IN-DEPTH ANALYSIS

Requested by the ECON committee



Impediments to resolvability of Banks

Banking Union Scrutiny



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Impediments to resolvability of Banks

What is the status quo?

Abstract

This paper gives an overview of the seven aspects of resolvability defined in 2019 by the Single Resolution Board, and then assesses progress in two key areas, based on evidence gathered from public disclosures made by the 20 largest euro-area banks. The largest banks have made good progress in raising bail-in capital. Changes to banks' legal and operational structures that will facilitate resolution will take more time. Greater transparency would make it easier to achieve the policy objective of making banks resolvable. This document was provided by the Economic Governance Support Unit at the request of the ECON Committee.

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LIST OF ABBREVIATIONS

AGRI Agriculture and Rural Development Committee

BRRD Bank Recovery and Resolution Directive (EC 2014/59)

EBA European Banking Authority

ESM European Stability Mechanism

FDIC Federal Deposit Insurance Corporation

FSB Financial Stability Board

G-SIB Global systemically important bank

MPE Multiple points of entry

MREL Minimum required own funds and eligible liabilities

RAF Resolvability Assessment Framework

SI Significant institution

SPE Single point of entry

SRB Single Resolution Board

SRF Single Resolution Fund

SRMR Single Resolution Mechanism Regulation

SSM Single Supervisory Mechanism

TLAC Total loss absorbing capacity

TREA Total risk exposure amount

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EXECUTIVE SUMMARY

- In the five years since the adoption of the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism Regulation (SRMR), preparations for the orderly failure and resolution of systemically important banks in Europe have made significant progress. Identifying and addressing barriers to resolvability is only now becoming a priority for the Single Resolution Board (SRB).
- Making banks resolvable should involve making all the financial, governance and structural
 preparations necessary to allow liquidations or resolution processes to go ahead without
 disrupting financial stability or interrupting the banks' critical functions. Draft SRB guidance to
 banks issued in October 2019 operationalises this policy objective by describing seven qualities of
 resolvable banks.
- Based on such standards, very few European banks could be described as resolvable. With the possible exception of the European G-SIBs, the deadline for making Europe's banks resolvable by 2024, which was set in the revised BRRD, is ambitious.
- Implementing the SRB's resolvability standards will require costly reforms in a sector that remains structurally weak. Banks' ongoing withdrawal from non-core business lines will reduce the burden, but nevertheless upgrades of governance, management processes and business information systems will also be required. Ultimately, concluding that a bank is 'resolvable' is unlikely to be a clear-cut decision, nor necessarily a lasting one.
- Bond markets have so far absorbed the subordinated debt instruments issued by banks seeking to meet their Minimum Requirement for own funds and Eligible Liabilities (MREL) targets. Constraints on issuance are faced by mid-sized banks which may lack an investor base, and have also emerged in smaller EU countries where bank bond funding is underdeveloped. Rating agencies acknowledge that the senior debt held by a number of European banks has become less risky through this additional loss-absorbing capital, though bail-in securities may be compromised by maturity concentrations and the need to 'pre-position' such funding within subsidiary jurisdictions.
- Funding of a bank following a resolution process is another aspect of resolvability that is a key
 concern for investors. The role of the Single Resolution Fund has been clarified in this area, and
 potential backup funding through the European Stability Mechanism (ESM) may emerge. But
 preparations by the banks for recovery plans and funding within a resolution appear to be
 inadequate.
- The relative lack of transparency and public disclosures of resolution plans are major obstacles to an effective resolution regime. A requirement for public disclosures could impose market discipline on banks while they are still going concerns, and could promote wider sharing of good practice within the industry. The disclosures from Europe's 20 largest cross-border banks were reviewed for this briefing and yielded only very limited information about resolution planning.
- Interdependencies between business units remain a barrier to resolvability of bank groups that envisage resolution through the partial transfer or sale of their business, or where resolution is envisaged through 'multiple points of entry', which would require operationally and financially independent subsidiaries.

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• This is a particular problem for Europe's cross-border banks which seek, or are encouraged into, resolution strategies around multiple points of entry. The strategies of key host-country resolution authorities still seem to be not fully aligned with those of the SRB in this regard.

1. INTRODUCTION

'Resolvability' reflects a readiness at both the level of the banks and the authorities to implement resolution strategies (Knot, 2019). Making banks resolvable therefore denotes the process of moving away from governance practices and a financial industry structure in which banks are too big, too complex or too interconnected to fail without disrupting financial stability. In this sense, resolvable banks are the endpoint of a journey away from a financial sector in which taxpayer-funded bailouts were the norm.

Europe began this transition in 2014 with the adoption of the Bank Recovery and Resolution Directive (BRRD) and the Single Resolution Mechanism Regulation (SRMR). In 2019, the BRRD was revised, setting 2024 as a deadline for raising sufficient bail-in capital, which would be an important milestone in the transition. Halfway through this process, little is known about the impediments that have been encountered to date, and how these will be addressed.

In the first three years of the Single Resolution Board's (SRB) operations the focus was on setting targets for raising additional loss-absorbing capital (MREL). Bail-in funding is of course insufficient to ensure resolvability. With the 2019 SRB work programme, identifying and addressing impediments to resolvability has become a more prominent strand of its work. In line with its original legal mandate, the SRB will need to assess a wide range of obstacles to resolvability linked to the legal structure of firms, their governance, and their plans for restructuring and ensuring continuity of critical functions¹.

Based on the SRMR, formal resolvability assessments need to be undertaken by the SRB. The board takes the lead in drafting assessments, identifying barriers and directing institutions to remove impediments. This is a notable difference to the resolution regimes in the United Kingdom and the United States, where banks seem to be given more responsibility, and perhaps have more ownership of the process. Still, the SRB acknowledges banks themselves will need to take responsibility for making themselves resolvable. A draft document issued in October 2019 helped in setting out how the SRB's expectations could be operationalised by banks, which will now have to draft their own resolution work programmes and devote senior management resources to this process.

