

# Overview of external briefings on the SSM and SRB during the 8<sup>th</sup> parliamentary term

The Committee on Economic and Monetary Affairs (ECON) plays a key scrutiny role in the context of the Banking Union, which is the EU-level banking supervision and resolution framework. Under Article 20 of the Single Supervisory Mechanism (SSM) Regulation and Article 45 of the Single Resolution Mechanism (SRM) Regulation, the ECB's Supervisory Board, which plays a central role in the SSM, and the Single Resolution Board (SRB) are accountable to the European Parliament (EP) for the implementation of these respective regulations.



The practical modalities of this accountability framework, as outlined in the the Interinstitutional Agreements between the European Parliament and the [ECB](#) and the [SRB](#), include:

- participation in regular public hearings in the EP;
- participation in confidential meetings if needed;
- responses to questions posed by Members of the EP;
- access to information;
- and presentation of the annual reports.

The Chairs of the SSM and SRB are therefore required to regularly participate in ECON hearings and to take questions on how those two institutions perform at their work. For more information on these accountability arrangements, see EGOV briefings [here](#) and [here](#), which are regularly updated.

To facilitate the parliamentary scrutiny work, ECON (including its Banking Union Working Group) has drawn on external experts to provide briefings on topics of relating to both the SSM and SRM. Prior to December 2015, experts had been requested on an ad-hoc basis, while thereafter, ECON could draw on expertise from two standing panels of experts, one panel for supervisory issues, the other for questions related to bank resolution.<sup>1</sup> Topics for the panel of experts to be provided in advance of each public hearing are chosen by ECON Coordinators. Since their inception, the two standing panels have in total provided 56 concise written briefing papers on 20 different topics.



A summary of all the external papers commissioned by ECON as part of the standing panels, as well as on an ad-hoc basis, is contained in the annex overleaf. Table 1 and 2 contain a list of the topics prepared by both the external panel and on an ad-hoc basis, respectively.

Table 1: Summary of topics: Papers prepared by the expert panels

Year	SSM	Year	SRM
2019	<a href="#">Supervisory challenges ahead</a>	2019	<a href="#">Stocktaking of the SRB</a>
2018	<a href="#">Anti-money laundering</a>	2018	<a href="#">Financing bank resolution</a>
2018, 2016	Stress test: <a href="#">2018</a> and <a href="#">2016</a>	2018	<a href="#">Valuation reports</a>
2018	<a href="#">Supervisory evaluation of banks</a> (SREP)	2018	<a href="#">Cash outflows in crises and SRB responsiveness</a>
2017	<a href="#">Structural characteristics of banking sector</a>	2017	<a href="#">Clarification of critical functions</a>
2017	<a href="#">Provisioning of non-performing loans</a>	2017	<a href="#">Precautionary recapitalisation</a>
2017	<a href="#">Bank misconduct</a>	2017	<a href="#">Legacy assets</a>
2016	<a href="#">Banks' internal rating models</a>	2016	<a href="#">Banking structure and resolvability</a>
2016	<a href="#">Marketing of subordinated debt</a>	2016	<a href="#">Minimum requirement for own funds and eligible liabilities</a> (MREL) requirements
2016	<a href="#">Supervisory dialogue</a>		

Table 2: Summary of topics: Briefings requested on an ad-hoc basis (prior to December 2015)

Year	SSM	Year	SRM
2015	Progress on capital shortfalls: <a href="#">interim</a> and <a href="#">final review</a>	2016	<a href="#">Bridge financing needs of the SRF</a>
2015	<a href="#">Change in EU banks post-crisis</a>		
2014	<a href="#">Asset Quality Review</a>		

<sup>1</sup> All experts were appointed via an open tender procedure that was widely published in the Official Journal, The Economist, Financial Times, and on specialised websites; the selection criteria addressed their proven technical expertise, reputational standing, professional qualifications, and accomplishments in the field. For further information on the requested expertise as set out in the contract notice, please see [here](#), and for information on the successful tenderers please see [here](#).

## Annex: Summary of external papers

### SSM external papers

The following list summarises the papers provided by the panel of experts on the Single Supervisory Mechanism since March 2016.

Table 1: Papers provided by the SSM expert panel

Title	Authors	Summary
21 March 2019		
<a href="#">The next SSM term: Supervisory challenges ahead</a>	Martin R. Götz, Tobias H. Tröger & Mark Wahrenburg	In this paper, the authors first highlight different developments for banks under direct ECB supervision within the SSM that may prompt further investigation by supervisors. They find that banks that were weakly capitalised at the start of direct ECB supervision (1) still face elevated levels of non-performing loans, (2) are less cost-efficient and (3) reduced their share of subordinated debt financing over the last years. They then stress the importance of continuous and ongoing cost-benefit analysis regarding banking supervision in Europe. They also encourage processes to question existing supervisory practices to ensure a lean and efficient banking supervision. Finally, the authors underline the need of continuous and intensified coordination among regulatory bodies in the Banking Union since the efficacy of European bank supervision rests on its interplay with many different institutions.
<a href="#">The next SSM term: Supervisory challenges ahead</a>	Andrea Resti	This paper looks at the challenges facing the Single Supervisory Mechanism in the coming years, and discuss vulnerabilities in the euro area's banking system, as well as possible improvements in the SSM's internal practices. Among the former are low profitability, the increased role of the shadow banking system and weak governance. The latter includes an overly complex regulatory framework, limits on staffing that lead to excessive usage of consultants, the need for more transparency and accountability. The SSM should help banks achieve more sustainable returns by making supervisory requirements less complex. It should monitor shadow banks, ensuring that traditional lenders are isolated from possible shocks. As for governance, the SSM ought to engage in a multi-year action plan aimed at improving ethics, technical qualifications, checks and balances. Regulatory complexity must be reduced by further harmonising national rules. Constraints on the SSM's budget and human resources should be loosened, but the use of external consultants ought to be limited to special cases. Accountability and transparency can be enhanced, e.g., through greater disclosure on resources and objectives, SREP and other internal methodologies, and on decisions taken by the SSM's Administrative Board of Review. The European Court of Auditors should be entitled to assess the soundness of the SSM's processes, without interfering with individual supervisory decisions.
<a href="#">The next SSM term: Supervisory challenges ahead</a>	Harry Huizinga	This paper focuses on two ways in which overall bank supervision and oversight can be improved in the next SSM term: (i) by more effective market discipline of banks by investors in banks' securities, and (ii) by more effective oversight of bank risk taking by bank boards. To improve market discipline, the ECB should consider facilitating the publication of additional bankspecific supervisory information. In addition, the ECB can cooperate with the EBA to increase the coverage of SSM banks in the EU-wide transparency and stress test exercises. The ECB could also review the quality of banks' Pillar 3 reports as part of its supervisory process, and it could potentially use market information on banks' valuation and cost of funding to inform its supervisory work. Furthermore, the ECB should revise its current guidance regarding bank boards that has the effect of increasing shareholder

