

Merler, Silvia; Wolff, Guntram B.

Research Report

Ending uncertainty: Recapitalisation under European Central Bank supervision

Bruegel Policy Contribution, No. 2013/18

Provided in Cooperation with:

Bruegel, Brussels

Suggested Citation: Merler, Silvia; Wolff, Guntram B. (2013) : Ending uncertainty: Recapitalisation under European Central Bank supervision, Bruegel Policy Contribution, No. 2013/18, Bruegel, Brussels

This Version is available at:

<https://hdl.handle.net/10419/106318>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

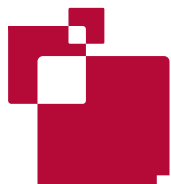
ENDING UNCERTAINTY: RECAPITALISATION UNDER EUROPEAN CENTRAL BANK SUPERVISION

SILVIA MERLER AND GUNTRAM B. WOLFF

Highlights

- Estimates of the recapitalisation needs of the euro-area banking system vary between €50 and €600 billion. The range shows the considerable uncertainty about the quality of banks' balance sheets and about the parameters of the forthcoming European Central Bank stress tests, including the treatment of sovereign debt and systemic risk. Uncertainty also prevails about the rules and discretion that will apply to bank recapitalisation, bank restructuring and bank resolution in 2014 and beyond.
- The ECB should communicate the relevant parameters of its exercise early and in detail to give time to the private sector to find solutions. The ECB should establish itself as a tough supervisor and force non-viable banks into restructuring. This could lead to short-term financial volatility, but it should be weighed against the cost of a durably weak banking system and the credibility risk to the ECB. The ECB may need to provide large amounts of liquidity to the financial system.
- Governments should support the ECB, accept cross-border bank mergers and substantial creditor involvement under clear bail-in rules and should be prepared to recapitalise banks. Governments should agree on the eventual creation of a single resolution mechanism with efficient and fast decision-making procedures, and which can exercise discretion where necessary. A resolution fund, even when fully built-up, needs to have a common fiscal backstop to be credible.

Silvia Merler (silvia.merler@bruegel.org) is an Affiliate Fellow of Bruegel. Guntram Wolff (guntram.wolff@bruegel.org) is Director of Bruegel. The authors thank Zsolt Darvas and other Bruegel colleagues for excellent comments and discussions, and Giuseppe Daluiso for excellent research assistance.



ENDING UNCERTAINTY: RECAPITALISATION UNDER EUROPEAN CENTRAL BANK SUPERVISION

SILVIA MERLER AND GUNTRAM B. WOLFF, DECEMBER 2013

EXECUTIVE SUMMARY

The European financial system is plagued by two major sources of uncertainty. First, there is still mistrust over the quality of banks' balance sheets. Second (and related to the first), major uncertainty remains about the rules that will apply to bank recapitalisation, bank restructuring and bank resolution in 2014 and in years to come.

The fact that the European Central Bank is due to become the single supervisor for euro-area banks, and that it will conduct a far-reaching preliminary assessment of banks' balance sheets, has the potential to greatly reduce the first uncertainty, because a centralised assessment will make balance-sheet information more transparent, comparable and credible. The ECB has already outlined the broad structure of the exercise and some important technical elements underpinning it, such as, for example, the 8 percent threshold of core Tier 1 capital that will be used as the benchmark capital level. However, to date, important parameters remain still undecided and/or have not yet been communicated. These include in particular the treatment of sovereign debt, the magnitude of the stress test and the treatment of systemic risk. In light of the relevance of these variables for the formation of market expectations *ex ante* and for the credibility of the stress tests *ex post*, it will be important for the ECB to be as transparent as possible as early as possible.

The choices that still have to be made about these elements can potentially affect the results of the exercise. Market analysts and academics have put forward numerous estimates of the recapitalisation needs that might be identified by the stress tests for the euro-area banking system. The estimates vary widely between €50 billion and €650 billion. Differences in estimates are explained by the lack of information about the balance sheets of banks, and by the uncertainty over central

parameters of the exercise, in particular the way the systemic dimension of the exercise will be approached.

If a recapitalisation need is identified, decisions will need to be taken about how the capital need will be met. In the current situation, the main guiding framework is national decision-making authority. Some harmonisation is introduced via the amended state-aid framework, which is discussed in this Policy Contribution. This regime however could lead to potentially significant differences between countries and could thereby deepen financial fragmentation. The Bank Recovery and Resolution Directive (BRRD) will improve the situation significantly in terms of harmonisation, but it will not be applied in 2014 when the ECB results will be known.

The discussion about bail-in is likely to remain topical in the context of this exercise. The modified state-aid regime *de facto* introduces bail-in of junior debt as a precondition for accessing public funds for bank recapitalisation. The BRRD will introduce tougher requirements from 2016. The new steady-state system should be based on strict and clear rules. However *de facto*, policy discretion will always be exercised in some exceptional cases in order to prevent major systemic fall-outs from bail-ins. Who exercises this discretion, and how they do it, are of central importance.

Finally, there is the question of how remaining recapitalisation costs should be distributed between national taxpayers and taxpayers of other European countries. While during the transition phase to the new steady state, national taxpayers will inevitably have to shoulder most of the burden, we argue that in order to credibly break the vicious circle between banks and sovereigns, a European insurance scheme for the large risks,

combined with a contribution from national taxpayers is needed in the steady state.