Little is known about the early resolution plans, even of the seven European banks that are considered global systemically important banks (G-SIBs), and which have been subject to earlier deadlines coordinated by the Financial Stability Board (FSB). This might not change much because, compared to resolution regimes in other major jurisdictions, the SRB's regime is also relatively opaque. Unlike the regime adopted in the UK in 2019, euro-area banks will not need to release public summaries of their resolution plans. This will hinder external assessments, such as attempted in this briefing, which must rely on public information alone.

This briefing paper gives an overview of the seven aspects of resolvability defined by the SRB in 2019, and then assesses progress in two key areas: raising sufficient financial resources, and changes in banks' legal and operational structures to facilitate resolution. We focus on banks under the SRB's remit – essentially the 'significant institutions' (SIs) under the Single Supervisory Mechanism (SSM) supervision, and a small number of other cross-border banks.

Previous work by Schoenmaker (2016) assessed the complexity of euro-area banks based on the extent of their foreign assets, number of subsidiaries and governance arrangements. In this briefing we assess progress on resolvability based on a stocktake of progress in raising MREL, and a systematic review of disclosures made by the 20 largest cross-border banks in the euro area.

¹ BRRD (EC 2014/59, Art. 15).

In Section 2 this briefing reviews the two most important frameworks for resolvability assessments in Europe: that in the UK (adopted in 2019), and that in the euro area, where it is only at consultation stage. Section 3 assesses progress in raising MREL, and impediments smaller banks are likely to confront in raising subordinated debt. Section 4 first assesses the transparency of the euro-area regime, before reviewing challenges in creating supportive governance arrangements and operational structures in our sample of 20 banks. This is examined in more detail in Section 5 for a sub-set of cross-border banks that have systematically important subsidiaries in a number of EU countries.

2. OPERATIONALISING RESOLVABILITY ASSESSMENTS

A resolvable bank is essentially one that is 'safe to fail'. Failure could result in liquidation, or, if a resolution process ensues, in the bank carrying on with its essential functions without seeking recourse to public funds or disrupting financial markets or the economy at large (Huertas, 2014).

It is worth recalling the costs that resulted from the absence of a regime for orderly bank failures prior to the BRRD. These costs arose not just because of an inability to impose losses on bank creditors but also because of banks' legal and operational structures and governance practices in which the prospect of failure never featured. Dexia, for instance, was one of the largest European financial conglomerates prior to its failure in 2008. Following an initial recapitalisation and provision of funding support by Belgium, France and Luxembourg, a second intervention became necessary in 2011. The lack of any bank internal recovery and resolution planning meant lengthy negotiations on a complex further restructuring solution. Resolution of Austrian Hypo Group Alpe Adria and its asset management vehicle in 2014 was one of the first cases under the BRRD. Yet it happened in the absence of a resolution plan and required a two-year moratorium to allow assets to be valued. Since then, large banks in the euro area (significant institutions) have begun to simplify their organisational structures and prepare for crises, and to some extent to prepare for their own resolutions should they be deemed to have failed. This is perhaps best shown by Nordea, which created efficiencies by moving its holding company to Finland in 2018, and now operates in foreign markets largely through branches. Conversely, two significant Spanish banks (BBVA and Santander) with subsidiary networks in Latin America, and two Austrian banks with such networks in central Europe (Erste Group and Raiffeisen) have adopted more decentralised group structures, which will allow for resolution schemes to be implemented in several jurisdictions in parallel.

2.1. Broad principles in the FSB's Key Attributes and the SRMR/BRRD

The original concept of resolvability assessments was set out in the FSB *Key Attributes* of effective resolution regimes. Attribute 10 contained broad guidelines on the powers of national resolution authorities, though such powers have so far only been applied to G-SIBs (FSB, 2014). The objectives of such assessments are to explore the implications of resolution for systemic risk, to identify factors affecting effective implementation of resolution measures, and to provide a basis for the authorities that seek to intervene in firms' internal structures and governance. The FSB *Key Attributes* set out four aspects of a firm's resolution plan which should be assessed by the responsible national resolution authority, and then reviewed in cross-border crisis management groups.

The early FSB standards also shaped national resolution regimes and the BRRD². At least as regards the scope for resolvability assessments and the authorities' powers to intervene, the BRRD conformed closely to these early FSB guidelines (Coleman *et al*, 2018). The definition in the SRMR Art. 10 (3) states:

"An entity shall be deemed to be resolvable if it is feasible and credible for the Board to either liquidate it under normal insolvency proceedings or to resolve it by applying to it <u>resolution tools</u> and exercising resolution powers while avoiding, to the maximum extent possible, any significant adverse consequences for financial systems, including circumstances of <u>broader</u> financial instability or system wide events, of the Member State in which the entity is situated,

² BRRD (EC 2014/59), recitals 67 and 101.

or other Member States, or the Union and with a view to ensuring the <u>continuity of critical functions</u> carried out by the entity" (*emphasis added*)³.

The definition in the SRMR underlines that the institution should be open to the deployment of the full range of resolution tools. Two key aspects of the definition are that the resolution should allow the bank to continue providing critical functions, and that the financial system should not be disrupted. Unlike the more open language in the FSB *Key Attributes*, deeming a bank as resolvable under the SRMR seems to be a binary assessment, even though in practice any resolution process is inevitably unpredictable.

The original BRRD also contained 28 elements that should be considered in resolvability assessments⁴. However, the definition and criteria in the BRRD and SRMR were too broad to guide resolution authorities, let alone banks, in delivering on this policy objective. So far, 'resolvability', broadly defined, has been no more than an aspiration.

2.2. The Bank of England's Resolvability Assessment Framework

A first set of operational guidance for banks was published in July 2019 when the Bank of England released the final version of its Resolvability Assessment Framework (RAF). The Bank has made a commitment to the UK parliament that major institutions will become resolvable by 2022. UK firms are now tasked with drafting by October 2020 resolvability assessments (of about 250 pages length), and releasing public summaries of these assessments by May 2021.