Title	Authors	Summary
		influence, as bank shareholders tend to benefit more from excessive bank risk taking than other stakeholders, including the bank's management.
<a href="#">The next SSM term: Supervisory challenges ahead</a>	Brunella Bruno & Elena Carletti	Compared to the pre-SSM period, the European banking system today appears healthier and sounder. Capital ratios and asset quality have steadily improved. Capital ratios have become not only higher but also more comparable and reliable. Taking stock of these positive outcomes, the challenges for supervision in the future is to be able to foster financial integration and reconcile harmonisation with greater consideration of bank and country specificities. In this respect, the authors see an approach encouraging supervisory dialogue positively. Furthermore, supervisory requirements need to be simple, clear, and possibly stable to reduce uncertainty and the compliance costs of an overly demanding supervision. The authors also look forward to a model that does not let out of sight the very final goal of good supervision, that is favouring economic growth through a healthier and sounder banking system. Overall, this paper encourages more nuanced and less 'one-size-fits-all' supervisory decisions, supported by stronger empirical research to reduce the risk of unintended effects.
20 November 2018		
<a href="#">The supervisory approach to anti-money laundering: an analysis of the Joint Working Group's reflection paper</a>	Harry Huizinga	On August 31 2018, a Joint Working Group consisting of representatives of the European Central Bank, the European Commission and the European Supervisory Agencies published a document entitled 'Reflection paper on possible elements of a Roadmap for seamless cooperation between Anti Money Laundering and Prudential Supervisors in the European Union'. This reflection paper straightforwardly calls for additional resources to be made available to the European Banking Authority to counter money laundering. Suggestions for better cooperation and information sharing among anti-money laundering and prudential supervisors, however, risk being ineffective, as long as the underlying incentives to engage in international regulatory competition towards low enforcement of anti-money laundering standards are not addressed. To eliminate the potential for regulatory competition, anti-money laundering supervision needs to be raised to a European level.
19 June 2018		
<a href="#">How demanding and consistent is the 2018 stress test design in comparison to previous exercises?</a>	Andrea Resti	The 2018 EU-wide stress test requires banks to evaluate the impact on profits and capital of common macroeconomic scenarios for 2018-2020. The methodology set up by the EBA addresses four main sources of uncertainty: credit risk, market risk, financial risks on net interest income and operational risk. Credit risk is assessed on the basis of the new IFRS 9 accounting standard. Market risk includes a valuation of illiquid, hard-to-price level 2/3 financial instruments. Net interest income is assumed to suffer from an asymmetric increase in the rates earned on assets and paid on liabilities. Operating risk includes conduct risk and takes into account past loss events. This written advice highlights some weaknesses in the EBA methodology, which may lead to a different degree of conservativeness for some business models or countries. It also discusses ways to make future stress tests more realistic and reliable, by addressing resource gaps and improving governance.
<a href="#">How demanding and consistent is the 2018 stress test design in comparison to previous exercises?</a>	Brunella Bruno & Elena Carletti	The new 2018 EBA EU-wide stress test exercise is similar to previous exercises for what concerns the employed methodology. The major change compared to the 2016 exercise is the inclusion of the new international accounting standards, which contributes to the increased severity of the exercise. The methodology incorporates several measures to guarantee internal consistency. However, despite all the progress made in designing the exercise, there remain critical areas concerning the application of a static-balance sheet assumption, the underrepresentation of liquidity risk and the implications of the lack of a fail-pass threshold. Improvements in these areas

Title	Authors	Summary
		<p>can enhance reliability of stress test results and empower their role as external and internal communication tools.</p>
<p><a href="#">How demanding and consistent is the 2018 stress test design in comparison to previous exercises?</a></p>	<p>Rainer Haselmann &amp; Mark Wahrenburg</p>	<p>This paper provide an assessment of the design and calibration of the 2018 EU wide stress test. The adverse scenario for the 2018 stress test is more severe than for previous stress tests in terms of the assumed GDP decline in the EU area. However, the test is less severe in terms of the losses that banks are expected to incur under the scenario. The adverse scenario has a highly asymmetric impact on different European countries, such that countries with a high degree of trade openness are affected considerably more. It seems unlikely that the assumed scenario constitutes the most plausible threat scenario for the EU economy. Since banks use heterogeneous models to forecast the stress scenario impact on loan losses and since the EBA does not publish its own respective benchmark parameters, the public cannot fully assess the true severity of the test in terms of its impact on banks' capital. The authors argue that both the lack of transparency and the heterogeneity of banks' practices to forecast stress scenario induced losses considerably weaken the credibility of the stress test and limit its usefulness in supporting market discipline among European banks.</p>
<p>26 March 2018</p>		
<p><a href="#">Review of the 2017 SREP results</a></p>	<p>Andrea Resti</p>	<p>This report looks at the methodology used by the ECB to carry out its supervisory evaluation of banks ("SREP"), as well as at the aggregate results disclosed by the supervisors and the figures released over time by individual banks. This review suggests that greater disclosure may improve uniformity in how the SREP is implemented across institutions, as well as consistency between SREP analyses and supervisory priorities. Disclosure towards banks could be enhanced by using a standard, detailed template in the communication of the SREP findings (including "horizontal" benchmarking analyses and differences between supervisory computations and the banks' own estimates). The release of SREP results to the public, while strengthening market discipline, may trigger undesirable reactions by customers and market counterparties; for banks with listed financial instruments, however, the additional capital requirements following from the SREP meet the definition of inside information provided in the Market Abuse Regulation, and should therefore be publicly disclosed. Finally, higher transparency standards are called for when it comes to the methodologies and metrics used by supervisors to assess specific areas within the SREP.</p>
<p><a href="#">Review of the 2017 SREP results</a></p>	<p>Harry Huizinga</p>	<p>This paper reviews the 2017 SREP results with a view to assessing their capital market implications and seeing whether the information provision about the SREP results could be improved. Aggregated SREP information as published by the ECB can be useful in detecting trends in banks' conditions, but it cannot be meaningfully applied to assess capital market reactions to the SREP results. Bank-level SREP disclosures are voluntary, and therefore are expected to be biased towards news that is favorable to investors in securities. Consistent with this, the author finds that bank stock returns on average are positive on SREP disclosure days. Overall, the 2017 SREP information that is in the public domain is insufficient to evaluate the efficacy of the SREP as conducted by the ECB in terms of improving the regulatory and market discipline of banks. The publication of full bank-level SREP information (by either the ECB or the individual banks) would facilitate such an evaluation, but full disclosure is undesirable as it exposes the banks with the weakest supervisory reviews to potentially very severe market discipline. However, the ECB could improve the information provision about the SREP by requiring banks that choose to reveal any capital regulatory information to disclose a complete breakdown of their CET1 demand to improve data comparability across banks and hence potentially market discipline.</p>
<p>9 November 2017</p>		