A number of important policy priorities follow:

- To end uncertainty, the ECB should soon transparently communicate the central parameters of the comprehensive assessment, in order to allow for private sector solutions. The risk connected to sovereign debt holding should be assessed in the Asset Quality Review (AQR) by treating it at a discount reflecting the current market value. But sovereign debt should not be part of the forward looking stress-test exercise. The resulting better capitalisation should strengthen the lending by banks to corporations and households. The ECB should also say how it will treat and take into account systemic interconnectedness.
- Once the exercise is underway, the ECB should not shy away from forcing non-viable banks into restructuring. We acknowledge that this could lead to short-term volatility on the financial markets, which could be unavoidable, but this should be weighed against the cost of a lasting weak and dysfunctional banking system and the value of the credibility of the ECB as a supervisor and a monetary authority. The ECB needs to be ready to provide large amounts of liquidity to the remainder of the financial system following the closure of banks.
- To credibly break the link between banks and sovereigns, creditors need to be more involved in the sharing of the burden than during most of the last five years. Toughening and advancing bail-in rules is one element of this strategy. However, for senior debt during the transition period until 2016, a systemic risk evaluation should be made before proceeding to the bail-in. The senior creditor bail-in should only occur for banks that are put in 'gone concern'.
- Governments should support the ECB in its effort to restructure and bring the banking system back to health. Most importantly, governments should accept and support cross-border bank mergers where sensible. They should also be ready to recapitalise banks where necessary.
- To credibly break the link between banks and sovereigns, the Eurogroup should agree that the same rules be applied to bank recapitalisation and creditor involvement in different countries also in the transition period. Bail-ins of senior debt in the transition should not be excluded *ex-ante* but the potential systemic implications will always need to be assessed.
- The public funds will mostly come from national taxpayer resources. In some cases, a European Stability Mechanism (ESM) programme with the country may be needed. Cost sharing for bank recapitalisation may be necessary in order to prevent government insolvency.
- Decisions on bail-in, bank restructuring and resolution should be based on rules that limit discretion and prevent different approaches in different countries. However, even in the steady state, there is always an element of policy discretion because the situation and implications are different depending on the case and cannot be fully made automatic. It is of crucial importance that the policy discretion is exercised by a European resolution authority. Relying on national authorities only can lead to major differences and applications in different countries, thereby undermining financial integration and reinforcing the re-nationalisation of finance that has been seen in the last few years. This is not only sub-optimal but also undermines monetary integration.
- A clear and credible commitment to a single resolution mechanism and a common backstop are important to reverse banking re-nationalisation. The transition period should not be too long to avoid prolonged financial fragmentation with negative implications for growth and jobs. A resolution fund, even when fully built-up, needs to have a common fiscal backstop to be credible.

INTRODUCTION

The European Council's June 2012 commitment to break the vicious circle between banks and sovereigns by creating a banking union is one of the most important steps taken towards a more integrated euro area. Since then, the co-legislators have agreed on the first element of banking union, the creation of a Single Supervisory Mechanism (SSM). Discussions on the single resolution mechanism (SRM) are still ongoing at the time of writing. There is now a political agreement on the Bank Recovery and Resolution Directive (BRRD). A central aspect of the political discussion is the rules governing the recapitalisation of banks and the important transitional arrangements on the way towards banking union. This Policy Contribution focuses on the question of recapitalisation of banks to be supervised by the SSM, putting special emphasis on the transition.

The European economy is currently plagued by two major sources of uncertainty about the financial system and banks in particular. First, there is still uncertainty about the information on the quality of banks' balance sheets. The fact that supervisors are to date still national means that outside investors cannot be fully sure that risk models are harmonised in different countries, and they may also have doubts about the reliability of different national supervisors. The fact that the ECB becomes the single supervisor and will conduct a far-reaching initial assessment of banks' balance sheets will greatly reduce this uncertainty¹.

The second major uncertainty concerns the rules that will apply to bank recapitalisation, bank restructuring and bank resolution. The European approach towards banking issues in general – and bank recapitalisation specifically – has changed considerably since 2008, jumping from one extreme to the other. Initially, the prevailing view was that private sector participation needed to be avoided at all costs². The ECB itself was adamantly against forcing losses on the private creditors of Irish banks, where admittedly the potential

savings to the taxpayer were rather subdued³. This opposition was mainly rooted in the concern – justified or not – that forcing losses on private investors would have had disruptive consequences for the stability of the financial system of the countries concerned, and of the euro area as a whole⁴.

The general approach changed – although slowly – when it became evident that the strategy of total bailouts was costly and could have major systemic consequences. The channels are well known by now: high costs associated to bank recapitalisation cast doubts on the sustainability of public finances, initiating a 'vicious circle'⁵ between sovereigns' and banks' misfortunes, which has been one of the characteristic feature of this crisis. Faced with the high cost of public bank rescues, European policymakers started to talk more openly about the possibility of private-sector participation. This started to be seen as a way to both reduce the cost for the taxpayer and to foster the right incentives, by allocating responsibilities to those that took risks in the first place. The Cyprus episode marked a jump to the extreme, leading to considerable confusion about the applicable framework for bank recapitalisation⁶. Since then, all in all, the EU has shifted from a framework in which private participation was abhorred to one where it will become the norm, but the transition is tricky and the timing is challenging especially in relation to the ECB's forthcoming comprehensive assessment of banks.

Against this background, we start by discussing estimates of potential recapitalisation needs that could result from the ECB's assessment of banks. This highlights that important choices, which will influence the outcome of the exercise, have not yet been made. It also highlights the fact that the ECB assessment will be *de facto* an assessment of the banking system and not just individual banks – which is necessary to restore trust but which is delicate, in view of the potentially substantial recapitalisation needs that it could imply. We then review the new rules on bank

1. See Constâncio (2013) on the way the SSM will further harmonisation.

2. This is what Bruegel scholar Nicolas Véron has called the 'Sanio doctrine' referring to the first large bail-out of the crisis that happened in Germany at the insistence of the BaFin president Jochen Sanio, with reference to the systemic nature of the affected bank and the Pfandbrief market.

3. Pisani-Ferry, Sapir and Wolff (2013) estimate the figure for Ireland to be about €5-10 billion.

4. See, for example, Asmussen (2012).

5. Gerlach, Schulz and Wolff (2010) empirically demonstrate that larger banking sectors and less-capitalised banking sectors can potentially constitute a significant burden on taxpayers and are therefore positively correlated with sovereign risk, in particular when risk aversion is increasing.

6. During the negotiations of the financial assistance programme for Cyprus, the Eurogroup initially agreed to also bail-in insured depositors. The resulting bank run led to a change in the decision and the safeguarding of insured depositors, but in the following weeks, concern arose in the market about whether Cyprus should be considered a 'template' for the application of bail-in in the near future.

