities consider the resolution powers proposed by the Commission are comprehensive enough. The industry, on the other hand, finds them too far reaching. Some respondents propose additional powers:

- power to change the maturity of debts or the amount of interests paid.
- temporary public ownership,
- powers to transfer claims for the return of segregated client's assets.

Transfer powers: Ancillary provisions

The Commission's provisions to ensure that the transfer is effective and the business can be carried on by the recipient are generally welcomed by the respondents. However, some clarity is needed as to the scope of any overriding rights to terminate, accelerate or declare default under an agreement or other instrument.

Transfer powers: continued support from transferor

On the matter of extending the power to require a residual credit institution to provide any necessary services or facilities as to allow authorities to impose equivalent requirements on other entities of the same group, the vast approach is positive. Some respondents propose that these obligations be limited to the provision of services and premises and be done at arm's length commercial terms.

Transfers of foreign property

Where a transfer includes assets located in another Member State or rights and liabilities that are governed by the law of another Member State, respondents follow the Commission approach, stating that the transfer cannot be challenged or prevented by virtue of provisions of the law of that other Member State. The doubt as to whether this is the same outside the EU is however raised.

Resolution mechanisms

The Commission proposes three different models by which resolution can be carried out: (i) a receivership model, (ii) one based on administration and (iii) an executive order or decree mechanism. Member States vote for full flexibility and the recognition of their national discretion when applying either one of the three proposed models. While the industry would prefer the development of a common EU framework, they also recognize that Member States have very different legal models and that this provision should be left to the discretion of MS, provided that it does not impinge on the level playing field in the EU. As long as it is clear what resolution mechanism(s) Member States use, different resolution mechanisms should not stand in the way of an efficiently coordinated cross-border resolution.

While half of the respondents opt for the harmonisation of resolution mechanisms as far as possible, the other half consider that it is sufficient to provide for the resolution tools and powers and that flexibility should govern the legal means in which the resolution powers are exercised. If harmonisation is not possible, it is suggested that Member States develop arrangements for the mutual recognition of mechanisms applied in resolution proceedings.

Procedural obligations of resolution authorities

The notification and publication requirements seem appropriate to the respondents. However, in terms of the publication, it would be onerous to require publication in one or more newspapers in each of the locations where the institution has branches. It is also suggested that, in addition to publishing a statement on the websites of the authorities and the EBA, there should be a requirement to publish the statement on the institution's website. Attention should be given to the sensitivity of timing, e.g. the time of disclosure should not mean an additional risk to the resolution process.

Protection of stakeholders: compensation

The core principle that no creditor should be worse off as a result of resolution than in bank liquidation, although possibly difficult to apply, receives wide support. The suggestion that the assessment of compensation is based on valuation by an independent valuer was also welcomed (one bank, however, noted that the use of an independent valuer may not always be proportionate and one Member State considered that any such requirement should not compromise the speed of intervention). Some contributions also note that the EU framework should specify the principles for valuation and the reference date should be harmonised.

Temporary suspension of rights

- Limited suspension of certain obligations: Opinion on a power for resolution authorities to enforce a temporary suspension of payment or delivery obligations is fairly evenly split. The majority of Member States support the proposal, although a couple express concerns about the interaction with the Settlement Finality Directive and with the Financial Collateral Directive if a stay affected rights in relation to financial collateral. A number of industry respondents and a couple of Member States oppose such a power, or express strong concerns based, variously, on the risk that it could spread contagion, its impact on financial infrastructure systems, lack of clarity about its scope, and the possible losses that might be incurred by affected counterparties if, as a result of the stay, they were unable to perform their own delivery obligations to third parties.
- Opinion is also divided on the exclusion of protected deposits from any such suspension. While some support the suggestion, others note that it could be impracticable (difficult to identify protected deposits, or the amount covered by the DGS if aggregating several accounts), and a couple warn that the existence of such a power risked increasing the chances of a bank run.
- A number of respondents suggest further exclusions, such as: all obligations entered into clearing and settlement systems; trade creditors and non-financial creditors; salaries and other operational costs; and payments under secured funding instruments such as covered bonds.
- Temporary suspension of close out netting: Most Member States support the need for a temporary suspension of close out netting rights, as suggested in the consultation. A number point out that a proposal would need to clarify the interaction with other EU measures, including the Financial Collateral and Settlement Finality Directives, EMIR and MiFID, or to deal with the impact of resolution on default and cross-default clauses. Many of the respondents that support the principle of a temporary suspension consider that there should be an exemption for central banks, CCPs and payment and settlement systems for reasons of financial stability. Industry respondents are more divided on this issue. While many recognize the need for, and support a stay, provided it is limited, subject to strict conditions and backed by the safeguards proposed in section H of the consultation, a couple strongly disagree and others express concerns. Particular concerns are expressed by exchanges, clearing and settlement systems and bodies representing this industry sector. Others note the need for clear notification procedures to avoid legal uncertainty about the exact beginning and end of the period of suspension.
- Scope of rights to challenge resolution: Member States are divided on this issue: some agree that the judicial review of resolution decisions should be limited to a review of the legality of the decision - without the possibility to revert it - and to set compensation, where appropriate, while others object to a complete exclusion

of the possibility to revert the resolution decision. They observe that a complete exclusion may be incompatible with effective judicial protection, or with the European Convention of Human Rights or the European Charter of Human Rights or with the constitutions of Member States. A Member State points out that excluding the possibility for the Courts to quash the decision may result in increasing the liability for damages of the authorities Another Member State suggests that the Court should have the power to declare unlawful and quash a decision that is found irrational, illegal, procedurally improper or incompatible with a Convention right.

- Most industry respondents support the idea of limiting judicial review to the legality of the action and of excluding the power of the court to revert the authority's decision. Some respondents suggested limiting the power of a Court to reverse a decision to certain cases, e.g. when the authority has infringed the rules on resolution and when the reversal of the decision is practically feasible and would not cause systemic risk or undermine legitimate expectations. The concepts of "legitimacy and legality" should be clarified.

