EBA QUANTITATIVE MREL REPORT

Data as of December 2018

EBA/Rep/2020/07

Contents

Contents 1
Annexes 2
Abbreviations 3
Executive summary 4
1. Introduction 2
2. Scope of the report 3
2.1 Progress of resolution strategy and MREL setting 3
2.2 Scope of the MREL analysis 4
3. MREL levels and subordination 6
3.1 MREL and subordination for G-SIIs 6
3.2 MREL calibration and subordination levels for O-SIIs 7
3.3 Other banks 8
4. MREL resources and shortfalls 9
4.1 MREL shortfalls and OMS for G-SIIs 10
4.2 MREL resources and shortfalls for O-SIIs 11
4.3 MREL shortfalls for other banks 13
Conclusions and next steps 15
Annexes 17

Annexes

Annex 1: Total MREL shortfalls and OMS by type of banks 17

Annex 2: Arithmetic average MREL requirements by type of banks and strategy (% of RWAs) 17

Annex 3: Impact of CRR2/BRRD2 on subordinated shortfalls 17

Annex 4: Methodological annex 19

Annex 5: Summary of published MREL policies 22

Abbreviations

BRRD	Bank Recovery and Resolution Directive
CRR	Capital Requirements Regulation
EBA	European Banking Authority
EU	European Union
FSB	Financial Stability Board
G-SII	global systemically important institution
MREL	minimum requirement for own funds and eligible liabilities
NCWO	no creditor worse off
OMS	other marketable securities
O-SII	other systemically important institution
RTS	regulatory technical standards
RWA	risk-weighted asset
SPE	single point of entry
TLAC	total loss-absorbing capacity
TLOF	total liabilities and own funds

Executive summary

This report aims to take stock of the increase in MREL capacity in the EU

This report covers the actual population of banks subject to minimum requirement of eligible liabilities and own funds (MREL) and shows the requirements effectively set by authorities, the level of resources effectively eligible and the resulting shortfalls.

Some 85% of the EU's domestic assets are covered by a bail-in or transfer strategy

The EBA received a total of 266 decisions relating to banks where resolution, by either a bail-in or a transfer, would be favoured rather than liquidation. Out of those decisions, 22 have been left out of the shortfall analysis for lack of actual MREL decisions and 22 were left out because of data quality issues. Note that for most banks the distribution of this MREL within the group is yet to be determined.

As of December 2018, 117 EU resolution groups exhibit an MREL shortfall estimated at EUR 178 billion

On average, weighted by RWAs, European resolution groups reported MREL resources reaching 30.5% of RWAs in MREL resources against weighted average requirements of 26.1%. Yet 117 resolution groups do exhibit MREL shortfalls representing a total of EUR 178 billion.

This report is a point in time estimate

The report is based on decisions submitted to the EBA up to June 2019 and resources as at December 2018. Resolution strategies and MREL decisions are reviewed annually and are likely to change.

This report is based on the current framework

This report reflects existing MREL policies and thus does not estimate the impact of BRRD2 beyond subordination for G-SIIs and top-tier banks and does not take into account the impact of other regulatory changes, e.g. Basel III.

1. Introduction

One of the cornerstones of a credible resolution regime is the requirement placed on financial institutions to have, at all times, adequate levels of own funds and specific types of liabilities to support resolution actions. This requirement ensures that a resolution, necessary for the continuation of critical functions and/or to avoid adverse effects on the financial system, can be financed by reverting to shareholders and creditors of the institution, to minimise the impact of the institution's failure on the wider economy and the financial system and avoid the use of public funds.

In the European Union (EU), the Bank Recovery and Resolution Directive (BRRD) introduced the concept of minimum requirement for own funds and eligible liabilities (MREL) to ensure that European banks have financial resources in sufficient quantity and quality to cover losses upon failure and restore the viability of the going-concern parts of the institution.

The purpose of this report is to provide information on the increased resilience of the European banking system through improved loss-absorbing capacity and in particular (i) to provide an update on the progress of authorities in setting resolution strategies and MREL across the Union, (ii) to report on the levels at which the requirements are set and (iii) to monitor the build-up of resources against these requirements. This report is the first by the EBA under a revised methodology and will be updated annually as required by the recently agreed banking package[1].

The EBA has published quantitative analysis on MREL in the past. Namely, it published an interim report on MREL in July 2016 (based on June 2015 data), the final report on MREL mandated by BRRD and published in December 2016 (using December 2015 data as a reference), and a quantitative MREL update in December 2017 based on December 2016 data[2].

This reports aims to be as forward looking as possible. This means that the report considers (i) formally adopted MREL decisions that were reported to the EBA[3] and (ii) MREL decisions that were communicated to institutions by way of indicative quotas by the middle of 2019, but have not been formally adopted[4] - both by end-of-June 2019.

Resolution strategies are always subject to change, as are the specific MREL requirements. The MREL decisions that form the basis of this report reflect the current relevant MREL policies in the respective jurisdictions (see Annex 5). The amount of resources considered eligible to meet the MREL requirement has been provided directly by resolution authorities and thus reflects their general policy, as well as discretionary exclusions applied.

[1] Article 45i of the update to BRRD (BRRD2).

[2] https://eba.europa.eu/regulation-and-policy/recovery-and-resolution

[3] BRRD Art 45 (16)

[4] Indicative decisions are, for instance, communicated to banks prior to the bank's right to be heard process.

This report is a point in time estimate and a number of aspects are not captured in this analysis. In particular the impact of the recently published banking package is only partially considered at this stage via the impact of the increased subordination levels on larger banks: global systemically important institutions (G-SIIs) and top-tier banks[5] (see Annex 3 for detailed analysis). Other forthcoming regulations are not taken into account either, e.g. the impact of Basel III on risk-weighted assets (RWAs).

Finally, the focus of this report is on external as opposed to internal MREL, that is, MREL expected to be issues to investors in the market and not to a parent company. For many resolution groups, the distribution of MREL within groups still need to be agreed.

2. Scope of the report

2.1 Progress of resolution strategy and MREL setting

Resolution authorities have made good progress in determining strategies and setting group MREL for institutions established in the Union, since the BRRD came into force in 2014. Approximately 80% of EU domestic assets are now covered by a bail-in strategy and 5% by a transfer strategy. The equivalent of *c*. 15% of assets are now either earmarked for liquidation or still awaiting a resolution strategy.

In the report, resolution strategies are grouped into two main categories: (i) bail-in and (ii) transfer. These two categories are meant to capture the multiple combinations of resolution tools as defined by the BRRD:

- the sale of business tool
- the bridge institution tool
- the asset separation tool and
- the bail-in tool.

The bail-in strategy should be understood as a strategy that aims to resolve a bank on a stand-alone basis and allow it to continue to operate, by writing down capital and converting existing debt into capital so as to absorb the losses incurred and recapitalise the failing bank. These bail-in strategies are sometimes combined with the use of another tool, complementary to bail-in, e.g. the asset separation tool or even a sale of business where the sale of some portfolio is foreseen (asset deals).

Transfer strategies should be understood as resolution strategies based on the transfer of all or part of the failed bank to an acquirer.

They therefore include:

- the sale of business tool

[5] Banks that are not GSIIs and have total assets above EUR 100 billion.

- the bridge institution tool and
- the asset separation tool.

Looking at the data, we find that bail-in is the first-choice strategy for the largest banks, with a total of 128 decisions covering EUR 26 trillion in assets. It is mostly envisaged within the framework of a single point of entry (SPE) strategy, with *c*. 20% of banks, in terms of assets, covered by a multiple point of entry (MPE) strategy, for which bail-in would take place at several entities of the same group.

Transfer is the preferred strategy for 116 banks: mostly banks that are limited in size, 104 of them with total assets below EUR 20 billion, 9 with total assets between EUR 20 billion and EUR 100 billion, and 3 with total assets above EUR 100 billion.

Authorities have also reported a total of 22 resolution groups for which a bail-in or transfer strategy is being considered but for which MREL has not been set yet (pending decisions in Table 1).