'The fact that supervisors are to date still national means that outside investors cannot be fully sure that risk models are harmonised in different countries, and they may also have doubts about the reliability of different national supervisors.'

recapitalisation and note that there is still considerable uncertainty, which should be removed before the ECB takes over as supervisor.

1 BANK RECAPITALISATION NEEDS, WHAT TO EXPECT

1.1 Elements of uncertainty in the design

The ECB will assume its new supervisory tasks in November 2014. Before that, together with national competent authorities (NCAs), the ECB will conduct a comprehensive assessment of the banking system, to be concluded in October 2014. This exercise will involve all banks that will in the future be directly supervised by the ECB, ie about 130 banks in 18 euro-area countries, accounting for approximately 85 percent of total euro-area bank assets. The comprehensive assessment is to be undertaken by the ECB based on the transitional arrangements laid out in Article 33.4 of the SSM regulation⁷; national authorities and the credit institutions concerned will supply the necessary information as requested. According to the ECB, the assessment has three elements⁸:

- A supervisory risk assessment, addressing key risks in the banks' balance sheets, including liquidity, leverage and funding.
- An asset quality review, examining the asset side of banks' balance sheets as of 31 December 2013. All asset classes, including non-performing loans, restructured loans and sovereign exposures, will be covered.
- A stress test, building on and complementing the asset quality review by providing a forward-looking view of banks' shock-absorption capacity under stress.

The ECB will set capital thresholds as a benchmark for the outcomes of the exercise amounting to 8 percent Common Equity Tier 1 (CET 1). The threshold is decomposed to 4.5 percent, which is the ratio that will be legally mandatory as of 1 January 2014 according to Capital Requirement Directive (CRD IV) and the Capital Requirement Regulation (CRR), a capital conservation buffer of 2.5 percent, and an add-on of 1 percent to take into account the systemic relevance of banks. The capital ratios make reference to the new regime that will phase in with the Capital Requirement IV

Directive. The 4.5 percent is the minimum CET 1 capital ratio required under CRD IV (up from 2 percent) whereas the capital conservation buffer is a new prudential tool introduced by the Basel III standard on bank capital adequacy, stress testing and market liquidity risk, and implemented by the CRD IV, which sets it at 2.5 percent of Risk Weighted Assets (RWAs). The capital conservation buffer will however only start to phase in gradually as of 2016. CRD IV includes also a mandatory systemic risk buffer of between 1 and 3.5 percent CET 1 of RWAs for banks that are identified by the relevant authority as globally systemically important. Moreover, CRD IV also gives the supervisor an option to set a buffer on 'other' systemically important institutions, including domestically-important institutions and EU-important institutions. The decision by the ECB to introduce an additional systemic buffer echoes a choice previously made by the Federal Reserve⁹ in its recent stress tests¹⁰.

These being the cornerstones of the exercise, two factors create uncertainty. The first is the definition of capital. There are in fact two elements that play a role in a stress test: (i) the size of capital ratios to be met and (ii) the strictness of the definition of capital (ie what instrument can and cannot be counted as CET 1). For given capital ratios, a tighter definition of CET 1 makes it more difficult for banks to meet the requirement. The element of uncertainty in the context of the ECB exercise stems from the fact that the latter will be taking place at the same time as the phase in of the new requirements foreseen in the EU Capital Regulation and Directives (CRD IV and CRR), which change the definition of capital by making it stricter¹¹. Currently-used instruments that do not meet the new requirements will have to be phased out. Both Basel III and Capital Requirement Regulation (CRR) foresee long transition periods¹². This means that banks will start adjusting next year to the new definition of capital, whereas the ECB exercise will use balance-sheet data as of end 2013, ie before the beginning of the transition. The definition of instrument that will be counted as Tier 1 in the stress test is therefore important and it has not yet been entirely clarified by the ECB¹³.

A second non-negligible element of uncertainty concerns the post-stress-test outcomes. To date

7. Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the ECB concerning policies relating to the prudential supervision of credit institutions.

8. ECB Note, Comprehensive Assessment October 2013, <http://www.ecb.europa.eu/pub/pdf/other/notecomprehensiveassessment201310en.pdf>.

9. See *Comprehensive Capital Analysis and Review 2014 Summary Instructions and Guidance*, 1 November 2013, <http://www.federalreserve.gov/newsevents/press/bcreg/bcreg20131101a2.pdf>, and *2014 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule*, 1 November 2013, <http://www.federalreserve.gov/bankinforeg/bcreg20131101a1.pdf>.

10. CRD IV establishes five new capital buffers: the capital conservation buffer, the counter-cyclical buffer, the systemic risk buffer, the global systemic institutions buffer and the other systemic institutions buffer. In addition, supervisors may add extra capital to cover for other risks following a supervisory review, and institutions may also decide to hold an additional amount of capital. See http://europa.eu/rapid/press-release_MEMO-13-690_en.htm.

11. The CRR follows Basel III and sets 13 criteria that any instrument would have to meet to qualify as CET 1. The criteria are listed in Article 28(5) of Regulation (EU) No 575/2013.

12. The transition period is established to ensure that before the new capital requirements apply in full, banks are given time to adapt in order to avoid nega-

it has neither been communicated what would happen with banks falling below the 4.5 percent threshold in the comprehensive assessment, nor it is clear how tough the ECB will be with banks above 4.5 percent but below 8 percent¹⁴.

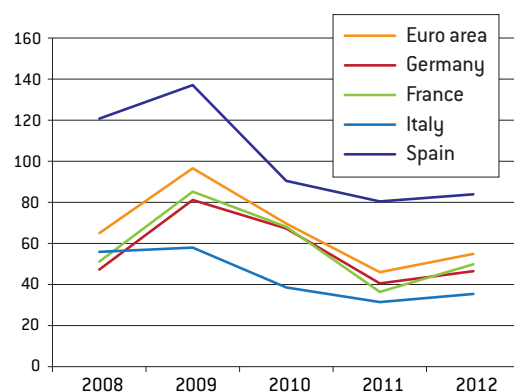
The ECB has signalled that it will publish further details about the comprehensive assessment by the end of January 2014.

