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# STACKING ORDERS AND CAPITAL BUFFERS

REFLECTIONS ON MANAGEMENT BUFFER PRACTICES IN THE EU – 15 JULY 2024

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## **ABBREVIATIONS**

Explanations of the main abbreviations below can be found in explanatory boxes in this report.

AT1	Additional Tier 1	OCR	Overall Capital Requirement
BRRD	Bank Recovery and Resolution Directive	OLRR	Overall Leverage Ratio Requirement
CBR	Combined Buffer Requirement	O-SII	Other Systemically Important Institution
ССВ	Capital Conservation Buffer	PRA	Prudential Regulation Authority (Bank of England)
ССуВ	Countercyclical Capital Buffer	P1	Pillar 1
CET1	Common Equity Tier 1	P2G	Pillar 2 Guidance
COREP	Common Reporting Framework		Pillar 2 Guidance for the Leverage Ratio
CRD	Capital Requirements Directive	P2R	Pillar 2 Requirement
CRR	Capital Requirements Regulation		Pillar 2 Requirement for the Leverage Ratio
CVA	Credit Valuation Adjustment	QIS	Quantitative Impact Study
EBA	European Banking Authority	RAF	Risk Appetite Framework
EL	Eligible Liabilities	RAS	Risk Appetite Statement
eSLR	Enhanced Supplementary Leverage Ratio	RCA	Recapitalisation Amount
EU	European Union	RWA	Risk-Weighted Assets
G-SII	Global Systemically Important Institution	SCB	Stress Capital Buffer
ICAAP	Internal Capital Adequacy Assessment Process	SLR	Supplementary Leverage Ratio
LAA	Loss Absorption Amount	SREP	Supervisory Review and Evaluation Process
L-MDA	Leverage ratio Maximum Distributable	SSM	Single Supervisory Mechanism
	Amount	SyRB	Systemic Risk Buffer
LR	Leverage Ratio	T1	Tier 1
LTD	Long-Term Debt	T2	Tier 2
MB	Management Buffer	TC	Total Capital
MCC	Market Confidence Charge	TEM	Total Exposure Measure
MDA	Maximum Distributable Amount	TLAC	Total Loss-Absorbing Capital
M-MDA	MREL Maximum Distributable Amount	TLOF	Total Liabilities and Own Funds
MREL	Minimum Requirement for Own Funds and Eligible Liabilities	TREA TSCR	Total Risk Exposure Amount  Total SREP Capital Requirement
Non-SII	Non-Systemically Important Institution	TTF	Top Tier or Fished

## 1. EXECUTIVE SUMMARY

## Introduction and background

- 1. In the EBA's response to the European Commission's Call for Advice (1) on the review of the macroprudential framework, it was highlighted that the implementation of the CRR2, CRD5 and BRRD2 frameworks is very recent and has introduced several new elements. This includes elements such as the minimum leverage ratio (LR) requirement and requirements for own funds and eligible liabilities (MREL) which have been fully phased-in since 2024. In addition, the SREP Guidelines (2) expanded on the roles for competent authorities in the setting of Pillar 2 requirements and guidance, and for the risk of excessive leverage. The EBA's response explained that a more comprehensive evaluation should be performed before considering further substantial changes to the current framework.
- 2. Against this backdrop, the EBA performed a broad analysis of the stacking order of requirements for own funds and eligible liabilities applicable to banks, with a focus on microprudential elements. More specifically, while the EBA is not promoting any suggestion for changes in a framework still recently implemented, the work conducted on stacking orders aimed at better understanding the interactions between the regulatory stacks and in relation to which stacks management buffers are usually set by banks. For this purpose, the report describes all regulatory stacks, i.e. going and gone concern stacks, that are relevant for understanding a bank's capital headroom above the requirements.

3. Section 2 presents an overview of the EU framework and its various stacks of requirements including some high-level and summarised comparison with those of the UK and US. Section 3 examines the institutions' practices on management buffers reflecting upon an EBA dedicated survey and the EBA roundtable meeting held on 23 October 2023 with institutions.