Title	Authors	Summary
<a href="#">Provisioning policies for non-performing loans: How to best ensure a "clean balance sheet"?</a>	Andrea Resti	This paper points out that the link between NPLs, profitability and loan growth is mostly about correlation, not causality. The long-term dynamics of NPLs are mainly driven by two factors: the macroeconomic cycle and the banks' lending practices. While NPLs tend to be associated with modest profits and poor loan supply, they are not causing them. Instead, bad loans, operational inefficiency and modest profitability may all follow from adverse macroeconomic conditions, ineffective management and inadequate governance schemes. Against this backdrop, the author reminds that bank profitability and lending capacity cannot be magically restored by forcing lenders to hastily offload, or write off, non-performing exposures. In his paper, Resti discusses in more detail the pros and cons of four levers that can be used to curb high NPL stocks, namely internal recovery processes, NPL sales, support by external asset management companies, and finally provisioning regimes.
<a href="#">Provisioning policies for non-performing loans: How to best ensure a "clean balance sheet"?</a>	Mark Wahrenburg	This paper explains the accounting mechanics regarding loan loss provisions and introduces the three most important models for loan loss provisioning: the incurred loss model, the expected credit loss model and the counter-cyclical buffer model. Based on economic reasoning, this paper finds that the expected loss model should be the preferred model for both financial accounting needs and prudential regulation. The new IFRS 9 accounting standard, however, adopted in the EU by the Commission Regulation (EU) 2016/2067 of 22 November 2016 and applicable as of 1 January 2018, is a mixture between the current incurred loss and the expected credit risk model while the American standard setter FASB has introduced a pure version of the expected credit loss model in the US.
<a href="#">Provisioning policies for non-performing loans: How to best ensure a "clean balance sheet"?</a>	Harry Huizinga	The author warns that supervisory guidance provided to banks on how to implement IFRS 9 has mostly been of a qualitative nature and may prove inadequate to prevent an undesirably wide future variation in provisioning among EU banks. Assuming that the heterogeneity among banks in the procyclicality of provisioning may not only reflect the formal accounting rules, but also the variation in discretionary provisioning policies, this paper presents empirical evidence on the heterogeneity of provisioning procyclicality among significant banks that are directly supervised by the ECB.
<a href="#">Provisioning policies for non-performing loans: How to best ensure a "clean balance sheet"?</a>	Brunella Bruno & Elena Carletti	The authors point to the problem that banks' provisioning policies are still quite different across banks and countries, and look into the various underlying reasons, ranging from different collateral characteristics and enforcement systems to tax regimes, accounting methods, to different managerial and supervisory practises. They see the new accounting rules and recent measures that increase transparency as an important step forward, but also point to the need of complementary early intervention powers at the supervisory level.
19 June 2017		
<a href="#">Have European banks actually changed since the start of the crisis? An updated assessment of their main structural characteristics</a>	Ata Can Bertay & Harry Huizinga	This paper documents trends in key bank variables over the 2003-2016 period for the set of banks that the ECB directly supervises as of January 1, 2017. A range of variables is considered that together indicate to what extent banks have been moving in the direction of better performance and greater stability. The authors examine variables related to bank profitability, activity mix, size, balance sheet composition, and loan impairment. The identified trends provide a mixed picture of whether banks have been moving in the right direction since the start of the crisis.
23 March 2017		
<a href="#">Fines for misconduct in the banking sector - what is the situation in the EU?</a>	Andrea Resti	Misconduct (conduct) risk may be defined as the risk of losses to an institution arising from an inappropriate supply of financial services, including cases of willful or negligent misconduct. Based on EBA data, it

Title	Authors	Summary
		<p>generates the vast majority of operational risks expected by Europe's top banks (€71bn according to the 2016 stress test). According to public-domain figures, misconduct costs have been rising strongly for large European banks in 2011-2015, although no European lender matches the costs experienced by large US banks. The distribution of losses looks highly skewed, with a few exceptionally high costs. More than 55% originates from traditional areas like commercial and retail banking. There are signs that conduct costs (per unit of total assets) have been stronger for small and mid-sized institutions, and for banks that ended up in resolution or requiring some other form of extraordinary support. Conduct risk is addressed by a number of EU-wide regulations and supervisory standards. Still, only half of the EU's competent authorities include conduct risk in their supervisory examination programmes. To discipline conduct risk ex post sanctions play a useful role, but should be complemented by ex ante tools like improving the quality of bank governance, preventing remuneration schemes that encourage inappropriate practices, encouraging whistle-blowing and improving the clarity of regulations to remove grey areas.</p>
<a href="#">Fines for misconduct in the banking sector - what is the situation in the EU?</a>	Martin R. Götz & Tobias H. Tröger	<p>Bank regulators have the discretion to discipline banks by executing enforcement actions to ensure that banks correct deficiencies regarding safe and sound banking principles. The authors highlight the trade-offs regarding the execution of enforcement actions for financial stability. Following this, this paper provides an overview of the differences in the legal framework governing supervisors' execution of enforcement actions in the Banking Union and the United States. After discussing work on the effect of enforcement action on bank behaviour and the real economy, the authors present data on the evolution of enforcement actions and monetary penalties by U.S. regulators. They conclude by noting the importance of supervisors to levy efficient monetary penalties and stressing that a division of competences among different regulators should not lead to a loss of efficiency regarding the execution of enforcement actions.</p>
<a href="#">Fines for misconduct in the banking sector - what is the situation in the EU?</a>	Elena Carletti	<p>The US system for addressing bank misconduct through fines delivers a number of lessons for the EU with regard to the design of bank enforcement architecture and the need to develop common approaches across national and EU levels with a view to avoiding regulatory arbitrage. Following the crisis, the highest money penalties imposed on banks in the US related to mis-selling of financial products – a criminal offence falling under the remit of Department of Justice – rather than to breaches of prudential supervisory requirements.</p>
9 November 2016		
<a href="#">Banks' internal rating models - time for a change? The "system of floors" as proposed by the Basel Committee</a>	Rainer Haselmann & Mark Wahrenburg	<p>The authors provide an assessment of the BCBS proposal on restricting the IRB approach and introducing RWA floors. If well enforced, risk-sensitive capital regulation results in a more efficient credit allocation compared to the SA. Thus, IRB should be maintained. Further, the use of IRB output floors potentially results in unintended negative side effects. Input floors are likely a valuable tool to achieve RWA comparability. Finally, the proposed measures have a potential detrimental impact for European banks as compared to others.</p>
<a href="#">Banks' internal rating models - time for a change? The "system of floors" as proposed by the Basel Committee</a>	Harry Huizinga	<p>This briefing paper reviews evidence showing that the adoption of an International Ratings Based (IRB) approach to estimating risk weights by banks has been associated with reductions in average reported risk weights. Several economic studies find that the lower reported risk weights using the IRB methodology to some extent reflect downward risk manipulation by banks. In a system of floors, the purpose of an aggregate output floor should be to prevent wholesale bank-level downward risk weight manipulation, giving rise to effective bank undercapitalization and a heightened probability of bank failure. Input floors can play a useful role alongside an</p>