1.2 Market expectations

Researchers and bank analysts have expressed their hope that the exercise will be a central element in the strategy to restore trust in Europe's banking system. One big difference between the current exercise and previous European Banking Authority exercises is that the ECB will actually become the competent supervisor. It will therefore have far-reaching powers and it will also be able to make sure that banks' internal risk models will be harmonised. This should contribute substantially to restoring trust in Europe's banking system.

Currently, market-based valuations of banks in Europe suggest that investors still do not trust entirely the quality of banks' balance sheets. Figure 1 shows that the market-to-book value of major banks in five selected euro-area countries is below 1, which indicates that stocks are either systematically undervalued or that the market suspects that balance sheets still hide significant potential losses.

Figure 1: Major banks, price/book ratio [%]



Source: Bruegel based on SNL Financials. Note: the data is computed as the unweighted average of the five largest banks in each country.

Concerns may be justified in light of the generalised rise in Non-Performing Loans (NPLs) on the balance sheets of European banks, especially in southern European countries. The absence of harmonisation in the definition of NPLs implies that numbers are not entirely comparable across countries (Barisitz, 2013) and adds another element of opacity that affects investors' confidence. The International Monetary Fund in the Global Financial Stability Report estimated potential losses stemming from corporate lending for several countries and the resulting estimates are very diversified. The importance of the ECB's exercise – which will use a uniform definition of NPL – is therefore immediately evident.

Bank analysts report different numbers for the capital shortfalls in Europe's banking system. Table 1 reports a selection of different estimates. The numbers generally vary between €100 billion and €300 billion even though some estimates are significantly higher. Behind the wide range of estimates there are differences in methodologies, in particular assumptions on the size of stress and the systemic interconnectedness of the banks, but also uncertainty as regards the the quality of banks' balance sheets and therefore the underlying data on which estimates are carried out. Concerning the geographical distribution of potential needs, market analysts seem to agree that the surprises are more likely to come from those countries where banks have not been subject to a thorough review, eg in the context of EU/IMF programmes.

The capitalisation of euro-area banks has certainly improved in recent years. According to the ECB, "euro-area banks have raised around €225 billion of fresh capital and a further €275 billion has been injected by governments, equivalent in total

Table 1: Selected estimates of the capital needs of Europe's banks

Source of estimate	€ bns	Publication date
Credit Suisse	50	16/10/2013
Goldman Sachs	75	31/10/2013
Standard & Poor's	95	08/11/2013
Standard & Poor's	110	12/12/2013
PricewaterhouseCoopers	280	28/11/2013
VLAB	652	23/11/2013

Source: Bruegel based on analysts' reports and press reports.

tive consequences for their activity of lending to the economy. In particular the phase out of capital instruments that will not meet the new and stricter eligibility criteria is to last eight years from 2014.

13. The guidelines state that "the capital definition of 1 January 2014 will apply for the asset quality review, whereas the definition that is valid at the end of the horizon will be used for the stress test". With the horizon of a stress test normally being around 3 years, the "definition valid at the end of the horizon" could include part of the transition period before the implementation of the stricter capital definition that would apply under CRD IV/CRR. But the ECB would be using (and stressing) underlying balance sheet data at end-2013, ie before the transition to the new capital definition comes into effect, which could create a problematic mismatch.

14. Current legislation only foresees the 4.5 percent threshold for existing bank balance sheets. Once the transition phase for capital conversion buffers is over, the law would also require banks that do not hold the full 2.5 percent capital conversion buffer to refrain from certain practices, such as payments of dividends. However, these rules are formally not applicable in 2014.

to more than 5 per cent of euro-area GDP¹⁵ since the beginning of the crisis. Core Tier 1 capital has increased substantially and the median now amounts to a healthy 12 percent¹⁶. Non-risk weighted average tangible equity in the euro area's nine global systemically important banks stands at 3 percent¹⁷.

However, an assessment of the recapitalisation needs of banks ultimately requires deep supervisory knowledge and involves a number of important choices in the stress tests. Potential recapitalisation needs depend on future growth, on the future development of non-performing loans and other factors that determine the performance of banks' assets. A particularly relevant issue is the systemic dimension of the stress with which the system will be confronted in the stress tests. Many of the banks that will be tested are systemic for the countries in which they are incorporated and for the euro area as a whole. In its note laying out some of the key principles of the comprehensive assessment, the ECB emphasises that an add-on of 1 percentage point of Tier 1 capital will be requested to take into account the systemic relevance of the banks concerned. The ECB also makes clear that the comprehensive assessment will not only concern the banks individually but that, because of the magnitude of the exercise, it should rather be seen as an assessment of the whole banking system.

A particularly relevant question is thus how systemic risk is taken into account. It is important to understand that systemic risk can give rise to non-linear effects on capital shortfalls. While at small-scale shocks, required capital buffers increase gradually, at larger shocks, some banks may suddenly require much larger capital increases because spillovers magnify the shock. However, it is also possible that at some capital levels, systemic interconnectedness abruptly goes down¹⁸.

The New York University's Stern V-Lab publishes estimates of systemic risk for major banks¹⁹. The estimates are based on publicly available information and include correlations of market price as well as currently reported capital levels. The central factors driving the estimates are the fact that leverage is measured at market values and that tail-risks are correlated. The estimated capital

shortfall is then based on a drop in the aggregate market value of 40 percent. The estimates therefore capture true systemically relevant episodes but are not necessarily comparable with the outcome of the ECB's exercise. Applying this methodology would result in a number of €652.62 billion for the euro area²⁰. Using the same methodology, Dor (2013) estimates the capital shortfall for the euro-area banking system to be €597.48 billion²¹. The capital shortfalls differ significantly in different countries. Such a tough approach may be exaggerated for next year's exercise because the size of the asset market shock would resemble the one experienced at the beginning of the crisis, an event very unlikely to be repeated in the next few years. Nevertheless, in the medium-run, sufficient capitalisation of the banking system to withstand such a shock is desirable.

