

Minimum requirement for own funds and eligible liabilities (MREL) – initial assessment for Austrian banks and selected subsidiaries in the EU

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The minimum requirement for own funds and eligible liabilities (MREL) is a key element in bank resolution planning. It is particularly important for the effective application of the bail-in resolution tool which was introduced into EU law, together with MREL, with the Bank Recovery and Resolution Directive (BRRD) in 2014 and enacted in Austrian law in 2015. The purpose of MREL is to ensure that banks have adequate loss absorption and recapitalization resources in case of resolution. Given the narrow time schedule for implementing this new requirement, it is important to gain an understanding of the current situation for Austrian credit institutions and their EU subsidiaries in Central, Eastern and Southeastern Europe (CESEE). Therefore, the Austrian national resolution authority, i.e. the Financial Market Authority (FMA), together with the Oesterreichische Nationalbank conducted a survey among a selected sample of Austrian banks with the aim of assessing their MREL-eligible resources. The surveyed institutions were asked to provide data on the composition of their own funds and liabilities as per year-end 2014. The survey was designed to elicit answers to the most important questions arising from the implementation of MREL: How high is the current amount of MREL-eligible resources in the Austrian banking sector? How high is the amount that is available for bail-in in case of resolution? What is the current composition of MREL-eligible resources? Are there differences between different types of institutions? Are there enough MREL-eligible resources or are there any shortfalls? The supervisory and in particular the resolution authorities will need this information when setting MREL levels in order to assess impacts on major banking groups, to increase market transparency and to contribute to a stable regulatory environment in general.

JEL classification: G21, G28, G31, G32, G33

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When Lehman Brothers had to file for bankruptcy in September 2008, financial markets worldwide were hit by plunging asset prices that spread contagion throughout the financial industry. To prevent more banks from failing, significant use was made of public funds to rescue struggling institutions that were deemed “too big to fail” – a phrase that, while ubiquitous since then, has actually been around since the mid-1970s (Farber, 2012). After all those

years, the authorities were still lacking effective tools for the orderly resolution of systemically important banks. Yet, a lot of efforts have been undertaken since then, both at a national and at an international level, to develop a toolkit to address these problems.

One of the main objectives of the new regulatory regime was to develop a comprehensive recovery and resolution regime in order to provide strategies and tools for handling national and

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cross-border bank failures. In October 2011, the Financial Stability Board (FSB) published a paper on “Key Attributes of Effective Resolution Regimes for Financial Institutions” to define international standards for recovery and resolution frameworks (FSB, 2014). In November 2015, the FSB (2015) issued an international standard for total loss-absorbing capacity (TLAC) requirements for global systemically important banks (G-SIBs).² This standard is to ensure sufficient loss-absorbing and recapitalization capacity in resolution to minimize impacts on financial stability, maintain the continuity of critical functions, and avoid exposing public funds to loss. As will be shown below, the EU concept of a minimum requirement for own funds and eligible liabilities (MREL) – though ultimately having the same goal as TLAC – differs somewhat from TLAC in its details so that discussions on the implementation of TLAC in the EU are currently ongoing, which might result in a unification of these two concepts. In other words, the definition of MREL may change in future years, which might alter the results and conclusions of this study.

As for the regulatory and legal background of MREL in its current definition: In June 2014, the Bank Recovery and Resolution Directive (BRRD) was finalized and published in the Official Journal of the EU, creating a harmonized framework across the EU Member States for dealing with the problem of “too big to fail.” One key element of this directive is the “bail-in” tool that gives the competent resolution authorities the power to impose losses on

equity holders and bondholders instead of using public funds.

In order to ensure that banks hold sufficient funds to absorb losses in case of a failure, the BRRD introduced MREL as a new requirement for institutions. The BRRD had to be implemented by national legislation by January 2015³ – in Austria, it was implemented by the Bank Recovery and Resolution Act (Bundesgesetz über die Sanierung und Abwicklung von Banken – BaSAG). The BRRD mandated the European Banking Authority (EBA) to develop regulatory technical standards to further specify the criteria on the basis of which the national resolution authorities should determine bank-specific MREL. The draft regulatory technical standards (EBA, 2015), which the EBA published in July 2015 for adoption by the European Commission, define five main criteria for this purpose:

1. *Loss absorption amount (LAA)*: Resolution authorities must determine the amount of capital an institution is likely to need to absorb occurring losses. The basis for calibrating this amount are the own funds requirements set by the supervisors.
2. *Recapitalization amount (RA)*: Resolution authorities must determine the amount of capital an institution is likely to need after resolution to meet the own funds requirements for it to be authorized to continue business. The calibration of this amount is based on the underlying resolution plan. The sum of these two amounts constitutes an institution’s MREL.