There are three broad outcomes firms must achieve to meet the RAF standard (Table 1):

- Adequate financial resources, including adequate loss absorbing capital (MREL) that is appropriately distributed across the group, the capacity to conduct a timely valuation and the capacity to mobilise sufficient liquidity in resolution.
- The ability to continue to do business during a resolution and any restructuring that the resolution authority might undertake.
- The ability to coordinate and communicate effectively, including with market participants, ensuring an orderly resolution and restructuring process.

Similarly to practice in the US, and notably different to the SRB approach outlined below, banks themselves are tasked with drafting their resolvability assessments under the RAF. They are held accountable for implementing these criteria, and the Bank of England will publish a statement evaluating the banks' documents.

Table 1: Potential barriers to resolvability

Financial Resources	 Loss-absorbing capacity Valuations Funding in resolution
Continuity	4. Continuity of financial contracts5. Operational continuity6. Continuity of access to financial market infrastructure7. Restructuring

³ A corresponding clause for banking groups in 10 (4) BRRD also covers the liquidation or resolution schemes implemented in individual units of a banking group.

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⁴ See Annex C to the BRRD (Directive 2014/59).

Coordination and
communication

8. Management, governance, and communications

Source: Bank of England.

2.3. The SRB's 'Expectations for Banks'

The SRB's mandate to conduct a resolvability assessment similar to that described in the RAF is given in the BRRD and SRMR (Art 10 SRMR). Until now however, the SRB's standards for bank resolvability and policies in addressing any impediments have been unclear. Little is known about SRB feedback on early resolution plans. In October 2019 the SRB started a consultation on such standards, which could become policy in early 2020.

In its draft standard 'Expectations for Banks' (SRB, 2019) the board sets out best practice for seven aspects of resolvability: governance, loss absorption and liquidity, operational continuity including access to financial market infrastructure, information systems, communication during resolution, and separability of different parts of a bank in support of a restructuring solution. These high-level objectives are articulated through 34 underlying principles, and more detail on the SRB's expectations (Box 1).

These standards cover areas similar to the Bank of England's RAF. Unlike the UK framework, there is no harmonised provision for disclosure (where national rules of EU member states are binding), and there appears to be less emphasis on banks' internal management and governance that could support resolution planning.

Early industry assessments of the SRB document suggest that these principles are considerably more detailed than any guidance banks have received to date from SRB staff. Several areas could require substantial resources (e.g. data management systems) or could require restructuring or separation of business units.

2.4. The process for removing impediments to resolvability

The process for identifying and addressing barriers to resolvability was already set out in the original SRMR. If the SRB identifies impediments, a report is issued recommending measures to remove them. The bank has four months to propose its own course of action. If this dialogue with the bank is unsuccessful, a formal procedure to remove impediments could follow, possibly requiring the bank to adopt some drastic measures, including:

- Revision of intra-group financing arrangements or limiting of exposures;
- Divestment of assets or ceasing certain activities;
- Changing legal or operational structures in order to reduce complexity, facilitating the separation of critical functions within a resolution;
- Issuing more MREL, or converting outstanding liabilities into a legal form that could be subject to conversion⁵.

There is no evidence that such formal procedures have already been initiated. In any case, such measures would be implemented by the national resolution authority (weakening the SRB's control over implementation), and would likely be directed at banks that are already under some stress. Access to funding or asset prices realised in a divestment might make these measures less effective.

⁵ Art 10 (11) SRMR.

The SRB also gives some guidance on the dialogue between banks and the SRB that is designed to preempt such formal and risky procedures. Banks will need to prepare resolvability work programmes and progress reports. Such documents could give banks greater ownership of the required changes, as they would engage their senior managements on an ongoing basis.

Box 1: Seven objectives of bank resolvability in SRB (2019)

1) Governance

Banks have in place robust governance processes that facilitate the preparation as well as the implementation of the resolution strategy. Robust governance arrangements ensure (i) a timely and accurate provision of relevant information on a regular and ad-hoc basis, (ii) effective oversight during resolution planning and in crisis and (iii) efficient decision making at the time of resolution.

2) Loss absorption and recapitalisation capacity

Banks have available sufficient loss absorption and, if applicable, recapitalisation capacity at the point of entry to absorb losses in resolution, to comply with the conditions for authorisation and to regain market confidence post-resolution, allowing, among other things, the continued performance of critical functions during and after resolution. Banks also maintain loss absorption and recapitalisation capacity at subsidiary level and set up a credible and feasible internal loss transfer and recapitalisation mechanism within resolution groups, if applicable.

3) Liquidity and funding in resolution

Banks have established processes and developed capabilities to (i) estimate the liquidity and funding needs for the implementation of the resolution strategy, (ii) measure and report the liquidity situation in resolution and (iii) identify and mobilise available collateral that can be used to obtain funding during and after resolution.

4) Operational continuity and access to FMIs

Banks have in place adequate operational arrangements to ensure the continuity of the services, and of the access to operational assets and staff that are necessary for preserving critical functions and supporting the achievement of the other resolution objectives upon entry into resolution and to allow post-resolution restructuring. Banks have established the necessary processes and arrangements to maximise the likelihood of maintaining access, ahead of, during and after resolution, to FMIs and to payment, clearing, settlement and custody services provided by intermediaries.

5) Information systems and data requirements

Banks have in place adequate Management Information Systems, valuation capabilities and technological infrastructure to provide the information necessary for (i) the development and maintenance of resolution plans, (ii) the execution of a fair, prudent and realistic valuation and (iii) the effective application of resolution actions, also under rapidly changing conditions.

6) Communication

Banks have in place communication plans to ensure timely, robust and consistent communication to relevant stakeholders supporting the implementation of the resolution strategy and governance arrangements to ensure an effective execution of the communication plan.

7) Separability and restructuring

Banks' structure, complexity and interdependencies do not present obstacles to, and ideally support, the operational implementation of the resolution strategy.

Source: SRB (2019).