Comparing the sum of all decisions with the total EU domestic assets, this leaves about 15% of EU assets as 'other', that is, assets relating to resolution groups or stand-alone banks that are either earmarked for liquidation or still awaiting a strategy decision or an MREL decision or both.

Table 1: Total assets and number of resolution group by strategy by strategy

Resolution strategy	Total assets (billion EUR)	% of assets	Number of decisions	% of decisions
Bail-in	26 146	80%	128	48%
Transfer	1 604	5%	116	44%
Pending	34	0%	22	8%
Other	4 912	15%	n/a	n/a
Total EU domestic assets*	**32 652**	100%	**n/a**	

Sources: EBA data collection, *European Central Bank data statistical data warehouse, n/a = not available

2.2 Scope of the MREL analysis

The following sections of the report cover 222 resolution groups and stand-alone resolution entities or groups from 24 Member States to which decisions have been communicated setting MREL higher than their current minimum capital requirement in order to facilitate a resolution strategy.

From the total population of 266 banks for which resolution authorities have made a determination against liquidation as a strategy, the following analysis excludes 22 resolution groups for which an MREL decision has not yet been taken and another 22 because of data quality issues.

The report aims to understand MREL-related issuance needs in the EU. Given this, entities considered in the report will be only entities or groups that (i) have been set MREL above their total own funds requirements and (ii) would be expected to issue MREL outside their group, i.e. entities

that have been designated as points of entry for the implementation of a bail-in or a transfer strategy. This excludes subsidiaries of foreign banks under an SPE strategy[6].

This report focuses on resolution entities and resolution groups as opposed to banking entities or banking groups. Resolution is a group matter and, in most cases, strategies envisage a single point of entry for the application of resolution tools. However, in some cases, the resolution strategy will envisage the break-up of the group into several parts, usually for operational or business reasons, so multiple entities of the group will be expected to issue external MREL. Those are called resolution groups, each with a resolution entity at the top.

Resolution groups are categorised in the report based on their systemic designation of the banking group: they belong to G-SIIs, other systemically important institutions (O-SIIs) and other banks that are neither G-SIIs nor O-SIIs. G-SIIs have been considered, where possible, at resolution group level on an anonymised basis; O-SIIs and other banks are considered by size categories (see table 2). Throughout the report, numbers by categories are weighted by RWAs. This gives a sense of the amount of risk effectively covered by MREL, at which level and by when. The population of each category is summarised in Table 2.

Note that resolution entities that are part of a G-SII have been categorised as G-SIIs themselves. This is to reflect the fact that these entities are subject to total loss-absorbing capacity (TLAC) even though on a stand-alone basis they may not be categorised as G-SIIs. This explains the total of G-SII resolution entities despite there being only 11 EU-headquartered G-SIIs according to the latest Financial Stability Board (FSB) list[7].

Table 2: Banks by categories and total assets

Member State	G-SIIs	O-SIIs (top tier)	O-SIIs (100-50)	O-SIIs (50-10)	O-SIIs (< 10)	Others (> 20)	Others (20-5)	Others (5-1)	Others (< 1)	Total
AT		1	1	4		1	14	3		24
BE		2		1		1				4
CY								1	2	3
CZ			1	1	2		1	1		6
DE	1	7				1				9
DK		1	1	2				13	33	50
EL			4							4
ES	1	4	1	2		4				12
FI		2					3	1		6
FR	4	2	1			1				8
HR					3					3
HU				1	4			1		6
IE		1	1			1				3
IT	1	3				4				8
LU				1			1		1	3
MT				1						1
NL	1	2	1				1			5

[6] In the case of an MPE strategy, a subsidiary of a foreign bank would be subject to MREL and expected to issue externally.

[7] https://www.fsb.org/wp-content/uploads/P161118-1.pdf

PL	3		1	4			2	3	20	33
PT	1		2							3
RO				2	2					4
SE		3				3	3			9
SI					1			1		2
SK				2						2
UK	4	3				6	1			14
Total decisions	**16**	**31**	**15**	**21**	**12**	**21**	**26**	**24**	**56**	**222**
Total assets (bn EUR)	**14 136**	**10 377**	**1 058**	**540**	**76**	**1 066**	**266**	**71**	**17**	**27 607**

Source: EBA data collection

3. MREL levels and subordination

3.1 MREL and subordination for G-SIIs

On average, weighted by RWAs, end-state MREL requirements for G-SIIs reach 26.5% of RWAs and subordination requirements reach 22.2% of RWAs.

Figure 1 below shows MREL for resolution groups that are part of banking groups designated as G-SIIs. Buffers are added on top of MREL requirements, where relevant, to reflect the fact that some authorities do not allow double counting of buffers. This is to give a sense of the loss-absorbing capacity these banks are effectively expected to hold (see Annex 5 for full details on the various policies in force in the EU). The recently agreed banking package harmonises the treatment of buffers preventing double counting from December 2020.

MREL for G-SIIs resolution groups varies between 20.7% and 32.8% of RWAs. We note that existing subordination requirements differ depending on the policies of the relevant resolution authorities and on their aversion to the risk of breaching the no creditor worse off (NCWO) principle. Subordination levels vary between 68.2% and 100% of the total MREL. Four resolution groups of G-SIIs have been set subordination requirements equivalent to 100% of MREL. In particular, the Single Resolution Board, in charge of setting MREL for G-SIIs headquartered in the Banking Union, has set subordination levels equal to 16% + combined buffer requirements (see Annex 5 for full details).

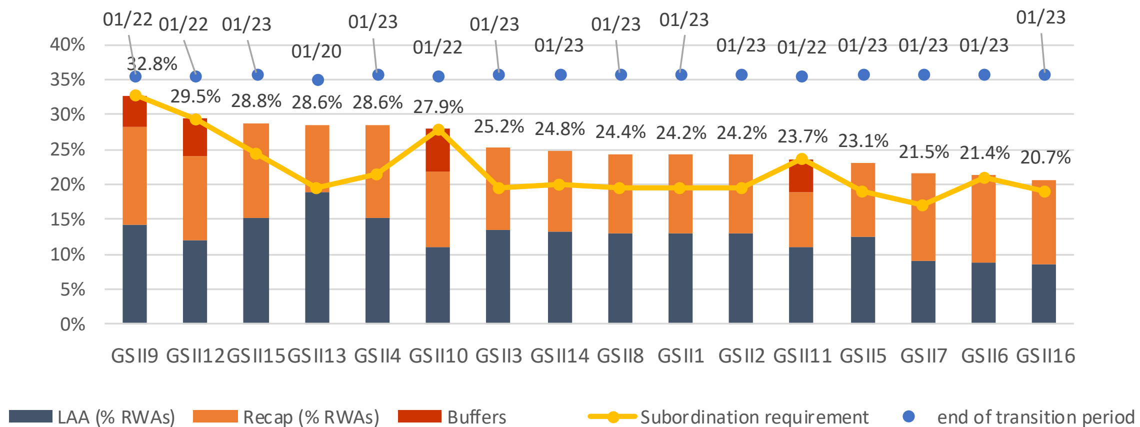
Resolution entities of G-SIIs are subject to TLAC, which has been introduced into the EU framework through the Capital Requirement Regulation[8] (CRR) that came into force in July 2019. The CRR requires G-SIIs to meet as a minimum the higher of 18% + combined buffer requirement (CBR) or 6.75% of leverage exposure by 1 January 2022, in line with the TLAC standard as defined by the TLAC term-sheet[9]. TLAC must be met with subordinated instruments, with the possibility for resolution authorities to grant an allowance for senior debt up to 3.5% of RWAs.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019R0876&from=EN

[9] https://www.fsb.org/wp-content/uploads/TLAC-Principles-and-Term-Sheet-for-publication-final.pdf

In Figure 1, we can see that current MREL decisions have a transition period running from January 2020 to 2023. This again is reflective the different policies adopted by resolution authorities in the EU, and is subject to change following the implementation of BRRD2.

FIgure 1: MREL for G-SIIs – resolution group levels



Source: EBA data collection

3.2 MREL calibration and subordination levels for O-SIIs

On an average basis, weighted by RWAs, resolution groups that are part of O-SIIs are expected to comply with MREL requirements varying between 24.1% and 26.4% of RWAs.