² TLAC is not legally binding by itself but G-20 member states which are home to G-SIBs are bound to adopt its rules into domestic legislation. Of the banks covered by TLAC, 13 are domiciled in the EU, among them UniCredit (Stiefmüller, 2016).

³ Except for the bail-in tool, which had to be implemented by January 2016.

3. *Sufficiency*: Resolution authorities need to ensure that MREL levels are sufficient even if certain liabilities are excluded from bail-in under the resolution plan.
4. *Deposit guarantee scheme (DGS) contributions*: Resolution authorities may reduce an institution's MREL, taking into account funds that deposit guarantee schemes are expected to contribute in case of resolution.
5. *Other bank-specific factors*: In setting MREL, resolution authorities have to take into account the size, business model, funding model and risk profile of the bank.

MREL is expressed as a percentage of the total liabilities and own funds of an institution.⁴ This is a similar figure to balance sheet size, but own funds are considered according to their regulatory – not their accounting – definition.⁵

MREL levels are set individually for each bank in banks' resolution plans and therefore differ across banks. Requiring banks to meet, as a minimum, MREL targets aims to ensure that enough bail-in volume is available in the case of resolution.

In order to be MREL-eligible, liability instruments have to satisfy specific criteria. In particular, liabilities with a remaining maturity of less than

one year may not be counted toward MREL (so that it is ensured that the instrument is available for bail-in should a crisis happen before the next yearly update of the resolution plan). The same holds true for preferred deposits, i.e. deposits from natural persons, micro and small and medium-sized enterprises (SMEs).⁶ Moreover, liabilities that are explicitly excluded from bail-in may not be counted toward MREL either. These exemptions aim to preserve customer confidence and market stability and comprise in particular deposits with a remaining maturity of less than seven days and covered deposits.⁷

Note that bail-in-able liabilities comprise not just liabilities eligible for MREL but also other instruments such as senior unsecured and subordinated debt with remaining maturities of less than one year and preferred deposits and liabilities arising from derivatives. Thus, in case of resolution, the volume of liabilities available for bail-in will in general exceed the volume of liabilities that count toward fulfilling the MREL target.⁸

Once TLAC is in place, the differences between TLAC and MREL would imply that European global systemically important institutions (G-SIIs) have to follow two similar loss absorption metrics at the same time. Therefore,

⁴ See recital 80 and Article 45 (1) BRRD and Article 100 BaSAG.

⁵ E.g. treatment of minorities, off balance sheet exposures, phase-in requirements.

⁶ More specifically, according to Article 45 (4) BRRD and Article 100 para. 2 BaSAG these criteria are (i) the instrument is issued and fully paid in; (ii) the liability is not owed to, secured by or guaranteed by the institution itself; (iii) the purchase of the instrument was not funded directly or indirectly by the institution; (iv) the liability has a remaining maturity of at least one year; (v) the liability does not arise from a derivative; (vi) the liability does not arise from a deposit which is preferred in case of insolvency. Preferred deposits refer in particular to those from natural persons, micro, small and medium-sized enterprises (SMEs) exceeding the amount guaranteed by deposit guarantee schemes. For more details, see Article 108 (2) BRRD and Article 131 para. 1 BaSAG.

⁷ More specifically, according to Article 44 BRRD and Article 86 para. 2 BaSAG the following liabilities are excluded from bail-in: (i) covered deposits; (ii) secured liabilities and instruments held for hedging purposes; (iii) liabilities arising from fund management activities; (iv) liabilities arising from fiduciary activities; (v) liabilities to institutions and corporations with an original or a remaining maturity of less than seven days; (vi) selected liabilities to employees, trade creditors and tax and social authorities.

⁸ However, it should be noted that under certain conditions the national regulatory authority may exclude some liabilities from bail-in; for details refer to Article 86 para. 4 BaSAG and Article 44 (3) BRRD.