### Main findings

## A. Overview of the EU regulatory framework

- 4. This report presents a high-level overview of the EU framework of currently applicable regulation (e.g. CRR2/CRD5 and BRRD2 in the EU). The EU framework consists of a variety of stacks for solvency and resolution purposes and includes Maximum Distributable Amount (MDA) triggers and, to a degree, expectations to hold additional regulatory resources above certain reference points. Interactions between them are essential in understanding the effectiveness of the functioning of the framework in practice.
- 5. In particular, under the EU framework, an institution may be subject to up to 10 different incremental stacks resulting from requirements or expectations in terms of own funds and eligible liabilities: three own funds ratios (Common Equity Tier 1 capital CET1, Tier 1 capital T1, Total Capital TC), the leverage ratio and the ratios for Total

<sup>(</sup>¹) See page 4 of the April 2023 EBA advice (https://eba.europa.eu/publications-and-media/press-releases/eba-proposes-simplify-and-improve-macroprudential-framework).

 $<sup>(^2)</sup>$  SREP Guidelines as published in March 2022 in their latest update.

Loss Absorbing Capacity (TLAC), MREL and subordinated MREL stacks, considering that each TLAC and MREL stack has a risk-based and leverage-based version.

- 6. Distribution restrictions via the calculation of an MDA can apply to seven of these stacks. MDA triggers are applied in various forms: automatically both in the buffer requirements of the risk-based capital and leverage ratio stacks, while partially discretionary in the risk-based MREL/TLAC stacks.
- 7. Pillar 2 Guidance (P2G) sits on top of the buffer requirements. P2G is a guidance which, if not met, leads to an expected notification and capital plan. In addition, in the EU, there is guidance or expectations that institutions hold additional own funds and/or eligible liabilities above certain reference points in the regulatory stacks, for instance above buffer requirements.
- 8. To add perspective, the overview highlights in a high-level and summarised form differences with the UK and US frameworks. The UK framework remains broadly similar to the EU framework, although there are some differences, while the US framework is more fundamentally different.
- 9. With respect to the UK framework, differences observed at the time of drafting the report are limited, such as the exemption of certain central bank exposures, combined with an offset in the minimum level of the requirement, in the calculation of the leverage ratio, or a more granular calculation of the leverage ratio buffer requirement. Regarding the composition of the resources to comply with the minimum requirements, there is no senior debt allowance in TLAC and there is more emphasis on CET1 in the leverage ratio framework. There are only automatic MDA triggers in the risk-based solvency stack and expectations to hold resources above reference points in the regulatory stacks are less explicit.
- 10. The US framework is more fundamentally different, with for example a Stress Capital Buffer (SCB) requirement in addition to

Pillar 1 capital requirements, a long-term debt requirement in addition to TLAC, and a (Collins) flooring of internal modelling approaches for the calculation of riskweighted assets, while in total having fewer components in the capital stack – as such no Pillar 2 capital requirement (P2R), P2G or Systemic risk buffer (SyRB) – and no MREL requirements. As in the UK framework, there is no senior debt allowance in TLAC. MDA triggers are automatic in all stacks, including the TLAC buffer. Expectations to hold resources above reference points in the regulatory stacks exist as well but, as in the UK framework, with less explicit guidance in comparison to the EU framework.

## B. EBA analysis on institution's practices on management buffers

- The EBA examined institutions' practices on management buffers with a dedicated survey completed by 53 EU institutions and an industry roundtable meeting.
- 12. Many institutions do not have a very clear definition of management buffers, but nearly all of them set a target on the basis of at least one stack. The survey results show that while many of the institutions did not have a clearly circumscribed definition of management buffers (e.g. only a general concept that it involves the 'excess of the capital over requirements'), they tended to compare the management buffer to the highest reference point in the relevant regulatory stack on which they have defined a management buffer (e.g. taking into account the P2G in the risk-based CET1 ratio).
- 13. Larger institutions and G-SIIs often cover nearly all of the regulatory stacks applicable to them (i.e. typically the 10 stacks mentioned below for G-SIIs). Most institutions set a management buffer target based on the risk-based CET1 ratio. In this case, the management buffer target was on average 2.4 percentage points above the P2G, on top of which, there was on average a 1.7 percentage points of additional headroom. Many institutions also set targets based on

- the risk-based Tier 1 and Total capital ratios and on the leverage ratio. Among the gone concern stacks, the risk-based MREL ratio was the most reported basis for setting management buffers.
- 14. The determination of management buffers is influenced by a broad set of factors, both internal and external. Internal considerations include the ability to manage unexpected risks and to develop strategic and business opportunities. External considerations include expectations from supervisors and regulators (e.g. no breach of regulatory requirements or expected changes in regulatory requirements) or from other stakeholders (e.g. rating agencies or peer pressure).
- 15. In terms of perceived usability of management buffers, most institutions considered management buffers to be more usable than the capital held to meet the Combined Buffer Requirement (CBR). Some