A second relevant factor is the treatment of sovereign bonds on the books of banks. The issue of sovereign holdings is a thorn in the side of both the ECB and European regulators, in light of the perverse dynamics observed during the crisis and the increasing exposure to sovereign debt of banks in some countries. As far as the ECB exercise is concerned, the published guidelines refer to the inclusion of sovereign bond holdings in the in-depth assessment conducted in the Asset Quality Review (AQR), but there is no information about whether and how they will be treated in the subsequent stress test, nor is it clarified how sovereign debt will be valued. In the AQR, it is advisable to treat sovereign debt at current market value and not at book value because lower market values do weigh on banks' balance sheets and may therefore curtail lending to corporations and households. In the medium-run, single exposure rules or risk weights should be introduced for sovereign debt as a further way of breaking the link between banks and sovereigns, but such rules cannot be applied immediately (Sapir and Wolff, 2013). One should therefore not include sovereign debt in the stress tests because this could lead to negative short-term dynamics akin to the immediate introduction of sovereign risk weights.

Ultimately, the capital needs can only credibly be assessed with detailed information on banks' balance sheets and on their systemic interconnectedness. Even more importantly, not all necessary

15. ECB Note, Comprehensive Assessment October 2013, <http://www.ecb.europa.eu/pub/pdf/other/notecomprehensiveassessment201310en.pdf>.

16. Constanzio (2013).

17. Sapir and Wolff (2013), based on FDIC statistics.

18. See for example, Schweitzer (2009) for an easy introduction. Also Xin *et al* (2011).

19. Global MES model for Systemic Risk Analysis by NYU Stern, <http://vlab.stern.nyu.edu/analysis/RISK.WORLDFINMR.GMES>.

20. This number refers to the 17 euro-area countries minus Estonia and Luxembourg, for which data are not reported. Last data update: 30/11/2013.

21. This number refers to the 17 euro-area countries minus Estonia, Luxembourg, Slovenia, Slovakia, Malta and Ireland. Last data update: 27/09/2013.

policy decisions have been taken that will allow the assessment of the capital shortfalls. The most important policy choices concern GDP projections, the treatment of sovereign debt and the extent to which systemic risk is taken into account in the tests. The ECB has therefore clearly communicated that no intermediate results can be published²². The fact that capital levels have increased in recent years does certainly not preclude the potential for further recapitalisation needs being detected.

To establish its credibility as a supervisor, the ECB should not only be tough in its assessment. It should also not shy away from forcing banks to raise new capital and in *ultima ratio* forcing banks into restructuring and resolution. The result may be temporary volatility on the financial market, which should be weighed against the cost of a lasting weak and dysfunctional banking system and the credibility of the ECB as a supervisor and also as a monetary authority. In the period of possible financial instability, the ECB should stand ready to provide large amounts of liquidity to the banking system. Governments should be supportive of this policy, even if the liquidity provision would result in a rise in Target2 balances.

Against this background, the next section discusses principles and practices of bank recapitalisation. Particular emphasis is put on the existing rules, which are the state aid rules, on the BRRD and on the principles that should govern the SRM.

2 BANK RECAPITALISATION: HOW AND WHEN

The comprehensive assessment of Europe's banking system in 2014 will start the phase of single bank supervision in Europe. The exercise is of fundamental importance for the ECB, because it will be the basis of its reputation as supervisor. Some market participants seem to have doubts about the fact that the exercise will be a game-changer. A recent investor survey run by Morgan Stanley²³ showed that the majority of investors interviewed did not see the AQR/stress tests as likely to have

a meaningful impact on boosting lending. To avoid episodes like Dexia – which jeopardised the reputation of the EBA's stress tests in 2011 – ensuring credibility is crucial, and statements from ECB officials suggest it will be biting. ECB President Draghi has stated²⁴ that if banks “do have to fail, they have to fail. There is no doubt about that”. This consideration has led to animated discussions at the political level across Europe about how to deal with the shortfalls that will possibly be discovered. More specifically, a key point in the debate surrounding the ECB's exercise is the optimal degree of private versus public contribution to the recapitalisation, in the case of banks that were not able or willing to raise all (or part) of the needed capital on the market.

A number of issues should be carefully considered when deciding on the how and when of bank recapitalisation.

Who should decide on whether a bank needs to raise capital? There is a difference between legal requirements and what the results of the comprehensive assessment could document, which stems ultimately from the supervisory choices underlying the design of the exercise. This also closely relates to the issue of when a bank is put into resolution and when it should be instead recapitalised. Raising of capital on the private markets versus public recapitalisation. Under what circumstances should European funds be used, and under what conditions should national funds be relied on?

The answer to the question of when a bank should be resolved rather than recapitalised, and who decides on this, is currently unclear. Under existing legislation, a bank can be forced to raise capital when it falls below the 4.5 percent threshold defined by the CRDIV/CRR. In case the capital threshold of 4.5 percent is met, the ECB has still, like any supervisor, the option to ask the bank to increase its capital. The decision on whether a bank should be put into resolution or recapitalised necessarily involves some degree of discretion on

22. Asmussen (2013): “We will not publish any preliminary or intermediate results and I am quite surprised about the noise you hear these days in all directions about the possible outcome of the exercise. If we knew that ‘banks in the periphery will not face severe problems’ or if we knew that ‘the recapitalisation needs will be a double digit billion figure’ we could spare the effort in conducting this exercise. All these statements are mere speculation”.

23. Morgan Stanley (2013) ‘EU Banks and Div Fins – 2014 Outlook: 10 key themes and top picks’, Morgan Stanley Research Europe, 5 December.

24. Stefan Riecher and Jeff Black (2013) ‘Draghi Says ECB Won’t Hesitate to Fail Banks in Stress Tests’, Bloomberg News, 23 October.