Title	Authors	Summary
		<p>aggregate output floor, if they are targeted to address the problem of potential mismeasurement of risk.</p>
<p><a href="#">Banks' internal rating models - time for a change? The "system of floors" as proposed by the Basel Committee</a></p>	<p>Andrea Resti</p>	<p>In this note, the author discusses the proposal for a reform of internal rating models outlined by the Basel Committee. This paper first presents internal rating models (which currently generate roughly 50% of supervisory capital in the European Union) and the reasons why they have been increasingly criticised. The author then reviews the key proposals circulated by the Basel Committee: the removal of internal models for "low-default portfolios" (where defaults are too infrequent to allow adequate calibration); additional constraints on internal models' estimates ("input floors"); an "output floor" tying the capital requirements generated by internal ratings to those that would emerge from the standardised approach. The paper then explain why, in its opinion, floors represent a technically flawed answer, and suggest a number of supervisory actions that may be pursued, instead, to restore internal models' credibility, without causing an excessive burden for banking authorities. Such actions, which have already been explored by the EU in the last few years, should be embraced wholeheartedly by supervisors, to ensure that increased transparency on implementation and validation practices may restore market confidence in internal models.</p>
<p>13 June 2016</p>		
<p><a href="#">How relevant are the new elements in the 2016 stress test design?</a></p>	<p>Andrea Resti</p>	<p>This note focuses on the elements of novelty that characterise the 2016 stress test, based on the methodological notes released by the European Banking Authority, and discusses in closer detail the following key aspects: (a) the request for specific forecasts concerning "conduct risk"; (b) the greater attention towards risks originated by foreign exchange exposures; (c) the lack of a "pass/fail" threshold that partitions tested banks into "safe" and "unsafe" ones; (d) and the change in the sample size of banks required to take the test.</p>
<p><a href="#">How relevant are the new elements in the 2016 stress test design?</a></p>	<p>Harry Huizinga</p>	<p>The 2016 EU-wide stress test requires banks to assess the impact of exchange rate movements on the quality of their foreign exchange lending. This is useful but not sufficient information for supervisors to be able to assess the implications of exchange rate risk for bank solvency. The 2016 stress test further asks banks to report in detail the expected future costs associated with already known misconduct cases. Information of this kind enables supervisors to ascertain whether banks' current levels of provisioning for such costs are adequate. If not, supervisors should follow up by requiring banks to increase their provisioning levels to reflect projected future costs.</p>
<p>22 March 2016</p>		
<p><a href="#">Should the marketing of subordinated debt be restricted/different in one way or the other? What to do in the case of mis-selling?</a></p>	<p>Martin R. Götz &amp; Tobias H. Tröger</p>	<p>An important prerequisite for the efficiency of bail-in as a regulatory tool is that debt holders are able to bear the cost of a bail-in. Examining European banks' subordinated debt, the authors caution that households may be investors in bail-in able bonds. Since households do not fulfil the aforementioned prerequisite, they argue that European bank supervisors need to ensure that banks' bail-in bonds are held by sophisticated investors. Existing EU market regulation insufficiently addresses mis-selling of bail-in instruments.</p>
<p><a href="#">An effective dialogue between supervisors and auditors – how can its implementation be monitored?</a></p>	<p>Harry Huizinga</p>	<p>Weak banks and their auditors have incentives to overstate bank asset values. In its dialogue with the auditor, the supervisor should stress the need for unbiased accounting data. However, only a supervisor that does not need to apply regulatory forbearance to distressed banks can credibly insist on receiving unbiased accounting data. The introduction of bail-in as the main avenue to resolve failed banks offers the prospect of ending the need for regulatory forbearance, and of improving the quality of accounting data.</p>
<p><a href="#">Should the marketing of subordinated debt be</a></p>	<p>Andrea Resti</p>	<p>This note provides a primer on subordinated bonds, covering a number of key concepts and definitions. The role of subordinated bonds as a source of</p>

Title	Authors	Summary
<a href="#">restricted/different in one way or the other? What to do in the case of mis-selling?</a>		<p>bank regulatory capital (“Tier 2 capital”) is also discussed. Empirical data are presented, showing that Tier 2 capital accounts for 16.2% of total regulatory capital (or 2.7 percentage points in terms of riskweighted assets). Based on national statistics and anecdotal evidence, it can be inferred that a significant share of Tier 2 issues is held by retail investors. This paper then looks at how recent rules on bank bailout and resolution (including the BRRD) have changed the risk attached to subordinated bonds and to other bank liabilities that rank senior to them. Key rules on the placement of subordinated bonds to retail clients are also briefly surveyed, highlighting how MiFID II will change the regulatory landscape since 2018, by imposing additional requirements on appropriateness, product governance and conflicts of interest, and by giving supervisors the power to impose extraordinary bans on unsuitable financial products. In the last part of this note the author argues that, rather than prohibiting the sale of subordinated debt to small investors, supervisors should tackle the risk originating from self-placement practices through a thorough and uniform implementation of MiFID provisions. Competent authorities may e.g. require banks to: set maximum concentration limits in their customers’ portfolios; develop adequate pricing procedures; or to ensure that remuneration schemes do not lead to improper selling practices.</p>
<a href="#">Should the marketing of subordinated debt be restricted/different in one way or the other? What to do in the case of mis-selling?</a>	<p>Elena Carletti &amp; Donato Masciandaro</p>	<p>Bail-in can potentially lead to enhanced market discipline and lower use of public finances only if its application is credible and stringent. This requires that the holders of bail-in able debt have the capacity of absorbing losses but also that the application of bail-in is consistent with financial stability. Sophisticated investors have typically a larger financial capacity than unsophisticated investors but they are also more reactive to information and/or imposition of losses and are therefore more likely to generate runs and systemic risk. In contrast, retail investors are slower movers and as such they constitute a more stable source of funding. As a result, the authors do not advocate the ban of the sale of subordinated debt to retail investors. Rather, it is crucial that the rules concerning the marketing of these products are appropriately designed and their implementation is supervised by competent authorities.</p>

## SRM external papers

The following list summarises the papers provided by the panel of experts on the Single Resolution Mechanism since July 2016.

Table 2: Papers provided by the SRM expert panel

Title	Authors	Summary
2 April 2019		
<a href="#">Stock take of the SRB's activities over the past years: What to improve and focus on?</a>	Karel Lannoo	It is time for the Single Resolution Board (SRB) to step into the limelight and for the authorities to let it live up to its task. Despite significant improvement in the health of banks over the last 10 years, stress tests results, money laundering scandals and bank failures indicate that the sector is not free of problems, and that the SRB may be called upon to act on a large systemic bank. Policy makers have so far preferred to continue to bail-out banks, rather than to use the SRB for what it was designed. This undermines the credibility of the institution and the single banking market.
<a href="#">Stock take of the SRB's activities over the past years: What to improve and focus on?</a>	Rosa M. Lastra, Costanza A. Russo & Marco Bodellini	This paper discusses from a legal perspective how, over the past years, the SRB has performed against the main goals it was supposed to accomplish, in light of the decisions taken so far (looking backwards) and points to some of the challenges ahead (looking forward). These include inconsistencies in the implementation of the BRRD/SRMR regime, in particular with regard to the 'dichotomy' between liquidation and resolution, the resulting fragmentation along national lines, the interpretation of the public interest test, and the complexity and inefficiency of the existing system of 'multi-layered' litigation. The ongoing work of the SSM and the SRM and the development of Banking Union need to continue to address the 'fault lines' in their design and provide for a better alignment of the triggers for resolution and liquidation and greater transparency on the outcome of resolution planning.
<a href="#">Taking stock of the Single Resolution Board</a>	Nicolas Véron	The Single Resolution Board (SRB) has had a somewhat difficult start but has been able to learn and adapt, and has gained stature following its first bank resolution decisions in 2017-18. It must continue to build up its capabilities, even as the European Union's banking union and its policy regime for unviable banks continue to develop. Specific areas identified for parliamentary scrutiny include the SRB's authority to determine a bank as failing or likely to fail; its crisis preparedness beyond the ongoing process of resolution planning; and its governance and operational independence.
6 December 2018		
<a href="#">Financing bank resolution: An alternative solution for arranging the liquidity required</a>	Willem P. de Groen	Liquidity in resolution is one of the unresolved elements of the Single Resolution Mechanism. Currently, with the Single Resolution Fund (SRF) and the Eurosystem, there are two potential sources of liquidity in resolution, which both have clear limitations in use and amounts. Straightforward solutions to give the SRF and/or Eurosystem more firepower in resolution go against the main objectives of the resolution mechanism (i.e. breaking the sovereignbank nexus and avoiding use of taxpayers' money). This paper proposes an ECB liquidity facility with an SRF guarantee as an alternative solution for banks in resolution. The funds available should be broadly sufficient to address potential liquidity needs for resolution tools. The proposed solution primarily requires agreement on the ESM backstop for the SRF, a firmer commitment for (possible) future contributions for the SRF as well as a change to the current emergency liquidity assistance or introduction of a new dedicated Transitional Liquidity Assistance by the Eurosystem.