Data in Figure 2a show the average MREL and subordination levels weighted by RWAs for O-SIIs sorted by their balance-sheet size[10]. We note that overall expected MREL requirements vary little between 24% and 26% of RWAs.

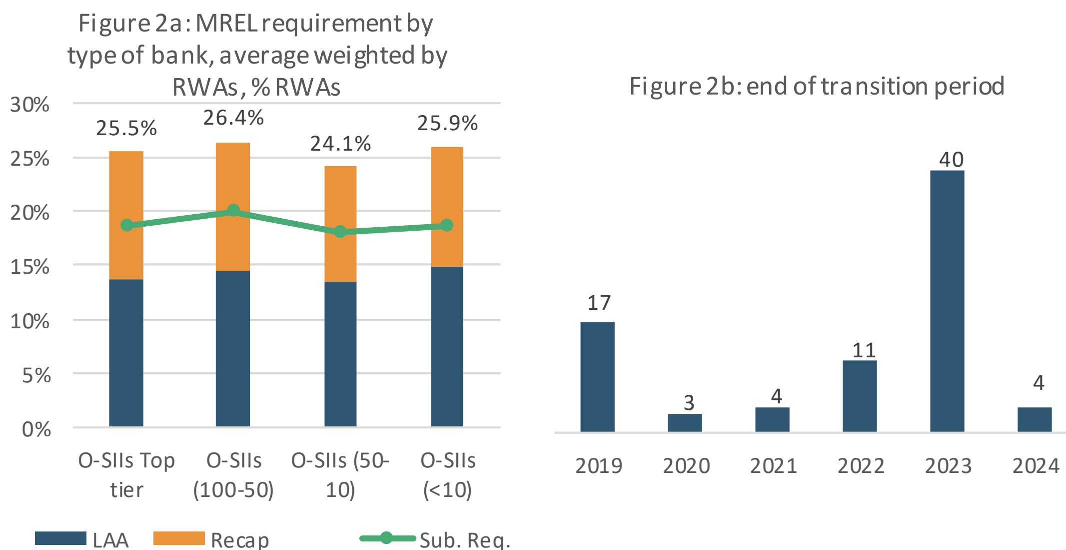
As seen below, average levels of subordination weighted by RWAs are below total MREL levels for all four groupings of O-SIIs. This reflects the fact that some resolution authorities opted to set subordination levels equal to total MREL requirement and others have set subordination levels below total MREL. For instance, the Swedish National Debt Office, the Bank of England and the Danish Financial Supervisory Authority require full subordination, whereas the Single Resolution Board has adopted a policy of requiring a minimum of 14% RWAs + CBR, and some authorities are not requiring subordination beyond what is required for own funds[11].

[10] Where relevant, buffers that sit on top of MREL have been included in the loss absorption amount for simplification.

[11] For these banks, we have assumed a subordination requirement equal to any bank's expected level of subordinated resources, that is, Pillar 1 + Pillar 2 + combined buffer requirement (that is, the loss absorption amount, itself equal to the prudential requirements).

Subordination is key in addressing the issue of potential NCWO claims in the event of a bail-in of creditors[12]. The EBA regulatory technical standards (RTS) on MREL requires resolution authorities to determine whether liabilities that are excluded from bail-in under Article 44(2) of the BRRD or reasonably likely to be excluded under Article 44(3) of the BRRD rank equally or junior in the insolvency creditor hierarchy to any class of liabilities that includes liabilities that qualify for inclusion in MREL. If, for each such class, the amount of liabilities identified totals more than 10% of that class, the authority should set a subordination requirement such that the NCWO risk is alleviated[13]. The EBA has not assessed levels of excluded liabilities but notes significant differences in treatment between entities. Going forward, the EBA will look in more detail into how authorities make use in practice of the power to require subordinated MREL under BRRD2[14].

In terms of transition period, in Figure 2b we find that for the majority of banks the transition period ends in either 2019 or 2023. This is also reflective of the different policies adopted across the EU. Some authorities have set bank-by-bank transition periods – shorter if the bank meets or is close to meeting the target and longer if the bank is further from meeting the target – or fixed all of them to end in either 2022 or 2023.



Source: EBA data collection

3.3 Other banks

MREL requirements for other banks with total assets above EUR 5 billion are around 25% of RWAs, in line with the findings for O-SIIs, while banks with assets below EUR 5 billion report MREL requirements closer to 20% of RWAs, with levels of recapitalisation falling to 4.4% of RWAs (Figure 3). Subordination requirements appear relatively low in terms of RWAs but remain high

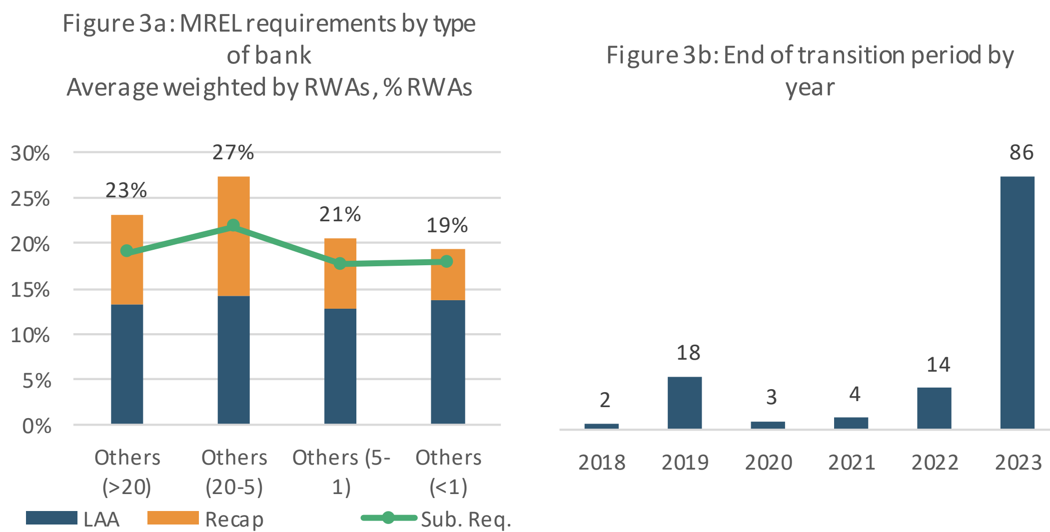
[12] This constitutes one the key safeguards of the resolution framework, in line with the FSB key attribute (https://www.fsb.org/wp-content/uploads/r_141015.pdf).

[13] Article 3 of Delegated Regulation (EU) 2016/1450.

[14] BRRD2, Art 45(c)5-6

when expressed as a proportion of total MREL capacity, reflecting MREL levels closer to minimum capital requirements.

Looking at banks with total assets below EUR 5 billion, we note the lower MREL calibration, driven in particular by lower recapitalisation requirements. This reflects the different approaches for smaller banks in different jurisdictions and the calibration of MREL for transfer strategies. In particular, for transfer strategies that are dominant in the population of banks with assets below EUR 5 billion, MREL is sometimes calibrated in line with the part of the bank that, in resolution, would be transferred to an acquirer or a bridge bank, leading to a lower recapitalisation amount. (See Annex 2 on MREL requirements by strategy and Annex 5 setting out the various MREL policies.)



Source: EBA data collection

4. MREL resources and shortfalls

This section covers MREL shortfalls, defined as the difference between the amount of MREL eligible resources as per the relevant resolution authority's policy as of December 2018[15] and the end-state requirement defined as the requirement banks will be expected to meet at the end of their transition period. These shortfalls underestimate the actual issuance needs of EU resolution groups, as they do not take into account (i) roll-over needs for existing maturing MREL eligible instruments and (ii) potential increase in balance sheet size.

To put these shortfalls in perspective, they are presented alongside other types of debt instruments (other marketable securities, OMS) that share many characteristics with MREL-eligible instruments and yet are not MREL eligible for various reasons (location in a group, residual maturity, law of issuance). The objective is to give a sense of (i) banks' access to an investor base likely to buy long-

[15] However, eligible liabilities are considered at only the point of entry level as opposed to group level.

term senior unsecured instruments and (ii) the impact that MREL will have on a bank's funding structure[16].