3. PROGRESS WITH RESOLVABILITY: ADEQUATE PRIVATE SECTOR FINANCIAL RESOURCES

So far, the focus of the SRB's work, and of banks' resolution planning, has been to put in place sufficient financial resources to allow a bail-in of creditors. The financial aspects of resolvability are broader and should also include preparing a speedy valuation of the bank at the point of failure, and putting in place collateral and funding arrangements that could support a resolution. Even a focus on headline MREL volumes omits important details. The SRB document points to the need for clarity on individual creditor classes, and requires that contractual terms for bail-in are applicable in third countries, and that the bank should communicate potential bail-in capacity to a resolution authority speedily.

Looking simply at shortfalls in MREL raised relative to targets set by the SRB, it seems that overall euroarea banks have made good progress in issuing such instruments. The inter-agency report on risk reduction of May 2019 (EC, ECB and SRB, 2019), which is based on end-2018 figures, suggests that banks under the SRB's remit in aggregate had issued MREL-type securities in excess of their collective target⁶:

- Outstanding MREL of on average 29.7 percent of total risk exposure amount (TREA) compared to an average of 25.2 percent;
- The majority of jurisdictions showed a shortfall relative to targets, though only in a small number was this shortfall significant, and on average it was only 1.8 percent of TREA;
- Shortfalls were concentrated in five member states and amounted to €125 billion in total⁷.

Bond investors have shown steady demand for bail-in type (senior non-preferred) securities, with spreads only marginally wider than those of regular (senior unsecured) bonds (S&P, 2019b). This observation, however, seems to be based on the issuance by the most creditworthy institutions.

Europe's seven G-SIBs had comfortably met their interim total loss-absorbing capacity (TLAC) targets by early 2019. These banks have kept their bond issuance roughly steady since the financial crisis, though have progressively sold more bail-in-type securities, which by now constitute half of the roughly €250 billion annual bond issuance. By contrast, Europe's mid-sized banks seem to face a greater problem. Analysis by the European Central Bank (ECB, 2018a) suggested that overall debt issuance by these banks has halved since 2010. Also, senior non-preferred securities (classed as part of MREL) amounted to only about 20 percent of this diminished issuance. These banks suffer from more deep-seated profitability problems and will need to issue more costly securities to a relatively inexperienced investor base.

In addition, banks in smaller and less-liquid bond markets face problems. In the EU countries of central and south-eastern Europe, bond issuance by banks is barely developed, and subordinated bonds that are potentially subject to a bail-in would be based on a novel legal framework. Banks whose business models rely primarily on local deposit funding have no existing investor base from which MREL could be raised. This is a problem not just for local resolution schemes, but also for the subsidiaries of euroarea banks that will be subject to multiple point of entry schemes that would be supported by local MREL.

⁶ 29.7 percent of the total risk exposure amount (TREA), compared to an average target of 25.2 percent.

⁷ The latest assessment, at time of writing, by the European Banking Authority (EBA) was based on end-2016 data, though is about to be updated.

A more market-based test of MREL adequacy is produced by rating agencies. The initial loss of implicit state support and bailouts, which became clear with the adoption of the BRRD, resulted in a wideranging downward revision of bank credit ratings. However, rating agencies now assess regularly the default risk of banks' senior unsecured debt to be *lower* than that of the bank as a whole if bail-in capital is sufficient, and if the local resolution regime is deemed effective.

By mid-2019 such a rating uplift had been awarded to 37 banks in 13 European countries, with a further eight expected to achieve such an uplift before 2021 (Standard and Poor's, 2019b). A further 16 were expected to fall short for the foreseeable future. Importantly, the thresholds for a rating upgrade were higher where maturity concentration resulted in refinancing risks, or where the need to pre-position bail-in securities within subsidiaries reduced the flexibility to use such loss-absorption flexibly across the entire group.

A greater concern for rating agencies and investors seems to be the lack of clarity about funding arrangements in a resolution scenario. It has been clear for some time that the capacity of the Single Resolution Fund (SRF) to act as a liquidity provider is ill-defined, and underfunded (Demertzis *et al*, 2018; Lehmann, 2018). Work is ongoing to give the SRF a well-defined role as a provider of liquidity in resolution. The ESM is expected to become the common backstop from 2020. A more comprehensive framework for liquidity in resolution would need to include national central banks and is only a work in progress. As the time of writing, this uncertainty over how banks emerging from resolution would be funded is a key gap in the resolution framework.

Funding arrangements also need to be prepared by the banks, and this is reflected in the SRB's (2019) draft resolvability framework. The board proposed that banks should estimate liquidity needs over the course of a resolution, provide an up-to-date picture of liquidity, and identify collateral that could be used during and after resolution. This would need to be coordinated with national central banks, where banks would pledge collateral for refinancing and emergency liquidity assistance.

There is little public information on how banks would address funding needs that arise over the course of a resolution and in its aftermath. Recovery plans, which banks need to submit to supervisors in preparation for hypothetical crisis situations that they would experience as a going concern, suggest this is an area of weakness. Banks seem to overestimate their abilities to raise funding in crisis scenarios, and seem to overestimate collateral availability and valuations (ECB, 2018b).

⁸ Rating agency Standard and Poor's, for instance, sets thresholds for additional loss-absorbing capital (in essence MREL other than core equity) beyond which a senior unsecured obligation (based on the issuer credit rating) could be rated above the stand-alone credit profile (Standard and Poor's, 2015). A one-notch upgrade is typically applied when additional loss-absorbing capital reaches 5 percent of risk-weighted assets.

