Report on the Bank Resolution Recovery Proposal of the European Commission

A report with funding from the Hans Böckler Stiftung

March 2013

Contents

1. Scope and Objectives

This report will address proposed regulation concerning Bank Recovery and Resolution and in particular the European Commission (EC) 'proposal for a directive … establishing a framework for the recovery and resolution of credit institutions and investment firms.' (European Commission, 2012a: 1)[1]

Consistent with Finance Watch's approach this report is part of a project to (1) to build a solid knowledge on the issue based on thorough analysis conducted by both our Secretariat and our Members and; (2) to elaborate Finance Watch's position on this issue.

The following position paper describes Finance Watch's analysis and position on Bank Recovery and Resolution. This analysis and position is part of a wider project to address bank regulation more generally including Bank Recovery and Resolution, Banking Structure and Banking Union.

[1] See the proposed directive: http://ec.europa.eu/internal_market/bank/docs/crisis-management/2012_eu_framework/impact_assessment_final_en.pdf . More details of the Commission's broader approach to Crisis Management can be found here: http://ec.europa.eu/internal_market/bank/crisis_management/index_en.htm#maincontentSec2

2. Summary

- The overall aim of bank recovery and resolution should be to **prevent bank failures becoming a systemic crisis** affecting the rest of the financial system and / or the rest of the economy.
- This can be achieved first and foremost, by taking **preventative measures** such that when banks fail minimal action must be taken to avoid systemic problems.
- Second, **resolution tools** can, to some extent, be defined in advance of crisis. These tools should allow authorities to manage bank failure, minimising the risk of systemic problems and the cost to taxpayers of doing so.
- The European context in particular raises question of **governance** around such issues: to reconcile national and supra-national responsibilities and powers and in doing so to be democratically accountable.
- The report discusses preventative measures in the next section (section 4), then resolution tools (section 5), and finally, briefly, questions of governance (section 6).[2]

<u>Preventative measures:</u>

- Preventative measures are the critical element to legislation aimed at preventing bank failure becoming a systemic problem. They are critical for two, broad, reasons.
- First, no matter how well designed resolution tools are, they will not be able to cope if action has not been taken to control banks size, structure, complexity and connectedness. Each step in this direction will improve the efficacy of resolution tools.
- Second, no matter how well designed resolution tools are, fresh crises are likely to bring fresh problems. These problems cannot be fully anticipated when designing resolution tools. Once again, ensuring that banks can fail by taking preventative measures will greatly increase the chances of successful resolution, whether with pre-designed or *ad hoc* resolution tools.

[2] Recovery tools are not explicitly discussed in the report. While important the principal focus is on the critical preventative tools and on the brand new elements which are introduced with the proposal to adopt resolution tools.

- First then, the proposal is right to state that '**Any insolvent institutions should be able to exit the market** … without causing systemic disruption' (European Commission, 2012a: 26)
- … and that the first option for a failing bank should be '**normal insolvency proceedings**.' (European Commission, 2012a: 26)
- For banks to be able to fail without causing systemic risk, first and foremost, their size should be controlled by BRR legislation. BRR legislation should prevent banks from being **"too-big-to-fail"**.[3]
- Connected to this, the structure of the banking sector as a whole should not be such that the failure of a large bank would quickly bring down the rest of the system, be it from large credit losses or because they are a monopoly supplier of essential services. BRR legislation should prevent banks from being **"too-connected-to-fail".** (e.g. Chan-Lau, 2010)[4]
- When banks do fail they should be as simple and as quick to deal with as possible, through normal or special insolvency procedures. BRR legislation should prevent banks from being "**too-complex-to-resolve"** (not to mention too-complex-to-manage and too-complex-to-regulate). (Viñals et al., 2010)
- A special insolvency regime (resolution) for banks is justified as in the public interest when normal insolvency proceedings might i) 'jeopardise financial stability', ii) '**interrupt the provision of essential services' and / or iii) 'affect the protection of depositors'**. (European Commission, 2012a: 26)
- **Commercial banking** functions, thanks mainly to the importance of bank credit money, manifested especially as essential payment services and deposits, will very often require special resolution.
- If they are not too-big-to-fail-then **investment banking** functions, as important as they are, should rarely if ever trigger special resolution.

[3] 'The 'Origins of the modern too big to fail doctrine' are often traced back to FDIC actions in the Continental Illinois failure in 1984 in the United States. (Todd and Thomson, 1990: 2) '[I]n September 1984 the Comptroller of the Currency testified before Congress that some banks were simply "too big to fail" (TBTF) and that for those banks total deposit insurance would be provided.' (O'Hara and Shaw, 1990: 1587)

[4] Official responses to the crisis have also discussed inter-connectedness, e.g. BIS (2009)

- BRR legislation should therefore consider the **separation of commercial and investment banking functions** in order to facilitate swift resolution.
- Do large complex banks bring other benefits to society that might mitigate the dangers? The evidence of this is ambiguous at best, most likely such **large complex banks are a cost to society**.[5]
- In conclusion the proposed legislation should go further to ensure that these preventative steps are taken throughout the EU.

Resolution Tools:

- The design of successful resolution tools must consider and **account for the character of the banks that will be entering resolution**. Two factors stand out.
- First, bank crises are liquidity crises. It is vital to account for the fact that these banks will be suffering from a **liquidity crisis** and will be in receipt of emergency liquidity provision from the state, e.g. from the central bank.
- Second, it is vital to **account for the incentives** this legislation itself creates.
- The resolution tools proposed address the current solvency problems of banks in the *current* European banking crisis. There is a danger they **do not sufficiently account for the liquidity situation** that banks will be in, in the *next* crisis.
- By not doing so the proposal risks, first, **under-estimating the cost to tax-payers.**
- Second, not doing so **reduces the effectiveness of resolution tools**. It does so in two ways:
- First, emergency liquidity provision by the State **transforms bank balance sheet**, encumbering assets and creating secured liabilities and reducing the scope for recovery and resolution tools to work.
- Second, **solvency and liquidity requirements can conflict:** most obviously emergency liquidity measures give preference to maturity (managing very short term cash flows) over seniority; solvency measures give preference to seniority over maturity. Not accounting for liquidity and these conflicts reduce the efficacy

[5] The Liikanen report showed that even private benefits of scale are ambiguous. (High-level Expert Group on reforming the structure of the EU banking sector, 2012)

of the **combined crisis management of liquidity and solvency** required in a bank crisis.[6]

- BRR legislation must also consider the **incentives** it provides and the effect they will have on the banks which enter resolution, especially when encouraging the use of instruments which will reduce the efficacy of resolution tools. **OTC derivatives** are potentially the most problematic potential exemption. OTC markets should be robust enough to withstand counterparty defaults. Exemption from bail in will only encourage growth of derivatives reducing the effectiveness of resolution tools.

Governance

- **Recovery and Resolution authorities should be accountable** to a wide range of groups representing the public interest, whose taxes backstop resolution measures.
- This report does not tackle directly elements stemming from the structure of the European Union and the status and form of banking union in particular. In the absence of meaningful union the single market in banking services is best served by consistent and clearly demarked powers and responsibilities for national authorities. **A further Finance Watch report is planned which will incorporate consideration of banking union and related issues**.

[6] These issues can be seen to impact, in different ways, in the use of market valuation by the proposal, in various resolution tools, and in the investment of pre-funded resolution schemes.

3. Introduction

Banks emerge and come to fulfil a specialist role in the economy, lending and, for commercial banks, creating bank credit money in the process. Banks rely on the rest of the economy: to repay their loans and as a source of profit, and on the other side to hold their liabilities, both money and non-money liabilities. In turn the rest of the economy relies on banks, for the provision of credit which is essential to developed economies and for commercial banks for the provision of bank credit money, the which, at typically more than 95%, forms the overwhelming majority of money in use in developed economies. While economies are dependent on many established specialists the case of banks is a special one, most of all because money faces all other goods and services that are exchanged.