Confidentiality

All Member States but one support the confidentiality rules proposed in the consultation document. In addition, Member States made the following suggestions:

- confidentiality requirements should also apply to the special manager;
- the framework should allow for an exchange of confidential information with third country authorities, provided that the confidentiality requirements are equivalent to those in the EU;
- any breach of confidentiality should be subject to sanctions.
- All the banking industry respondents stress the importance of confidentiality and consider the provisions proposed by the Commission to be adequate to protect confidential information. The following specific comments and suggestions come from the industry:
- other parties should be explicitly included in the list of professionals bound by confidentiality, such as the entity or person that perform the evaluation, the managers of the firm at the time when the resolution decision is taken, the advisers of the potential acquirer;
- it should be clearly established that the confidentiality rules should override national rules on public access to documents;
- the allowance that information could be published if "it is in summary or collective form" can lead to misinterpretation, since there may particular cases when, even in aggregate form, the information remains sensitive, for example in the case when one or more institutions are in the resolution stage;
- the employees of the resolution authority and the authority advisers need to be able to use the information for the purpose of effecting, or seeking to effect, the resolution transaction, but this would not be covered by the formulation proposed.

Respondents from other non-financial industry express the view that the provisions were too far reaching and that more transparency would be desirable. In their view, better public understanding of the risks to which a credit institution is exposed and of the way these risks are addressed by the institution itself and the supervisory authorities, will prove to be beneficial.

Safeguards

Partial transfers: safeguards for counterparties

Overall, there is almost universal support among respondents for the principle that safeguards of the kind suggested in the consultation are necessary, and the majority agrees with the approach that EU legislation should prescribe the outcomes to be achieved, and leave Member States flexibility of implementation in order to adapt appropriately to the differences in national law. However, a number of respondents (both public and industry) expressed the view that the framework should specify the consequences of any contravention of the safeguards. Several recommended in this regard that in the case of a breach the counterparty should be able to exercise termination rights.

There is strong support from industry respondents for the suggested safeguards. Those respondents contribute a range of technical comments, including the need to ensure equivalent protection for assets and liabilities located outside the EU or subject to the governing law of a third country; and the difficulty of defining the structured finance arrangements to ensure a sufficiently comprehensive application of the safeguards. Particular concerns are expressed in response to a number of provisions in section H about the treatment of foreign property and the consequences if robust legal opinions could not be provided as a result of that treatment.

The majority considers that further harmonisation of definitions is not necessary, although several argue in favour of harmonisation on the grounds that current definitions in EU and national law vary and this could give rise to legal uncertainty.

Respondents generally consider that the scope of protection suggested in the consultation is appropriate and adequate.

A minority of Member States express concern that an inflexible 'no cherry picking' rule could unduly constrain the freedom of action of resolution authorities. One suggests that the safeguards should be limited to contracts that need to be protected for reasons of financial stability, and another that compensation could offer an alternative in cases where contravention of the principle was necessary. Industry respondents overwhelmingly disagree that there is any significant risk that the safeguards would detrimentally affect the flexibility of resolution authorities, and stress that they are necessary to ensure legal certainty of financial market arrangements that are important for financial stability.

Appropriate protection for financial collateral, set-off and netting arrangements

All respondents support the safeguards for title transfer financial collateral, set-off and netting arrangements. One MS, while supporting these safeguards, suggests that it would be necessary to limit asset encumbrance to ensure that heavy use of secured funding does not limit the ability of authorities to ensure an orderly resolution while limiting costs to taxpayers.

A slight overall majority of respondents (including all public authorities) also supports exclusion for retail rights and liabilities – although a majority of industry respondents opposes the latter exclusion on the grounds that any exclusion is unjustified or it could undermine legal certainty. One law firm points out the possible impacts on regulatory capital of the proposed exclusions.

Appropriate protection for security arrangements

All respondents to this question supported the safeguard for security arrangements.

Appropriate protection for structured finance arrangements

Respondents generally support the suggested safeguard for structured finance arrangements. One Member State suggests that there should be some scope for authorities to separate contracts under such arrangements in appropriate cases. Some industry respondents consider that more clarity is needed as to the scope of the safeguard. A law firm argues that structured finance arrangements pose particular difficulties in the context of resolution as a result of their complexity and the potential number of roles played by banks, and that the safeguard as suggested in the consultation may not, alone, be sufficient to provide certainty for such arrangements.

Member States and most industry respondents support an exclusion of insured deposits. A couple of industry respondents question the logic of a carve out for all eligible deposits and several disagree on the grounds that any exclusion would lead to legal uncertainty.

Partial transfers: Protection of trading, clearing and settlement systems

A slight majority of respondents believe that an express provision is necessary in relation to the protection of trading, clearing and settlement systems. Such a provision would enhance legal certainty. Besides, the scope of the Settlement Finality Directive is considered too narrow and, in particular, does not cover physical commodities transactions. Nevertheless, a significant minority considered the SFD to be sufficient.

On the matter of partial transfers and the need to compensate third parties – respondents show their support the principles outlined in the consultation. Opinion is divided as to whether it is necessary to specify the details of compensation in the EU framework, with a small majority supporting the view that general detailed provision is not needed. However, a number of respondents argue that the EU framework should include more detailed provision on the specific issue of valuation. The framework should deal, in particular, with valuation principles, including the method of valuation and the reference date.

Group Resolution

Resolution colleges

The composition of the resolution colleges receives diverging approaches in the contributions. Some Member States agree with the Commission, while others think that all the authorities should be members of the colleges, but that it will be for the lead authority to decide which entity takes part in the meetings depending on the issues to be dealt with. Some Member States consider that the resolution colleges should only be established intra EU, leaving outside those banks that have established FSB CBS. It is suggested to include into the colleges significant branches. Finally, some respondents disagree with the need to establish resolution colleges.

As for the industry, the overwhelming majority is in favour of the Commission proposal.