- institutions reported being ready to use P2G, if need be, while others practically considered P2G a hard requirement. In this context, banks believed that keeping the management buffer, including any surplus, on top of CBR plus P2G, may have helped them to avoid a potential breach of P2G.
- Further work of the EBA will include efforts 16. to continue to clarify, where necessary, the interactions of the different stacks. The work will also inform forthcoming EBA products like the one arising from the mandate on the interplay between the output floor and Pillar 2 (Article 104a(7) CRD6) and lay the groundwork for the update of the SREP Guidelines following CRR3 and CRD6 implementation. Further, as necessary, the EBA stands ready to support the European Commission in the follow up work to its 24 January 2024 report to the European Parliament and the Council on the macroprudential toolkit.

# 2. OVERVIEW OF THE EU FRAMEWORK AND ITS CHARACTERISTICS

#### **KEY TAKEAWAYS OF THIS SECTION**



#### **OVERVIEW OF THE EU FRAMEWORK**

There are three risk-based Pillar 1 (P1) capital requirements. They are set as a percentage of three different capital measures: CET1 capital, T1 capital and TC. To determine those capital requirements, each capital measure is compared to the Total Risk Exposure Amount (TREA). The P1 minimum requirements are set at 4.5%, 6% and 8%, respectively. On top of P1, institutions need to add a P2R, a CBR and a P2G. The CBR comprises up to five different buffer elements (Capital Conservation Buffer requirement, Countercyclical Capital Buffer (CCyB) requirement, G-SII buffer requirement, O-SII buffer requirement and Systemic Risk buffer requirement (3). The CBR, which can only be met with CET1 capital that is not used to meet other risk-based requirements already, also forms part of the risk-based TLAC and MREL stacks. Restrictions on profit distributions apply automatically when the calculation of the MDA determines that the CBR in the risk-based capital requirements stack would not be fully

The EU <u>LR framework</u> is based on adjusted accounting values in its denominator (Total Exposure Measure or TEM) and serves as a backstop to risk-based capital requirements

to curb excessive borrowing. All parts of the leverage ratio stack, comprising the 3% LR minimum, P2R LR, LR G-SII buffer, and P2G LR need to be met with at least T1 capital. Restrictions on profit distributions apply automatically when the calculation of the Leverage Ratio Maximum Distributable Amount (L-MDA) determines that G-SIIs are unable to meet the LR G-SII buffer.

The MREL consists of a loss absorption amount (LAA) and recapitalisation amount (RCA), tailored to resolution strategies. Resolution authorities set the institutions' MREL requirements as a percentage of TREA and TEM. G-SIIs must also maintain minimum risk-based TLAC and leverage-based TLAC. In addition, Pillar 1 Banks, consisting of G-SIIs, Top Tier banks (larger than €100 bn) or Fished Banks, must fulfil part of MREL (and TLAC) requirements with subordinated liabilities (⁴).

All in all, EU G-SIIs are subject to four going concern capital requirements (between solvency and leverage) and up to six gone concern ones (from a risk-based and leverage perspective), which can be illustrated graphically (5) as in Figure 1. For simplicity

<sup>(3)</sup> Please see more in info box on relevant terms and conditions on risk-based requirements below.

<sup>(4)</sup> For an explanation of Pillar 1 Banks, Top Tier Banks and Fished Banks, please refer to the info box on terms and definitions related to resolution requirements on page 23.

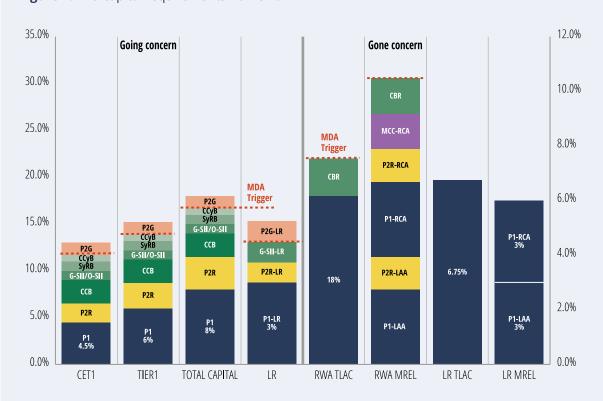
<sup>(5)</sup> Please note that the sizes of the layers in this bar chart are illustrative (with different denominators), to enhance the understanding of the make-up of the different stacks, and thus are not indicative of their actual size. To be noted that TREA-based stacks scale on the left hand axis while the TEM-based stacks scale on the right hand axis.

neither the subordinated MREL requirement, expressed as % TREA and %TEM, nor the 8% TLOF rule have been included.