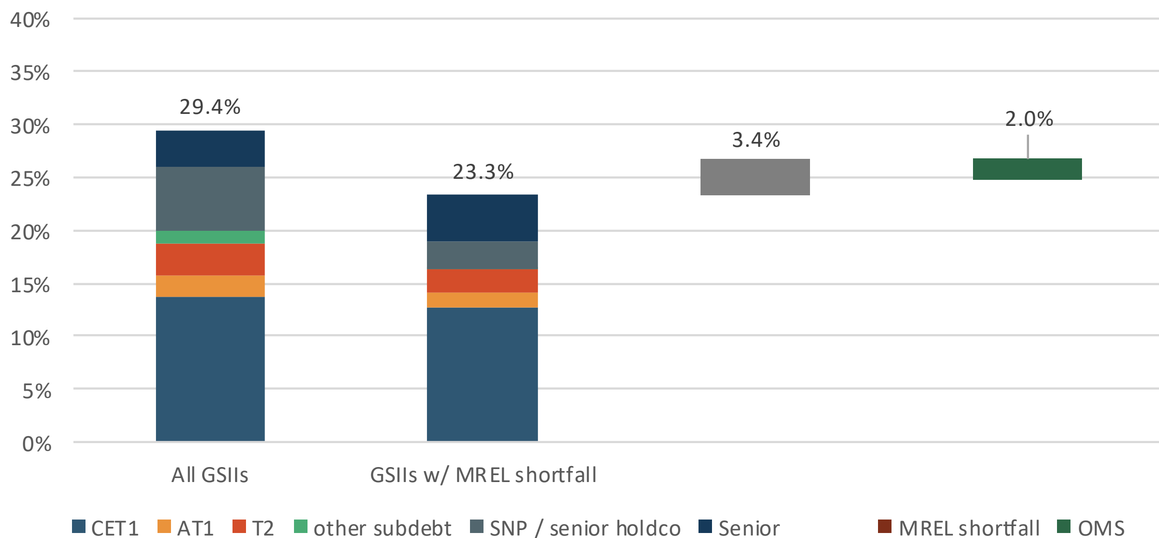
Ultimately, this gives a sense of the challenge faced by institutions with a shortfall. This challenge varies depending on whether an institution only has to re-issue outstanding instruments from another point in the group or needs to actually build an investor base, obtain a credit rating and significantly change its funding structure.

4.1 MREL shortfalls and OMS for G-SIIs

On an average basis, weighted by RWAS, and as per Figure 4, resolution groups that are part of G-SIIs report total MREL resources reaching 29.4% of RWAs. Yet 7 out of 16 G-SII resolution groups report an MREL funding need. G-SIIS with MREL shortfalls report lower MREL resources, at 23.3% of RWAs, resulting in a shortfall of 3.4% of RWA or EUR 51 billion.

We note that five of these resolution groups that are part of G-SIIs exhibit a total of EUR 29 billion OMS or 2% of RWAs (approximately 60% of total funding needs)[17]. This highlights the lesser impact of MREL requirements on the funding structure of G-SIIs.

Figure 4: MREL resources, shortfalls and OMS, average, weighted by RWAs (% of RWAs)



Source: EBA data collection

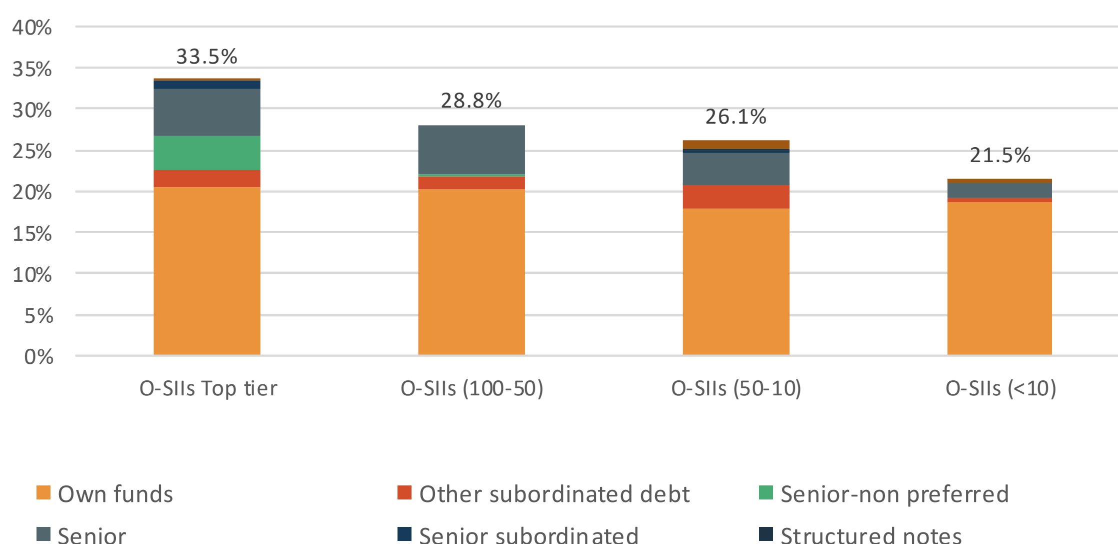
[16] The amount of OMS for individual resolution groups is capped at the level of the MREL shortfall – see full methodology in Annex 4 of this report.

[17] See Annex 3 for detailed description.

4.2 MREL resources and shortfalls for O-SIIs

On average, weighted by RWAs, resolution groups that are part of O-SIIs report MREL resources ranging from 21.5% to 33.5% of RWAs. We note that larger banks exhibit greater and more subordinated resources. Resolution groups with total assets between EUR 50 billion and EUR 10 billion have a higher proportion of wholesale deposits than other O-SIIs.

Figure 5: MREL resources all O-SIIs, average weighted by RWAs (% of RWAs)[18]



Source: EBA data collection

Out of 79 O-SII resolution groups, 49 (62%) report an MREL shortfall, totalling EUR 102 billion – to be considered in the light of an estimated EUR 33 billion stock of OMS spread among 39 groups.

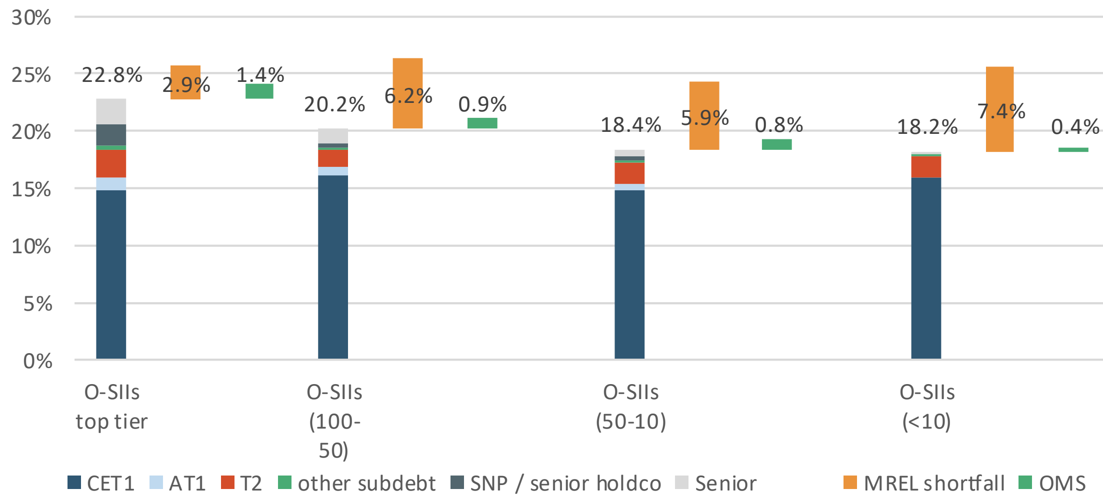
The largest O-SIIs (the top-tier banks, i.e. with total assets above EUR 100 billion) report OMS amounting to 43% of their funding needs, while smaller banks exhibit greater shortfall and less OMS.