Group resolution

The majority of Member States consider that the effectiveness of the proposed coordination mechanism is diminished by the fact that the host resolution authority may decide not to comply with the scheme and to take independent measures where they reasonably consider it necessary for reasons of national stability. Each national resolution authority should remain responsible for the legal entities incorporated in its jurisdiction and host countries need to exercise independent judgement even in branch bank structures. However, they all agree that coordination by the group level resolution authority is desirable. The very few Member States that agree with the suggested framework require additional elements to be considered, such as making the group resolution plan not binding or make the 24h deadline more flexible.

The industry's view is that the framework suggested does strike a reasonable balance.

However, all respondents call for flexibility, given that each financial crisis is different and a too detailed regulation risks ruling out efficient measures not foreseen today.

Multilateral arrangements with third country

Respondents agree that an internationally coordinated approach is most definitely desirable and suggest using international fora such as G-20, FSB and BCBS in order to promote it. Nevertheless, the creation of an international legal framework should be preceded by harmonisation of EU rules. Some respondents point out that this will not be a short-term option.

Firm specific arrangements

This tool is perceived by most respondents as a useful interim stage until a general global agreement is reached. When/if used, it should be applied on a voluntary basis. One Member State considers that national resolution authorities should be responsible for their national branches located in 3rd countries, while another one states that individual solutions for single institutions should not be legally binding. Banks welcome as many countries to be covered by the framework. Federations consider it to be a good starting point, but the optimal outcome is for the EU to mutually recognize 3rd countries' resolution schemes.

Assessment of third country resolution arrangements

While admitting that the possibility of requiring changes to the organization or operating structure of the credit institution in a third country has a rather intrusive character, the public and the private sector take opposite views: most of Member States' supervisory authorities consider it justified; the industry, on the contrary, does not find it neither appropriate, nor proportionate.

Financing arrangements

Overall, there is limited support from industry for the need of resolution financing, with many arguing that alternative arrangements already exist (DGS, national levies) or are in the process of being installed. Notable exceptions are those from Member States where resolution funds already exist. Also, call on the Commission to take into account on-going reforms to improve resilience of financial system (e.g. Basel III/CRDIV).

Requirement for each Member State to establish a bank resolution fund

Many Member States call on the Commission proposing a general requirement for them to make financing available for resolution, but leaving the design of such a requirement at the discretion of Member States. At most, some general principles can go in the Directive. As regards defining what the fund can do, some argue that it should also be able to finance recapitalisation measures / restructuring procedures for going concern but then such financing being subject to strict conditions (e.g. shareholder/creditor write-offs, restructuring).

The financial industry remains unconvinced of the need to set up a specific resolution financing regime and argue that it can increase moral hazard (less incentive for market to police the system) and come with significant deadweight costs (bind up resources in ex ante funds that could otherwise finance real economy). They also call on the Commission to take into account other risk mitigation instruments (e.g. CRDIV/Basel III), changes to the DGS, other resolution measures (e.g. RRPs) as well as national financing measures (e.g. systemic taxes/levies). Many argue that DGS is already sufficient for financing purposes. Furthermore, a generally held view is that it is not necessary to specify what a regime can finance. However, if a financing regime is established, most respondents stress that the overarching purpose should be to absorb residual losses and administrative costs and that there should be coordination so as to avoid e.g. double imposition. On the contrary, there is wide opposition to funds being used for liquidity support, as this would be too significant and quickly deplete any funds.

While relatively few contributions from the non-financial industry comment on the financing aspect, those who do highlight the uphill task of ensuring a coordinated outcome in an area where a number of Member States have already adopted a financing approach. Others highlight the difficulty of mustering political will to establish funds of sufficient size and the need to ensure risk based contributions so as to avoid prudent institutions not cross-subsidising risky ones.

Financing of the Fund

While some Member States highlight that it is difficult to foresee how much funds will be needed ex ante and that, therefore, it is important to develop ex post financing arrangements, respondents provide little guidance how such arrangements could look like. Others stress that it is important to keep maximum flexibility about alternative funding arrangements and that therefore no further detail is needed. The financial industry's predominant view is that this does not need to be further spelled out but rather left to national discretion. Some actually call for less prescription, so as to maximise flexibility.

Calculation of contributions to the Fund

Some Member States highlight the need to follow a DGS approach, with harmonised risk-weighted parameters to be taken into account when determining contributions. Some call for base to be harmonised so as to avoid double imposition and unlevel playing field and agree that eligible liabilities best way forward. Others highlight the need for full discretion so as to cater for different national circumstance and in the same vein do not see need for any harmonisation in this field, as long as Member States can credibly show that they have some form of resolution financing in place.

Some contributions from the financial industry stress the need for full harmonisation as regards base, so as to ensure level playing field and avoid competitive distortions. Most also stress the virtues of risk based contributions. Others stress the need for discretion in order to cater for existing safeguards at Member State level.

Relationship with the DGS

Most public authorities welcome the possibility of exploiting synergies between DGS and resolution financing. Some argue that more funds will be needed in the future to cover new resolution obligations, while others point out that, if the two instruments become integrated, then safeguards will be needed to ring fence resources for depositor pay-out function. On contributions, some disagree with DGS contributions being fully deducted from resolution fund contributions. Instead, the base for calculating contributions to both funds should be coordinated (e.g. deducting customer deposits from calculation basis of bank levy).

At a general level, financial industry representatives widely welcome the recognition of synergies between DGS and resolution financing, as many argue that both are crisis management tools. Many argue that there should be no requirement for national resolution funds separated from DGS and therefore welcome the intentions to allow Member States to establish a single legal entity. However, some respondents call for separation of DGS and resolution financing, as objectives differ, the contributors and the base for contributions are likely to be different and decision-making procedures for mobilising the finances may be different. Some fall in between, arguing that the two funds should be managed separately, which does not mean that there needs to be two entities. As regards the contributions, most agree that contributions to DGS should be deductible from those to a resolution fund.