As can be seen from the figure, multiple MDA thresholds apply. First in the risk-based own funds stack (CET1, T1 and TC), second in

the leverage ratio stack (for G-SIIs only) and third in the risk-based TLAC (G-SIIs only) and MREL stacks. The process to restrict MDA is triggered upon breach of CBR (G-SII LR buffer requirement for the LR stack).

Figure 1: EU capital requirements framework



## High-level comparison with the UK and US frameworks

In the UK, the risk-based framework is largely similar to the EU framework, but with minor differences. In practice, the SyRB is inactive and there may be differences in Pillar 2 implementation (named P2A and P2B under the UK framework) with for example a different treatment of sovereign exposures.

The UK's leverage ratio framework differs from the EU by excluding certain central bank assets from the TEM calculation and setting a higher LR minimum of 3.25%, met predominantly with CET1 capital. Additionally, the UK requires a Countercyclical Leverage Ratio Buffer (CCLB) and Additional Leverage Ratio Buffer (ALRB),

both to be met with CET1 capital. Unlike the EU, the UK doesn't impose automatic restrictions on distributions when LR buffer requirements are not met.

The UK's resolution framework broadly mirrors the EU framework, with MREL requirements tailored to resolution strategies. To note that in the UK, banks (but not building societies) with a bail-in resolution strategy must meet MREL via structural subordination (i.e. with a Holdco structure).

Generally, the US framework is the most fundamentally different, with a SCB requirement in addition to Pillar 1 requirements and a flooring of internal modelling approaches (Collins floor) for the calculation of risk-weighted assets. There are fewer components, with no P2R, P2G or SyRB.

In the US, two leverage requirements exist: a leverage ratio based on average balance sheet assets, and the Basel LR requirement (Supplementary LR), with a 3% minimum. Both are to be met with Tier 1 capital. Category I banks (G-SIBs) comply with the Enhanced Supplementary Leverage Ratio (eSLR), requiring an additional 2% in Tier 1 capital. Unlike the EU, the US framework's buffer portion is not tied to the G-SIB surcharge or other bank-specific considerations. An automatic maximum payout trigger applies to the eSLR, which is activated at 5%.

Finally, the US TLAC rule mandates G-SIBs to comply with a minimum of 18% on the risk-based TLAC ratio and 7.5% on the leverage-based TLAC ratio. G-SIBs must also meet a

long-term debt (LTD) requirement, ensuring reliance on own funds is controlled. There is no allowance for senior debt, with a requirement of structural subordination of TLAC resources. The MDA trigger in the US TLAC stacks is automatic, leading to distribution restrictions if the buffers above the TLAC requirements are not met.

Overall, while the EU, UK, and US frameworks share common goals of ensuring bank stability and minimising taxpayer exposure, differences exist in the scope of institutions covered and specific requirements, such as subordination mechanisms and distribution restrictions.

The comparative overview of frameworks sticks to the currently applicable regulation (CRR2/CRD5 and BRRD2 in the EU). In all three jurisdictions, there are proposals to implement the final elements of Basel 3. These have not been taken into account.

17. To promote a better understanding of the framework and the interactions between the different stacks, the following subsections provide a description of the EU framework and its characteristics. To add perspective, high-level summarised comparisons with the UK and US frameworks (without being exhaustive) are considered in their three main dimensions, being the risk-based requirements, the leverage requirements and the resolution requirements.

## 2.1 Risk-based requirements

18. The EU solvency framework calculates an institution's capital requirements based on risk-weighted assets (RWA), with the sum of all risk-weighted exposure amounts referred to as TREA (6). To cover the risk of these exposures, banks need to hold a sufficient

- amount of own funds to be able to absorb unexpected losses, both on a going concern and gone concern basis. The EU solvency framework generally reflects an institution's exposure to credit risk, market risk, settlement risk, credit valuation adjustment risk, operational risk and counterparty credit risk.
- 9. The EU risk-based capital requirements rely upon three capital ratios, where CET1 capital, T1 capital and TC are compared to TREA and for which the P1 minimum requirements are set at 4.5%, 6% and 8%, respectively. On top of P1, institutions need to add the P2R, the CBR and the P2G. The CBR is the sum of the Capital Conservation Buffer (CCB), the Systemically Important Institutions buffer (the higher of G-SII or O-SII buffers), the SyRB and the CCyB (7).