Title	Authors	Summary
<a href="#">How to provide liquidity to banks after resolution in Europe's banking union</a>	Maria Demertzis, Inês Gonçalves Raposo, Pia Hüttl & Guntram Wolff	Banks deemed to be failing or likely to fail in the banking union are either put into insolvency/liquidation or enter a resolution scheme to protect the public interest. After resolution but before full market confidence is restored, the liquidity needs of resolved banks might exceed what can be met through regular monetary policy operations or emergency liquidity assistance. All liquidity needs that emerge must be met for resolution to be a success. In the euro area, this can only be done credibly for systemically important banks by the central bank. The authors discuss how to establish guarantees against possible losses in order to allow liquidity provisioning in times of resolution.
<a href="#">The financing of bank resolution - who should provide the required liquidity?</a>	Costanza A. Russo & Rosa M. Lastra	This paper addresses two distinct yet interconnected problems. The first is whether the provision of Emergency Liquidity Assistance (ELA) on an individual bank basis should be centralised within the European Central Bank (ECB) and the second is whether existing liquidity financing arrangements are fit for the role. The paper argues that ELA centralisation would not require Treaty amendment and that a liquidity backstop is needed. However the latter cannot be provided by the ECB due to the prohibition of monetary financing and other Treaty and EU law requirements. The choice of the EU entity which should be entrusted with the specific mandate will largely depend on the characteristics the facility would take. The paper considers such characteristics and analyses which authority may best fit that role. The paper also suggests that a well-structured facility could have a positive broader macroprudential impact, and that a fine balance needs to be struck between the risk of moral hazard and the beneficial effect this facility may have on market confidence.
11 July 2018		
<a href="#">Valuation reports in the context of banking resolution: What are the challenges?</a>	Martin F. Hellwig	This paper discusses the problem of valuation in bank resolution. In an overview over the most relevant principles of valuation theory, the paper notes the difficulties inherent in valuing risks and illiquidity in holding non-traded assets. Subsequently, the paper briefly reviews the resolution of Banco Popular Español, and then discusses the need for clarification of the no-investorworse-off principle, the relation between the price in a sale of business and the presumed outcome in an insolvency procedure, and the difficulties attached to assessing the value of an illiquid asset that is held. The paper concludes with a discussion of the need for time, for valuation and in resolution, warns against a moratorium on withdrawals and payouts, and argues that time pressures would be much reduced if funding in resolution was provided for.
<a href="#">Valuation Reports in the Context of Banking Resolution: What are the Challenges?</a>	Rosa M. Lastra & Rodrigo Olivares-Caminal	This paper discusses from a legal perspective the challenges and difficulties involved in the production of the valuation reports required by the BRRD and considers the option of a moratorium tool for use by the resolution authorities as a possible way forward, which could address the concerns about timing and flexibility in the valuation process. Given the discretionary powers of the resolution authorities and the need for SRB independence, the paper also considers the wider issues of legitimacy and accountability in the actions and decisions taken by the Single Resolution Board in light of the unique and complex institutional structure of the SRM.
<a href="#">Valuation reports in the context of banking resolution: What are the challenges?</a>	Willem P. de Groen	The preparation of accurate valuation reports is among the most challenging elements of the resolution mechanism. That challenge is underlined by the following observation: during the crises in the past decade, for almost half of the bailed-out banks the estimates for losses and capital needs were initially too low, resulting in several rounds of public capital injections. The single resolution mechanism has introduced a formal procedure with three valuations, respectively, to determine whether a bank is failing or likely to fail (valuation 1), to inform about the use of the resolution tools including bail-in (valuation 2), and to ensure that the 'no creditor worse off' condition is respected (valuation 3). This paper gives an initial assessment of the

Title	Authors	Summary
		<p>preparation of valuation reports in resolution. It finds that there are still substantial uncertainties regarding the outcome of these valuations due to organisational, legal and economic challenges. In order to reduce the uncertainties, several measures are suggested, such as improving the IT systems, increasing the use of historical data, shortening the procedure to assign the valuator, introducing a moratorium, and harmonising the insolvency laws for banks in a way that integrates the insolvency and resolution regimes.</p>
20 March 2018		
<p><a href="#">Cash outflows in crisis scenarios: do liquidity requirements and reporting obligations give the SRB sufficient time to react?</a></p>	<p>Alexander Lehmann</p>	<p>Bank failures have multiple causes though they are typically precipitated by a rapidly unfolding funding crisis. The European Union's new prudential liquidity requirements offer some safeguards against risky funding models, but will not prevent such scenarios. The speed of events seen in the 2017 resolution of a Spanish bank offers a number of lessons for the further strengthening of the resolution framework within the euro area, in particular in terms of inter-agency coordination, the use of payments moratoria and funding of the resolution process.</p>
<p><a href="#">Cash outflows in crisis scenarios: do liquidity requirements and reporting obligations give the Single Resolution Board sufficient time to react?</a></p>	<p>Willem P. de Groen</p>	<p>The large majority of the more than €2.5 trillion of public and monetary support that euro area banks received between 2008 and 2016 was liquidity support. Liquidity has nevertheless been inadequately addressed in the legislative overhaul following the global financial crisis. This paper focuses on liquidity in resolution, the moment when the need for liquidity is most acute. Based on an assessment of the liquidity needs as well as the role and size of the central bank facilities and Single Resolution Fund, it draws the conclusion that a back-stop for the resolution fund, prompt corrective action and better information exchange between the authorities involved appear to be required in order to improve the functioning of the resolution mechanism.</p>
4 December 2017		
<p><a href="#">The Provision of Critical Functions at Global, National and Regional Level—Is there a need for further legal/regulatory clarification if liquidation is the default option for failing banks?</a></p>	<p>Rosa M. Lastra, Rodrigo Olivares-Caminal &amp; Costanza A. Russo</p>	<p>This paper defines critical banking functions and considers whether there is a need for further legal/regulatory clarification if liquidation is the default option for failing banks. The authors rely on EU law and soft law principles (FSB) bearing in mind that 'liquidation' is at times a loosely defined concept. Despite efforts to agree upon a set of qualitative and quantitative criteria to assess the critical nature, or lack thereof, of relevant functions, this paper argues that simplification is needed. Given the discretionary element in the determination of public interest and critical functions and the existence of different legal sources with different purposes, the authors recommend a consistent application of the resolution rules to build up credibility in the Banking Union project, considering in particular the differential treatment by the competent resolution authorities in recent Spanish and Italian liquidation and resolution cases.</p>
<p><a href="#">The Provision of Critical Functions at Global, National and Regional Level—Is there a need for further legal/regulatory clarification if liquidation is the default option for failing banks?</a></p>	<p>Willem P. de Groen</p>	<p>The introduction of a bank resolution framework for EU banks has created the need for clear legal definitions of the main elements in resolution. This paper assesses one of these elements, namely "critical functions", which encompasses the activities of a bank that are of significant importance for the real economy. The assessment of the regulation and implementation shows that there is room for sharpening the definition and equal application across all banks. It is questionable, however, whether regulatory intervention is necessary given the on-going work of authorities at different levels. In turn, legislative intervention will be required to align the objectives of the resolution framework and state aid. The latter currently leaves more room for public support measures, which are not necessarily in the public interest.</p>
<p><a href="#">Critical functions and public interest in banking</a></p>	<p>Silvia Merler</p>	<p>Under the EU framework for dealing with banking problems, resolution is seen as an exception to be granted only if liquidation under national</p>