O-SIIs with total assets below EUR 100 billion exhibit relatively higher shortfalls than G-SIIs and top-tier banks, with weighted averages ranging from 5.9% to 7.4% of RWAs.

Among the 49 O-SIIs with funding needs, we identified 39 exhibiting OMS, leaving a limited 11 with no OMS at all. Among those with no OMS we find that about half are either rated below investment grade or not publicly rated.

[18] Senior subordinated designate instruments that are effectively subordinated either via structural of statutory subordination

Figure 6: MREL resources, funding needs and OMS for O-SIIs with an MREL shortfall, average weighted by RWAs (% of RWAs)

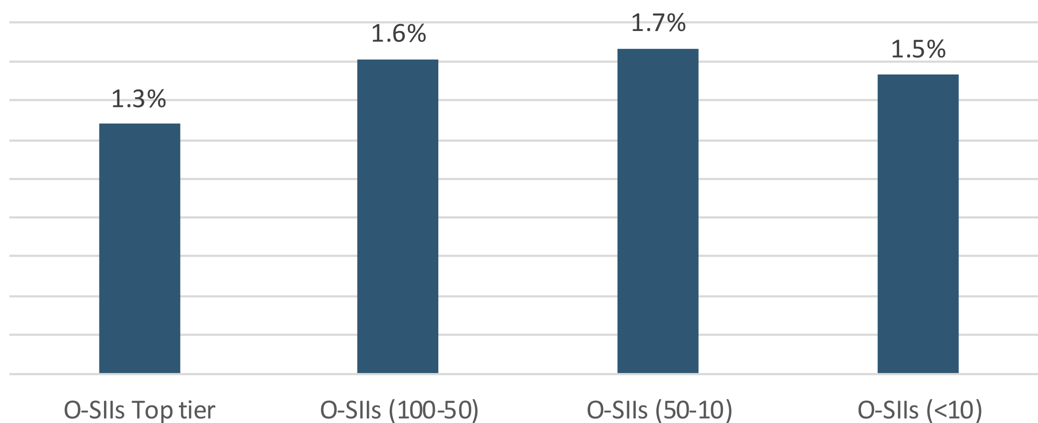


Source: EBA data collection

By dividing the total shortfall by the duration of the transition period in years, we seek to estimate the additional effort required, in terms of issuance, to meet future MREL requirements. This does not take into account the roll-over needs of existing debt or the impact of balance-sheet growth.

In Figure 7, we find that annualised shortfalls vary between 1.3% and 1.7% of RWAs. We note that, although O-SIIs with total assets below EUR 10 billion have the highest shortfall, that is not the case on an annualised basis. This shows how some resolution authorities are taking banks' specificities into account when setting transition periods.

Figure 7: Annualised shortfalls (% of RWAs)

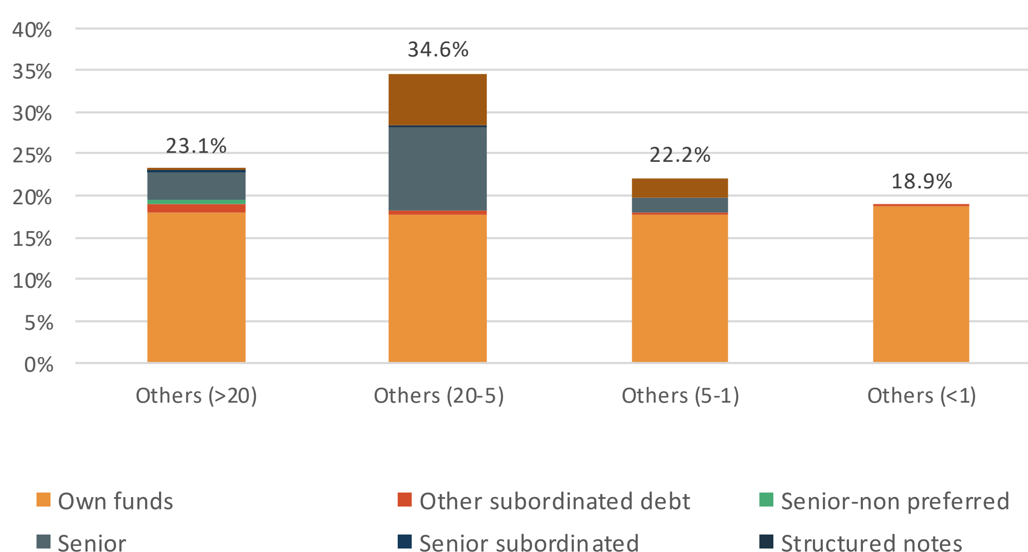


Source: EBA data collection

4.3 MREL shortfalls for other banks

Overall, on average, weighted by RWAs, resolution groups that are part of other banks report MREL resources ranging from 18.9% to 34.6% of RWAs. As for O-SIIs, own funds constitute the majority of MREL resources and we note that, beyond own funds, MREL resources are only marginally subordinated except for banks with total assets above EUR 20 billion. MREL is particularly high for banks with assets between EUR 20 billion and EUR 5 billion, driven mostly by senior MREL instruments but also wholesale deposits – this reflects both the banks' funding structures but also varying eligibility criteria in different jurisdictions.

Figure 8: MREL resources for all other banks, average weighted by RWAs (% of RWAs)[19]



Source: EBA data collection

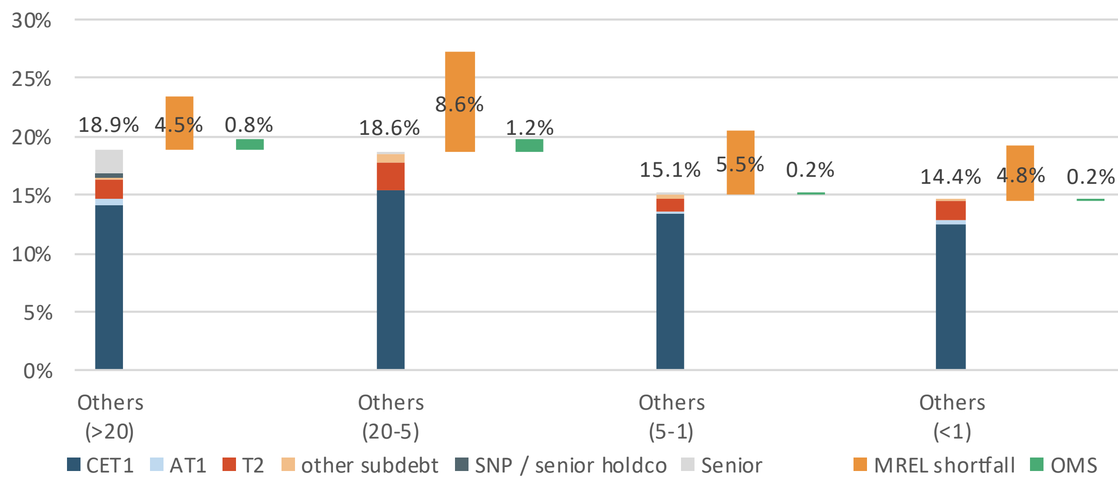
Out of 130 'other resolution groups', 61 (47%) report a funding need totalling EUR 23.3 billion, with a limited stock of EUR 4.4 billion of OMS spread among 21 groups or entities.

Figure 9 shows weighted averages for banks with funding needs in each category. Other banks exhibit significant shortfalls between 4.5% and close to 8.6% of RWAs, with little to no OMS apart for institutions above EUR 5 billion in total assets.

Forty resolution groups report MREL shortfalls and no OMS. Out of those, 34 are not publicly rated, 9 are rated above investment grade and only 5 are rated sub-investment grade.