Privileged creditor position

While many Member States do not see the need for ex ante resolution funds, in the event that they were established, most support giving a priority ranking to such funds / creditors financing resolution. The argument put forward is that this would incite participation in resolution financing.

The financial industry has mixed views with general reluctance to grant exceptions to normal rank order. Some argue that a priority ranking is useful where resolution funds and DGS are merged. This would protect depositors, put the major burden on the resolved entities and protect others. Once they are protected, the fund should rank pari passu with senior creditors. Some argue that such priority ranking should be exceptional and at any rate should not only be granted to a resolution fund but also to other tools for temporary funding.

Discussion of possible approaches to the design of debt write-down (or 'bail-in') as a resolution tool

Comprehensive approach

Most respondents agree that certain senior debt categories should be excluded from the bail-in regime. Some consider that wholesale deposits and short term debt should not be excluded. In addition, the non covered part of covered debts (residual) should also be bail-in-able in the opinion of certain respondents. One respondent mentioned that if some derivative transactions are too big, there might be a need for write off, too (see AIG case).

A minor number of banks and associations were against that senior debt could be written down at all. In their opinions only subordinated debt and maybe some special new debt instruments (coco) could be written off.

Regarding the different treatment of creditors, the majority of respondents disagree, as this could create uncertainty, decrease transparency, breach fundamental rights, give opportunity for abuse, and unfair arbitrary treatment. In addition guidelines on how to discriminate creditors would be difficult to design. On the other hand, many respondents admit that in the case of excluding certain debt classes from the bail-in regime, such differentiated treatment might be unavoidable to reach the objectives of resolution. Some argue that the bail-in regime would work only if a new ranking among senior creditors is established, in view of the exclusions of certain debt types. A compensation scheme could be put in place to settle discrimination of creditors.

Respondents have a range of ideas on how to avoid regulatory arbitrage and restructuring of debt: the power and circumstances under which authorities could write down debt and the classes of bail-in-able debt should be clearly defined to prevent regulatory arbitrage; the consistency at global level to avoid geographical relocation of debt; the interaction with the new capital rules, buffers and capital surcharges for SIFIs should be further considered.

Targeted approach

Some respondents oppose any minimum level of bail-in debt, as they believe it is impossible to estimate the appropriate level of bail-in debt ex ante because of the idiosyncratic nature of any future crisis. Others argue that a minimum requirement for bail-in debt will be equivalent to increasing minimum capital requirement (so they suggest leaving it to the banks' discretion).

Many respondents are concerned that allowing the credit institution to insert a write down term in any debt instrument will dramatically increase complexity because all banks can shape BID the way they like. Therefore many call for standardization. On the other hand, others see as advantage what some call complexity. Concerns are raised on the following matters:

- Banks may issue too many BID or BID on too many types of debt which may spoil purpose of BID;
- Inserting a write down clause into a contract should not arbitrarily and retrospectively impede rights of creditors. Which instrument "is deemed appropriate" is not a predictable standard;
- Unclear where incentive to insert write down clause should come from.

Market capacity for such instruments

The general view across the board is that the triggers should be clear, transparent and predictable; they should also be the same as the resolution ones. Respondents do not, however, present views as to which should be the elements that the trigger should incorporate. Although a trigger point far from insolvency would facilitate the possible restructuring and recuperation of the bank, it is also considered by most respondents that it will make the bail-in debt difficult to market. In this respect it seems to be preferable (at least from the investor point of view) that the trigger is the closer possible to insolvency. Some respondents argue that it would not be good to have a trigger based on market data because this could lead to market manipulation.

Big banks are confident that there will be a market for such instruments. In order to reinforce it (i) triggers must be clear, (ii) creditors ranking must provide legal certainty, (iii) these mechanisms apply only to new debt and (iv) an adequate transition phase is foreseen. Small banks and insurers consider that, if there is such a market, small entities will be disadvantaged.

Compensation mechanisms

A number of respondents point out that the overarching principle for bail-in (and resolution generally) must be that no creditor is worse off than they would be in liquidation, and the level of any compensation should be benchmarked against recovery in liquidation. Compensation would be needed if certain creditors are left worse off as a result of the use of (statutory) bail-in (or resolution generally). One law firm notes, however, that this principle is hard to prove (especially where compensation takes the form of conversion to shares) because of the difficult questions about the timing of the assessment of the quantum of recovery in liquidation.

On the matter of conversion as a form of compensation, a majority took the view that conversion to equity would be generally sufficient compensation for the interference to property that statutory write down entails. A number pointed out that conversion would not be possible in all cases. Several suggested other forms of compensation, such as write up clauses, schemes that purchase the converted shares from the bondholders, or later repayment from retained earnings (in order of priority – senior debt before capital holders). However, a few argued that conversion may not be sufficient, particularly if the converted equity is wiped out in a subsequent resolution or winding up.

A majority take the view that (provided priority is respected, write down is accompanied by conversion to equity and the principle of 'no creditor worse off' is respected) no additional compensation mechanisms would be required. Others go further and argued that it is not self-evident that compensation is needed if the terms of the write down is transparent from the outset (although not clear whether this means only contractual). A couple note that any compensation would undermine the purposes of the proposal. One banking association notes that mechanisms would be needed to ensure that creditors that cannot hold equity could share in the recovery, while a major bank suggests that claims should be restored on recovery (and offered to provide a model to achieve this). A couple of banks state that compensation would be needed if debt is written down (and not converted) and the bank subsequently recovers, or if the ranking is subverted. However, the bank would be unlikely to have sufficient resources to pay compensation. One bank and a couple of banking associations point out that if bail-in is subsequently followed by a winding up or further resolution measures, compensation may be needed to address the greater loss suffered by senior debt-holders that had been subject to bail-in compared with those that were not. However, that could only work as a subordinated claim against the bank in resolution.