4. PROGRESS WITH RESOLVABILITY: OVERCOMING BARRIERS RELATED TO STRUCTURE, COMPLEXITY AND INTERDEPENDENCIES

In assessing how large euro-area banks have adopted standards other than the SRB's resolvability framework, we turn to public disclosures made to investors and in annual reports. We accessed this information for the 20 largest euro-area institutions in terms of cross-border exposures. This is a small, though illustrative, subset of the 124 banks currently within the SRB's remit, and we included the seven European G-SIBs, for which resolvability preparations began earlier and have been ramped up more quickly⁹. For all banks we assessed four aspects:

- (1) Governance: the implementation of governance processes to facilitate preparation and implementation of the resolution strategy;
- (2) Operational continuity and access to financial market infrastructures (FMIs): operational arrangements for the provision of services to ensure operational continuity and access to FMIs in case of resolution;
- (3) Information and data requirements: arrangements to provide the information necessary for the development, maintenance, execution and effective application of resolution plans and actions; and
- (4) Separability and restructuring: steps to ensure that the banks' structure, complexity and interdependencies do not present obstacles to, and ideally support, the operational implementation of the resolution strategy and the achievement of the resolution objectives.

For all banks in this sample, including the G-SIBs, public information on firm-specific resolution planning turned out to be patchy at best (Table 2 provides an overview). Disclosures show that planning is in the very early stages. Of the 20 banks, 11 offered no or only very general statements about their resolution plans. Nine banks disclosed their resolution approaches in more detail, including by setting out their preferences either for a single-point of entry resolution scheme, or one governed by multiple authorities.

We find that the G-SIBs offer the most advanced levels of disclosure:

- All seven G-SIBs (BNP Paribas, Crédit Agricole, Santander, Deutsche Bank, Société Générale, ING and UniCredit) state they have developed plans in accordance with current EU regulation;
- Only two of these seven banks publish sections dedicated to resolution planning which directly addresses all four aspects of resolvability listed above¹⁰;
- Deutsche Bank's 2018 Annual Report dedicates a section to resolution and resolvability, but of the four aspects listed above, only directly addresses governance in the context of resolvability;
- Crédit Agricole, ING, Société Générale and UniCredit only mention their resolution plans in broad terms (i.e. they do not directly address any of the four aspects).

⁹ By 2018 the seven European G-SIBs had undergone four resolvability assessments within their respective cross-border crisis management groups (FSB, 2018).

¹⁰ See Santander's 2018 Economic and Financial Review and BNP Paribas' Registration Document and Annual Financial Report 2018

Six of the seven European G-SIBs also disclose public versions of their US resolution plans via the website of the Federal Reserve. Some limited detail about group-wide schemes emerges from the US disclosures¹¹.

Given the as-yet lax requirements for bank-specific disclosures, we cannot preclude that preparations are more advanced, though it is impossible to assess here. Investors will confront similar opacity, which is likely to undermine the objective stated in BBRD that the health of institutions should be monitored well ahead of any stress emerging.

 $^{^{11}\,}See\ https://www.federalreserve.gov/supervisionreg/resolution-plans.htm.$

Table 2: Resolution strategies and resolvability disclosures by the 20 largest euro area banks

	Bank	Country	Total Assets (2018, billion €)	ECB Supervised Subsidiaries		Resolution strategy ¹	Governance ²	Operational Continuity	Information and Data	Separability and	
				Home	Non- home Eurozone			and Access to FMIs ²	Requirements 2	Restructuring	
	BNP Paribas	France	2,041	15	10	Unclear	✓	✓	✓	✓	
	Crédit Agricole	France	1,624	58	10	SPE		General st			
_	Santander	Spain	1,459	5	18	MPE	✓	✓	✓	✓	
G-SIB	Deutsche Bank	Germany	1,348	5	12	SPE	✓				
Ġ	Société Générale	France	1,309	21	10	Unclear	General statement only				
	ING	Netherlands	887	3	4	SPE	General statement only				
	UniCredit	Italy	831	1	8	SPE	General statement only				
	Crédit Mutuel	France	853	36	8	Unclear	No information				
	Intesa Sanpaolo	Italy	788	6	5	Unclear	✓	✓			
	BBVA Spain		677	2	2	MPE	General statement only				
Ë	Nordea	Finland	551	2	1	SPE	No Information				
Ħ	DZ Bank	Germany	519	5	1	Unclear	General statement only				
돨	KBC Bank	Belgium	284	2	3	SPE	General statement only				
Έ	LBBW	Germany	241	1	0	Unclear	No information				
fica	Erste	Austria	237	51	2	MPE	✓	✓	✓		
Other Significant institutions	Banco de Sabadell	Spain	222	1	0	Unclear	General statement only				
er S	Raiffeisen Bank	Austria	135	3	1	MPE				✓	
툼	Bank of Ireland	Ireland	124	2	0	Unclear		√			
	Caixa Bank	Portugal	89	1	1	Unclear	√				
	Banco Comercial Portugues	76		2	0	MPE	✓	✓			

Source: Bruegel compilation, based on annual reports; data from SNL; ECB list of supervised entities; and S&P (2019b)

Notes: (1) Based on information disclosed in annual report, investor presentations, and S&P (2019b).

(2) Last four columns refer to compatibility of at least one statement in bank disclosures with standards set in the SRB (2019).

4.1. Limited transparency of European resolution plans

Disclosure is essential in making resolution scenarios credible, and bringing market discipline to bear on individual firms. Information on resolution scenarios needs to be shared with market participants *ex ante*, well ahead of any financial stress. Only once investors and other stakeholders can anticipate that resolution is credible, and which parts of a failing bank would not be deemed critical, will they offer funding at pricing that reflects such risks. Otherwise, the bank would still be perceived as too-big-to-fail, and the moral hazard problems familiar from the past crisis would set in. Disclosure on resolution scenarios should help set up contracts with financial service providers in such a way to ensure continuity of certain parts of a bank, and to ensure access to financial market infrastructure (Bank of England, 2017).

At one level, information needs to be provided by the authorities about general approaches to resolution planning and assessment of the resolvability of firms. The standards for setting additional loss-absorbing capacity, and positioning it within individual parts of a group, need to be well explained, and there needs to be confidence that a resolution process would draw on sufficient funding, for instance through a public back stop as a last resort. Cooperation with other authorities that govern parts of a multiple-point-of-entry scheme should be well understood. Such general standards on resolution frameworks were set out by the FSB (2019), and seem to be met by the SRMR.