[19] Senior subordinated designate instruments that are effectively subordinated either via structural of statutory subordination

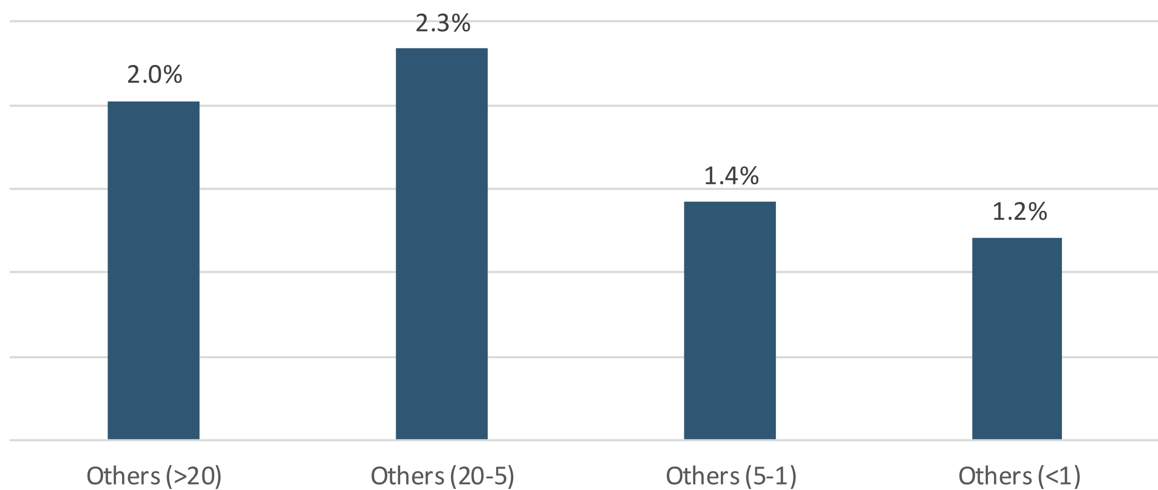
Figure 9: MREL resources, funding needs and OMS, average weighted by RWAs (% of RWAs)



Source: EBA data collection

In Figure 10, as in Figure 7, we divide the total shortfall by the duration of the transition period in years. Again, we find that setting the bank-specific transition period helps to level the playing field between types of banks.

Figure 10: Annualised shortfalls (% of RWAs)



Source: EBA data collection

Conclusions and next steps

Authorities have progressed well in setting resolution strategies and adopting MREL decisions. As of December 2018, we estimate that MREL decisions for resolution groups that would go into resolution as opposed to liquidation represent *c*. 85% of EU total domestic assets, leaving *c*. 15% of total assets as part of resolution groups or stand-alone banks either earmarked for liquidation or awaiting a strategy and/or MREL decisions. Note that the topic of internal MREL is not covered in this report and that the question of the distribution of externally issued MREL within groups remains outstanding.

On a weighted average basis, MREL requirements in the EU range between 26.5% of RWAs for the G-SIIs – the largest and most complex banks – and 19% of RWAs for the banks with total assets below EUR 1 billion that are neither G-SIIs nor O-SIIs. Overall, we find that MREL levels are reflective of banks' going-concern requirements; in the case of transfer strategies, MREL levels also reflect the scaling down of MREL based on the transfer perimeter.

Subordination levels vary significantly, from 100% of MREL to just the level of own funds requirements. This is reflective of the relevant resolution authority's policy and risk appetite towards NCWO risk. The recently adopted banking package will, however, introduce harmonised subordination levels for G-SIIs and top-tier banks.

Out of the 222 resolution groups that have been considered in the shortfall analysis, 117 show an MREL shortfall, totalling EUR 178 billion. This funding need should be considered in the light of a reported EUR 67 billion stock of debt instruments that are similar in nature to MREL-eligible debt but not effectively eligible for various reasons (location, law of issuance, residual maturity). This shows that, for some 65 out of 117 banks with funding needs, MREL requires them not to issue completely new types of debt instrument but, at least in part, to roll over existing debt. While this does not come without friction, it does highlight that MREL has a greater impact on some banks than on others, depending on their existing funding profiles.

Shortfalls vary depending on the type and size of the bank and its resolution group. And, as expected, OMS tends to benefit larger banks and to dry out as institutions decrease in size. Total shortfall for 7 out of 16 G-SII resolution groups reaches EUR 51 billion, to be considered in the light of EUR 29 billion in OMS. Funding needs for 49 out of 79 O-SIIs reach EUR 101 billion, to be considered in the light of EUR 33 billion of OMS for 39 O-SIIs. Finally, funding needs for 61 out of 127 smaller banks reach EUR 23 billion in the light of a limited EUR 4.4 billion of OMS for 21 resolution groups.

In the light of these shortfalls, the EBA would encourage European resolution groups to take advantage of the current positive market conditions to issue and build up resources. As pointed out in the recent EBA risk assessment report, despite continued volatility, spreads for all market

instrument have been on a downward trend for most of 2019, with spreads between secured and unsecured as well as between senior and subordinated instruments narrowing.

Starting with this report, the EBA will monitor progress in closing shortfalls. In particular, through enhanced action in colleges of competent and resolution authorities, EBA will increase its focus on the effectiveness of debt and capital planning of institutions and groups, in order to understand how the different options available to banks (earning retention, issuance of eligible liabilities, de-risking, consolidation) may be used in order to meet MREL targets.

The EBA will also monitor how possible difficulties in reaching the target may affect the effectiveness of the resolution strategies chosen. For smaller and non-externally rated groups, in particular, the impact of building up the MREL is greater and the question of access to senior unsecured debt market at a reasonable cost may be raised, although the current particularly positive market conditions might alleviate it.

The topic of the impact of MREL on banks' profitability will be considered in more detail in the impact assessment that the EBA will have to deliver to the European Commission by December 2022.

Annexes

Annex 1: Total MREL shortfalls and OMS by type of banks[20]

Type of bank	MREL shortfall (EUR billions)	OMS (EUR billions)	OMS (% of Shortfall)	Number of groups with shortfalls	Number of groups with OMS
G-SII	51.1	29.4	58%	7	5
O-SIIs Top tier	63.5	27.6	43%	9	13
O-SIIs (100-50)	28.2	4.2	15%	12	9
O-SIIs (50-10)	10.2	1.5	14%	15	12
O-SIIs (<10)	2.0	0.1	6%	13	5
Others (>20)	16.8	3.8	23%	9	10
Others (20-5)	5.3	0.6	11%	11	5
Others (5-1)	0.9	0.0	4%	29	2
Others (<1)	0.2	0.0	5%	12	4
Total	178	67	38%	117	65

Source: EBA data collection

Annex 2: Arithmetic average MREL requirements by type of banks and strategy (% of RWAs)

Type of banks	Bail-in	Bridge	Combination of tools	Transfer	Total
G-SII	25.9%				25.9%
O-SIIs top tier	27.9%			24.9%	27.6%
O-SIIs (100-50)	27.8%			18.8%	27.2%
O-SIIs (50-10)	24.9%			22.5%	24.6%
O-SIIs (<10)	26.8%	24.1%		18.9%	25.3%
Others (>20)	26.0%			21.1%	24.8%
Others (20-5)	26.0%			23.0%	25.1%
Others (5-1)	23.2%		18.6%	20.5%	20.2%
Others (<1)	19.7%		18.9%	17.8%	18.4%
Total	**26.3%**	**24.1%**	**18.8%**	**20.0%**	**23.4%**

Source: EBA data collection

Annex 3: Impact of CRR2/BRRD2 on subordinated shortfalls

Key changes introduced by CRR2/BRRD2

The recent banking package (CRR2/BRRD2) introduces a number of changes to the loss absorbency requirement for the purpose of resolution. In particular, it introduces TLAC, harmonises the MREL

[20] OMS at individual resolution group level is capped at the level of the resolution group's MREL shortfall.

calibration, clarifies eligibility criteria and harmonises subordination levels for the largest banks. However, the full extent of these changes will be difficult to assess until (i) authorities have started to take MREL decisions under the new framework and (ii) reporting starts to reflect the new eligibility criteria.

One of the key impacts of BRRD2, and one that is relatively straightforward to estimate, is the impact on minimum subordination levels for G-SIIs and top-tier banks.