Group treatment

Responses are split on the question of flexibility as to the level at which bail-in debt should be issued. Most industry responses and one Member State generally suggest that flexibility would be preferable (with the exception of one body representing in investors, which saw no reason for flexibility), while several Member States who favour flexibility also note that that the college of supervisors should play a role in deciding where the debt should be issued.

Respondents are divided as to whether the debt should be issued at parent level only, or at the level of subsidiaries. One industry respondent suggests that issue by subsidiaries would give rise to unnecessary complexity, while others are concerned about the effect of conversion at the level of subsidiaries on the structure of the group. A number of MS respondents express concerns about the ability of hosts to intervene if the debt is only issued at parent level.

Views are split on the question of the trigger and its relation with the level at which the debt is issued. One MS respondent notes that bail-in could not be triggered at parent level if only subsidiaries met the conditions for resolution, while another argues that group bail-in would be possible if the trigger for group bail-in debt (at parent level) were linked to the capital adequacy of the subsidiaries. A number of MS and industry respondents note that the question of level is intimately linked to the extent to which liquidity and capital could be freely transferred within the group; if transfer is possible and national ring-fencing of capital restricted, it might not be necessary to require issuance at solo level, but in that case it must be transparent to investors that they are exposed to the risk of the whole group.

Several MS argued that the power to require and trigger bail-in debt should be invested in solo supervisors, with joint agreement or cooperation. One academic respondent notes that in theory bail-in should be at group level, but in practice it would probably not be achievable for the group-level authority to take the lead. An investor notes that bail-in should not be applied at parent level simply because it is easier to apply it at the level of subsidiaries

A couple of respondents make reference to the need for consistent implementation of bail-in in all major jurisdictions (EU, US, Japan) to avoid geographical and legal arbitrage, and recommends that a regime should require debt instruments issued in or governed by the law of a jurisdiction without a bail-in regime to contain bail-in terms.

Ensuring creditor confidence and adequate liquidity

The majority of supervisors welcome the proposal for a "super senior" status granted to some creditors of the newly bailed in institution, but they call for further considerations to be provided in the legislative proposal:

- the definition of the categories of claims eligible for such status;
- the degree of discretional recognition conferred to the resolution authority.

Banks and federations also agree that such priority right could set an incentive to potential lenders to provide the bailed-in bank with urgently needed liquidity. However, the industry proposes various requirements:

- the consent of all remaining senior creditors;
- the status should be limited in time;
- the senior debt should be pari passu;
- the super senior status should be restricted to new funds injected after the bail-in event

The respondents are divided on the question of opting for a discretionary / statutory rule.

Supervisory authorities in Member States believe that a bail-in mechanism should also be applicable to non-joint stocks companies, provided that the principles of the bail-in are applicable proportionally without regard to the legal form of the institution; the special features of mutuals are taken into account; all equity holders and other subordinated capital providers have been fully wiped out before creditors must absorb the losses. Three MS consider that non-joint stock companies should be excluded from the bail-in requirement.

As a general principle, banks and federations believe that bail-in should be applicable to both joint-stock and non-joint stock companies to ensure a level playing field for recovery and resolution measures. With respect to cooperative banks, however, the specificities of their governance and internal financial relations should be taken into account so as to restrict bail-in to write-down and avoid any measures of conversion into capital.

Regarding the fact that co-operative banks are governed by public law, several federations propose as a solution the conversion into silent contributions which do not give any rights of active involvement.

Possible changes to company law

Most respondents agree with the Commission that derogations from Company Law Directives are needed in order to allow Member States to effectively implement the crisis management framework. However, a considerable number of public authorities point out to the following issues when dealing with the use of resolution powers:

- derogations should be allowed only if necessary for the financial stability;
- the Cross-border Mergers Directive should also be included in this package;
- the derogation from the Shareholders' Rights Directive seems excessive;
- further analysis of the Takeover Bids Directive (and possible formulation of an exception in connection with “poison pills”).

The industry respondents remind of the fundamental nature of shareholders' rights, but agree, however, that derogations are necessary so that the framework can function. Some banks suggest to address the problem of large creditors who, as part of a debt restructuring, agree to convert debt for stock, and who may be faced with the obligation to make a mandatory public bid on the remaining stock (which would operate as an unintended bail-out mechanism for the remaining shareholders). Some federations point out to the fact that derogations are also needed from the Market Abuse Directive insider information reporting requirements and to the fact that shareholders should have swift and simple access to court in order to have the decision to use a resolution tool reviewed in full.

One law firm, followed by a few other entities, requires that, in addition to the articles proposed for amendments by the Commission, the following should be considered:

(i) Articles 10 and 10(a) of the Second Company Directive (77/91/EEC, as amended) if it is possible that the failing institution may wish to issue shares for a non-cash consideration, because the requirement for an expert's valuation is usually time-consuming;

(ii) Article 27(2) of the Second Company Directive (for the same reason as in (i));

(iii) Article 29(7) of the Second Company Directive, where shares are to be issued to banks or other financial institutions and offered to shareholders;

(iv) Article 32 of the Second Company Directive, because allowing creditors the right to obtain security for claims or to apply to court could delay the proposed action;

(v) Article 33 of the Second Company Directive which relates to capital reductions to offset losses;

(vi) Directive 2005/56/EC – the Cross Border Mergers Directive – if it is proposed that the powers that could be taken could involve a cross-border merger of companies;

(vii) Directive 2003/6/EC – the Market Abuse Directive – Article 6 of which requires issuers to inform the public as soon as possible of inside information which directly concerns the issuer. It may be unhelpful for an issuer to have such an obligation where a supervisory authority proposes to take measures relating to it or is taking such measures; and

(viii) Directive 2004/109/EC – Transparency Directive – Articles 4, 5 and 6 place obligations on issuers to provide financial information within certain time periods. It would be useful to consider whether issuers should be relieved of these obligations or if the time periods should be extended if the issuer is subject to measures by its supervisory authority.