<sup>(6)</sup> Calculation of TREA is defined in Article 92(3) and (4) CRR.

<sup>(7)</sup> Please see more in info box on relevant terms on solvency below.

- 20. In terms of composition of capital to cover the buffers to minimum requirements, only CET1 capital can be used to meet all the capital requirements referred to above. More in detail, the CBR can only be met with CET1 capital, whereas the P1 and P2R have to be met with at least 56.25% CET1 capital and at least 75% of T1 capital. By way of derogation, a competent authority may require the institution to meet its P2R with a higher portion of T1 or CET1 capital. As specified in the EBA SREP Guidelines (8), competent authorities should communicate to institutions that the P2G (for the risk-based ratio) is to be met with CET1 capital.
- 21. If an institution's own funds drop, or are likely to drop, below the level determined by P2G, the institution is expected to notify its competent authority and prepare a revised capital plan (°). In its notification, the institution should explain what adverse consequences are likely to lead to the reduction of the P2G and the envisaged actions to restore compliance with the P2G. This initiates an intensified supervisory dialogue. However, there is no automatic link between the decline in own funds below P2G and a specific supervisory measure.
- 22. Based on the circumstances that caused the fall of the own funds below the level of the  $P2G(^{10})$ , if:
  - a. they reflect risks covered by the P2G that have materialised, competent authorities may allow the institution to temporarily operate below the level of P2G if the revised capital plan is considered credible;
  - b. they do not reflect risks covered in the P2G, competent authorities should expect the

- institution to increase its level of own funds to the level of P2G within an appropriate timeline;
- c. the institution disregards P2G, does not incorporate it into its risk management framework or does not establish sufficient own funds to meet P2G within the time limits set in accordance with the EBA SREP Guidelines (11), competent authorities may apply additional supervisory measures.
- 23. In the last two cases, if the institution's own funds continue to be repeatedly below the level of P2G, the competent authority should impose additional capital requirements (P2R).
- 24. An institution that does not have sufficient own funds to meet the CBR (i.e. exceeds the P1 and P2R requirements but not by the full amount of the CBR) falls within the capital conservation range and needs to calculate an MDA. The MDA is an automatic restriction on distributions. It limits the amount of profits that can be used as remuneration to investors of CET1 and AT1 instruments, as well as discretionary payments (variable remuneration or pension benefits) to employees.
- 25. The calculation of the MDA is based on a multiplication of interim or year-end profits by a factor ranging from 0 to 0.6, depending on the size of the CET1 shortfall against the CBR. Accordingly, a bank in the highest quartile of the MDA could not distribute more than 60% of its profits. This restriction would be tightened to 40% in the second quartile, 20% in the third quartile and 0% in the fourth quartile.

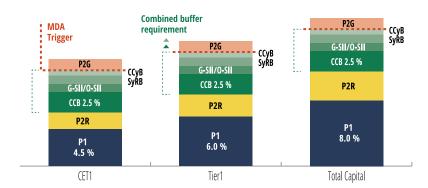
<sup>(8)</sup> Paragraph 439 of the EBA SREP Guidelines (Guidelines for common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing | European Banking Authority (europa.eu).

<sup>(9)</sup> Paragraph 584 of the EBA SREP Guidelines.

<sup>(10)</sup> Paragraph 585 of the EBA SREP Guidelines.

<sup>(11)</sup> Paragraph 438 of the EBA SREP Guidelines.

Figure 2: EU risk-based capital framework



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SII). To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

26. In addition to minimum requirements, buffer requirements and Pillar 2 requirements and guidance, institutions are also required to determine their own internal requirements. Following their internal processes and given their own strategies and risk appetite, EU institutions may hold additional financial resources in the form of own funds and/or eligible liabilities above the applicable minimum requirements (including possibly P2G). In accordance with EBA guidelines on recovery triggers (12), banks are expected to set triggers above levels requiring supervisory intervention. Therefore, recovery triggers should be set sufficiently above

capital and leverage requirements / TLAC / MREL plus CBR. Moreover, from a prudential standpoint, institutions are also required to define their risk appetite statements and to develop their risk appetite framework around a set of limits and early warning triggers which imply a higher level of financial resources. Competent authorities may also set more specific expectations for additional management buffers. For example, the SSM's ICAAP guide (13) states that 'the institution is expected to assess and define management buffers above the regulatory and supervisory minima and internal capital needs that allow it to sustainably follow its strategy'.