Title	Authors	Summary
<a href="#">services: Need for clarification?</a>		insolvency proceedings is not warranted. The paper looks at the recent liquidation of two Italian banks to show how resolution and liquidation differ substantially when it comes to the scope of legislation applicable to the use of public funds. The author argues that more clarity would be needed as to the role that the concepts of critical functions and public interest play in Member States' decision to grant liquidation aid, and that the two-tier system – in which resolution is done at the EU level but insolvency remains a national prerogative – raises issues in the context of Banking Union.
11 July 2017		
<a href="#">Precautionary recapitalisations: time for a review</a>	Willem P. de Groen	With the introduction of the Bank Recovery and Resolution Directive (BRRD), public capital contributions to insolvent banks should have become a thing of the past or at least an extremely unlikely eventuality. The supposedly exceptional precautionary recapitalisation of Banca Monte dei Paschi (MPS) seems to offer evidence of the contrary. Based on a review of the empirical literature and the recent resolution of Banco Popular and MPS, this paper argues that a precautionary recapitalisation facility can be in the taxpayers' interest, but only under very specific circumstances and conditions. The current rules on precautionary recapitalisation and guidelines for the supervisory exercises used to determine the shortfall should therefore be revised. On the one hand, the current requirements are too flexible, leaving room for public capital injections into de facto insolvent banks, while on the other hand, the requirements imposed on the recapitalisation amounts are too rigid to allow the realisation of maximum economic returns.
<a href="#">Precautionary recapitalisations: time for a review</a>	Rodrigo Olivares-Caminal & Costanza Russo	This paper conducts an analysis of the precautionary recapitalisation tool of article 32.4(d)(iii) of the BRRD, which gives Member States the ability to provide support to solvent banks with a capital shortfall highlighted by stress tests and asset quality reviews, in case of a serious disturbance in the economy. In doing so, the paper examines the relationship between precautionary recapitalisation, financial stability and a serious disturbance in the economy underlying how the absence of a clear definition of 'serious disturbance' and 'financial stability' gives sufficient room for manoeuvre to determine when to provide aid. It also reviews the applicable rules on State aid and burden sharing, which allow for sufficient flexibility in case of financial stability concerns, balancing the needs of preserving financial stability but at the same time taking competition policy interests into account. Overall, precautionary recapitalisation is a necessary measure, especially given the current economic climate and its potential to facilitate the restoration of necessary capital levels.
<a href="#">Precautionary recapitalisations: time for a review</a>	Nicolas Véron	Precautionary recapitalisation, a tool for public intervention in the banking sector defined in the Bank Recovery and Resolution Directive (BRRD), is consistent with the rest of BRRD and a legitimate instrument for bank crisis management. The conditions set for it by BRRD are restrictive and have so far been effective to prevent its inappropriate use on insolvent banks. Minor corrections to the legislative text are desirable to fix a few cases of poor drafting. Beyond these, there is no immediate need for legislative change before the broader review of BRRD scheduled in late 2018. Outside of the scope of BRRD, the co-legislators should consider a reform of the EU audit framework to improve audit quality, and the European Stability Mechanism should be empowered to participate in future precautionary recapitalisations.
<a href="#">Precautionary recapitalisations: time for a review</a>	Martin Hellwig	The first part of the paper considers the effects of pre-empting a resolution procedure for a troubled financial institution by a precautionary recapitalization as specified in Article 32 (4) (d) of the Bank Recovery and Resolution Directive (BRRD). Benefits are seen for the maintenance of systemically important operations of an institution with legally independent subsidiaries in multiple jurisdictions and possibly for the maintenance of lending in situations where an entire banking system is involved. Other

Title	Authors	Summary
		<p>systemic concerns, such as the maintenance of lending when only part of a banking system is affected, the avoidance of damage to money markets, and potential systemic effects from bailing in creditors, can be addressed in a resolution procedure under the rules of the BRRD and do not require the instrument of a precautionary recapitalization. The second part of the paper provides a critical assessment of Article 32 (4) (d) of the BRRD and finds some weaknesses that contribute to raising taxpayers' costs or to reducing the effectiveness of the operation. The availability of precautionary recapitalization outside of resolution contributes to undue and costly delays in acknowledging and addressing problems. The conditions specified in the Directive are problematic, sometimes too tough, sometimes too lenient, most importantly because the objectives of State aid control differ from the objectives of the BRRD. The paper concludes with suggestions for reform.</p>
22 March 2017		
<a href="#">Carving out legacy assets: a successful tool for bank restructuring?</a>	Rym Ayadi, Giovanni Ferri & Rosa M. Lastra	<p>This paper considers a number of issues related to the restructuring of troubled banks in the EU. First, the authors provide an overview of how legacy assets have been dealt in a number of countries (in particular, drawing upon the experiences in Japan, the USA, Sweden and Spain), which support the case for a centralized solution in the presence of a generalized banking crisis. Second, this paper sheds light on the need to differentiate between systemic and nonsystemic events, by examining the relevant literature on the credit channel. Third, the authors elaborate the theoretical argument on the need for a systematic centralised approach at EU level to deal with legacy assets in bank restructuring in order to maintain fair recovery rates. Finally, the authors provide a preliminary assessment of the business models, risk, response to regulation and performance of 38 state aided banks via recapitalisation measures and explicit restructuring requirements, with an emphasis on APS-AMC arrangements using available data between 2005 and 2015. The indicators show that these state aided banks are only returning progressively to soundness and struggling to regain their performance levels of the pre-crisis period, which is a generalised problem throughout the European banking sector.</p>
<a href="#">Carving out legacy assets: a successful tool for bank restructuring?</a>	Alexander Lehmann	<p>This brief reviews the options for a separation of non-performing and other problematic assets from the main business of a bank. This separation is essential for bank rehabilitation, though secondary loan markets are illiquid, and plagued by problems in valuation and information sharing. Independent asset management companies are therefore needed, in particular as a tool in resolution. The legal framework for such institutions should now be prepared.</p>
<a href="#">Carving out legacy assets: a successful tool for bank restructuring?</a>	Willem P. de Groen	<p>European banks have accumulated more than €1 trillion in non-performing loans (NPLs) on their balance sheets after the burst of the 2007-2009 great financial crisis. The NPLs pose a potential threat to bank stability in euro-area countries such as Cyprus, Greece, Italy, Portugal and Slovenia, where more than 15% of the loans are non-performing. This paper assesses the effectiveness of the various resolution tools to deal with legacy assets such as NPLs under the resolution framework. On the one hand, the on-balance sheet tools (no tools, sales of entire bank, and asset guarantees) and on the other hand, the tools that carve out the assets from the banks' balances (selling part of the bank, bridge bank and asset separation) are assessed based on the experiences in the aftermath of the financial crisis. The figures for the 79 euro-area banks that received capital support between 2007 and 2016 show that the differences in bank viability as well as financial and economic stability are fairly similar across tools, except for the sale of the entire business and bridge banks. Taking also the costs (losses and recapitalisation) into account, asset management companies in particular, as well as bridge banks, guarantees and no specific resolution tools, seem under the current conditions to effectively deal with legacy assets such as NPLs.</p>