Table 1

MREL and TLAC – an overview

	MREL	TLAC
Objective	The objective is to ensure a sufficient level of loss-absorbing and recapitalization capacity at the entities covered to guarantee that, in and immediately following resolution, critical functions can be continued without taxpayer (public) funding and without the risk of jeopardizing financial stability.	
Scope	Credit institutions and investment firms	Global systemically important banks (G-SIBs) ¹
Eligible instruments	Equity, junior, subordinated debt and senior unsecured debt, other unsecured liabilities with a residual maturity > 1 year; exemptions according to Article 86 para. 2 BaSAG; Article 44 (2) BRRD, see footnote 7.	Equity, junior debt, subordinated debt and part of senior unsecured debt which is pari passu with excluded liabilities (to be determined in consultation with the Crisis Management Group of the FSB; limited to a range of 2.5% to 3.5% of risk-weighted assets (RWA), depending on minimum TLAC requirement).
Calculation	MREL = eligible instruments as a percentage of total liabilities and own funds.	TLAC = eligible instruments as a percentage of RWA or of leverage ratio denominator.
Methodological approach	Case-by-case approach (Pillar 2) for each institution, based on specific criteria like size, business model, funding structure, complexity and risk profile.	Minimum TLAC set by the FSB (Pillar 1); additional TLAC requirements (Pillar 2) can be applied by the resolution authorities.
Calibration	MREL is calculated based on capital requirements including capital buffers and the recapitalization amount. Additionally, adjustments may be applied, taking into account, risk profile, resolution strategy, etc.	Minimum requirement of 16% of RWA, rising to 18% by 2022. 6% of the Basel III leverage ratio denominator, rising to 6.75% by 2022.
Time schedule	MREL is anchored in the BRRD. On May 23, 2016, the European Commission adopted a Delegated Regulation based on (amended) EBA draft regulatory technical standards. The European Council and the European Parliament have three months for potential objections.	To take effect on January 1, 2019, with a phase-in period until 2022. G-SIBs in emerging markets will be granted a longer phase-in period, until 2028.

Source: Authors' compilation.

¹ The equivalent of global systemically important institutions (G-SIBs) under the Basel III framework.

Note: MREL may be regarded as the European version of TLAC; it was established by the Financial Stability Board (FSB). MREL extended the scope from global systemically important institutions (G-SIBs) to all financial institutions within the EU. Yet, despite having the same purpose, MREL and TLAC differ in their details.

there are preliminary discussions at the EU level on how to harmonize these two different approaches. In this regard, integrating both concepts would be desirable. The above table is a simplified presentation of the main characteristics of the two concepts.

1 MREL implementation in Austria

The BRRD established a common resolution regime within the EU that allows resolution authorities to deal with failing institutions. This new regime allows also for the resolution of cross-border banking groups by clearly defining the necessary cooperation agreements between home and host authorities.

On January 1, 2015, the Austrian Financial Market Authority (FMA) took over the additional role of national resolution authority for Austria, on top of its mandate as the integrated supervisory authority for Austria.

In accordance with BaSAG, the FMA received far-reaching powers in the case of a failure or impending failure of an institution to carry out an orderly resolution and to safeguard financial stability. Moreover, the FMA can elicit expert opinions on predefined specific economic topics from the OeNB. By orderly winding down an institution, the national resolution authorities strive to ensure that the continuity of critical functions of the institution is guaranteed, that significant adverse effects on financial stabil-

ity are avoided, and that public funds and consumers' secured deposits are protected, whenever these objectives could not be met by normal regular insolvency proceedings.

At the same time, the newly established Single Resolution Board (SRB) in Brussels – the decision-making body of the Single Resolution Mechanism (SRM), the second pillar of the banking union within the euro area – became fully operational on January 1, 2016.

The SRB is responsible for banks that are (1) subject to direct supervision by the ECB under the Single Supervisory Mechanism (SSM) – the so-called significant institutions (SIs) – and (2) all cross-border banking groups within the euro area. According to this definition, a total of 10 banking groups in Austria fall under the direct responsibility of the SRB.⁹

In Austria, resolution planning started already in 2012/13 for the top 3 banks. In 2014, the scope was extended, under the predecessor of BaSAG, the Bankeninterventions- und Restrukturierungsgesetz (BIRG), to include the top 6 banks. Banks were required to develop resolution plans and to discuss them with the authorities. To this end, the FMA and the OeNB issued an explanatory note that ensured that banks' resolution plans have a harmonized structure and follow a common approach. In the course of 2015, both the FMA and the SRB began to draw up first transitional resolution plans for selected priority banking groups.

According to BRRD/BaSAG provisions, MREL must be fulfilled individually by each banking group and each individual bank based on individual resolution plans. Hence, within a banking group, MREL has to be fulfilled at the

group level as well as at the solo level by each individual institution within the group. The national resolution authorities may waive the solo level MREL for individual group members, but only if group members are located within the same Member State and if it can be ensured that funds are adequately distributed among the parent and the subsidiary (i.e. if there is already an own funds waiver in place, according to Article 7 CRR¹⁰).

MREL must be set and updated as part of the resolution planning process by the national resolution authority, following a consultation of the competent authority (supervisor) for each institution individually. Resolution plans must be updated at least annually, taking into account the principle of proportionality. By the end of 2015, none of the resolution authorities in the EU, including the FMA and the SRB, had yet set MREL.

As communicated earlier this year (SRB, 2016), the SRB intends to prescribe MREL in 2016 only at the consolidated level for all major banking groups established in the banking union. The SRB plans to interact closely with banking groups on the basis of a detailed implementation timeline and to monitor their progress toward reaching their MREL targets. The SRB also indicated that these decisions may include requirements on the quality of the entire or part of the MREL (e.g. a subordination requirement). MREL decisions for subsidiaries will be taken at a later stage. They will be based on the MREL determined at the consolidated level, individual characteristics of the respective institution, and the consideration of certain waiver options.