In addition, the provisions of Article 1(3) of Directive 78/855/EEC (which are also applied to Directive 82/891/EEC) merely say that a Member State need not apply the Directive where the company which is being acquired or will cease to exist is the subject of bankruptcy proceedings etc. A Member State may therefore have allowed the Directives to apply in such cases – in which case presumably the provisions will need not to be applied.

Regarding the creation of a mechanism for rapid increase of capital for emergency situations in the early intervention phase, Member States respondents tend to favour the proposed Option 2 (an ex-ante mandate to the management body to take a decision on capital increase) or a combination of Option 1 (an ex-ante decision on a shortened convocation period to convene the general meeting to decide on an increase of capital) and Option 2. The private sector mostly opts for Option 2.

ANNEX XVIII RESULTS OF TARGETED DISCUSSIONS ON BAIL IN

Annex XVIII (a) Summary of meetings with stakeholders on bail-in

After publication of the discussion paper on bail-in on 30 March 2012, the Commission organized three meetings with various stakeholders:

- Member States (mostly ministries of finance and central banks) – on 13 April 2012;
- Banking industry – on 17 April 2012;
- Legal experts – on 19 April 2012.

Issue	Feedback
Triggers	Member States: Most Member States agree that bail-in should be available at the same point as other resolution tools (point of non-viability). Some MS may send further views on how to balance the need for this point to offer sufficient legal certainty yet flexibility for authorities to react, as well as when and how this point should be construed for groups (holding company level, parent, subsidiary). Industry: a) Broad support for the same triggers for bail-in and other resolution tools. b) Investors suggested to follow the Swiss model and prescribe an intermediate buffer of bonds (CoCos) automatically convertible to equity when the minimum capital sinks below a certain level. Other instruments could be convertible at the point of non-viability. The intermediate buffer could provide more layers of loss absorbency and give more confidence to investors. c) It was suggested to clarify that recourse to emergency liquidity assistance (ELA) should not be a sufficient condition for presuming a liquidity problem. d) Some banks expressed concern about the discretional nature of the triggers and the possibility that they are interpreted in different ways by different authorities. Legal experts: The lawyers supported flexible and discretional triggers. They noted that requiring objective elements to support that the bank is failing constrains too much authorities. There is always a subjective element in the assessment made. They noted that the triggers should be slightly different for the holding and for the credit institution. Solvency problems of the holding should not automatically trigger resolution of the subsidiary credit institution. The suggestion was made that a rapid judicial review of the decision to bail in a bank could give more certainty to authorities, shareholders and creditors. Others pointed out that this could delay and complicate the process and that it would be difficult to define the extent of the review and whether the review would be subject to appeal.
Scope	Member States: Most Member States supported a broad scope. Some

	of them expressed reservations over inclusion of DGS at least as a first buffer; others of exclusion of short-term (< 1month) debt altogether. General support for suggested inclusion of derivatives. <u>Industry:</u> The industry would prefer a narrow scope limited to subordinated debt, or to other specific contractual capital instruments. They claim that a broader scope would make it extremely difficult for banks to finance themselves on the market, with consequent effect of deleveraging and significant reducing of lending capacity. However, if the choice is to have a broad scope, the industry supported the exclusion of short term debt (some suggested >3 months as this would be the minimum time required to concretely apply bail-in) and of derivatives (because of the complexity of bailing in these instruments, of the problems it creates for hedging risks, and because derivatives holders are the bank clients). There was support for the use of DGS together with bail-in. <u>Legal experts:</u> The lawyers' views were divided. Some argued that it's impossible to apply bail to all liabilities in an open bank and that bail in should be only for subordinated debt and certain categories of senior debt. Others supported a broad scope coinciding with the scope of insolvency. There was general agreement that distinguishing on the basis of the maturity would not be workable.
Hierarchy of claims	<u>Member States:</u> Some expressed a preference for respecting ordinary insolvency ranking while most other MS indicated that some deviations were preferable. Questions centred on possible cost increases of the different options but no MS had firm views. <u>Industry:</u> The industry was sceptical about the sequential bail in, investors could be deterred by the added complexity and critically damage the funding prospects for large parts of the EU banking sector, adding to on-going funding difficulties amid sovereign debt stress. They would rather prefer that the hierarchy of claims in insolvency is respected. <u>Legal experts:</u> The lawyers were sceptical about the sequential bail in.
Group resolution and bail-in	<u>Member States</u>: It needs to be clarified what is the trigger of a resolution executed at group level: whether trigger conditions at subsidiary level justify the intervention at mother or holding level. <u>Industry:</u> Different arrangements for bail-in in different group structures were advocated. Authorities should be able to execute the resolution/bail-in at mother/holding or subsidiary level depending on the case. In the US, SIFIs mostly have holding structure. In a resolution only the holding company is placed under receivership, while the subsidiaries are untouched. The holding is placed into a bridge holding and its creditors are haircut and converted into equity holders. <u>Legal experts</u>: They asked for more clarity how the triggers function in the group context. Notably if the failure of the parent can automatically justify the resolution of subsidiaries, or the failure of the subsidiary may

	allow resolution at mother / holding level. Some suggested introducing separate triggers for different cases. The treatment of intra group debt was also discussed. There were arguments for subordinating such debts (convert them first before other senior to protect ordinary creditors) while others argued against it as this would change the order of ranking and would increase the risk of intra group contagion.
Minimum requirement of loss absorbing capacity	Member States: Feedback thus far is mixed. Some MS have indicated support for the idea of a harmonised minimum level but do not have firm views on the suggested level (i.e. 10%) arising from the preliminary economic analysis. Other MS who favoured a broad scope of bailinable instruments argued that no minimum level may be required. One MS expressed a preference for national authorities to determine any required level per bank case-by-case, taking account of differences in banks' funding profile and systemic relevance. Industry: Generally quite critical of a common minimum requirement. Many argue that it would fail to take account of different banking models and that it would force them to raise new capital or issue debt which is costly or inconsistent/inefficient from the point of view of their funding model. Some questions about why the minimum is expressed in terms of total liabilities and not risk weighted assets, and whether deposits could be excluded from the total liabilities. Some indicated a preference for flexibility in determining suitable bail-in/loss absorption tools individually together with their regulators. Legal experts: In favour of specific class of bailinable debt, which to be credible, would need a minimum although they also indicate preference for flexibility to work it out together with authorities.
Grandfathering and transitional entry-into-force	Member States: Very little support for grandfathering of existing debt. Greater consensus over delayed implementation of bail-in tool. Industry: Any expected stability-benefits from grandfathering would be marginal. Markets' and investors' anticipation of bail-in would outdo them and could still hasten the plight of weaker banks. Some support for a delayed entry into force of the tool to give market time to adapt. Legal experts: No support for grandfathering. Comment that all outstanding debt issued in third countries would still be grandfathered. Few views on the merits of a delayed entry into force except that it could be inconsistent with adopting the bridge bank tool with no delay (which are often economically identical outcomes).