Banks however can fail, and because the rest of the economy is so reliant on the credit and bank credit money that they provide their failure can lead to risks that the economy suffers very grave damage, the risk of which is labelled systemic risk. The overall role of bank recovery and resolution (BRR) legislation should be to prevent bank failures becoming systemic crises. Analysis of BRR legislation can proceed by examining the reasons for bank failure and the ways in which these failures can cause systemic problem.

Commercial banks create assets in their balance sheets by lending to the rest of the economy. By doing so they create bank credit money, bank liabilities which act as money. The recipient of a loan receives the right to draw down on demand from the bank, i.e. the loan the bank makes is simultaneously deposited at the bank.[7] To establish bank credit money generally banks build a reputation that the asset side of their balance sheet is sound and will repay in order to settle liabilities as they fall due or demanded. As a part of this banks must develop the reputation that they have cash to hand.

Investment banks facilitate large scale credit, essential for the economy, by making markets for securities. They organise borrowing on a large scale, through securities issuance and maintain the ability of investors to return to money, i.e. to remain liquid, by “making markets” in securities. This involves both standing ready to buy and sell for a bid ask spread and providing the infrastructure of the markets. Investment banks assets in the form of an inventory of securities, both in order to make markets

[7] Or drawn down and deposited at another.

and investing their own capital. Investment banks liabilities do not come to serve as money, rather their liabilities are securities, exchangeable for money, as other sectors in the economy.

Risks to banks come from both side of their balance sheets. They face liquidity risk if confidence in them fails and liability holders demand repayment. They face solvency risks if their assets fail to perform. These risks can quickly interact. For commercial banks, for example, a reduction in solvency, or perceptions of solvency, can lead to a reduction in confidence and a traditional run on the bank. (Diamond and Dybvig, 1983) For investment banks changes in the perceptions of solvency can quickly turn to real solvency problems as securities prices drop. Market based liabilities, typically short term if not on demand, can become quickly prohibitively expensive, or more likely not be available at all. The market-based assets and liabilities of banks are more likely to be volatile than the non market-based ones. Northern Rock provides an example, where a run on market based funding preceded and precipitated a more traditional run on deposits. (Ondo-Ndong and Scialom, 2008) It can be seen that the confidence in banks must be continuously maintained and backed with available liquidity.

The risk to the wider economy from bank failures is labelled systemic risk, defined as: 'a risk of disruption to financial services that is (i) caused by an impairment of all or parts of the financial system and (ii) has the potential to have serious negative consequences for the real economy. Fundamental to the definition is the notion of negative externalities from a disruption or failure in a financial institution, market or instrument.' (Staff of the IMF BIS and the Secretariat of the FSB, 2009: 2) [8]

Systemic risks arise from both assets and liabilities of banks. Starting with bank assets, over the longer term solvency poses a risk to banks as their assets fail to repay sufficiently to allow them to honour their liabilities. The result is that in the longer term the failure of banks might reduce the amount of credit available to the economy. Bank crises however almost inevitably manifest themselves, first, as liquidity crises in which perceptions of bank (in)solvency, whether based in reality or in "irrational" panics, lead to a loss of confidence and a withdrawal of funding, a

[8] The threat to the economy from finance is thought to come from two channels. First, through a chain of contagion: most obviously from one bank, to the rest of the financial system, and from there to the rest of the economy. Or second, simultaneously: from one bank sufficiently large and connected that the shock hits finance and the "real" economy at the same time. (George, 1998)

refusal to hold bank liabilities. The immediate damage to the wider system comes from credit losses on bank liabilities which are not honoured and from the loss of bank credit money which manifests itself both as credit losses on deposits and as the loss of essential services, above all payment systems.

This then is the terrain on which bank recovery and resolution legislation must operate. Bank crisis management involves first liquidity management such that banks can continue to operate and crisis resolution for longer term solvency problems. Put another way an illiquid but solvent bank cannot continue to operate; an insolvent but liquid one can. It is the latter which bank crisis management must first attempt to ensure is the case before moving to crisis resolution to tackle any solvency problems.[9] Overall the aim of the bank recovery and resolution should be to prevent bank failures from becoming systemic crises and, given that, to minimise the cost to taxpayers of doing so.

Starting with prevention (and taken up in section 4) the first task of BRR legislation should be to establish and maintain a financial system comprised of institutions that can fail with a low risk of systemic damage. Most importantly this involves the size of organisations, but also the structure of banks and of the industry itself. Secondly, in the event that a system critical bank might fail banks should be of such a nature that steps can be quickly taken, at a low cost to the economy more generally, to recover or resolve them. In today's banking environment this above all means reducing the complexity of banks operations and ownership structures.

The second area to be addressed is the resolution tools which are available to authorities (to which section 5 turns). Critical to successful analysis of resolution tools is a full consideration of the banking sector that is likely to enter resolution. This has two main aspects: first, the real world experiences of bank crises generally – and here this means considering the emergency liquidity situation such banks will be in and; second, the likely consequences of incentives contained within the legislation being discussed – here for example exemptions to the bail in tool appear to be a cause for concern, most especially the exemption for short term liabilities and the possible exemption for OTC derivatives.

Section 4 tackles prevention or resolvability, section 5 resolution tools and Section 6 briefly highlights some Governance and Accountability measures.

[9] Borio (2012) makes the distinction between bank crisis management and bank crisis resolution.

4. Prevention: the importance of tackling large / complex / connected banks and of considering bank structure.

As noted above the aim of the legislation, broadly stated, should be to prevent bank failures becoming systemic crises. Prevention is critical to achieving this aim.

There are two main reasons for this. First, no matter well designed recovery and resolution tools appear to be, there is only so much they can deal with. Preventing bank failure becoming a systemic problem by limiting size, bank structure, complexity and connectedness is more effective than using recovery and tools and, moreover, when such tools are required preventative measures will greatly increase the impact of recovery and resolution tools. Second, no matter well designed recovery and resolution tools appear to be, a fresh crisis will almost inevitably call for fresh solutions. Legislation should attempt to provide the conditions in which recovery and resolution tools, both foreseen and *ad hoc*, can be effective.[10]

What preventative measures can be taken? First, banks should be able and allowed to fail, as the proposal notes. To facilitate this, too-big and too-complex banks must be tackled. Second, it is overwhelmingly commercial banking activities that require a special resolution regime.[11] To facilitate this, bank structure must be tackled. Third, banks should be simple in order to be quickly and effectively resolved (or administered in insolvency). To facilitate this, bank complexity must be tackled.

Sub-section 4.1 looks first at size and connections (or industry structure) and then at complexity. Sub-section 4.2 looks at bank structure. Section 4.3 dismisses the argument that there are other benefits to society that justify large, complex, connected banks. The principal findings are that to reduce systemic risk first, more weight should be given to tackling large, complex, connected institutions, and second that bank structure must also be tackled in BRR legislation.

4.1. **Large and Complex banks and resolvability**

Bank failures tend to have a disproportionate effect on the wider economy relative to other types of firm failure. Preventative measures should aim to minimise this threat.

---

[10] In short the first step should be one of 'limiting the scope of financial institution activities rather than seeking more efficient methods of resolution'. (Kregel, 2009: 3)

[11] Providing they are not allowed to become too large, investment banks should be subject to usual insolvency proceedings.

1) Very large banks have the potential to cause unsustainable damage: BRR legislation should therefore ensure that bank size is limited such that their failure can be contained. 2) The transmission of the effects of bank failure to the wider economy is partly a matter of industry structure: BRR legislation should therefore consider the connections of institutions to the wider system. 3) If banks must enter insolvency or resolution they should be easy, quick and cheap to deal with, the biggest barrier to that currently is complexity: BRR legislation should aim to restrict the complexity of institutions. These dimensions are now discussed.