⁹ Compared with 8 institutions under direct supervision by the ECB.

¹⁰ Regulation (EU) No 575/2013 (Capital Requirements Regulation).

When an institution enters resolution, under Article 44 (5a) BRRD, it can only access funds from the resolution fund after at least 8% of its total liabilities including own funds have been used for loss absorption and recapitalization. In that respect the SRB announcement includes the commitment that the MREL decisions will as a general rule require not less than 8% of total assets (as a proxy for total liabilities and own funds) under the remit of the SRB.

2 Assessment of Austrian banks and their subsidiaries in Central, Eastern and South-eastern European EU Member States (EU CESEE)

2.1 Scope of the study

In the fourth quarter of 2015, the SRB, the FMA and the OeNB conducted a survey among a sample of Austrian credit institutions in order to assess MREL-eligible resources. The institutions were asked to provide data on their year-end composition of liabilities and own funds for 2014. The data request was sent to two groups of Austrian banks: the significant institutions excluding UniCredit Bank Austria¹¹ and a sample of less significant institutions (LSIs).¹²

The objective of the survey was to receive answers to the following three main questions:

- How high is the current amount of MREL-eligible resources and bail-in instruments Austrian banks hold on their balance sheets?
- What is the current composition of Austrian banks' MREL-eligible resources?

- Are the available MREL resources sufficient or are there any shortfalls? If yes, in which subsegments of the banking sector do they show up?

2.2 Data description and assumptions

The survey covered data at the consolidated level and also at the solo level for Austrian credit institutions and material subsidiaries as per year-end 2014. Templates were collected for institutions on a consolidated basis (cbd-logic¹³) and for their material subsidiaries at a solo level. The sample represents the bulk of total assets of the Austrian banking sector. In 2016, there will be a follow-up survey based on a revised template; at the time of writing, data collection was still in progress. To our knowledge, so far no comparable study has been conducted in Europe for one particular EU country that investigates the effects of MREL on such a broad sample comprising international banking groups as well as local institutions.

Since it was the first exercise and the goal was to get an overall picture for the Austrian banking sector, the templates were not granular enough to answer each and every aspect related to MREL. Moreover, some banks seem to have faced challenges in providing the requested information.

In particular, the data reported on total liabilities and own funds showed severe inconsistencies. Therefore, total assets were used as a proxy for total liabilities and own funds throughout the sample.

The calculations of own funds are done on a “fully loaded” basis, i.e. based on the rules that will apply at the end of

¹¹ Bank Austria is part of UniCredit Group (Italy) and therefore under the responsibility of the SRB together with the Italian Resolution Authority (Banca d'Italia).

¹² Representing the larger share of less significant institutions in Austria in terms of total assets.

¹³ According to “cbd-logic,” consolidated banking data (cbd) refers to a dataset that consists of consolidated data for all banks that are part of a banking group and data at a solo level for those which are not.

the transition periods that apply under the CRR. Overall capital requirements comprise Pillar 1, Pillar 2¹⁴ and the fully phased-in capital buffers as published by competent authorities by the first quarter of 2016.

2.3 Assessment of institutions' current MREL-eligible resources

The composition of MREL-eligible resources available within banks varies significantly within the sample. In the following, liabilities that are eligible for MREL are subsumed in the categories (1) own funds (common equity tier 1 (CET1), additional tier 1 (AT1) and tier 2 (T2) capital), (2) subordinated debt securities with a remaining maturity of over one year, (3) senior unsecured debt securities with a remaining maturity of over one year, and (4) any other MREL-eligible liabilities, such as certain corporate deposits with a remaining maturity of over one year, which may be excluded by the resolution authority.

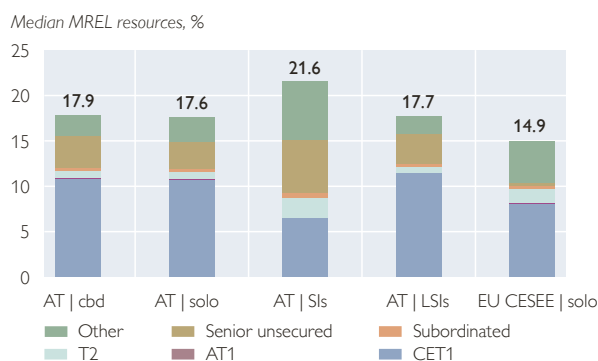
On a consolidated basis, the median Austrian institution was found to record an MREL ratio of 17.9% of total liabilities and own funds (chart 1). Roughly two-thirds (66%) of all MREL resources held by a typical Austrian bank¹⁵ are own funds, followed by senior unsecured debt securities (20%), while only minor amounts stem from other MREL-eligible liabilities (13%) and subordinated debt securities (2%).