CRR2 introduces non-bank-specific subordination levels for G-SIIs as the higher of 18% of RWAs + CBR and 6.75% of leverage exposure in line with the FSB's TLAC term-sheet requirements and 8% of total liabilities and own funds (TLOF). Resolution authorities have the possibility of granting a tolerance of 3.5% of RWAs for the TLAC calibration (and as per the term sheet) and applying a 'tolerance' scalar for the TLOF calibration (1-3.5%/18%).

BRRD2 introduces non-bank-specific subordination requirement for top-tier banks (banks with total assets above EUR 100 billion) as the highest of 13.5% of RWAs, 5% of leverage exposures and 8% of TLOF, with the possibility of applying the following tolerance scalar to the 8% of TLOF: 1-3.5%/18%. In addition, under certain conditions, the subordination level can be capped at 27%.

Beyond this new pillar 1 subordination requirement for G-SIIs and top-tier banks, resolution authorities can raise subordination via a discretionary pillar 2, applicable to all entities under certain conditions and for specific reasons.

What we are calculating?

We have computed subordinated shortfalls under two scenarios: a high one where no adjustment is applied and a low one where the 3.5% allowance is applied in full to all G-SIIs and the allowance scalar is applied to the 8% TLOF formula for both G-SIIs and top-tier banks. Note that subordination levels are not changed in a holding company structure.

What we are not capturing?

BRRD2 also harmonises the MREL calibration and clarifies the treatment of buffers and this will have an impact on the total MREL levels. However, it was decided not to seek to estimate those changes but to focus on subordinated shortfalls.

The impact of pillar 2 subordination requirement is not considered here, as these will remain at authorities' discretion.

BRRD2 also introduces changes to eligibility criteria for MREL. The impact of those is not captured due to the limitations of the existing reporting.

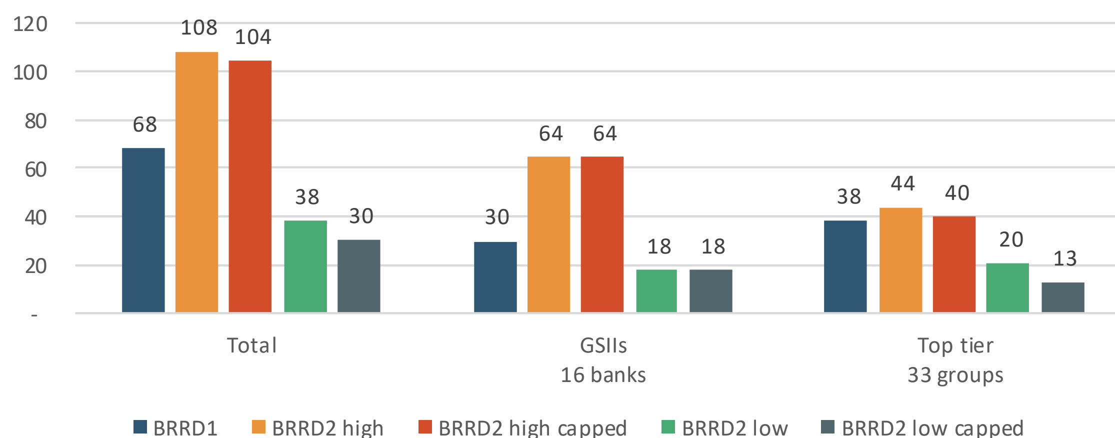
As for the rest of the report, roll-over needs and balance-sheet changes are not taken into account.

Conclusion

As shown in Figure 11, BRRD2 increases the subordinated MREL shortfall by a range of EUR 36 billion to EUR 40 billion under the high-impact scenario and would alleviate the MREL

shortfall by a range of EUR 30 billion to EUR 38 billion under the low-impact scenario. Thus, the impact of BRRD2 on subordination levels and resulting shortfalls will depend on the individual decisions of authorities.

Figure 11: Subordinated shortfalls for G-SIIs and top-tier banks under BRRD1 and BRRD2 (billion EUR)



Annex 4: Methodological annex

i. Scope and common principles

The MREL report covers all entities in the scope of MREL decisions with a positive recapitalisation amount to be issued externally. This approach aims to ensure that the results of the report represent the population of all institutions subject to MREL requirements above minimum capital requirements.

For all building blocks, we have followed a common approach, which is to rely on data from resolution authorities and, when required, assumptions in sufficient detail to enable the EBA to fulfil its mandate. MREL decisions and MREL resources are considered based on BRRD1 requirements.

BRRD2 provisions were considered only to the extent that the impact of minimum subordination levels for G-SIIs and top-tier banks can be estimated or where resolution authorities provided an estimate of the subordination requirement to be applied to entities, where such a decision has still not been taken.

The data for both MREL decisions and resources has been provided by resolution authorities. This guarantees the highest degree of quality of the data.

Data on total RWAs and total assets by Member State and for the EU are sourced from the European Central Bank statistical database.

ii. MREL decisions

The MREL report is based on actual decisions as much as possible, but also includes pending MREL decisions including any subordination requirements if foreseen by resolution authorities.

Regarding MREL decisions for institutions for which resolution planning has not started or is still ongoing, or for those institutions for which authorities were not in a position to provide an indicative MREL level, an estimation of the missing MREL decisions is made according to the following approach:

- in Member States with missing decisions estimated at below 5% of domestic RWAs, entities for which either a decision or an indicative target does not exist are not included in the analysis for the 2019 report;
- in Member States with missing decisions above 5% of domestic RWAs, the relevant authorities were given the choice to (i) submit an estimate (preferred option), (ii) apply the weighted average of MREL decisions in the Member State concerned or (iii) apply a standard calibration as per the EBA RTS including full subordination.

iii. MREL resources

MREL resources were considered on the basis of local policies and of the most recent choices on eligibility made by the resolution authorities under the discretion allowed by BRRD1. However, MREL capacity of institutions was computed including only resources at the point of entry, other than own funds. Although some local policies consider resources at consolidated levels, these were moved towards a point of entry eligibility for resources beyond capital. The assumption above raises the question of the transition period for institutions currently meeting the consolidated MREL target and thus without a set timeline to meet their target. For those banks, a period of 4 years is assumed.

Own funds and liabilities recognised as meeting the subordination requirement include by default own funds, subordinated liabilities (not recognised as own funds) and senior non-preferred liabilities. Resolution authorities were give the option to overrule the above-mentioned classification by providing a duly justified rationale (e.g. in cases of structural subordination).

iv. Other marketable securities

OMS are liabilities meeting some, but not all, of the requirements for adequate loss absorbency and that banks may replace with MREL-eligible instruments.

Some resources, although bail-inable and not MREL-eligible, are not considered to qualify as OMS, in particular:

- non-covered preferred deposits – core deposits are directly connected to the business models of institutions, which are not very likely to be modified, and are in general closely

connected to other banking products such as loans, credit lines, credit cards, pensions, investments;

- non-covered non-preferred deposits with a maturity below 1 year – short-term wholesale deposits are not considered OMS, as it is assumed that their short-term nature is valued by both the depositor and the bank and therefore would not easily be recycled into long-term debt instruments;

- non-covered non-preferred deposits with a maturity above 1 year – they are considered to be close enough to long-term unsecured debt instrument to be considered OMS; however, because those deposits may be linked to the franchise of the bank and thus difficult to recycle as MREL-eligible debt, MREL shortfalls are considered with and without including these long-term deposits as OMS.

In addition, liabilities arising from derivatives and uncollateralised liabilities arising from secured instruments, although they would be bail-inable, are usually issued for specific reasons and thus would not be simple to replace with MREL-eligible debt.

Overall, it is assumed that short-term liabilities should not be considered OMS.

Given this, liabilities with an original maturity below 1 year should not be considered OMS, but liabilities that have fallen below the 1-year threshold should.

Due to reporting constraints (it was not possible to distinguish between original and remaining maturity below 1 year), the following sets out how various types of instruments have been treated:

(i) Senior unsecured liabilities with maturities below 1 year do not count as OMS.

(ii) Structured notes, senior non-preferred, subordinated liabilities and Tier 2 instruments with maturity below 1 year are considered OMS. Resolution authorities were given the option to overrule the above-mentioned provision with a duly justified rationale.