4.1.1. Too big to fail

First, banks should be able to fail via normal insolvency proceedings without posing a systemic threat.[12] Currently the largest European banks, exemplified by the European SIFIs, are too-big-to-fail: the option of letting them fail using normal insolvency procedures could not be contemplated. Their failure would have a catastrophic impact on the financial system and on the economy more generally. The result is that institutions of this size must be rescued. However beyond a certain point the largest (usually also most complex and connected) banks are simply not resolvable without the use of tax payer money. This in itself is likely to provide an incentive to banks to become large, and for large banks to undertake risky activities (the “moral hazard” problem). BRR legislation will fail unless to-big-to-fail is tackled. The simplest way to do so is to prevent individual financial institutions achieving such scale in the first place.

Second, as well as reducing the likelihood of having to use special resolution mechanisms, smaller institutions will also be easier to resolve should that be required. During the crisis management phase of a bank crisis they will require smaller amounts of liquidity injection, be it from the central bank or from other arms of the State. During the resolution phase special resolution tools will have less work to do before the impact of failure e.g. through credit losses or the cessation of essential services, become small enough that they can be absorbed by the financial system and the economy more generally. Moreover the same scale of finance split across

[12] The Proposal clearly states that ‘in order to avoid moral hazard, any insolvent institution should able to exit the market, irrespective of its size and interconnectedness, without causing systemic disruption.’ (European Commission, 2012a: 26) Furthermore the first option is normal insolvency proceedings: ‘A failing institution is in principle liquidated under normal insolvency proceedings.’ (European Commission, 2012a: 26) and ‘The Winding up of an insolvent institution through normal insolvency proceedings should always be considered before a decision could be taken to maintain the institution as a going concern.’ (European Commission, 2012a: 26 (Article 28))

more institutions results in a reduction of systemic risk more generally (providing default correlations are less than one and economies of scale are small or non-existent - which would seem to be the case). [13]

Discussion so far is implicitly at the national level, but it might be argued that: first, the correct comparator is the European economy as a whole, and; second, in which case bank size is not too large.[14] Both arguments can be refuted. First, the current status of banking union, and the structure of the European Union more generally, do not suggest that a supra-national solution to large bank failure exists. The European economy as a whole is, therefore, not the correct comparator. Second, even should a single European Resolution Authority come to be, the possibility of contagion and the simultaneous failure of more than one of the European SIFIs would currently still pose a systemic risk, even at the supra-national level.[15]

This conflict is put in stark relief with an example from the US, albeit one involving the deposit guarantee scheme (DGS). In the US, the Federal Deposit Insurance Corporation (FDIC) had been able to deal with all of the bank failures during its 75year history without the support of the US Treasury. However the failure of a larger bank, Washington Mutual, required the DGS to call on additional funds form the US treasury. Washington Mutual's balance sheet was around 300mUSD. This represents only about 10% of the size of largest European banks and critically Europe has no supra-national treasury on which to call. (Finance Watch, 2012b)

In short, the current European SIFIs are too large to fail – whether losses are taken publicly or privately, whether recovery and resolution mechanisms exist at the national or supranational level.

4.1.2. Too connected to fail

Banks are necessarily connected to the rest of the financial system and the wider economy, and in normal times this allows banks to benefit the economy (and vice

[13] See the Liikanen Report and Finance Watch's answer to the Liikanen consultation for more details. (High-level Expert Group on reforming the structure of the EU banking sector, 2012, Finance Watch, 2012a)

[14] The IMF highlight that there is in Europe a conflict between the single, supra-national, market for banks and a lack of a supra-national apparatus for resolving them. (Fonteyne et al., 2010) This is taken up further to some extent in section 6

[15] Moreover a European GDP figure for comparison would include the contributions of the southern and eastern periphery. These nations are typically in severe recessions and it is not clear that they could, should or would contribute any of their, steadily shrinking, GDP to supra national bank resolution at the moment.

versa). Of more interest here are the routes these connections provide for bank failures to become systemic crises. The factors to be considered in this regard are complex but revolve around the structure of the sector. Furthermore bank structure, i.e. the separation or otherwise of commercial and investment banking activities is also relevant. Two areas are key to consider, credit losses for holders of the liabilities of defaulting banks and interruptions to essential services.[16]

Turning first to credit losses, if banks are of a similar size then the more connections they have to the rest of the economy, including the financial system, the smaller the average loss each non-defaulting institution must take. If however the sector is dominated by a small number of very large banks which connect to a large number of considerably smaller institutions then the default of a large bank entails non-defaulting institutions taking larger credit losses relative to their size. The virtue of more connections becomes a vice, as, other things being equal, more connections means more and therefore smaller institutions facing potentially ruinous credit losses from the default of any one of a small amount of much larger institutions.

When it comes to the provision of essential services, such as payment systems, the degree of monopoly of the service provider is important. The larger the degree of monopoly then the more impact the failure of a service provider will have, increasing the likelihood of public intervention and special recovery / resolution. It is better if essential services are provided by a wide range of banks (either in collaboration or via easily substitutable services). There is a strong case for separation of bank's interest in the provision of essential services from the rest of the bank. This would facilitate the uninterrupted provision of essential services by a stand-alone entity and / or by an autonomous entity representing the combined interests of various contributing banks. As prominent a figure as Andy Haldane at the Bank of England has recently admitted to being attracted by the idea of placing 'some core banking services in the hands of a shared utility'. (Haldane, 2012)

Unfortunately European banking, and banking more generally around the world, displays a two-tiered or oligopolistic structure with a handful of large / complex banks forming a concentrated hub facing the rest of the sector.[17] The result of this

[16] Note that the triggers for special resolution are financial stability, interruption of essential services and losses for depositors; where the first is in many ways a function of bank size and the 2nd and 3rd triggers.

[17] For example Langfield, Liu & Ota (2012) describe UK banking as having a hub-and-spoke structure with large oligopolistic banks forming the hub.

concentration is that the failure of a large / complex "hub" bank produces a disproportionally large systemic risk thanks to its "connectedness".

The current proposals for European Banking Union risk reinforcing this two tiered structure. Under the proposals the largest banks would be subject to central supervision by the ECB while smaller banks remain under national supervision. It is possible that those near the defined border face incentives to become bigger or smaller accordingly, picking up and reinforcing the hub and spoke structure of the industry. (Munchaau, 2012)

Finally multi-functional financial institutions are also more highly connected to the rest of the financial system and therefore offer a higher degree of systemic risk than single function institutions. (Kregel, 2009: 2) This would suggest reducing systemic risk by separating payment services but also separating commercial and investment banking functions to introduce additional circuit breakers slowing contagion (the need for BRR legislation to tackle bank structure is discussed in section 4.2).

4.1.3. Too-complex-to-resolve

Simple banks are easier and quicker to resolve than complex ones and the largest banks in Europe are too-complex-to-resolve (not to mention too-complex-to manage and too-complex-to-regulate). For those banks that do fail, either through normal or special insolvency regimes reducing the complexity of financial institutions facilitates rapid resolution thus reducing the risk of such a failure transforming into a systemic issue.

High profile failures during the current crisis have provided a valuable insight into complexity and the resulting difficulties. Lehman Brothers, for example, had more than 3000 legal entities (Moya, 2009); even two years after the collapse several thousand employees of administrators were still working 'trying to unwind the complicated affairs of a one-time titan of high finance' (Treanor, 2010). In the US Lehman Brothers took 3½ years to exit from Chapter 11 status. (Alvarez & Marsal, 2012) In Europe it would seem that the largest banks operate at a similar level of complexity. For example the on-going efforts to resolve the Dexia group have proved, if anything, more costly, time-consuming and tortuous than the Lehmans case.[18]

[18] Anecdotal evidence suggests, for example, that a recent "living will" exercise at Deutsche Bank revealed over 2000 legal entities with insufficient centralised knowledge about them; a situation which apparently led to Deutsche Bank deciding for themselves to simplify their legal structure.