On a solo basis, the MREL ratio of the median Austrian institution is slightly lower, namely 17.6%, with only minor differences in composition compared with the consolidated view. The median significant Austrian institution reaches a substantially higher MREL ratio (21.6%) than less significant institutions (17.7%). Most interestingly, also the composition of MREL resources varies substantially between significant and less significant institutions: around one-third (30%) of MREL resources in significant institutions is CET1, whereas CET1 constitutes almost two-thirds (65%) of the MREL resources of less significant institutions. The share of T2 capital is higher in significant institutions (10%) than in less significant institutions (4%). Also the share of senior unsecured debt in MREL resources is substantially higher for significant institutions (27%) than for less significant institutions (19%).

The median subsidiary of an Austrian banking group in EU CESEE¹⁶ shows an MREL ratio of 14.9% on a solo basis, which is approximately 3 percentage points lower than the comparable MREL ratio of Austrian credit institutions on a solo basis (17.6%).

Chart 1

Current amount of MREL-eligible resources in % of total liabilities and own funds



Source: OeNB, FMA.

Note: SIs = significant institutions; LSIs = less significant institutions.

¹⁴ Based on Supervisory Review and Evaluation Process (SREP) 2015 decisions for 2016 requirements.

¹⁵ Chart 1 shows the median of the MREL-eligible resources. The individual components are split according to unweighted average resources.

¹⁶ Only at the solo level.

Also, the composition of MREL-eligible liabilities diverges significantly between Austrian banks and their EU CESEE subsidiaries. For the latter, debt market instruments (senior unsecured or subordinated debt securities) constitute on average only 4% of the MREL resources within the sample, compared with 19% for Austrian credit institutions on a solo basis. Indeed, most of the Austrian banks' subsidiaries in EU CESEE are not active on capital markets and hence do not issue debt market instruments that would be eligible for MREL. Instead, they rely on debt market funding by the parent institution in Austria rather than in the respective EU CESEE country, which has a direct negative effect on the amount of MREL-eligible liabilities available at these banks. EU CESEE subsidiaries are strongly reliant on funding via local deposits or, at least in some cases, direct funding lines from the parent institution in Austria. In particular, this is also reflected by the high proportion of "other MREL-eligible liabilities" that include deposits above EUR 100,000 of corporates and financial institutions (31% for EU CESEE compared with 15% for Austrian solo institutions). Any exclusion of these liabilities from MREL by the respective resolution authorities in charge could therefore significantly impact the ability of these banks to meet a future MREL.

As noted above, the volume of bail-in-able liabilities¹⁷ will in general exceed the volume of MREL-eligible liabilities. Rough back-of-the-envelope calculations suggest that at a consolidated level, for the median bank, the amount of bail-in-able liabilities is significantly higher than the amount of MREL-eligible liabilities – assuming

that no instruments are excluded from bail-in by the national resolution authorities. The ratio between bail-in-able and MREL-eligible liabilities is similar for the median consolidated bank, solo institutions as well as for EU CESEE subsidiaries. However, there is a notable difference between significant and less significant institutions, with less significant institutions typically having significantly more bail-in-able liabilities in relation to their MREL-eligible liabilities.

2.4 Assessment of institutions' possible MREL targets

According to the BRRD, MREL levels are determined for each institution individually based on their resolution plans. Since no resolution plans have been finalized so far, we have made some stylized assumptions along the above-mentioned EBA criteria:

- MREL targets do not deviate between institutions (i.e. do not reflect institution-specific differences).
- MREL targets are calculated based on the "fully loaded" levels of capital requirements (including fully phased-in capital buffers and Pillar 2 requirements based on 2015 decisions). The assumption of "fully loaded" requirements is supported by the fact that the initial MREL levels might be set together with a transitional period for implementation.
- Potential contributions from deposit guarantee schemes have not been included.
- All liabilities that may, as a rule, be bailed in are accounted for (no exemptions made by the resolution authority). In particular, it is as-

¹⁷ For a definition of bail-in, refer to Article 85 BaSAG and Article 43 BRRD. For a definition of liabilities that are eligible for bail-in, refer to Article 86 BaSAG and Article 44 (2) BRRD, and see also footnote 7.

sumed that the resolution authority does not exempt any “other MREL-eligible liabilities” (e.g. deposits > EUR 100,000 of corporates and financial institutions).