Transparent firm-specific resolution plans are equally important. Credit rating agencies take a keen interest in individual resolution plans, not least to gauge the risk to subordinated funding that could be subject to a bail-in (S&P, 2019a). But transparency of scenarios for individual firms is also in the public interest because it will make market discipline more effective and will help contain contingent fiscal liabilities through potential support once private bail-in capital is exhausted. The FSB is at the time of writing consulting the industry on the appropriate extent of transparency for firm-specific resolution plans (FSB, 2019), which has already elicited some critical responses¹². Clearly, commercially sensitive information needs to be protected, and disclosures should not constrain decision making by the resolution authority, which is inevitably *ad hoc*, with authorities needing to respond to circumstances as they present themselves at the point at which an institution fails.

The largest US financial institutions with a balance sheet in excess of \$50 billion are required to submit living wills. Public versions of these plans are made available by the Federal Reserve. Banks themselves draft their resolution plans, though supervisors then publish feedback where necessary (with disclosures available on the FDIC website). This approach is designed to disseminate best practice throughout the industry.

The 2019 Bank of England resolution framework similarly expects firms to disclose summaries of their preparations for resolution, and will make public statements on the resolvability of each firm. A supervisory statement lists a number of topics that should be covered as part of this disclosure to the UK's Prudential Regulation Authority (PRA), though these are deliberately kept very broad in order to ensure that firms think comprehensively about their resolution plans, and report information specific to their situations¹³. The public disclosure would be a concise summary of the regulatory submission, and would be released in the following year. The PRA acknowledges limitations in public disclosure related to confidentiality concerns, though the Basel pillar 3 disclosure requirements act as a baseline.

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¹² See responses, including from the European Banking Federation, on the FSB website: https://www.fsb.org/2019/08/public-responses-to-consultation-on-public-disclosure-of-resolution-planning-and-resolvability/.

¹³ A first report should be about 250 pages in length and is to be submitted to the UK PRA in October 2020, and thereafter every two years.

By comparison, transparency about the resolution scenarios for euro area-based banks is as yet very poor. An early and as yet rare insight came from the European Court of Auditors (2017), which noted that resolution plans were late in materialising, and did not meet many of the requirements set out in the 'Single Rulebook' of bank supervision. Resolution strategies appeared not to have been operationalised. Communication with stakeholders was assessed as slow and incomplete.

4.2. Internal support for resolvability: governance and information systems

The SRB and Bank of England documents both underline that governance, management capacity and information systems are crucial foundations of resolution planning. The SRB (2019) framework calls for swift decision-making and adequate staffing within banks to support their resolution schemes. This would be evident in the active involvement of senior management; in the integration of resolution planning in the overall management framework; and in audited information relevant for resolution. Arrangements for resolution planning should be documented (in so-called play books), and simulated through 'dry runs'. The Bank of England's framework requires similar capacity, though emphasises that the quality of recovery and resolution planning will depend on the broader strength of governance practices.

In our sample, we found that seven of the 20 banks addressed at least some of these governance requirements. Banks appeared keen to show their preparedness for crisis scenarios. However, ECB (2018b) highlighted that, overall, banks' internal structures for crisis recovery planning are still poor. Governance of a resolution process is likely to present a similar challenge.

4.3. Preparing for resolution: ensuring separability, restructuring options and operational continuity

A bank's legal structure, complexity of business lines and the inter-connectedness of different units can present major obstacles to resolution ¹⁴. The 'sale of business' resolution tool might involve the partial transfer of only some assets or business lines. The asset separation tool (of sound assets from distressed assets) might be complicated in practice because all assets will rely on common business lines, including IT, servicing and legal services. Even the open-bank resolution plans, which are based on the bail-in of unsecured creditors, will result in restructuring that requires speedy separation of healthy business lines from those that are unprofitable. This would require comprehensive and rapid restructuring to restore a bank's viability, allowing it to re-open after the resolution weekend. This would need to be prepared well before a bank comes close to the point of failure.

The objective in any resolution plan is to secure the ongoing operation of critical functions, while those deemed non-critical should be liquidated. The SRB defines critical functions as those activities, services and operations of the bank whose discontinuation would affect third parties and the whole economy (SRB, 2016). Difficulties arise when business lines are not aligned with group entities. Centralised bank structures, which are common in European banks, create interdependencies that could be impossible to untangle in a resolution that relies on either the partial transfer or the sale of business resolution tools. A number of banks have already demonstrated that services that support critical functions can be reorganised to facilitate restructuring following resolution.

¹⁴ See Schoenmaker (2016) and Lastra et al (2016).

Under the original BRRD and SRMR legislation, banks must provide information on their 'separability', describing their internal organisation – this is a key element of their own resolvability assessments (known as living wills in the US)¹⁵. This information would underpin decisions about which business units can indeed be separated and would continue to function following a resolution. For these units, 'operational continuity' would need to be ensured in contractual terms. In particular, access to financial market infrastructure, payments, clearing, settlement and custody services should be ensured. This might require a complex restructuring of contracts with financial services and infrastructure providers.

This is by far the most complex of the seven aspects of resolvability (and which takes up the longest section in the SRB document). It is not surprising that the changes banks have implemented to date have had limited visibility. In our sample, only three of the 20 banks offered specific details on separability, and six provided information on operational continuity (Table 2). Only one bank – Santander – had made a comprehensive assessment of these aspects, including in the public version of its US resolution plan¹⁶.

¹⁵ See SRMR Art. 8 (9). These assessments are initially performed by the bank itself, and then reviewed by the resolution team in their own assessment.

¹⁶ Each of Santander's local sub-group uses own contracts with third parties or obtains certain core services, such as software programming or network infrastructure, from group-wide 'factories'.

5. IMPEDIMENTS TO RESOLVABILITY IN EUROPE'S CROSS-BORDER BANKS

An assessment of current impediments to bank resolvability is intricately linked to the situation of euroarea banks with significant cross-border exposures. Schoenmaker (2016) estimated that the 30 largest euro-area banks hold 16 percent of their assets in euro-area countries other than their home countries, and another 10 percent in EU countries outside the banking union. Resolvability of such banks therefore depends on effective cooperation between home and host countries, and on bank internal reorganisation that reflects the chosen resolution strategy.