The most complex (and large) banks are also at risk of being too-complex-to-manage. Large complex institutions are more likely to suffer from control failures which can lead to losses as senior executives lose track of the various activities of the institution. The inclusion of an Operational Risk capital requirement under Basel II is perhaps the most explicit recognition of this.[19] (Bank for International Settlements, 2006)

Lastly, and importantly, large complex banks have become too-complex-to-regulate and supervise. The Basel Committee on Banking Supervision (BCBS) 'Core Principals for Effective Supervision' state that 'legal, managerial, operational and ownership structures' of banks should facilitate both on-going supervision and the taking of 'corrective measures'.[20] It is hard to see how the complex European SIFIs are complying with this principle and how the Bank Recovery and Resolution proposal furthers this aim.[21]

The proposal should go further to explicitly include a reduction of complexity in the preparation of recovery and resolution plans. (European Commission, 2012a: 49-57 (Articles 5-12)) An important step in reducing bank complexity might be to push banks towards "one business line: one legal entity" (perhaps per country). Not only would this make bank resolution plausible, it would also have many other benefits such as simplifying and making more transparent the tax affairs of financial institutions.

---

[19] The existence of such a risk is borne out by a long series of scandals such as the collapse of Baring Brothers attributed to a 'rogue trader' (Leeson and Whitley, 1996) or more recently a series of troubles revealed in the light of the crisis e.g. at UBS. (Shotter and Jenkins, 2012)

[20] Principle 5 on page 28, states: "The licensing authority determines that the proposed legal, managerial, operational and ownership structures of the bank and its wider group will not hinder effective supervision on both a solo and a consolidated basis. The licensing authority also determines, where appropriate, that these structures will not hinder effective implementation of corrective measures in the future." http://www.bis.org/publ/bcbs230.pdf

[21] For example the Liikanen report lists several academic papers which point to the increased opacity of complex organisation and the difficulties this poses for regulators. (High-level Expert Group on reforming the structure of the EU banking sector, 2012, Jones, 2000)

4.2. **Banking Structure and Resolution**

4.2.1. Banking Structure and the need for resolution vs. normal insolvency proceedings.

The separation of commercial and investment banking functions would further the aim of allowing banks to fail via normal insolvency without causing systemic risk (thereby avoiding taxpayer support).

As noted above, the Proposal clearly states that 'any insolvent institution should be able to exit the market without causing systemic disruption'. Furthermore 'a failing institution is in principle liquidated under normal insolvency proceedings'. (European Commission, 2012a: 26) and 'normal insolvency proceedings should always be considered before a decision could be taken to maintain the institution as a going concern.' (European Commission, 2012a: 26 (Article 28))

Only when normal insolvency proceedings might i) 'jeopardise financial stability', ii) 'interrupt the provision of essential services' and / or iii) 'affect the protection of depositors' is there a 'public interest case in applying resolution tools'. (European Commission, 2012a: 26)

Commercial banks, even if not very large and / or complex, and thanks to the importance of bank credit money, of the payment systems that they operate and their deposit holding functions are likely to qualify for resolution on all three criteria i.e. their failure is likely to i) 'jeopardise financial stability', ii) 'interrupt the provision of essential services' and / or iii) 'affect the protection of depositors'. (European Commission, 2012a: 26)

Investment banking, on the other hand, is less likely to trigger special insolvency mechanisms – provided that they are not too-big-to-fail. Investment banking provides 'essential services' to the economy in the form of facilitating large scale financing of companies in the capital markets. However these services would only be 'interrupted' if a single financial institution is so large that its failure would prevent the market from operating – even with the current high concentration of SIFIs this is unlikely. It might be noted that securities issuance is already very often conducted by a syndicate of investment banks. Should one fail there is nothing to suggest that other investment banks would not take their place. Similarly the failure of an investment bank would only 'jeopardise financial stability' if that institution is sufficiently large and interconnected that its liabilities form a large share of the assets of the rest of the system.

In short, provided they are not too big, complex or connected to fail, Investment Banks have little reason to enter resolution and should follow 'normal insolvency proceedings'. There is then a case for examining the proposal in light of a structural separation of commercial and investment banking.

4.2.2. BRR Impact Analysis

The impact assessment of the proposed regulation should be extended to consider the separation of commercial and investment banking. The Commission's Impact Assessment uses a model (the SYMBOL model) to calculate the likely effectiveness of the resolution tools. (European Commission, 2012b, Campolongo et al., 2011) The analysis was conducted on the basis of universal banks, however the results of modelling investment bank and commercial banking activities separately would provide valuable information.

Amongst other things the model attempts to establish whether the proposed resolution tools, including the bail-in tool, would be effective.[22] Currently the estimates are based upon a "blended" bank funding rate. As the HLEG Report on Banking Structure made clear there is a clear subsidy from commercial to investment banking, this subsidy is two-fold in its nature: first, economically deposits provide a more stable funding base than market based funding; second, investment banking can benefit from the higher likelihood of the state rescuing a commercial bank, in short the moral hazard problem. (High-level Expert Group on reforming the structure of the EU banking sector, 2012) The Impact Assessment should be run to account for the separation of commercial and investment banking functions including using different funding rates.

4.3. **Economies of scale and scope, the size of finance.**

It might be argued that the systemic risk of large, complex, connected, multi-function banks is worth bearing thanks to other benefits they bring to society. However the evidence for such benefits is ambiguous at best, and most likely such institutions and bloated finance more generally, are actually harmful to society.[23]

[22] It also attempts to estimate the effect on the cost of bank funding and changes to GDP.

[23] It seems that there are unlikely to be private economies of scale / scope. There is even less likelihood that there exist benefits to the public interest.

Beyond a certain size banks show no evidence of economies of scale (High-level Expert Group on reforming the structure of the EU banking sector, 2012, Kregel, 2009) or synergies across multiple functions. Further, 'nor do large global companies rely on a single bank for all their financial service needs' (Kregel, 2009: 3). In the US when bank size was limited '[t]here is no evidence that U.S. multinational firms have suffered because bank size was limited by regulatory restrictions.' (Kregel, 2009: 3). If anything there is evidence that large financial institutions might increase asset correlation in crisis times as they are forced to liquidate assets which would ordinarily be uncorrelated. (Kregel, 2009: 4) Such an increase in asset correlation further reduces bank resolvability, reducing the effectiveness of resolution tools. At a macro level the BIS recently found that beyond a certain size finance is not beneficial to economic growth. (Cecchetti and Kharroubi, 2012, Dolphin, 2012)

4.4. Conclusion – prevention is key and the proposal could and should go further

The weight of bank recovery and resolution legislation to be on ensuring sufficient preventative measures are taken to reduce the likelihood that bank failure does not translate into systemic crisis. To do so reduces systemic risk. It reduces the likelihood special resolution tools will be required. It increases the likelihood that resolution tools will be successful if they are required. Both of which reduce the likelihood of taxpayer support. The proposal should go further in ensuring prevention measures are taken throughout the European Union.

5. Resolution: the importance of considering the whole picture – liquidity and derivatives.

The first section above stressed the role BRR legislation has in influencing the character of the banking sector prior to, and going into a crisis. It argued that the banking sector should be made safer through preventative measures. More targeted discussion of resolution tools must carry over this mode of analysis by keeping a clear idea of the character of the banking sector to which resolution tools will be applied.

In this section the importance of two further characteristics is considered. First, banks entering crisis will be in an emergency liquidity situation and will almost certainly be in receipt of emergency liquidity provision from the State, most likely from the central bank. They will also most likely, but not necessarily, face solvency problems. Consideration of resolution tools must account for an emergency liquidity situation.

Second, consideration of the effectiveness of resolution tools must also consider the incentives generated prior to the crisis by those resolution tools themselves. Several aspects might be highlighted but perhaps the most prominent, and that taken up here, is the role of OTC derivatives.

Section 5.1 argues that the proposal does not sufficiently consider the liquidity situation of failing banks. Section 5.2 argues that the possibility to exempt derivatives from bail in will lead to a growth in derivatives, which, among other things, will have a detrimental effect on the effectiveness of the proposed resolution tools.

5.1. The importance of liquidity in bank crises.

New crises tend to be, unpredictably, different from previous ones. One result is that governments facing a fresh crisis are usually not equipped by existing regulation to prevent systemic problems and as a result pass emergency legislation to tackle crises.[24] As was seen in the previous section, this makes emphasis on preventative measures critical. Banking regulation is often adjusted to account for the last crisis, even as this bias is noted and (usually failed) attempts are made to avoid it.