For the setting of the loss absorption amount and the recapitalization amount, we consider two scenarios:

- *Scenario 1: Loss absorption amount = overall capital requirements; recapitalization amount = 0:* MREL targets in the (lower bound) scenario 1 are equal to the capital requirements on a “fully loaded” basis (including buffers); i.e. the assumption is that the resolution authority does not require any institution to hold a recapitalization amount beyond the current requirements for own funds as defined by supervisors. This would imply that no resolution plan accounts for bail-in (e.g. because the institution would be liquidated rather than sent into resolution). Though this will clearly not be the case for all resolution plans, it gives a reasonable lower bound for MREL targets. Note that a shortfall in scenario 1 is equivalent to a shortfall with respect to the “fully loaded” capital requirements.
- *Scenario 2: Loss absorption amount = recapitalization amount = overall capital requirements:* MREL targets in the (upper bound) scenario 2 are based on twice the amount of scenario 1, i.e. the implicit assumption

is that each institution will be fully recapitalized¹⁸ during resolution by using the bail-in tool (i.e. no use of the asset separation tool or the sale of business tool). This gives a reasonable upper bound for MREL targets, though for specific institutions, resolution authorities might even go beyond this doubling approach.

The median MREL target is slightly higher at the consolidated level than at the solo level (12.8% vs. 11.4% for scenario 2) due to the higher capital requirements (in particular, since significant institutions have to fulfill their Pillar 2 requirements and systemic risk buffers only on a consolidated/subconsolidated basis). Moreover, we find significant institutions to have a higher MREL target (median of 17.7%) than less significant institutions (median of 12.2% in scenario 2). At the same time, the spread in MREL targets for less significant institutions is much wider due to the diversity of their business models, which results in highly different ratios of risk-weighted assets to total liabilities and own funds that translate into varying MREL targets. For EU CESEE subsidiaries, the median MREL target is substantially higher (15.3% for scenario 2) since these subsidiaries of Austrian credit institutions tend to have higher capital requirements (e.g. Pillar 2 on a solo basis, capital buffers).

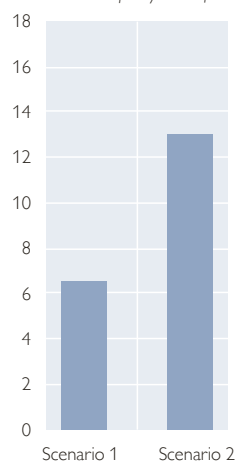
¹⁸ Without prejudice that any liabilities might be exempted from bail-in or to other factors that might further increase the recapitalization amount.

Chart 2

Scenarios for target MREL levels

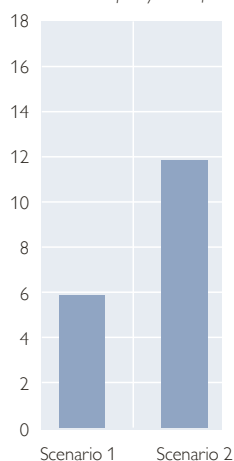
Austrian credit institutions (consolidated)

Median MREL proxy in % of TLOF



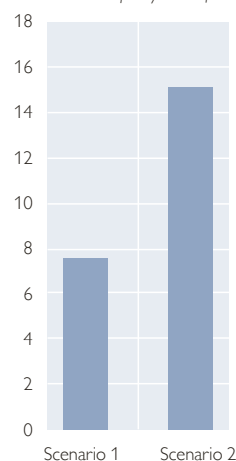
Austrian credit institutions (solo basis)

Median MREL proxy in % of TLOF



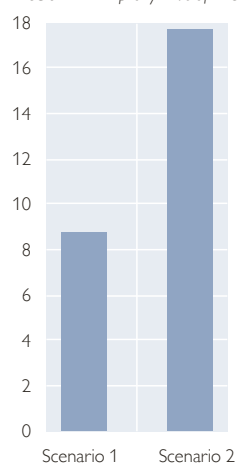
EU CESEE subsidiaries (solo basis)

Median MREL proxy in % of TLOF



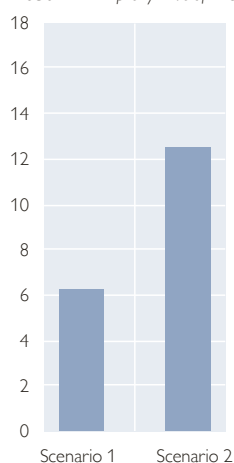
Austrian SIs (consolidated)

Median MREL proxy in % of TLOF



Austrian LSIs (consolidated)

Median MREL proxy in % of TLOF



Source: OeNB, FMA.

Note: TLOF = total liabilities and own funds. Scenario 1: Loss absorption amount = overall capital requirements; recapitalization amount = 0.

Scenario 2: Loss absorption amount = recapitalization amount = overall capital requirements. SIs = significant institutions; LSIs = less significant institutions.

2.5 Range of possible shortfalls

One of the most important questions for banks and policymakers alike is the question of how many MREL-eligible resources banks would have to build up¹⁹ in order to meet their MREL targets.