# MORE INFO

#### **RELEVANT TERMS ON SOLVENCY**

This section provides background on key terms for the European solvency framework, namely the: i) composition of capital; ii) Pillar 2 requirements and guidance; and iii) the combined buffer requirement and its components.

- i) Composition of Capital and applicable requirements. The three tiers of own funds are defined as follows:
- Common Equity Tier 1 (CET1) capital consists of all CET1 items (CET1 instruments, share premium, available reserves, etc.) of

<sup>(12)</sup> Guidelines on recovery plans indicators.

<sup>(13)</sup> ECB Guide to the internal capital adequacy assessment process (ICAAP).

an institution, net of regulatory adjustments. In addition to the 4.5% TREA minimum requirement, CCB, G-SII, O-SII, CCyB, SyRB and P2G buffers should be met by CET1. P2R follows the composition of P1, with at least 56.25% consisting of CET1 capital.

- Additional Tier 1 (AT1) capital refers to the prudential capital items that meet the definition of perpetual capital instruments that are not CET1 capital net of regulatory adjustments, which are able to provide loss absorption on a going concern basis and meet all conditions of Article 52 CRR, and their related share premium.
- Tier 1 (T1) capital is the prudential capital consisting of CET1 capital and AT1 capital, each net of applicable regulatory adjustments. It is also referred to as going concern capital. In addition to the 6% TREA minimum requirement, P2R follows the composition of P1, with at least 75% consisting of T1 capital.
- Tier 2 (T2) capital refers to prudential capital items as defined in Article 62 CRR, net of regulatory adjustments, that is able to provide loss absorption on a gone concern basis (in addition to the items included in Tier 1 capital). It is also referred to as 'gone concern capital'.
- Total capital (TC) is the sum of T1 and T2 capital of an institution. In the absence of sufficient available AT1 or T2, the institution can meet the entire solvency stack (8% minimum, P2R, buffers, P2G) with CET1 capital.

## ii) Pillar 2 adds the following to the solvency stack:

 Pillar 2 Requirement (P2R) is a mandatory capital requirement that can be set by competent authorities on top of the P1 minimum capital requirement, and below the CBR. P2R serves the purpose of capturing

- risks, besides the risk of excessive leverage, that are insufficiently or not captured in the Pillar 1 capital requirements. Total P2R has been subject to public disclosure since CRR2/CRD5.
- Pillar 2 Guidance (P2G) is a buffer on top of the CBR which, unlike the P2R, is not legally binding, as it only reflects supervisory expectations. P2G indicates the level of capital that institutions should maintain to be able to withstand periods of financial stress from a solvency perspective. It is communicated to an institution by its competent authority, which calculates the P2G after applying supervisory stress tests (14).
- iii) Combined Buffer Requirement (CBR) is a capital buffer that institutions need to meet in addition to (on top of) their minimum solvency requirements (P1 and P2R) and risk-based MREL/TLAC requirements. The CBR is defined as the sum of the following buffers:
- Capital Conservation Buffer requirement (CCB) is intended to ensure that firms build up buffers of capital outside any periods of stress and is designed to avoid breaches of minimum capital requirements. This capital buffer can then be drawn upon in times when losses are incurred. The CCB is a capital buffer which is set at 2.5% of TREA and applicable to all institutions.
- Countercyclical Capital Buffer requirement (CCyB) is a capital buffer which is designed to counter procyclicality in the financial system. When cyclical systemic risk is judged to be increasing, institutions should accumulate capital to create buffers that strengthen the resilience of the banking sector during periods of stress when losses materialise. This will help maintain the supply of credit to the economy and dampen the downswing of the financial cycle. The CCyB can also help dampen excessive credit

<sup>(14)</sup> To be determined in line with the EBA Guidelines on common procedures and methodologies for the supervisory review and evaluation process (SREP) and supervisory stress testing under Directive 2013/36/EU (EBA/GL/2022/03).

growth during the upswing of the financial cycle. The CCyB is set for each Member State. The CCyB applicable to each bank is calculated as the sum of each credit exposure weighted by the CCyB rate defined by the Member State where the exposures are located. It generally ranges from 0% to 2.5% of TREA but can exceed 2.5% during some circumstances.