Annex XVIII (b) Summary of written comments

In response to its discussion paper on bail-in published on 30 March 2012, the Commission received around 60 written comments, submitted between 18 April and 10 May 2012. Respondents can be divided in the following groups of stakeholders:

- Public sector – national authorities from Member States (ministries of finance, central banks, supervisors) and European institutions/organizations;
- Banking industry – banks, banking associations;
- Financial institutions (e.g. insurance/investment firms) and their associations;
- Legal experts and academics.

Issue	Key findings
General remarks	Overall, most stakeholders from both public and private sectors were generally supportive to the suggested bail-in framework – however, they raised several concerns about some specific issues. A few stakeholders were strongly against including the bail-in tool in the forthcoming Commission proposal. In some key areas, there were mixed/opposite views. Often further analysis was needed – impact of bail-in, consistency with other initiatives (CRD, Solvency II), cumulated impact, etc. Stakeholders agreed that the implementation of the bail-in framework must be consistent across Member States. Therefore, harmonization in the EU is key – but not enough since many European banks operate globally (sometimes having extensive operations outside the EU) and there are jurisdictional limits of EU law. Hence, as emphasized by several stakeholders, international coordination and harmonization is essential (G-20, FSB, Basel Committee). Otherwise, in the absence of a broader international agreement, the efficiency of the proposed EU framework would be limited in relation to banking arrangements involving foreign property and contracts governed by the law of a jurisdiction outside the EU. Thus, the bail-in tool could only apply to the European parts of international banks. This would create regulatory arbitrage in banks' funding operations and very different standards of resilience in different parts of the global financial system.
Point of entry into resolution	There is a broad agreement among all stakeholders (from both private and public sectors) that the point of entry into resolution (trigger) should be the same as for the other resolution tools (close to but before insolvency). As emphasized by the banking industry, bail-in should be considered as a "last resort" tool since this is a resolution and not a recovery mechanism. Most representatives of the banking industry are of the opinion that a breach of capital requirements should not be a formal trigger. Also, there should be no automatism regarding the opening of a resolution

	proceeding, and the final decision to trigger resolution of a failing bank must be made by the competent authority (supervisor / resolution authority). As regards a group resolution perspective, there are mixed views. On the one hand, some respondents present a stand-alone view: bail-in should only be used for entities which meet the conditions for bail-in (i.e. no cross bail-in of sound entities within a group). Some others prefer a "single point of entry" at the holding company level (similarly like in the US – FDIC).
Open- and closed-bank models	On the one hand, several stakeholders (from both private and public sectors) believe that the framework should be as broad as possible and support both open- and closed-bank scenarios for bail-in. This would provide resolution authorities with the flexibility as to how best to structure the bank's resolution. On the other hand, several respondents (mostly banks) are reluctant to the open-bank model. Hence, they strongly recommend the use of the bail-in tool in a closed-bank scenario only, as it is defined in the Commission's discussion paper (possibly limited to the set-up of a bridge-bank). Some respondents would like to seek further clarification on the open- and closed-bank models, as it needs to be ensured that the bail-in tool is not used as a tool in the recovery phase. Others complain that the terminology used in this context is unhelpful and risks confusion (e.g. references to "going concern" and "non-viability" as well as "open bank" and "closed bank"). One bank thinks that the distinction between open- and closed-bank models is misleading.
Scope of the bail-in tool	Some stakeholders (associations of cooperative and savings banks) strongly emphasize the need for a proper application of the principle of proportionality. Therefore, the bail-in tool should only be applied to systemically important financial institutions (SIFIs) since only such institutions may cause a systemic risk to the financial stability in the EU. Bail-in should not be applied to small banks (such as cooperative banks). There is a general agreement among stakeholders (from both private and public sectors) that the bail-in framework should be as broad as possible in terms of eligible bailinable liabilities, i.e. as little liabilities as possible should be excluded from the scope of the bail-in tool. The wide scope of bail-in and a short list exclusions should be helpful in mitigating the riskthat financial instruments are designed with the purpose of being excluded from the scope of bailinable liabilities. As regards potential exceptions, stakeholders agree that covered deposits (i.e. deposits protected under Directive 94/19/EC, currently up to € 100 000) should in principle be outside the scope of the bail-in tool. At the same time, some Member States are strongly against including DGS in the scope of bail-in. They are deeply concerned that it would