In addition to the assumptions made above in the assessment of MREL targets (calculation based on overall capital requirements, no contributions from deposit guarantee schemes, no exemptions), the following analyses assume a static balance sheet (i.e. asset

¹⁹ On the assumption that banks replace non-MREL-eligible with MREL-eligible resources, rather than issue new capital.

and liability side do not change – in particular, all liabilities are rolled over).

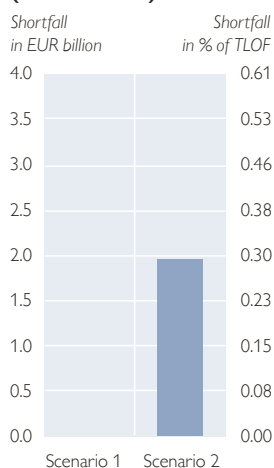
The cumulated shortfall over all banks in EUR billion (chart 3) is negligible in the lower bound scenario and merely driven by the fact that not every institution fulfilled its “fully loaded” requirements for own funds already at year-end 2014. In the following, we will therefore focus on the upper bound shortfall (scenario 2) and compare these levels between different sectors and consolidation levels.

Note that the shortfall strongly depends on the assumptions and that chart 3 hence needs to be interpreted with care: On the one hand, the calculations do not take into account potential additional mitigating effects such as (1) banks’ regular rollover of (longer-term) liabilities that would naturally increase their amounts of MREL-eligible liabilities available, (2) that banks have to build up additional own funds over the course of the coming years due to the phasing-in of CRR

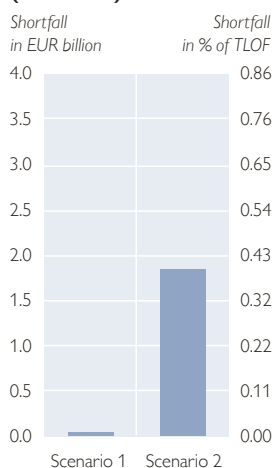
Chart 3

Possible aggregate MREL shortfalls

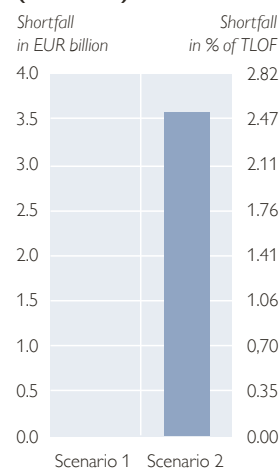
Austrian credit institutions (consolidated)



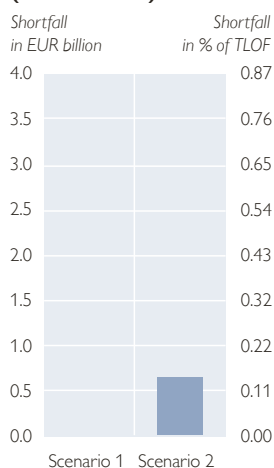
Austrian credit institutions (solo basis)



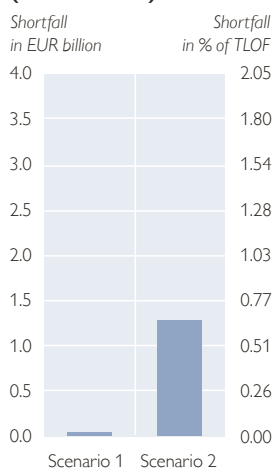
EU CESEE subsidiaries (solo basis)



Austrian SIs (consolidated)



Austrian LSIs (consolidated)



Source: OeNB, FMA.

Note: TLOF = total liabilities and own funds. Scenario 1: Loss absorption amount = overall capital requirements; recapitalization amount = 0. Scenario 2: Loss absorption amount = recapitalization amount = overall capital requirements. SIs = significant institutions; LSIs = less significant institutions.

own funds requirements, which again would naturally reduce shortfalls in scenario 2 with fully phased-in capital assumptions, or (3) the resolution authority can take potential contributions from deposit guarantee schemes into account when setting MREL. On the other hand, shortfalls might be higher if the resolution authorities decide to exempt certain components of MREL (in particular from the category “other MREL-eligible liabilities”). Most importantly, the factor of twice the overall capital requirements for MREL in the “upper bound” scenario is not set in stone but might vary with the specifics of the institution and its resolution plan.