A key innovation of BRRD2 was to make operational the two alternative strategies for cross-border resolution planning: resolution via a single point of entry (SPE) or through multiple points of entry (MPE), depending on whether one or several resolution schemes address all or separate parts of a failed banking group¹⁷. Based on an initial choice of the bank group, resolution colleges would adopt one of these two alternative strategies.

In the SPE model, a single resolution scheme applies to the entire group under the direction of the home-country authority ¹⁸. Subsidiaries in host countries issue bail-in capital (equity and subordinated bonds) to a parent or holding company (formalised in BRRD2 as internal MREL). Only the holding company would issue MREL-type subordinated bonds into the market under home-country law, and its creditors alone would be exposed to a potential bail-in. Once losses occur within any subsidiary, the parent must inject capital to comply with host-country rules on capital coverage, or, if necessary, convert internal MREL into equity. Losses are passed up, and capital is passed down. Should the holding company enter resolution, the home-country resolution authority (the SRB) implements its global resolution plan, and there is no need for different national insolvency proceedings. This allows the recapitalisation of the subsidiaries.

A key feature of this model is that, at least initially, the ownership structure of the group remains intact. The option of the financial, legal and operational separation of subsidiaries from the parent is not central to the resolution plan. Underlying profitability problems, including in host countries, can be dealt with based on a group restructuring plan. The strategy is also efficient in preserving equity, which can be allocated flexibly within the group wherever it is needed.

The alternative scenario is the MPE model. Here, the banking group is resolvable within the national boundaries of each of the jurisdictions in which it operates (or resolution groups spanning several countries), with minimal need for coordination (resolution groups can also apply to several member states). Clearly this sets a high bar, not just for raising bail-in capital in each jurisdiction, but also for making the bank locally 'resolvable' in legal and operational terms. Following a resolution, investors in subordinated debt would be converted into distinct national groups of new owners. The banking group would thus be essentially broken up along national lines.

This choice between the SPE and MPE resolution strategies is particularly relevant in central and south-eastern Europe. A significant number of banking groups based in the euro area, under ECB supervision, and subject to SRB resolution planning, continue to operate extensive subsidiary networks in that region. Banking groups from Austria, Italy and France are deeply engaged in central and south-east European markets, which have generated steady asset growth in excess of their euro-area home

¹⁷ BRRD2 (EU 2019/879) also formalised a clear distinction between resolution entities (where resolution action is applied) and resolution groups (which are subsumed under the individual resolution plans); and also formalised internal MREL, issued by the subsidiary to its parent.

¹⁸ The scheme could also apply to just a part of the banking group (the so-called 'resolution group').

markets. Subsidiaries are typically significant within host markets, and are often also significant individually within the respective banking groups¹⁹. Table 3 provides an overview of the respective host-country shares in group assets.

SPE and MPE strategies will appeal to different types of banking groups. Table 2 lists public disclosures from the 20 largest euro-area banks about their initial choice of resolution strategy. Many of these resolution schemes still need to be formalised, and in any case will be subject to ongoing review in the resolution colleges. Nine of the 20 banks have not, at time of writing, publicly disclosed their chosen strategies.

As with most G-SIBs, euro-area cross-border banks that operate through a centralised structure, in which core functions such as funding, risk management and IT are performed at parent level, prefer the SPE model. Given the flexibility in the allocation of loss-absorbing capital that this model implies, this is the default choice for cross-border banks²⁰.

Conversely, significant decentralised groups are more likely to propose a strategy of multiple entry points. Among the euro-area banks listed in Table 2, at least four are likely to opt for this strategy. Apart from Santander and BBVA with their traditionally independent Latin American operations, the MPE groups include Austrian banks Erste Group and Raiffeisen, each of which has extensive subsidiary networks in central and south-eastern Europe, in both the banking union and other EU member states.

The MPE approach might have become more attractive as banking groups increasingly rely on local funding, as opposed to traditional parent and foreign wholesale financing. Figure 1 shows this increase in deposit-to-loan ratios. By funding themselves largely through local deposits, subsidiaries have become more decentralised and potentially amenable to local resolution schemes. Separation from the parent can now be foreseen, at least in financial terms.

At the same time, a local resolution scheme (under an MPE strategy) would require local MREL, not internal subordinated debt funded by the parent. However, several member states with significant euro-area bank subsidiaries lack an investor base for locally-issued subordinated debt. Several host-country resolution authorities have argued that their domestic bond markets are too shallow to support issuance of bail-in capital that supports local resolution schemes.

A resolution plan conceived by the host country in the MPE strategy also requires the operational separation of the banking group into two or more resolution groups (composed of a subsidiary and other business units under it). A number of functions shared within the group could be relatively easily replicated locally – for example IT or marketing – or can at least be outsourced, even though such operational decentralisation of course entails further costs. Even for the two Austrian banking groups that appear to have opted for MPE strategies, little is known about their work to make individual subsidiaries operationally independent.

Table 3 also underlines that for several banks, coordination between the SRB and host-country resolution authorities will determine the resolvability of the entire group. Banks' initial choices, and the resolvability of their cross-border operations, are likely to run into constraints as home and host-country preferences might not converge. Poland, with relatively liquid local bond markets and a well-developed local resolution regime, appears to prefer MPE schemes for all local banks, while Romania, with more limited options for local MREL funding, appears to prefer SPE schemes supported by bank-

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¹⁹ Based on RBI (2019), the dominant banking groups in central Europe are Erste Bank of Austria, KBC, Santander, Unicredit, SocGen, RBI, Commerzbank, ING, BNP, Intesa, and Millenium Bank. In addition the Slovenian bank NLB and Greece's Eurobank operate in the southeast Europe region.

²⁰ Carmassi and Herring (2014).