‘To establish its credibility as a supervisor, the ECB should not only be tough in its assessment. It should also not shy away from forcing non-viable banks into restructuring and resolution, though the result may be temporary volatility on the financial market.’

the part of the supervisors. But there are also technical issues that should be taken into account. In particular, it would be at present very difficult for the ECB to put a bank into ‘gone concern’, ie force it to actually restructure, even assuming that it wanted to, if the bank’s current capital ratio exceeds 4.5 percent. In case resolution is the avenue chosen, the ECB would have to work closely with national resolution and supervisory authorities.

Unfortunately, in the absence of a single resolution framework – at the time of writing the SRM is in the early stage of negotiations and the BRRD has yet to be finalised – there is currently no EU harmonisation of the procedures for resolving credit institutions. Under current legislation, the

ECB would have to work with numerous national resolution authorities, each operating under different legal rules and political logics. This is likely to lead to massively different recapitalisation and restructuring practices across the EU. This would not only constitute a very difficult situation for the ECB, but would also likely lead to a further re-nationalisation of banking and fragmentation of the financial system²⁵.

Private or public resources: transition towards a rules-based system

A central question in the context of the ECB assessment is what to do with banks that fail the stress test – ie are found to have a capital shortfall – but are not to be resolved. In such circum-

BOX 1: RECAPITALISATION AND STATE AID RULES

The new state aid rules introduce important elements of relevance for the re-capitalisation of banks. Two aspects are central:

First, *ex-ante* evaluation is strengthened. The European Commission communication* clarifies in particular that state intervention (in the form of recapitalisations and impaired asset measures including asset guarantees) will be authorised only if the member state concerned has previously demonstrated that all measures to limit such aid to the minimum necessary have been fully exploited. To that end, the “*Member States are invited to submit a capital raising plan, before or as part of the submission of a restructuring plan*”. This means that as a general rule, a restructuring plan will have to be notified to the Commission and a final state aid approval will have to be obtained before recapitalisation is undertaken. An exception is foreseen, but only in cases in which the competent supervisory authority expressly confirms that the rescue aid is required.

Second, a bail-in framework is *de facto* introduced. The communication states that the restructuring plan must cater for “*adequate burden-sharing*”. More specifically, “*before granting any kind of restructuring aid [...] to a bank all capital generating measures including the conversion of junior debt should be exhausted, provided that fundamental rights are respected and financial stability is not put at risk*”. A pecking order is also specified, with losses being first absorbed by equity and then by contributions from hybrid capital holders and subordinated debt holders. The contribution from senior debt holders will instead not be required as a mandatory component of burden-sharing under state aid rules. The communication also draws a distinction between cases of banks found to be below the minimum regulatory capital requirements or not. In cases of banks falling below the minimum regulatory capital requirements, “*subordinated debt must be converted or written down, in principle before state aid is granted. State aid must not be granted before equity, hybrid capital and subordinated debt have fully contributed to offset any losses*”. In cases of banks with capital ratios above the EU regulatory minimum, the communication points out that “*the bank should normally be able to restore the capital position on its own, in particular through capital raising measures*” but if there were no other possibilities, “*then subordinated debt must be converted into equity, in principle before state aid is granted*”.

* Communication from the Commission on the application, from 1 August 2013, of state aid rules to support measures in favour of banks in the context of the financial crisis (‘Banking Communication’), available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2013:216:0001:0015:EN:PDF>.

25. See for example Sapir and Wolff (2013).

stances, the ECB will as the relevant supervisor ask the bank to raise its capital levels.

If a bank cannot or does not want to raise private capital, under current legislation, state aid rules would determine how public resources would be used. In July 2013, the European Commission issued a new communication that amends the rules for state aid to banks. The new regime includes a number of fundamental changes, which will have bearings in the context of the ECB's exercise (Box 1).

The new state aid rules therefore subordinate the possibility to use public funds for the recapitalisation of a bank to the previous implementation of an "appropriate" amount of bail-in. These rules extend the idea of bail-in beyond the resolution context, to the case of recapitalisation of banks that are not in resolution, and it will be applicable in the context of the ECB exercise. Banks that are not able to raise all the capital they need on the market would therefore need to bail-in their subordinated debt-holders before having the option to access public money.

The modification of the state aid rule works as a bridge towards the fully harmonised framework that will be introduced with the Bank Recovery and Resolution Directive (BRRD). The BRRD includes a number of important provisions, which can rightly be considered game changers in European banking. They also represent a significant step forward in terms of creating a harmonised approach to bank resolution and to the resolution of the large banks to be supervised by the ECB directly. In particular, the BRRD foresees:

- An asset separation tool;
- Bail-in of investor capital, which is mandatory up to 8 percent of the bank's non-risk-weighted assets, before using any public sector money²⁶;
- That banks issue debt that is subject to bail-in
- Establishment of a resolution fund financed by the industry;

- A requirement for banks to provide resolution plans.

It is the declared aim of the EU heads of state and government to not only have the BRRD in place by the time of the ECB's comprehensive assessment but also to have agreed on a single resolution mechanism by that time. However many BRRD provisions will not be applicable during 2014 and 2015, so state aid rules will apply²⁷. The handling of the results of the stress test and the comprehensive assessment more generally should be uniform across member states in 2014/15 (Véron, 2013). Differences in the bail-in rules, with some countries haircutting junior debt only while others also go after senior debt, should not be arbitrary, but should be exclusively based on an independent assessment of the systemic consequences of such action. If the differences in generosity to bailout banks relate mostly to the fiscal space of a country, the vicious circle between banks and sovereigns will be reinforced in the next two years.