Annex 5: Summary of published MREL policies

Annex 5.1: Austria, Czechia, Denmark, Croatia, Hungary

MREL calibration	FMA (AT)	CNB (CZ)	Danish FSA and FSC (DK)	CNB (HR)	MNB (HU)
End-state calibration	LAA (P1+P2R+CBR) + RCA (P1+P2R) + MCC – 125bp	2*(P1+P2)	For systemic institutions: 2*(P1+P2) + 2*CBR – 1*CCyB For non-systemic institutions: P1+P2+ institution-specific MREL add-on 3.5% and 6% of REA	LAA=P1+P2R+CBR RCA= P1+P2R+MCC	Higher of: (LAA+RCA, TLOF*8%)=(P1+P2R+CBR)+(P1+P2R)*Adj, TLOF*8%
Adjustments	Balance-sheet depletion (in line with SRB methodology)	Bail-in: no Transfer: consider size of B/S and RWAs subject to transfer upon failing or likely to fail (defined by critical functions and their representation in B/S and RWAs)	For systemic institutions: counter cyclical buffer excluded from recapitalisation amount. Non-systemic institutions: loss absorption amount adjusted upwards relative to default. Recapitalisation amount set at 8% of the REA that remains after sale of business	To RCA: balance-sheet depletion: TREA post resolution = TREA prior resolution - LAA P2R post resolution = P2R prior resolution*50% MCC=capital conservation buffer	To RCA: Bail-in: balance-sheet depletion effect Transfer: balance sheet adjustment based on resolution plan. Bail-in + transfer: based on validated restructuring plan
Subordination	End-state: Bank-specific add-on in case - of a potential NCWO risk; - implementing the PRS is otherwise impeded	Full - structural, contractual or statutory. May not be required for transfer firms if the transfer perimeter only assumes transfer of preferred liabilities	Full subordination requirement for all institutions Regulatory subordination	Subordination requirement on a case-by-case basis to address NCWO risk or to address impediments (e.g. share of retail holdings of MREL instruments)	No subordination requirement.

MREL calibration	FMA (AT)	CNB (CZ)	Danish FSA and FSC (DK)	CNB (HR)	MNB (HU)
Additional eligibility criteria	- Eligibility criteria pursuant to Article 45 of the BRRD; - bank-specific analysis required regarding MREL eligibility of non-covered, non-preferential deposits	No additional eligibility criteria as specified in BRRD2, other than the following: - instrument has no derivative features (only early redemption options are permitted)	N/A	Hybrid approach – own funds at consolidated level but MREL eligible liabilities at PoE level. Eligibility criteria in line with BRRD1 – no difference between internal and external resources	- Effective maturity > 1 year; - issued externally by the resolution entity (exemption for multiple points of entry); - no liabilities whose value is linked to a derivative; - no set-off/netting arrangements; - no incentive to redeem; - no deposit unless maturity above 1 year is demonstrated
End-state	2020	31/12/2023	Systemic institutions: 01/07/2019 for compliance with MREL level. Until 01/01/2022, non-subordinated liabilities can be included in MREL-eligible liabilities if issued prior to 01/01/2018. Non-systemic institutions: 01/01/2023	01/01/2024	2023
Phase-in	No phase-in, if MREL target is already met, otherwise bank-specific (max. 4 years)	Interim target to be met by 31/12/2021	Systemic institutions: subordination requirement to met fully by 01/01/2022. Non-systemic institutions: linear build-up from 01/01/2019 to 01/01/2023	Annual target during transitional period	4-year transitional period with annual interim targets

MREL calibration	FMA (AT)	CNB (CZ)	Danish FSA and FSC (DK)	CNB (HR)	MNB (HU)
MREL to transfer strategies	Transfer: balance-sheet depletion + 20% scaling factor of the post-balance sheet depletion RCA *Further development of the methodology to be considered (e.g. based on separability analyses)	End-state calibration: 2*(P1+P2)*(transfer perimeter/total assets) Subordination not required if transfer limited to preferred liabilities	N/A	Decrease of total assets in RCA calculation on a case-by-case basis depending on the perimeter of assets subject to transfer	RCA based on individual analysis, depending on the transferable portfolio

Annex 5.2: Poland, Romania, Sweden, United Kingdom, EU

	BGF (PL)	NBRO (RO)	SNDO (SE)	BoE (UK)	SRB (BU)
End-state calibration	LAA= [P1+ P2R - requirement set to cover systemic risk referred to in art. 4 point 15 of the Act on macroprudential supervision + OSIIs buffer]; RA = scaling factor * [P1 + P2R+ CBR]	Recapitalisation amount (incl. MCC) benchmarked against capital position of peer institutions	LAA: P1+P2R-$P2_{macro}$ RCA: P1+P2R	Higher of: 2*(P1+P2R), 6.75% leverage exposures for G-SIBs, 2*any applicable leverage ratio (3.25% in the UK for DSIBs)	LAA: P1+P2R+ CBR RCA: P1+P2R MCC: CBR-125 bps
Adjustments	Bail-in strategy: balance sheet depletion: TREA post resolution = TREA prior resolution * scaling factor (1 - LAA for bail-in strategy; 70% for commercial banks for P&A strategy; 70% or 55% for selected cooperative banks for P&A strategy)	Balance sheet depletion (loss = LAA) Adjusting the implicit value of MCC according to Article 2(8) of the MREL RTS	No ex ante adjustments	Bail-in: no Transfer: consider if some components of P2A can be left out	Recovery actions Balance sheet depletion Binding divestment plans

	BGF (PL)	NBRO (RO)	SNDO (SE)	BoE (UK)	SRB (BU)
Subordination	Expectation of full subordination at the solo level. Eligible liabilities issued to cover MREL requirement at the consolidated level constituting a surplus over the minimum amount of own funds and eligible liabilities subject to write-down and conversion set at individual level may not be subordinated	No specific requirement for the time being	Full subordination (mandated via resolvability principle)	Full – structural via clean holding companies for banks, contractual/statutory for building societies (cooperatives) May not be required for transfer firms if the transfer perimeter only assumes transfer of preferred liabilities	16% GSIIS + CBR 14% other banks + CBR
Additional eligibility criteria	In addition to the above: - debt instruments included in the MREL shall be purchased by professional clients within the meaning of Appendix II of Directive 2014/65, that is to say, they will not be offered to retail clients; - nominal value per unit of an MREL-eligible debt instrument shall amount at least PLN 400 000	No deposits were included in the MREL capacity	RCA to be met with eligible liabilities only, resulting in an effective MREL requirement equal to 2*(P1+P2R)+CBR. (Mandated via resolvability principle)	Instrument to be issued at point of entry: - no liabilities whose value is linked to a derivative; - no set-off/netting arrangements; - no incentive to redeem (where coincides with a call date, that shall be the effective maturity); - non-EEA-issued instrument needs to have recognition of UK bail-in rules	N/A

	BGF (PL)	NBRO (RO)	SNDO (SE)	BoE (UK)	SRB (BU)
End-state	01/01/ 2023		01/01/2022	2022	< 4 years
Phase-in	According to Article 8 of Commission Delegated Regulation 2016/1450 the transitional periods will be communicated to the banks	Transition period until 01/01/2024	Same phase-in period for all resolution banks (towards end-state with 100% subordination)	January 2019 for G-SIBS, January 2020 for all	No interim targets
MREL to transfer strategies	End-state calibration	Post-resolution RWA adjusted to reflect assets transferred	Same as end-state calibration (no specific adjustments)	End-state calibration * (transfer perimeter/total assets) Subordination not required if transfer limited to preferred liabilities	Scaling factor: 0.8

FSA, Financial Supervisory Authority; LAA, loss absorption amount

EUROPEAN BANKING AUTHORITY

Floor 27, EUROPLAZA, 20 Avenue André Prothin, CS 30154
92927 Paris La Défense CEDEX

Tel. +33 1 86 52 70 00
E-mail: info@eba.europa.eu

http://www.eba.europa.eu