According to our estimates, the total shortfall of Austrian banks in the cbd-logic is higher than the total shortfall at the solo level in absolute terms, but lower in relative terms, due to the different composition of the two subsamples (shortfall in the cbd-logic: around EUR 1.9 billion or 0.3% of total liabilities and own funds; shortfall at the solo level: around EUR 1.8 billion or 0.4% of total liabilities and own funds). EU CESEE subsidiaries have – given our assumptions – the highest shortfall (EUR 3.6 billion or 2.5% of total liabilities and own funds) due to their prevailing business model of strong deposit funding in combination with high overall capital requirements and thus the absence of MREL-eligible resources other than own funds. The significant gap between Austrian banks at a consolidated level and EU CESEE institutions at the solo level is due to consolidation effects. Note however that for CESEE subsidiaries – as for all other subsamples – MREL targets and therefore also the shortfall amounts will de-

pend crucially on the resolution plans, so that these figures need to be interpreted with adequate care. The sensitivity of the shortfall is investigated in more detail in the next section.

2.6 Sensitivity analysis of the shortfall

Sensitivity analyses show that even slight changes in the above-mentioned assumptions result in a huge spread of predicted shortfalls. Two assumptions that can be easily tackled quantitatively are

- the factor by which overall capital requirements are multiplied when setting MREL targets and
 - the fraction of “other MREL-eligible liabilities” (i.e. in particular corporate and financial deposits > EUR 100,000) that are deemed eligible by the resolution authority.
- Table 2 shows for several combinations of these two assumptions the resulting shortfall both in EUR billion and as a percentage of total liabilities and own funds of the observed sample.

The figures in bold indicate our base case that we analyzed above. In general, table 2 shows that the shortfall is highly nonlinear in the two driving assumptions. Note however that not all scenarios should be considered equally probable. In particular, the lower two right-hand figures of the subtables are rather unlikely (i.e. the resolution authority setting a factor of 2.3 for each and every institution while at the same time excluding all “other MREL-eligible instruments”). Another way of putting the shortfall into perspective is to compare the table’s figures with the volume of MREL-eligible bonds of significant Austrian banks²⁰ that come due and will need to be replenished: EUR

²⁰ Including AT1, T2 and subordinated and senior unsecured bonds.

Table 2

Aggregate shortfall across all banks (cbd) for different scenarios

	%	Factor of overall capital requirements set by national resolution authority		
		x1.7	x2.0	x2.3
		EUR billion		
Percentage of "other MREL-eligible instruments" accepted by national resolution authority	100	0.89	1.95	5.42
	50	1.61	3.98	13.16
	0	7.18	13.64	24.21
		% of total liabilities and own funds ¹		
Percentage of "other MREL-eligible instruments" accepted by national resolution authority	100	0.14	0.29	0.82
	50	0.25	0.60	2.00
	0	1.09	2.07	3.68

Source: OeNB, FMA.

¹ Sum of total assets of all institutions of the sample, based on consolidated data ("cbd") for all banks that are part of a banking group and data at the solo level for those which are not.

25 billion of MREL-eligible funds will need to be issued until 2019 and as much as EUR 45 billion until 2024.²¹ However, challenges will certainly occur if the market for MREL-eligible bonds dries up – e.g. if too many institutions approach the market at the same time.

3 Conclusions and next steps

MREL is one of the key elements in resolution planning and a major tool for removing impediments to the effective resolution of banks. Most importantly, it allows for the effective application of the bail-in tool. Nonetheless, MREL can have direct effects on the going concern of banks, since banks will need to adjust their funding structure to some extent to comply with these new requirements.

In our base case (for which we assume that no "other MREL-eligible liabilities" are exempted by the resolution authority, that MREL equals twice the overall capital requirements, and that no funds are contributed from

deposit guarantee schemes), the shortfall is only a fraction of the necessary rollover amount. Since some banks will, at any rate, have to build up additional own funds over the next years (due to the phasing-in of CRR own funds requirements), part of the shortfall will naturally even be covered by that. Moreover, the fact that overall bail-in-able resources are more than twice the amount of MREL-eligible resources provides an additional safety cushion in times of crises. However, as we have seen above (table 2), the shortfall is highly sensitive to case-by-case decisions of the resolution authority and can therefore only be seen as a first rough ballpark figure.

Given our assumptions, challenges might occur in some cases at Austrian banks' subsidiaries based in EU CESEE, which essentially lack senior unsecured or subordinated debt. However, the situation is highly dependent on the resolution plans of these institutions. Moreover, there are still considerable uncertainties about the maximum shortfall

²¹ Source: Bloomberg (January 27, 2016).

because EU CESEE subsidiaries' own funds requirements are relatively high and it is yet unknown to which extent the host national resolution authorities will exhaust their options in setting MREL.

At the current stage, the methodology for setting MREL is not yet final. Furthermore, the European Commission is required to come up with a review of the current MREL design, which might lead to adaptations (also in light of the necessity to implement

TLAC requirements for global systemically important institutions in EU legislation). As we have seen above, the sensitivity and impact of the calibration of MREL on banks is substantial. Despite the uncertainties described above, this study (and similar efforts throughout Europe) provides essential support for public authorities in their decision making, thus contributing to a stable regulatory environment that helps banks plan ahead properly.

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