On the extent to which private and public money should be used for bank recapitalisation, in principle, banks found to be undercapitalised with respect to the benchmark set by the ECB will be asked to raise capital on the market. This is what banks would normally do and it should be seen as the benchmark also for the stress test. However, a number of specific factors can make the issue more complicated. First, the different estimates of potential capital shortfalls reported in the previous section show that the numbers could be quite big. This could give rise to a situation in which some of these banks do not manage to raise all of the required capital on the market²⁸. In such instances, the use of some public resources might be desirable in order to prevent major fire-sales of assets. Those public resources should, however, only be used according to clear and strict rules, including the bail-in of junior creditors in line with state aid rules and even the bail-in of senior creditors may be contemplated. The debate here centres on the date at which the bail-in tool will be made operational. The BRRD currently foresees

26. "A contribution to loss absorption and recapitalisation equal to an amount not less than 8 percent of the total liabilities including own funds of the institution under resolution, measured at the time of resolution action in accordance with the valuation provided for in Article 30, has been made by shareholders and the holders of other instruments of ownership, the holders of relevant capital instruments and other eligible liabilities through write down, conversion or otherwise", Article 38 (3cab) of the Council 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, <http://blogs.rftdata.co.uk/brusselsblog/files/2013/06/BRSSelsblog.pdf>.

27. BRRD initially foresaw the bail-in provisions taking effect from 2018, but this has recently been changed to 2016.

28. Banks are major investors in other banks, and having possibly several big European banks on the market for capital at the same time could therefore reduce the number of potential investors.

'The new state aid rules extend the idea of bail-in beyond the resolution context. Banks that are not able to raise all the capital they need on the market would therefore need to bail-in their subordinated debt-holders before having the option to access public money.'

the tool becoming available only in 2016. The main argument advanced for this date that banks need time to prepare. The counterargument is that the solution to significant past problems can only hardly be imposed on taxpayers, that have already significantly contributed, and that it would therefore be preferable to impose them on current bank creditors.

Bail-in can be an effective tool in reducing the cost of rescuing a bank. Its application on a systemic scale risks introducing a negative confidence effect that would induce investors to rush out of otherwise solvent banks with evident financial stability risks²⁹. However, in a situation in which capital is above the regulatory minimum, the usage of public capital is not entirely convincing because the capital levels are anyway above the legal requirement. At the same time, there is a risk that not all banks manage to raise the entire amount they need on the market, based on the fact that several very big banks could go to the market for capital as a result of the stress test and the amount needed could be sizable. A solution to this dilemma might be to agree on longer transition periods during which banks would raise capital on the market.

More problematic is the case in which the capital level is below the legal minimum but there is a going concern. Here, the use of public capital is much more straightforwardly regulated and the central question is then how much to dilute the current shareholders of banks. The state aid regulation does cater for exceptions to the bail-in requirements in cases in which implementing such measures would “*endanger financial stability or lead to disproportionate results*” but the circumstances are not defined. This has the advantage of leaving flexibility to cope with unforeseen situations. At the same time, flexibility introduces yet another element of uncertainty from the point of view of the investors that the framework was supposed to reassure, and it increases the risk that flexibility will result in public recapitalisations even in cases in which no financial stability risk exists. The bail-in of senior debt should not be excluded *ex ante*. The experience with two middle-sized Danish banks, Amagerbanken and Fjordbank Mors, shows that bail-ins can be handled without systemic implica-

tions (even though the situation is not fully comparable with the current situation)³⁰. However, senior bond holder involvement can have systemic implications, which would need to be carefully assessed before the decision to bail-in.

Overall, we acknowledge that the framework should be based on very clear and binding rules which minimise taxpayer involvement. However, some flexibility might be necessary in very exceptional cases. The governance of exercising this flexibility is of crucial importance. To exercise flexibility, it is important to clearly define the authority that will exercise the discretion. The BRRD framework is clearly insufficient for exercising this discretion because national authorities will still play a dominant role. This could lead to vastly different applications of the rules causing significant distortions in the European banking market and increasing substantially the policy uncertainty for bankers. It is therefore of central importance to finish the work on the Single Resolution Mechanism.

The SRM should be able to take meaningful bank resolution decisions in a short time period. Unanimity voting mechanisms are not suited for such an aim. It is therefore necessary to revert to normal or qualified majority voting. This means that national authorities can be overruled, even where there are fiscal implications. Further steps to ensure the appropriate legitimacy of this process are necessary.

National or European public resources?

The further policy question concerns the use of national or European public resources for bank recapitalisation. This discussion should be seen in the light of the potentially very large risks identified above. More generally, banking crises can have very large fiscal implications³¹. To permanently and credibly break the vicious circle between banks and sovereigns, credible insurance for large risks is necessary. The build-up of a resolution fund, paid from contributions from the banks covered is an important step. In the steady state in which the common resolution fund would be funded by the large banks, it would make sense to organise this fund at European level because individual countries often do not have a

29. ECB President Mario Draghi expressed concern about such an outcome in a letter sent to the Commission, see for example <http://www.bloomberg.com/news/2013-10-22/eu-lawmakers-reject-draghi-call-for-bank-bondholder-clemency.html>. He called for flexibility in the case of banks found to need more capital without falling below the minimum regulatory requirement. Calls for limiting the scope of bail-in were also at the root of a disagreement between EU finance ministers and the European Parliament, which delayed the finalisation of the BRRD. In particular, the Parliament strongly called for authorities to be allowed temporarily to nationalise a bank while protecting senior creditors, based on the argument that in some circumstances temporary nationalisation and the other so-called ‘government financial stabilisation tools’ would be needed to protect financial stability. By contrast, finance ministers agreed in June 2013 that wiping out 8 percent of a failing bank’s liabilities would normally be needed before having the possibility to access backstops (such as the resolution funds).

30. For details, see Darvas (2013).

31. Pisani-Ferry and Wolff (2012).

sufficient number of large banks to provide a meaningful number to diversify risks. However, to be fully credible, such a fund would need to have a credit line to the European taxpayer, which could, for example, be based on the ESM. In the steady state, it will also be important to keep national taxpayers on the hook. As long as numerous national policies influence the likelihood of bank failures, the continuing exposure of national taxpayers alongside the common insurance fund is justified.