Title	Authors	Summary
<a href="#">Carving out legacy assets: a successful tool for bank restructuring?</a>	Martin Hellwig	Beginning with the proposal by Enria (2017), this paper discusses the scope for successful bank restructuring through a carveout of impaired assets and a transfer of these assets to a government-sponsored asset management company. The paper argues that the success of such an operation requires a use of public funds, either outright or through contingent commitments. Clawback provisions are problematic because they create contingent liabilities that merely shift risks from the assets side to the liabilities sides of banks' balance sheets. The paper distinguishes between asset impairments coming from considerations of prospective returns and asset impairments coming from frictions in the markets in which these assets are traded. It also distinguishes between threats to bank solvency and threats to bank funding/liquidity. In each case, the success of bank restructuring from asset carveouts depends on the extent to which threats to the bank's solvency is eliminated. If these threats concern bank funding and asset liquidations at depressed prices, public funds may eventually not be needed. If threats to bank solvency come from nonperforming loans, taxpayer support may be essential. The notion of "real economic value" as the price at which assets should be transferred is problematic and leaves ample room for hidden subsidies. The success of restructuring of the individual bank may itself come at a risk to financial stability as the preservation of existing capacities maintains competitive pressure and depresses bank profitability. Additional risks may come from the burden on the government's fiscal stance.
5 December 2016		
<a href="#">The different legal and operational structures of banking groups in the euro area, and their impact on banks' resolvability</a>	Dirk Schoenmaker	The legal and operational structures of banks matter for their resolvability. While resolution applies to legal entities, its success depends on the underlying logic and viability of bank business models. Moreover, to the extent that activities of a bank transcend borders, resolution is an affair for multiple national authorities. This paper categorises the largest euro-area banking groups according to their number of entities, cross-border assets and governance. The author identifies three main impediments to resolvability: complex structures, the broad definition of critical functions and provision of liquidity after resolution. This paper makes recommendations to address these impediments.
<a href="#">The different legal and operational structures of banking groups in the euro area, and their impact on banks' resolvability</a>	Rosa M. Lastra, Rym Ayadi, Rodrigo Olivares-Caminal & Costanza Russo	This paper discusses the legal and operational structure of the 129 banking groups in the euro area, which meet the test of SSM significance. Following a brief consideration of some key definitional and theoretical aspects, the paper analyses the data available from those 129 groups under a tri-dimensional taxonomy (considering their institutional, organizational, and operational structure). Based upon such data and taxonomy, the paper poses a number of questions or issues that the Single Resolution Board might consider in their resolvability assessments in the light of the Bank Recovery and Resolution Directive and the SRM regulation. The paper outlines avenues for further research since greater clarity is needed to understand both legal and operational structures of banking groups in the euro area.
<a href="#">The different legal and operational structures of banking groups in the euro area, and their impact on banks' resolvability</a>	Willem P. de Groen	The Single Resolution Mechanism, which started in January 2016, must ensure that even the largest, most interconnected and complex bank in the euro area can fail. One critical element to make this feasible is enhancing the resolvability of banks. Systemic banking groups are in general highly complex institutions composed of many different legal entities that are interconnected not only in a juridical sense but also operationally and financially. To carry out this analysis, the author assessed the 125 banks that were under the direct supervision of the European Central Bank as of May 2016, of which almost three-quarters are internationally active and more than a third of which are owned or controlled by one or more other banks. This paper looks at the critical elements in the resolvability of these internationally active and bank-owned banking groups and reaches two main findings. First, resolution authorities need to introduce closer coordination and cooperation in order to lower the costs of resolution (e.g.

Title	Authors	Summary
		bail-in costs and negative financial stability effects). Secondly, decision-makers within bank-owned banking groups need to change their system of governance to allow for orderly resolution (e.g. to allow prompt capital and asset transfers for loss absorption in resolution).
13 July 2016		
<a href="#">Total Assets versus "Risk Weighted Assets": does it matter for MREL requirements?</a>	Rym Ayadi & Giovanni Ferri	Using a comprehensive sample of European banks by business model, ownership structure and systemic footprint, this paper calculates MREL requirements based on three hypotheses: i) 18% of RWA; ii) 6.75% of LRE; iii) EBA- RTS. The maximum of i) and ii) TLAC prescription – reveals different requirements across business models/ownership structures not in favour of traditional banking. Variations are reduced somewhat with EBA RTS and an 8% floor. Shocking banks in respect of tail risk events suggests that currently envisaged MREL levels might be insufficient for a smooth resolution for banks.
<a href="#">Total Assets versus "Risk Weighted Assets": does it matter for MREL requirements?</a>	Martin Hellwig	This paper discusses the role of risk weighting in the determination of minimum requirements for eligible bail-in-able liabilities of banks (MREL), i.e. liabilities that are not exempt from the bail-in tool in bank resolution and that can be written down or converted into equity if losses on assets exceed the available equity and such bailing-in is required to re-establish bank solvency so as to provide a basis for maintaining systemically important operations in resolution. The paper begins with a general discussion of the reasons for introducing bank resolution as a special procedure outside of insolvency law, of the reasons for having the bail-in tool and of the frictions that may stand in the way of successful and frictionless resolution. This discussion emphasizes the importance of having sufficient bailin-able liabilities available; in contrast, for large institutions that have access to bond markets, the social costs of such requirements are small (unlike the private costs to the banks themselves). However, neither risk weighted nor total assets provide proper guidance for determining MREL. Risk-weighting suffers from a lack of a proper statistical basis and a certain manipulability. Moreover, the risk weighting that is used for capital regulation is not well suited for determining MREL; whereas capital regulation focuses on the probability of bad results, MREL is concerned with the extent of losses conditional on results being bad. "Total assets" suffer from not truly representing total assets because various rules, e.g. for netting, allow banks to keep certain assets and liabilities off their balance sheets.
<a href="#">Total Assets versus "Risk Weighted Assets": does it matter for MREL requirements?</a>	Bennet Berger, Pia Hüttl & Silvia Merler	The Bank Recovery and Resolution Directive (BRRD) foresees a minimum requirement for eligible liabilities and own funds (MREL) that banks need to comply with, to ensure the effectiveness of the bail-in tool. A discussion is currently on-going on how MREL should be constructed in practice. In this paper, the author looks at alternative ways to compute the requirements, showing how the choice of the benchmark metric (between Risk Weighted Assets, Total Assets or Leverage Exposure) can change the allocation of requirements across banks. This paper also reviews MREL in light of the global effort to ensure future resolvability of banks, highlighting some differences and inconsistencies with the FSB's Total Loss-Absorption Capacity (TLAC) measure.
<a href="#">Total Assets versus "Risk Weighted Assets": does it matter for MREL requirements?</a>	Willem Pieter de Groen	The bail-in of creditors forms a critical element within the new European bank recovery and resolution mechanism. The bail-in must ensure that indeed creditors instead of taxpayers absorb a bank's losses under ordinary circumstances. In order to allow an orderly bail-in to happen it is important that banks, among others, have sufficient loss-absorbing capacity. This so-called 'minimum requirement for own funds and eligible liabilities' (MREL) is currently based on a combination of indicators that are translated into a ratio as a percentage of total liabilities plus own funds. In this paper distribution across banks for the total liabilities plus own funds and the two alternative indicators – risk-weighted assets and leverage exposure – are assessed. The