[24] Indeed it can be convincingly argued that bank activity, regulation and crisis / fragility are intimately related; e.g. bank activity reacts to regulation (“innovation”) (e.g. #Helleiner, 1994) and the resulting innovations can increase fragility, (Engelen et al., 2008) perhaps because there is a rush into the new instruments. (Gennaioli et al., 2012)

The current proposal has been influenced by the current crisis in a number of ways. First, the last crisis resulted in extra-ordinary tax payer support for banks and the Commission's proposal reacts directly to this. This reaction, though, contains both dangers and opportunities for public interest. On the one hand, and dangerously, the proposed legislation would explicitly define an obligation for taxpayers to rescue troubled banks in certain circumstances. (e.g. the 'context of the proposal' discusses 'minimising taxpayer exposure to losses in insolvency' (European Commission, 2012a: 2).[25] This was not the case previously: subjecting banks to normal insolvency regimes makes no mention in law of taxpayer support for failing banks. On the other hand, recognition that bank crises do, indeed, often involve taxpayer support can also have advantages for the public interest. If tax-payers are to accept this formal obligation it must be clear that they have powers to affect bank behaviour. If these powers are not granted there is a danger that the proposed legislation amounts to a weakening of the public interest vis-à-vis financial institutions.

Second, and more directly relevant here, the current banking crisis has left Europe with a 'balance sheet recession' (Borio, 2012) and it might be argued that the emphasis on solvency measures in the Commission's proposal is a reaction to this and the, very real, need to clean up banks' balance sheets. This has the effect, however, of concentrating too much emphasis on solvency at the expense of liquidity considerations. As a result too much emphasis is placed on resolution of the current crisis rather than management of the next crisis.[26]

Bank crises are a complex mix of solvency and liquidity issues. The Commission's proposal explicitly excludes liquidity issues, focussing on solvency. This may be unavoidable: separate legislation deals with central banks who are most often the provider of emergency liquidity to failing banks. However, any discussion of resolution tools, even if constrained to resolution measures, must take full of account of the liquidity situation that a failing bank will be in, particularly one entering resolution. Such a bank will almost certainly have been subject to a bank run of some sort and, if they are to be functioning at all, will be in receipt of emergency liquidity from the central bank and possibly from other arms of the State as well. The proposal does not appear to fully acknowledge this. Rather, in separating the provision of

[25] Notwithstanding Article 5.3 which states that 'recovery plans shall not assume any access to or receipt of public support but shall include, where applicable, an analysis of how and when an institution may apply for the use of central bank facilities in stressed conditions.' (European Commission, 2012a: 49)

[26] This BIS also notes the distinction between crisis management and crisis resolution. (Borio, 2012)

liquidity from resolution through solvency measures it appears to assume "ordinary" liquidity conditions.[27]

This sub-section examines the impact on resolution tools of taking this approach to liquidity. It finds that not fully accounting for the liquidity position that failing banks will find themselves in leads the proposal to face a number of problems. The section begins by very briefly laying out the anatomy of a bank failure, arguing that the nature of banks means that bank failures are a complex mix of both liquidity and solvency problems. It then turns to the impact on the resolution tools, which aim to prevent such failures becoming systemic problems.

5.1.1. Liquidity and Solvency in Bank crises

The likelihood of a bank triggering the recovery resolution tools and remaining liquid (i.e. the rest of the economy is willing to hold its liabilities is very small). Figure 1 illustrates this idea, a liquid bank is unlikely to be in crisis, conversely an illiquid bank is unlikely to avoid crisis. Almost by definition a bank crisis is triggered when it has liquidity problems, usually in the form of a bank run, be it a traditional bank run of depositors (Diamond and Dybvig, 1983), or a market based bank run. (Aglietta and Scialom, 2009)

Figure 1

	Not Crisis	Crisis
Liquid	Normal Operation → ↓ ↘	Low / zero probability
Not-liquid	Low / zero probability	High probability

Consider now the relation between bank solvency and liquidity. A bank can be insolvent, in the sense that its assets would not service its liabilities, and yet avoid crisis as long as it remains liquid and honours its obligations. The current Greek banking system might be one example of this. Conversely illiquid banks, regardless

[27] This is especially perverse considering that many sections of the European banking sector are reliant on liquidity provided by their central banks, most especially by the ECB and the Euro-system Central Banks.

of whether solvent or not, will enter crisis. Banks operate on confidence, if all of the holders of bank liabilities demand a return of their cash at the same time the bank will be in crisis regardless of its theoretical solvency. Of course insolvent banks generally become illiquid and hence enter crisis, but, critically, the crisis is triggered by liquidity (which has a complex link to solvency). Figure 2 illustrates how banks crisis are matters of liquidity regardless of solvency, and that banks may remain in a state of liquid / insolvent but will often migrate from this state to insolvent / illiquid. The very nature of banks means that liquidity and solvency issues are closely related.

Figure 2

	Solvent	Insolvent
Liquid	No Crisis	Possibility of no crisis
Illiquid	Crisis	Crisis

5.1.2. The omission of liquidity issues from the proposal

While the Commission's Proposal appears to acknowledge that emergency liquidity provision by the State is often required the resolution tools themselves appear to concentrate only on the resolution of solvency. Most importantly they appear to do so while assuming "normal" liquidity conditions persist. The result is that the proposal appears to analyse the case where a bank is liquid but insolvent and in resolution i.e. a very low probability state of affairs. Furthermore in the tools if not the triggers for resolution, it appears to exclude the case where a solvent bank becomes illiquid.[28]

The text of the Proposal acknowledges that failing banks often require emergency liquidity, through the central bank or other arms of the State.[29] But it does so in order to exclude emergency liquidity provision by the State as a sufficient trigger for entry to resolution. [30]

[28] Bank runs can be self fulfilling. (Diamond and Dybvig, 1983) For example through market panics.

[29] It would be hard to deny it, economists have been discussing the central bank's role as lender of last resort to banks in trouble for well over a hundred years (e.g.Bagehot, 1873)

[30] Recital 24 states: 'The need for emergency liquidity assistance from a central bank should not in itself be a condition that sufficiently demonstrates that an institution is or will be, in the near-term, unable to pay its liabilities as they fall due.' And further that: ;In order to preserve financial stability, in particular in case of a systemic liquidity shortage, State guarantees on liquidity facilities provided by central banks or State guarantees on newly issued liabilities should not trigger the resolution framework…' (European Commission, 2012a: 25-6)

The difficulties of attempting to exclude liquidity issues in a treatment of bank failure begin to emerge in the same recital however. While in general the triggers are solvency based (capital shortfalls, assets less than liabilities and extraordinary public support) a bank may also enter resolution 'when the institution is or is to be unable to pay its obligations as they fall due', or in other words when it has liquidity problems.[31]

Perhaps more importantly here the design of the resolution tools themselves is focussed entirely on resolving solvency problems, while failing banks will also face liquidity problems which will impact the working of the resolution tools. By neglecting to consider the impact of liquidity issues on the working of resolution tools the proposal faces a number of problems as is now explored.[32]

5.1.3. Problems from neglecting liquidity issues.

Neglect of liquidity issues and the high likelihood that a bank entering resolution has already received liquidity assistance from the State can be analysed to have two effects on the effectiveness of resolution tools, under-estimating the exposure of tax-payers and impacting the working of the tools themselves.

Under-estimating the cost to tax payers.

The provision of emergency liquidity by the State has a potential cost to the economy and to tax-payers which is not considered in the proposal. Furthermore the workings of the resolution tools might actually transfer risks to liquidity tools if this is not acknowledged. This cost might occur in a variety of ways, e.g. directly or indirectly from central bank credit losses on loans to failing banks; from credit losses State guarantees; from losses sustained by mechanisms providing temporary State ownership (which will require liquidity).