- **G-SII buffer requirement** addresses systemic importance and its level is mainly determined by the sub-category of G-SII (and relevant systemic importance score). The lowest category of G-SII has a buffer requirement of 1% of TREA (6 out of the 8 EU G-SIIs at the time of drafting this report), which is increasing by gradients of 0.5% for each G-SII sub-category.
- **O-SII buffer requirement** can be up to 3% of TREA (15) and is set by competent authorities (or designated authorities) in each jurisdiction. The EBA has proposed a

- methodology to calibrate O-SII buffer rates. If an institution also has a defined G-SII buffer, it is the higher of the applicable G-SII and O-SII buffer requirement that applies.
- Systemic Risk buffer (SyRB) is a capital buffer set by the competent (or designated) authority that aims to address systemic risks that are not covered by the Capital Requirements Regulation or by the CCyB or the G-SII/O-SII buffers. The level of the SyRB may vary across institutions or sets of institutions as well as across subsets of exposures. It is cumulative to the O-SII and G-SII buffers. If the SyRB is above 3% (up to 5%) an opinion from the Commission needs to be considered and if the combined O-SII (or G-SII) and SyRB is above 5% then the European Commission needs to provide an authorisation. Since the advent of CRR2/ CRD5, the SyRB can be implemented on a sectoral basis, such as for example targeting only exposures secured by residential real estate in a country.



## COMPARISON WITH MAIN CHARACTERISTICS OF UK AND US RISK-BASED FRAMEWORKS (16)

## The UK risk-based capital framework is generally similar to the ELI framework with

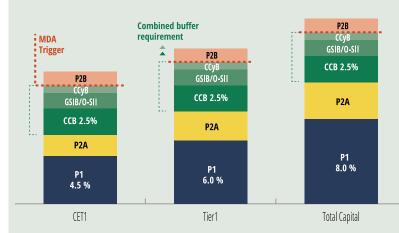
generally similar to the EU framework, with limited differences observed at the time of drafting this report. The CET1, T1 and TC capital stacks need to meet the sum of P1, Pillar 2 capital requirement (called P2A in the UK), the CBR and Pillar 2 guidance (called P2B or PRA buffer in the UK). In the UK, the CBR consists of

the sum of the CCB, G-SII buffer or O-SII buffer, SyRB and CCyB. The UK currently does not use the SyRB, which is considered to be included in the calculation of the G-SII/O-SII buffer. As in the EU, the CBR is subject to an automatic MDA trigger. This leads to the following high-level overview of the risk-weighted capital stacks:

<sup>(15)</sup> It may exceed 3% TREA subject to the conditions of Article 131(5a) CRD involving an authorisation of the European Commission.

<sup>(16)</sup> This box (as well as the further boxes that compare with the UK and US) provide a high-level comparison, which is not exhaustive as it does not cover all potential differences.

**Figure 3:** UK risk-based capital framework



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SII). To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

Another example of a difference between the UK framework and the EU framework is that the UK PRA considers whether sovereign exposures with RWA of 0% and sufficiently covered in the Pillar 1 framework, and, if not, the PRA may include these exposures in the P2A assessment. Further, in the P2B calculation the UK PRA includes a risk management and governance factor which is only applied for cases of significant risk management and governance weaknesses and is usually only in place until those weaknesses are addressed.

In the UK, banks should hold resources above buffer requirements. However, the guidance on recovery plan indicators is less explicit, for example there is no requirement that they should be above levels allowing supervisory intervention. However, firms should justify the calibration of capital and liquidity indicators in relation to the relevant buffers, linked to risk appetite and risk tolerance. In the UK framework, there is no statement comparable to the SSM guide that expects institutions to define management buffers.

In the US framework, the structure of the risk-based capital requirements resembles the EU

as regards Pillar 1 risk-based minimum capital requirements (CET1, T1 and TC).

However, differences exist regarding Pillar 2 for which there is no dedicated P2R or P2G like in the EU. In addition, the buffer requirement is structured differently in the US with the SCB, which is calibrated as the result of the Federal Reserve Stress Test (17) under the severely adverse scenario and four quarters of planned common stock dividends (18).

The SCB is floored to 2.5% and it has an automatic MDA trigger when not fully met. The SCB is fully disclosed as is the case for the P2R and CBR in the EU framework, but unlike the P2G. It should be noted that the US regulation does provide for a prior approval process under which the automatic MDA restriction exceptionally can be lifted on an individual case.

In the US, the G-SIB surcharge (19) is calculated annually taking the higher between the Basel Committee on Banking Supervision (BCBS) methodology ('Method 1'), which is the applicable G-SII scoring methodology as in the EU, and a US specific methodology ('Method 2'). Method 2, which for example excludes the

<sup>(17)</sup> Category I to III banks are subject to annual supervisory stress tests, category IV banks are subject to 2-year cycle supervisory stress test and Other Firms are not subject to supervisory stress tests.