Title	Authors	Summary
		<p>results show, based on a sample of 90 euro-area banks subject to direct supervision of the Single Resolution Board, that the difference between leverage exposure and total liabilities plus own funds is limited across the four different variables applied to categorise banks, namely supervisory, size, business models and ownership structures. In turn, the application of a risk-weighted and assets-based ratio substantially changes the distribution, with relatively lower average requirements for systemically relevant, larger, more market-oriented and publicly owned banks.</p>

## Individually contracted papers on the SSM and SRM

Table 3: Papers provided on the SSM

Title	Authors	Summary
19 October 2015		
<a href="#">Capital shortfalls in SSM banks: How much progress has been made?</a>	Sascha Steffen	On 26 October 2014, the European Central Bank (ECB) published the results of the comprehensive assessment that comprised both an asset quality review (AQR) as well as a stress test. Banks that have shown capital shortfalls after the assessment had up to 9 months to close the capital gap. In this paper, the author investigates whether actions taken by banks have resulted in noticeable reactions in capital markets. Evidence suggests that banks with shortfalls made some progress during the months after the comprehensive assessment. However, banks that passed might actually be riskier than expected based on the official results from the ECB. Quantitative Easing (QE) by the ECB makes it difficult to interpret market prices due to inflation in asset prices and decrease in risk premia.
<a href="#">Capital shortfalls in SSM banks: How much progress has been made?</a>	Thomas Breuer	The 2014 Comprehensive Assessment by the ECB identified and made public capital shortfalls at 25 major European banks. The banks concerned were required to submit a capital plan to the ECB and the national Competent detailing how the capital shortfall would be filled. Capital plans were to be implemented within six resp. nine months after 26 October 2014. Now that this time has passed, the author examines the progress made by the banks required to take action. This paper also evaluates how far the Comprehensive Assessment achieved its objectives.
25 June 2015		
<a href="#">Have European banks actually changed since the start of the crisis?</a>	Ata Can Bertay & Harry Huizinga	This paper documents trends in key bank variables over the 2003-2013 period for the set of banks that the ECB directly supervises as of January 30, 2015. This time period enables the authors to see how the crisis has affected the banks, and also how they have changed since the crisis. A range of variables is considered that together provide a picture to what extent banks have been moving in the direction of better performance and greater stability. These variables include indices of banks' overall business model, size, off-balance sheet exposures, and internationalization. In addition, the authors consider several variables that inform about banks' asset portfolios, funding strategies and capitalization. The identified trends provide a mixed picture of whether banks have been moving in the right direction since the start of the crisis.
31 March 2015		
<a href="#">Capital shortfalls disclosed by the ECB comprehensive assessment: How much progress has been made by banks that were requested to take action?</a>	Sascha Steffen	Following the publication of the results of the 2014 comprehensive assessment by the ECB, a capital shortfall of €9.5 billion across 13 European banks remained. The capital shortfall needs to be addressed and banks that have failed the assessment were required to submit capital plans and take actions to cover their respective shortfall. The main objective of this briefing is to evaluate whether the remedial actions of the banks can actually be considered appropriate and sound, and to analyse whether these actions have resulted in any notable reactions on the financial markets. The preliminary results of the analysis suggest that actions taken by banks that failed the stress test in 2014 might not have been successful. Share prices and market-to-book (MTB) ratios have further declined and these banks exhibit higher systemic risk relative to before the results have been disclosed and relative to banks that have passed the stress tests. Overall, there is insufficient information about actions taken by the banks after the publication of the comprehensive assessment and that can be used to assess these actions. The author concludes that the ECON Committee should request more detailed information from the ECB.

Title	Authors	Summary
<a href="#">Capital shortfalls disclosed by the ECB comprehensive assessment: How much progress has been made by banks that were requested to take action?</a>	Thomas Breuer	<p>On 26 October 2014, the ECB presented the results of its comprehensive assessment, stating that capital shortfalls were detected at 25 out of 130 participant banks, in total amounting to €25 billion. Each of the banks concerned had to explain to the ECB within two weeks after the public disclosure of the results how those shortfalls could be addressed within a maximum period of nine months. Given that the overall timeframe for addressing the capital shortfalls has not yet fully elapsed, one can so far only present interim results on the progress made. On the request of the ECON committee Professor Thomas Breuer reviews the progress made in preparation of the final results in October 2015.</p>
3 November 2014		
<a href="#">Robustness, Validity and Significance of the ECB's Asset Quality Review and Stress Test Exercise</a>	Thomas Breuer	<p>This Analysis presents in plain language the main features of the Asset Quality Review and the EU-wide stress test 2014 and discusses some key issues in the interpretation of the forthcoming 2014 stress test results. It comments on selected policy issues in the implementation of the asset quality review and the stress tests into supervisory processes.</p>
<a href="#">Robustness, Validity and Significance of the ECB's Asset Quality Review and Stress Test Exercise</a>	Sascha Steffen	<p>As we are moving toward a eurozone banking union, the European Central Bank (ECB) is going to take over the regulatory oversight of 128 banks in November 2014. To that end, the ECB conducted a comprehensive assessment of these banks, which included an asset quality review (AQR) and a stress test. The fundamental question is what will the financial condition of these banks be when the ECB commences its regulatory oversight? And, can the comprehensive assessment lead to a full repair of banks' balance sheets so that the ECB takes over financially sound banks and is the necessary regulation in place to facilitate this? Overall, the design of the assessment does not comprehensively deal with the problems in the financial sector and risks may remain that will pose substantial threats to financial stability in the eurozone.</p>

Table 4: Papers provided on the SRM

Title	Authors	Summary
28 January 2016		
<a href="#">Estimating the bridge financing needs of the Single Resolution Fund: How expensive is it to resolve a bank?</a>	Willem Pieter De Groen & Daniel Gros	<p>The Single Resolution Board (SRB) will be responsible for the resolution of banks in the euro area from 1 January 2016. However, the resources of the Single Resolution Fund (SRF) at the disposal of the SRB will only gradually be built up until 2023. This paper provides estimates of the potential financing needs of the SRF, based on the euro area bank resolutions that actually occurred between 2007 and 2014. The authors find that the SRF would have been asked to put a total amount of about €72 billion into these failing banks, which is more than the target for the SRF (€55 billion) but less than the amount the SRF could draw on, if the ex post levies are also taken into account. As this sum would have been required over eight years the broad conclusion is that bridge financing, in addition to the existing alternative funding, would only have been needed in the early years of the transition.</p>

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