The danger of excluding liquidity can be illustrated with the current case of the Greek banking system. Greek banks, quite naturally, turned to their central bank as a lender of last resort as they began to experience liquidity issues. In this case both solvency

[31] Recital 24 states: 'An institution should be considered as failing or likely to fail when it is or is to be in breach of the capital requirements for continuing authorisation because it has incurred or is likely to incur in losses that are to deplete all or substantially all of its own funds, when the assets of the institution are or are to be less than its liabilities, when the institution is or is to be unable to pay its obligations as they fall due, or when the institution requires extraordinary public financial support.' (European Commission, 2012a: 25-6)

[32] It should be noted that Article 5 calls for analysis in the Recovery Plan of how and when institutions might 'apply for the use of central bank facilities in stressed conditions and available collateral.' The point is however that the mechanics of the proposed resolution tools do not account sufficiently for the nature of such funding.

and liquidity (because of perceptions of solvency) deteriorated. Greek banks are now entirely dependent on the Greek Central Bank for liquidity provision. Should Greek banks be taken into resolution the central bank will be forced to bear very large losses. These losses, in one way or another, must be borne by society more generally.[33]

It might be argued that swifter action and a robust resolution regime would have prevented the emergency liquidity provision from reaching such a size. It is of course hoped that this would be the case. Never-the-less it cannot be guaranteed that resolution tools would have prevented all losses to emergency liquidity providers. Emergency liquidity provision by the State is not a "get out of jail free" card; it has consequences.

Impacting the effectiveness of the proposed resolution tools

The provision of emergency liquidity by the State (usually via the central bank) negatively impacts the effectiveness of the proposed resolution tools. It does so in two ways.

First, emergency liquidity provision by the State prior to entering resolution reduces the effectiveness of resolution tools by altering the balance sheets of banks. Bank crisis usually manifests itself as a liquidity crisis: as confidence in a bank's ability to meet its obligations decreases the bank is forced to replace fleeing funding from depositors and the markets with emergency funding from the central bank and potentially with asset sales.

A recent paper by the BIS which studied the current European banking crisis shows clearly the effects on the balance sheet of a bank in receipt of emergency liquidity provision from the central bank. (Allen and Moessner, 2012) The biggest impact arises because central bank lending tends to be secured lending.

On the asset side this reduces the amount of unencumbered assets as banks adjust their balance sheet and switch into assets which can be used as collateral.[34] The implication for resolution tools which target sales of bank assets is that the range of available assets is greatly reduced. This effect is in addition to any asset sales that

[33] It might be argued that swifter action and a robust resolution plan would have prevented

[34] In the European Sovereign Debt crisis this has meant that banks have switched, above all, into sovereign bonds of their own sovereign, bonds which are eligible as collateral at the ECB.

banks have made prior to resolution as they scrambled for cash to meet liquidity requirements.

On the liability side, accompanying encumbered assets are “encumbered liabilities”: an increasing percentage of central bank liquidity increases the amount of secured lending on the liability side of the balance sheet. This reduces the flexibility and efficacy of resolution tools. For example secured lending is explicitly excluded from the bail-in tool, with increased secured borrowing from the central bank the amount of liabilities which are available for write down is greatly reduced.

Second, during resolution there may be conflicts between measures to conserve liquidity and measures to improve solvency.

On one hand, the purpose of a special insolvency regime is to maintain (at least parts of) the bank as a going concern, e.g. to prevent the ‘interruption of essential services’. (European Commission, 2012a: 26) To do so requires meeting obligations as they fall due. In short a bank in resolution requires access to liquidity. Liquidity management typically wishes to prevent cash leaving the bank in the short term, i.e. by failing to honour certain obligations, regardless of seniority.

On the other hand as crisis management becomes crisis resolution attention must turn to solvency. The solvency-based resolution tools which are proposed respect the hierarchy of claims, regardless of maturity or of the effect on current liquidity. These can conflict, as is illustrated below when looking in more detail at resolution tools and especially the bail in tool.

In the end the two must converge, for assets and liabilities are only be future cash flows, the resolution tools must alter the balance sheet such that cash available from assets is enough to service those liabilities which cannot be written down. Abstracting completely from liquidity in the design of resolution tools can reduce the usefulness of those tools.

5.1.4. Considering the resolution tools in light of liquidity and solvency

A number of the most important resolution tools and activities necessary for their implementation can be considered through the lens of solvency and liquidity, and the proposals treatment of them.

<u>Market Valuation</u>

Upon entering resolution a ‘preliminary valuation’ of the bank is required. (European Commission, 2012a: 74 (Article 30)) The proposal states that the objective is to

'asses the **market value** of the assets and liabilities of the institution' (emphasis added). [35] This risks exacerbating the bank's problems and may involve a liquidity / solvency conflict.

Bank solvency and liquidity are intimately connected: of particular interest here, market panic, unjustified by long term views or so-called "fundamentals", can be caused by liquidity issues or perceptions of solvency issues and can cause bank failure. Market panic in this regard can be self-fulfilling and can lead to "unjustified" bank failures. For example, liquidity issues (by banks or others) might lead to fire-sales of assets, driving down prices and leading to apparent solvency problems as the market value of bank assets falls with no immediate change in the long term credit worthiness of bank assets.[36] Conversely, falls in the market value of bank assets can lead to a loss in confidence which can lead to liquidity problems for the bank. In short bank failure can be triggered by perceptions of solvency and / or by liquidity issues. These perceptions however might not reflect the underlying performance of the bank's assets. The crisis therefore can be a self-fulfilling one.

Using market valuation in these circumstances appears to include in resolution the situation that the legislation appears to wish to exclude, i.e. one where emergency liquidity provision by the State would see the bank through the irrational market panic (recall that one trigger for resolution is the banks assets worth less than the liabilities).

If a bank is in resolution it is because the resolution authority believes that at least some part of it is a viable going concern. In this environment, the resolution authority should be stepping back from market panic and looking at the long term ability of assets to service liabilities – this cannot be achieved using market valuation (markets which will almost certainly be distressed).

In the proposal long term valuation is a second-best to market valuation in case of dysfunctional markets. Markets will almost certainly be dysfunctional in the case of a bank crisis which threatens systemic stability; hence the preference for market valuation is redundant. More than this however the spirit of the proposal should

[35] The need for a valuation is so that 'any losses that could be derived are recognised at the moment of resolution' and is closely linked to the safeguards outlined in Article 65.

[36] Notwithstanding longer term effects caused by disruptive market movements.

emphasise the importance of escaping the panic of short term market falls through long term valuation.

Furthermore the sale of business tool refers to the valuation obtained under the initial valuation to ensure that commercial terms are obtained for the sale of businesses. If however resolution is required because of liquidity / market panic issues then this market based valuation merely ensures that liability holders of troubled institutions have to pay for market panic. In this way the resolution tools threaten to "lock-in" the effects of an irrational market panic

Spreading MTM accounting during a period of market disruption is likely to have negative effects, most especially for those balance sheet items which were not previously marked-to-market. (International Accounting Standards Board) More generally MTM accounting encourages market behaviour. For example MTM accounting encourages the hedging of P&L volatility (but not "real risks") with market-based instruments, which in turn justifies MTM accounting but can be based on very thin markets which evaporate in crisis.[37]

The 'bridge institution tool' and the 'asset separation tool'[38]

Both the bridge institution and the asset separation tool allow for transfer of assets to entities wholly (in the case of asset separation) or wholly or partially owned (in the case of the bridge institution) by one or more public authorities. Whilst this provides a powerful resolution tool it is highly likely that both of these tools will require initial liquidity injections. Once again this liquidity will be provided by the state and leave taxpayers with a credit exposure to the new resolution entity.[39]

The bail in tool

[37] In a related example from the beginning of the current crisis: ABX indices were used both to mark-to-market market illiquid residential mortgage CDO tranches and as the reference for CDS protection on those tranches.. However as the only hedging tool available ABX indices were driven down by demand for credit protection on CDS as problems emerged in the US residential mortgage market. Because the same indices were used to mark-to-market the illiquid tranches for which no market remained this caused the "market" valuation of those tranches to appear even more distressed than a long term valuation might have. This in turn led to even more distressed selling of the indices via the purchase of credit protection.