For the transition, the main principle should be that the European insurance fund should be only used for large risks that endanger national public solvency. National budgets can take care of small public recapitalisation needs. For somewhat larger risks, a programme similar to the Spanish programme is advisable in order to avoid the risk of a country's government being priced out of the market. In some cases of very large capital needs, direct bank recapitalisation from the ESM, combined with national taxpayer contributions, is advisable to take care of the legacy problems. This can be motivated not only by the fact that government solvency problems should be prevented. Equally important is the fact that some of banking problems are not the responsibility of faulty national supervision, but have arisen for euro-area financial stability concerns³². In such circumstances, the case for burden sharing is strong. It is impossible to agree *ex ante* on precise thresholds at which direct bank recapitalisation should be carried out. Certainly, when banking rescue costs are high, a debt sustainability analysis should be undertaken. There may also be instances in which government solvency is in any case endangered undermining the logic of direct bank recapitalisation. During the transition, policy discretion will remain a defining element of pro-

viding support. However, it is important to limit this discretion as much as possible so that the same conditions pertain for all countries. Furthermore, it is important that the ECOFIN clearly signals its intention to find the best European solution for the recapitalisation and restructuring during the transition, and that it commits to a clear roadmap towards a European resolution authority that will eventually take such decisions with qualified majority voting and based on a single backstop³³.

CONCLUSIONS

The euro area has embarked on a process of creating a banking union, which is of critical importance to the stability of the common currency area. After the creation of the single supervisory mechanism, the debate now focuses on bank recapitalisation, not least because of the ECB's forthcoming stress test.

Considerable uncertainty prevails for investors in European banks about the quality of banks' assets, the valuation of assets by policy makers and the rules under which losses will be handled. Reducing all three uncertainties will improve funding conditions throughout the euro area. Policy makers should therefore increase their commitment to harmonise as much as possible bail-out/bail-in decisions in the next year, and they should agree on a clear roadmap towards a workable SRM³⁴. The ECB should define clearly the rules under which the assessment will be done. This includes, *inter-alia*, the definition of the stress test and the treatment and valuation of sovereign debt. Finally, governments should be prepared to recapitalise banks where necessary and there should be a political commitment to direct bank recapitalisation if it is needed to avoid government insolvency.

REFERENCES

Asmussen, J. (2013) 'The public and the private banking union', speech at the Humboldt Universität/Financial Risk and Stability Network conference on *The Single Resolution Mechanism and the Limits of Bank-Regulation*, Berlin, 8 November, available at http://www.ecb.europa.eu/press/key/date/2013/html/sp131108_1.en.html

Asmussen, J. (2012) 'The Irish case from an ECB perspective', speech at the Institute of International and European Affairs, Dublin, 12 April, available at <http://www.ecb.europa.eu/press/key/date/2012/html/sp120412.en.html>

32. See Asmussen (2013).

33. We therefore go further than the ECOFIN Council conclusion of 15 November and acknowledge the need for direct bank recap under specific circumstances. Council statement on EU banks' asset quality reviews and stress tests, including on backstop arrangements. Economic and Financial Affairs, Council meeting Brussels, 15 November 2013, http://www.consilium.europa.eu/uedocs/cms_data/docs/press_data/en/ecofin/139613.pdf

34. Creating a workable SRM is not an easy task as Véron and Wolff (2013) outlined in February.

Barisitz, Stephan (2013) 'Nonperforming Loans in Western Europe – A Selective Comparison of Countries and National Definitions', *Focus on European Economic Integration* 2013, 1: 28-47, National Bank of Austria

Constâncio, Vitor (2013) 'Banking union and the future of banking', speech at the IIEA Conference on *The Future of Banking in Europe*, Dublin, 2 December, available at <http://www.ecb.europa.eu/press/key/date/2013/html/sp131202.en.html>

Darvas, Zsolt (2013) 'To bail-in or not to bail-in, that is the question for Cyprus', *Bruegel Blog* 14 March, available at <http://www.bruegel.org/nc/blog/detail/article/1043-to-bail-in-or-not-to-bail-in-that-is-the-question-now-for-cyprus/>

Dor, E. (2013) 'The recapitalisation needs of European banks if a new financial crisis occurs', *Working paper* 2013-ECO-19, IESEG School of Management, available at http://www.ieseg.fr/wp-content/uploads/2013-ECO-19_Dor.pdf

Gerlach, Stefan, Alexander Schulz and Guntram B. Wolff (2010) 'Banking and sovereign risk in the euro area', *Discussion Paper*, Series 1: Economic Studies 09/2010, Deutsche Bundesbank, available at <http://econstor.eu/bitstream/10419/32799/1/627499228.pdf>

Pisani-Ferry, Jean, André Sapir and Guntram B. Wolff (2013) *EU-IMF assistance to euro area countries: an early assessment*, Blueprint 19, Bruegel

Pisani-Ferry, Jean and Guntram B. Wolff (2012) 'The fiscal implications of banking union', *Policy Brief* 2012/02, Bruegel

Sapir, André and Guntram B. Wolff (2013) 'The neglected side of banking union: reshaping Europe's financial system', contribution to informal ECOFIN, 14 September, Bruegel, available at <http://www.bruegel.org/publications/publication-detail/publication/792-the-neglected-side-of-banking-union-reshaping-europes-financial-system/>

Schweitzer, Frank (2009) 'Mechanisms of Systemic Risk: Contagion, Reinforcement, Redistribution', presentation to ZIF Workshop, Bielefeld, Germany, 1-11 September, available at http://www.sg.ethz.ch/media/talk_slides/zif-schweitzer-presentation.pdf

Véron, Nicolas (2013) 'A realistic bridge towards European banking union', *Policy Contribution* 2013/09, Bruegel

Véron, Nicolas and Guntram B. Wolff (2013) 'From supervision to resolution, next steps on the road to European Banking Union', *Policy Contribution* 2013/04, Bruegel

Xin Huang, Hao Zhou and Haibin Zhu (2011) 'Systemic Risk Contributions', *Finance and Economics Discussion Series* 2011-08, Federal Reserve Board, Washington DC, available at <http://www.federalreserve.gov/pubs/feds/2011/201108/201108pap.pdf>