	have a number of important negative consequences (e.g. undermining the fundamental purpose of DGS, increasing moral hazard, risk that DGS would in effect pay twice for the same liabilities, increasing the risk of public funds being used for saving failing banks, etc.). Some stakeholders (banks and lawyers) are more supportive – in their view, there is a case (at least in principle) for treating the claims of the DGS itself against the bank pari passu with other creditors subject to bail-in. With regard to <u>short-term liabilities</u>, stakeholders present rather mixed views. Several respondents (from both the public and private sectors) stated that both their inclusion and exclusion could have some undesirable consequences (e.g. it would encourage banks to rely excessively on short-term funding in normal times, which would be totally inconsistent with Basel III and CRD IV). Several respondents (mostly banks, but also some ministries and legal experts) believe that very short-term liabilities should be excluded, but the rest of short-term liabilities (beyond a specified maturity) could be subject to bail-in. They generally state that a cut-off set at 1 month is inappropriate (too short), so it should be minimum 3-4 months and preferably 6 or 12 months. There are also opposite views with reference to <u>derivatives</u>. On the one hand, several stakeholders (majority of the banking industry, some legal experts and securities market associations) are in favour of excluding derivatives from the scope of bail-in. On the other hand, other stakeholders (mostly Member States, but also some banks) prefer including those instruments. Both proponents and opponents indicate several practical obstacles relating to the inclusion of derivatives in the scope of bail-in (e.g. valuation difficulties). Apart from the above exemptions from the scope of bailinable liabilities, some stakeholders (mostly legal experts) suggest <u>other potential exclusions</u> (e.g. clearing, settlement and payment systems, trade creditors, foreign exchange transactions, custody arrangements, etc.) as well as an exemption for public creditors such as social insurance systems.
Hierarchy of claims	<u>No support for the sequential model</u>. Stakeholders from both private and public sectors believe that the insolvency hierarchy should be respected as far as is possible. In their opinion, the sequential model introduces unnecessary complexity, e.g. the distinction between short and long term liabilities. In this context some lawyers point out that the sequential model cannot be described as being consistent with insolvency rules as they are not aware of any jurisdiction where, in a liquidation, the priority of debts depends on their maturity. As regards <u>derivatives cleared and not cleared through a CCP</u>, some banks regard this distinction as artificial or even fictitious. They argue that in all basic aspects, derivatives cleared through a CCP (CCP-transactions) are identical to derivatives not cleared through a CCP (bilateral transactions). Moreover, both public- and private-sector stakeholders are not convinced that resolution regime should be the instrument to promote the development of derivatives that are cleared through a CCP. There

	are other pieces of legislation and initiatives specifically designed to meet this end (Basel III already sets incentives for CCP clearing).
Minimum requirement for eligible liabilities	The main consensus is that there should not be a set minimum for bailinable liabilities. This is because, in the main, it is thought that there exists enough pre-existing debt in banks, especially after the implantation of Basel III. If there is to be a set amount then opinion is much divided between the EU setting a fixed amount and it being left up to national supervisors. The main benefit of having a set EU wide level is that it creates a level playing and does not lead to the possibility of regulatory arbitrage. However there is a fear this may create a trigger effect if institutions fail to maintain this level. The main benefits espoused of a flexible regulator set amount is that it can be adapted to suit the different banking models in the EU and that it rewards banks that fund themselves from safer sources. If this was to be adopted it seems that EU level guidance for the regulators would be needed to try and limit discrepancies. There is no clear consensus on which is better and there are suggestions of a comprises such a low fixed minimum with discretionary top up or else different set levels for different types of banks. It is also clear from the vast majority of responses that it should be risk weighted assets and not total liabilities that should be the metric. This is because the organisations feel that this better reflects the risk profile of the different banks and keeps the proposal in line with Basel III. Finally it is preferred by the majority of respondents that any minimum debt requirement be set at the holding group level, where applicable, not at an entity level.
Selected legal issues	The majority of responses were in favour of following existing insolvency procedures in wiping out shareholders before moving on to cancelling or converting debt. However this raises legal concerns and it is unclear if, legally, total cancellation is allowable due to pre-emption rights and minimum capital requirements. This concern is heightened in the case in a going concern bail-ins where there may be residual value. This could be seen as an unlawful expropriation. It is stressed that flexibility should be one of the main driving points here and that therefore there should be no automatic need to cancel shareholders. It was also raised that if dealing with a group situation it may be unfeasible to cancel shareholders at that level. In relation to the write down or conversion of creditors it is seen that conversion is preferred and that again the no creditor worse off mantra should be followed. However, there is concern that this new ownership structure after conversion may not be the most suitable and perhaps converted share should have none or restricted voting rights. It is also noted that the conversion from debt to equity may also have large tax implications for the new institutions, particularly in some jurisdictions. Finally it was noted that some jurisdictions have public

	law institutions which could not have their equity cancelled.
Recovery and reorganization measures to accompany bail-in	There is a wide support for the benefits of having a thorough plan about bail-in as it will reassure investors and the market. There are however two main comments: First, that the 1 month time limit is not suitable particularly if the bank is being reorganised and there is new management. However, that the plan should be published as soon as possible, if there is not a pre-existing one, but that flexibility should be given to regulators re the exact timing. Suggestions of a possible timescale were 2-3 months. Secondly, there will already be recovery and resolution plans in existence under the new regulatory regimes and it would be better to implement these as they have been drawn up by existing management and the regulators. To not use these would undermine the point of having tem and in this regard they should be drawn up to include bail-in.
Contractual provisions	There is wide acceptance of the need of contractual recognition in order to involve third country debt. However, there are major concerns over the practicality of this measure as it is unclear what the effectiveness of contractual acceptance of an EU statutory bail-in and how third countries courts would enforce this. The respondents were concerned about market confidence and while supportive were careful to stress the sanctity of contract and how any measures should respect this to keep confidence among third country investors. It is also noted of course that any contractual recognition can only be prospective and not retrospective It is agreed that international agreement, at G20 level for example, on the issue of international recognition would be desirable as it would foster a more effective regime.
Timing	There is a wide agreement that the introduction of a debt write down tool will have significant and adverse effects on the applicable banks. The main impact would be on the funding of banks. It is seen that the cost of funding will increase and that potentially the debt market will contract as European debt will be seen as less attractive due to the possibility of bail-in. There is a wide range of views on this but the main convergence is that grandfathering should not happen, as its implication on funding (i.e. with cliffs and the increased cost of non-grandfathered new debt) is too high. It is also agreed that there should be a transition period to allow markets to adjust and that implantation should be in line with other requirements under Basel III and CRR. This then gives an appropriate implementation date of either 2019 or 2022.