[38] Respectively: (European Commission, 2012a: 80-3 (Article 34-5)) and (European Commission, 2012a: 83-4 (Article 36))

[39] At the very least in these situations state supplied funds should have super creditor status as the FIDC does in the US.

Consistent with rest of the proposal the bail-in tool is a balance sheet exercise, cancelling liabilities. Ultimately the aim of the bail-in tool must be to find sufficient liabilities available to write-down such that cash available from assets is enough to service those liabilities which cannot be written down.[40]

Conflicts between liquidity and solvency also arise with the bail-in tool. Taking a pure balance sheet approach, as the bail in tool does, neglects the maturity dimension of assets and liabilities; the maturity dimension however is critical to liquidity management. The result is potential conflicts. Liquidity management (in a crisis) is concerned with conserving cash regardless of seniority in order to meet those obligations which it must do to remain viable. This may overlap with the reasons for entering resolution, e.g. to preserve financial stability and essential services and to protect depositors. Solvency considerations, reflected in the mechanism of the bail-in tool, demand writing down liabilities based upon their seniority, starting with equity, then subordinated debt and so on. Writing down equity however is of little use in preserving liquidity to meet obligations falling due, certainly no more effective than suspending dividends.

This conflict is perhaps most evident in the exemption of all 'liabilities with an original maturity of less than one month.' (European Commission, 2012a: 86 (article 38)) There appears to be no reason to exempt liabilities under 1 month from the possibility of bail-in. In fact given the liquidity requirements of a bank in resolution it is exactly these payments which should be under most scrutiny by a resolution authority.[41]

Consider the situation of the bank that enters resolution. First, it will already be in an emergency liquidity situation. So the argument that such an exemption might protect the liquidity situation of the bank is redundant: by the time a bank enters resolution there it will almost certainly not have "normal" liquidity to protect.

Second, such an exemption will only encourage short-term liabilities. This will directly reduce the amount of liabilities available for write-down and therefore the effectiveness of the resolution tools more generally. In fact it might be the case that as a bank gets into crisis that such an exemption further encourages a shift into shorter term liabilities, further worsening the bank's liquidity situation. Moreover such

[40] In conjunction with the other resolution tools.

[41] It is quite possible to imagine that an impending and short term liability might actually be the catalyst for a loss of confidence in a bank and hence a bank crisis.

incentives are in direct contradiction to the liquidity measures implemented as a part of the capital requirement legislation (CRD4).

In short, there should be no exemptions to bail-in for short term maturities.

Resolution funds

Resolution funds are envisaged as final back stop once other possibilities have been excluded to absorb losses during balance sheet write down before taxpayers are called upon. But as seen above, balance sheet items are not abstract things, but must ultimately be backed by cash, i.e. liquidity. The resolution fund must therefore be able to be used to meet obligations falling due – otherwise it is meaningless.

It is generally agreed that resolution funds should be pre-funded, to avoid pro-cyclicality and in an attempt to ensure funds are made available. It seems unlikely however that even pre-funded resolution funds can currently attract enough cash to make them meaningful.

Moreover pre-funded resolution funds come with an inherent investment fund linked to the need to make them liquid in a crisis. The problem comes when deciding in what form to hold resolution funds. If it is held in a non-money asset there is a problem of exchanging the asset for money in times of crisis – who will buy it and at what price.[42] On the other hand holding the resolution fund in a money asset involves holding it in the banking system – the very banking system which will be in crises at the point the money is required. For example holding it on deposit at the central bank entails an asset on the central bank balance sheet which, as it is unlikely to be notes and coins held in a vault, is presumably lending to banks, banks which are in crisis when the money is required.

5.2. **Derivatives**

The proposal leaves the possibility to exempt OTC derivatives from the bail in tool to national authorities. There is however no reason to exempt derivatives as this short section discusses.

Derivatives claims on defaulting counterparts inevitably fall under an ISDA Master Agreement or equivalent. This document subsumes all derivatives contracts and treats them as one contract. (Hudson, 2002) ISDA Master Agreements typically apply

[42] Moreover, holding the fund in assets entails a decision regarding allocation of resources in the economy e.g. lending to sovereigns, purchase of commodities etc.

close-out netting across contracts, in addition the majority of OTC notional outstanding is also subject to a collateral agreement under a Credit Support Annex. In the event of a default a process is triggered under the Master Agreements which, in certain circumstances, results in the non-defaulting party typically holding a senior unsecured claim for any shortfall. These agreements, especially close-out netting, already offer several advantages to the non-defaulting counterpart. (Bliss and Kaufman, 2005)

Providing the ISDA process is triggered by resolution there is no reason for derivative exposures to be exempt from bail in. The non-defaulting counterpart will have the chance to replace the defaulted trades in the market and to enter a claim with the defaulting counterpart. If the agreement is collateralised this residual claim should be small.

The derivative market must be robust enough to handle a counterparty default. In fact it might be argued that in the current crisis derivatives markets have indeed proved robust to hundreds of defaults. Even the Lehmans default has failed to put a dent in derivative turnover statistics. (Bank for International Settlements, 2011) Moreover the economist estimated that losses to Lehman's derivative counterpart amounted to around 200mUSD each – not enough to cause systemic risks. (Economist, 2008)

Moreover, as above, it is necessary to think about impact of this legislation on the shape of banks entering resolution. An exemption for OTC derivatives will only encourage their growth relative to other forms. This will reduce the impact of resolution tools as fewer liabilities will be available for bail in. It should be noted that the extra-ordinary growth of OTC derivatives markets since the late 1980s is exactly as a result of granting exemptions in the face of growing notional outstanding. [43]

The nature of derivatives however means that exemptions for derivatives might also have a wider negative impact on the effectiveness of the proposed legislation. The flexibility of derivatives means that encouraging their use might undermine other measures taken in the legislation e.g. measures to reduce complexity, to separate different banking functions and so on.

[43] A 1989 Policy Statement by the CFTC in response to a slow trickle of swaps deals such as the famous IBM-World Bank Swap (Kapur et al., 1997) only served to open the way for more OTC transactions. By threatening the consequences of rendering invalid a growing mountain of OTC derivatives ever stronger exemptions were granted culminating in the Commodity Futures Modernisation Act (CFMA). (Stout, 2009, Greenberger, 2010)

In short there is no reason to leave the possibility of exempting derivatives from bail-in and to do so risks undermining the effectiveness of the resolution tools which have been proposed.

6. Governance and Accountability

6.1. **Governance in Financial Authorities.**

In general governance in financial authorities could be improved to be more in the public interest. A prominent example is provided by Central Banks which have tended to become more independent from democratic control over the last 20-30 years. In Europe the ECB is amassing considerable powers and responsibilities without increasing or necessary accompanying democratic accountability.

With regard to the proposed BRR legislation Article 11 & 12 discuss the formation of resolution authorities and the importance of relevant government ministries being represented. This should be amended to include representatives of various stakeholder groups including employees. “Civil society” should also be represented in the resolution authority to protect public interest and to tackle problems of “group think” and regulatory capture.

6.2. **Groups and cross border groups**

This report will not comment extensively on the issues concerning banking groups and particularly cross border banking groups.[44] However while European banking Union remains in early stages with no credible resource to provide recovery and resolution funds (apart from emergency liquidity provided by the ECB) the emphasis will be on Member States to rescue banks.

As a result the most sensible approach for bank recovery and resolution legislation is to clearly define which entities national regulators are responsible for, clearly demark how groups will be split along national lines and for each national regulator to require that those entities within its responsibility be controlled for size, complexity and connectedness. As above the emphasis should be on prevention, reducing the need for complex cross-border co-operation. This approach is consistent with furthers a single market in banking services if there is consistent treatment across Member States and banks are more clearly aware of the arrangements. Furthermore what the banking sector in Europe most needs to aid its recovery is robust regulation which can restore confidence.

[44] These issues will be taken up in a further report by finance watch which will jointly discuss Banking Union, Bank Structure and Bank Recovery and Resolution.