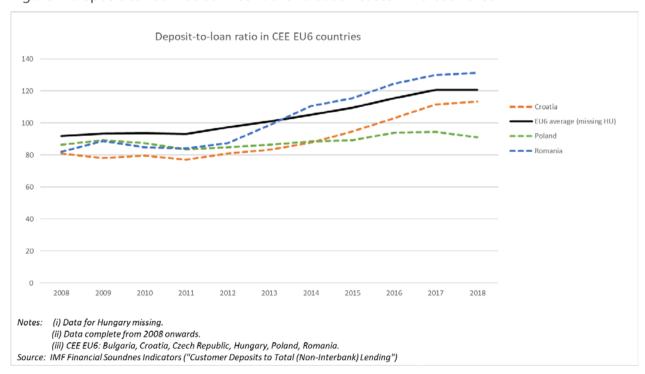
internal bail-in capital. Initially, a banking group might need to accommodate diverging strategies which might not be mutually compatible.

Table 3: Share of group assets (in %) within selected host member states

	Resolutio	non-EA EU			Euro area								
Bank	n Regime	Bulgari a	Croatia	Czech Rep.	Hun.	Poland	Roman.	Estonia	Latvia	Lithuan.	Slovak.	Sloven.	Total
ВСР	unclear					23.7							23.7
Banco Santander	MPE					2.5							2.5
BNP Paribas	unclear					0.7							0.7
Commerzbank	unclear				0.2	3.8							4.0
Crédit Agricole	SPE					0.3	0.0						0.4
Deutsche Bank	SPE					0.6							0.6
Erste	MPE		4.0	12.5	1.2		3.6				7.4		29.5
ING	SPE			1.0		3.6							4.6
Intesa	SPE		0.9		0.7		0.1				1.9	0.3	4.6
KBC	SPE	0.8		9.8	3.3						3.2		17.0
Nordea	SPE							14.2	0.8	1.2			16.2
Raiffeisen	MPE	2.7	3.4	9.9	5.2		5.8				9.3		39.4
Société Générale	SPE	0.3		1.7		0.3	0.9					0.2	3.7
UniCredit	SPE	1.2	2.0	2.5	1.1		1.1				0.6	0.3	9.3

Source: SNL database.

Figure 1: Deposit-to-loan ratios in central and south-eastern EU countries



6. CONCLUSIONS

Making Europe's banks resolvable will be a long process. So far, only the first steps have been taken. BRRD2 updated the earlier regime of 2014, and the SRB's draft resolvability assessment framework has clarified its expectation that banks will need to play a key role in this process. While smaller banks may be safely liquidated, numerous barriers still impede resolvability of those banks for which SRB intervention might be necessary.

Several of the impediments in this process may reflect constraints in debt markets or unclear coordination between different resolution authorities. Additional loss-absorbing capital has been raised by the largest banks while mid-sized banks are likely to face problems. Even where MREL targets are met, investors might question the utility of bail-in capital should significant parts need to be 'prepositioned' in individual jurisdictions, or if there are refinancing risks. Unclear coordination between home and host countries might leave the final resolution strategy unclear for some time. Several large euro-area groups have subsidiaries in host countries that insist on independent local regimes, and also in other countries where hosts would like to see SPE strategies supported by the injection of bail-in capital from the parent. More fundamentally, the lack of transparency about European resolution plans will impede market discipline and sharing of best practice.

The SRB's work programme to remove barriers to resolvability is likely to identify numerous bank-specific barriers in terms of inadequate governance and management information systems, and legal and operational structures. These would complicate the separation of critical functions, and any group-wide restructuring. Resolution planning will suffer from many of the well-known underlying problems in a structurally weak sector, in particular in terms of corporate governance standards and inadequate investment in infrastructure, such as data information systems. European bank assets continue to shrink as banks divest substantial assets that are considered non-core. Central European countries used to be dependent on cross-border parent and wholesale funding, but have become much more reliant on local deposit funding, making them more amenable to multiple local resolution schemes and restructuring. However, our review of resolution-related disclosures by the 20 largest euro-area banks has offered very limited evidence that other operational and legal barriers to resolvability are being addressed.

The SRB should become more open about its own standards, the barriers it has identified and how it goes about addressing them. As a young institution which had to quickly establish its role in the banking union, it might have decided against disclosure of potentially market-sensitive information. But the US experience has shown that banks can be asked to produce public versions of their crisis plans, and that it might be in their interest to do so. More transparency would likely bolster confidence that risks to the taxpayer are indeed limited, while guiding the industry as it reorganises into a more crisis-resilient structure.

With the formalisation of the SRB's expectations for banks, and given its future work programme, addressing barriers to resolvability will become a central part of its agenda. The following key questions need further discussion:

Considering that public disclosure and the resulting market discipline are essential to achieve
the desired resolvability of firms, what preparations is the SRB making to create more
transparency around firm-specific resolution plans? What barriers in national and EU legislation

prevent adoption of similar processes to those in the US and UK, where banks disclose summaries of their resolution plans, and the resolution authorities release comments on such plans where warranted? Could euro-area supervisors require such disclosure as part of banks' ongoing ('pillar 3') communications with market participants?

- Does the SRB consider structural problems in MREL issuance by smaller and mid-sized banks to be an obstacle to their resolvability?
- How will the SRB assess the 'separability' of the foreign subsidiaries of euro-area bank groups, which could be relevant when these banks opt for an MPE strategy, or where an SPE strategy envisages a partial transfer of operations or a restructuring of a group? How will impediments to such separability be addressed in the less-developed financial markets in the banking union and other EU countries where local financial market infrastructure and the capacity to create independent financial services firms is limited?

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This paper gives an overview of the seven aspects of resolvability defined in 2019 by the Single Resolution Board, and then assesses progress in two key areas, based on evidence gathered from public disclosures made by the 20 largest euro-area banks. The largest banks have made good progress in raising bail-in capital. Changes to banks' legal and operational structures that will facilitate resolution will take more time. Greater transparency would make it easier to achieve the policy objective of making banks resolvable. This document was provided by the Economic Governance Support Unit at the request of the ECON Committee).