7. Bibliography

AGLIETTA, M. & SCIALOM, L. 2009. A systemic approach to financial regulation: a European perspective. *Economix Working Paper.* Paris: Université Université de Paris Ouest Nanterre La Défense.

ALLEN, W. A. & MOESSNER, R. 2012. The liquidity consequences of the euro area sovereign debt crisis. *BIS Working Paper.* Basel: Bank for International Settlements.

ALVAREZ & MARSAL. 2012. *Lehman Returns: Bank Emerges from Bankruptcy 3.5 Years Later* [Online]. Available: http://www.alvarezandmarsal.com/en/about/news/article.aspx?article=6470 [Accessed 2012].

BAGEHOT, W. 1873. *Lombard Street : A description of the money market,* London, Henry S. King & Co.

BANK FOR INTERNATIONAL SETTLEMENTS 2006. Basel II: International Convergence of Capital Measurement and Capital Standards: A Revised Framework - Comprehensive Version *In:* SETTLEMENTS, B. F. I. (ed.). Basel: BIS.

BANK FOR INTERNATIONAL SETTLEMENTS 2009. Strengthening the resilience of the banking sector. *BIS Consultative Document.* Basel: Bank for International Settlements.

BANK FOR INTERNATIONAL SETTLEMENTS. 2011. *Semiannual OTC derivatives statistics at end-June 2011* [Online]. Basel: Bank for International Settlements. Available: http://www.bis.org/statistics/derstats.htm [Accessed 6/12/2011].

BLISS, R. R. & KAUFMAN, G. G. 2005. Derivatives and Systemic Risk: Netting, Collateral, and Closeout. *Federal Reserve Bank of Chicago Working Papers.* Federal Reserve Bank of Chicago.

BORIO, C. 2012. The financial cycle and macroeconomics: What have we learnt? *BIS Working Papers.* Basel: Bank for International Settlements.

CAMPOLONGO, F., MARCHESI, M. & DE LISA, R. 2011. The Potential Impact of Banking Crises on Public Finances: An Assessment of Selected EU Countries Using SYMBOL. *OECD Journal: Financial Market Trends,* 2011**,** 73-84.

CECCHETTI, S. G. & KHARROUBI, E. 2012. Reassessing the impact of finance on growth. *BIS Working Papers.* Bank for International Settlements.

CHAN-LAU, J. A. 2010. Balance Sheet Network Analysis of Too-Connected-to-Fail Risk in Global and Domestic Banking Systems. *IMF Working Paper.* Washington.

DIAMOND, D. W. & DYBVIG, P. H. 1983. Bank Runs, Deposit Insurance, and Liquidity. *Journal of Political Economy,* 91**,** 401-419.

DOLPHIN, T. 2012. Don't Bank on it. The financialisation of the UK economy. Institute for Public Policy Research (IPPR).

ECONOMIST. 2008. The great untangling. *Economist*.

ENGELEN, E., ERTURK, I., FROUD, J., LEAVER, A. & WILLIAMS, K. 2008. Financial innovation: frame, conjuncture and bricolage. *CRESC Working Papers.* Manchester: CRESC.

EUROPEAN COMMISSION 2012a. Establishing a framework for the recovery and resolution of credit institutions and investment firms - Proposal. *In:* COMMISION, E. (ed.) *COM(2012) 280 Final.* Brussels: European Commision.

EUROPEAN COMMISSION 2012b. Establishing a framework fr the recovery and resolution of credit institutions and investment firms - Impact Assessment. *In:* COMMISION, E. (ed.) *SWD(2012) 166 Final.* Brussels: European Commision.

FINANCE WATCH 2012a. Answer to the Liikanen Consultation. Finance Watch.

FINANCE WATCH 2012b. Answer to the public consultation from the European Commission on the Liikanen report. Finance Watch.

FONTEYNE, W., BOSSU, W., CORTAVARRIA-CHECKLEY, L., GIUSTINIANI, A., GULLO, A., HARDY, D. & KERR, S. 2010. Crisis Management and Resolution for a European Banking System. *IMF Working Paper.* Washington.

GENNAIOLI, N., SHLEIFER, A. & VISHNY, R. 2012. Neglected risks, financial innovation, and financial fragility. *Journal of Financial Economics,* 104**,** 452-468.

GEORGE, E. 1998. The New Lady of Threadneedle Street. . *Vital Topic Lecture.* Manchester Business School: Bank of England.

GREENBERGER, M. 2010. The Role of Derivatives in the Financial Crisis. Testimony of Michael Greenberger. *Financial Crisis Inquiry Commission Hearing.* Wednesday, June 30, 2010, 9am EDT ed. Washington DC.

HALDANE, A. G. 2012. A leaf being turned. *Occupy Economics, "Socially useful banking".* At Friend's House, Euston, London.

HELLEINER, E. 1994. *States and the reemergence of global finance : from Bretton Woods to the 1990s,* Ithaca, NY ; London, Cornell University Press.

HIGH-LEVEL EXPERT GROUP ON REFORMING THE STRUCTURE OF THE EU BANKING SECTOR 2012. Final Report. Brussels.

HUDSON, A. 2002. *The law on financial derivatives,* London, Sweet & Maxwell.

INTERNATIONAL ACCOUNTING STANDARDS BOARD. *IAS 39 — Financial Instruments: Recognition and Measurement* [Online]. Available: http://www.iasplus.com/en/standards/standard38 [Accessed].

JONES, D. 2000. Emerging problems with the Basel Capital Accord: Regulatory capital arbitrage and related issues. *Journal of Banking & Finance,* 24**,** 35-58.

KAPUR, D., LEWIS, J. P. & WEBB, R. C. 1997. *The World Bank : its first half century,* Washington, D.C., Brookings Institution.

KREGEL, J. 2009. Observations on the problem of "too big to fail / save / resolve". *Levi Insitute Public Policy Brief.* Levi Economics Instutute.

LANGFIELD, S., LIU , Z. & OTA, T. 2012. Mapping the UK interbank system.

LEESON, N. W. & WHITLEY, E. 1996. *Rogue trader,* London, Little, Brown.

MOYA, E. 2009. Lehman assets considerably reduced, say receivers. *The Guardian*, 6/9/2009.

MUNCHAAU, W. 2012. Politics undermines hope of banking union. *Financial Times.*

O'HARA, M. & SHAW, W. 1990. Deposit Insurance and Wealth Effects: The Value of Being "Too Big to Fail". *The Journal of Finance,* 45**,** 1587-1600.

ONDO-NDONG, S. & SCIALOM, L. 2008. Northern Rock: The anatomy of a crisis – the prudential lessons. University of Paris West - Nanterre la Défense, EconomiX.

SHOTTER, J. & JENKINS, P. 2012. UBS dogged by series of disasters. *Financial Times*, 19 December 2012.

STAFF OF THE IMF BIS AND THE SECRETARIAT OF THE FSB 2009. Guidance to Assess the Systemic Importance of Financial Institutions, Markets and Instruments: Initial Considerations. Report to the

G-20 Finance Ministers and Central Bank Governors by Staff of the International Monetary Fund and the Bank for International Settlements, and the Secretariat of the Financial Stability Board. *Report to the G-20 Finance Ministers and Central Bank Governors.* Report to the G-20 Finance Ministers and Central Bank Governors.

STOUT, L. A. 2009. How Deregulating Derivatives Led to Disaster, and Why Re-Regulating Them Can Prevent Another. *LOMBARD ST.,* 1**,** 4-10.

TODD, W. F. & THOMSON, J. B. 1990. An insider's view of the political economy of the too big to fail doctrine. *Federal Reserve Bank of Cleveland Working Paper.* Clevland: Federal Reserve Bank of Cleveland.

TREANOR, J. 2010. Solving the Lehman insolvency. *The Guardian*, 15/9/2010.

VIÑALS, J., FIECHTER, J., PAZARBASIOGLU, C., KODRES, L., NARAIN, A. & MORETTI, M. 2010. Shaping the New Financial System. *IMF Staff Position Note.*