<sup>(18)</sup> The SCB does not apply to Other Firms (only to Category I to IV banks).

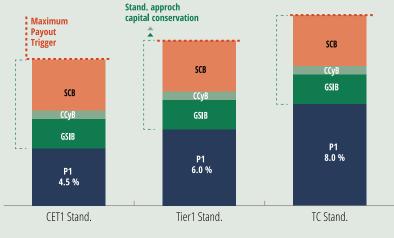
<sup>(19) 12</sup>CFR §217.403

substitutability category of indicators and adds a short-term wholesale funding indicator, usually leads to a higher capital surcharge compared to Method 1 ( $^{20}$ ).

A difference between the US and the EU frameworks lies also in the proportionality and weight on standardised approaches. The applicability of requirements is determined by the 'Tailoring Approach' that distributes banks into five categories according to their total assets and their cross-jurisdictional activity (see box below). Accordingly, category I (i.e. G-SIBs) and category II banks shall use both (i) the advanced approaches, i.e. the internal ratings-based models to calculate RWAs for credit risk, CVA risk, market risk and an internal measurement approach for operational risk; and (ii) the standardised approach to calculate RWA for credit risk and market risk. Category III and IV banks and Other Firms must solely apply the standardised approaches to calculate RWAs and benefit from other simplifications of the prudential rules. Banks in these three categories can apply a filter on unrealised gains and losses on available for sale ('AFS') securities. The Collins Floor, introduced in the US regulation by the Collins Amendment to the Dodd-Frank Act, holds that total advanced-approach RWAs (based on the 4 risks under (i)) must not fall below 100% of total standardised RWAs (based on the 2 risks under (ii)). The approach used to compute solvency requirements (SA or internal models) determines which buffer requirements to apply.

Under the standardised approach, the total buffer requirement is called the 'standardised capital conservation buffer' (Standardised CCB) composed of the SCB, the CCyB (21) and for category I banks, the G-SIB surcharge (Figure 4 below gives a stylised overview). Under the Advanced Approaches, the total buffer requirement is called the 'advanced capital conservation buffer' (Advanced CCB) and is composed of a fixed Capital Conservation Buffer (CCB) floored at 2.5% RWA, the CCyB, and for the category I banks, the G-SIB surcharge. The US has not introduced the SyRB nor an O-SII/D-SIB buffer but has introduced (to date never activated) the CCyB. In terms of composition, all buffers shall be met with CET1.

Figure 4: US risk-based capital framework



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SIB). For simplicity, it only displays the standardised approach-based stack. To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

In terms of expectations, in the US there is general guidance on recovery plan thresholds. However, the guidance is high level and in

addition there is no statement on management buffers.

 $<sup>\</sup>label{eq:condition} \ensuremath{\text{(20)}}\ https://www.garp.org/hubfs/Whitepapers/a2r5d000004TgupAAC\_RiskIntell.GBI.Whitepaper.GSIBs.8.4.22.pdf$ 

<sup>(21)</sup> The CCyB is not applicable to category IV banks and Other Firms.

# MORE INFO

#### BANK'S CATEGORIES IN THE US

TThe **Tailoring rule** applies since October 2019 and divides institutions with more than \$100 billion in total assets into **4 categories** based on several factors including asset size, cross-jurisdictional activity, reliance on weighted short-term wholesale funding, non-bank assets, and off-balance-sheet exposures:

- Category I banks are US G-SIBs (in practice, 8 banks);
- Category II banks are banks with or more than \$700 billion in total assets or with or

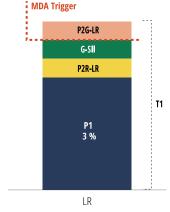
- more than \$75 billion in cross-jurisdictional activity;
- Category III banks are banks with or more than \$250 billion in total assets or with or more than \$75 billion in non-bank assets, weighted short-term wholesale funding (STWF) or off-balance sheet exposure;
- Category IV banks are the other firms with total assets between \$100 billion and \$250 billion; and
- Other Firms are banks with total assets between \$50 billion and \$100 billion.

## 2.2 Leverage requirements

- 27. The leverage framework calculates an institution's capital requirements based on exposure measures as found in an institution's accounting statement, with various adjustments for specific exposures. It was designed to act as a backstop to the risk-based capital requirements to prevent excessive borrowing of institutions. To meet the capital requirements of the LR banks need to hold a sufficient amount of Tier 1 capital relative to the sum of all their exposures (TEM).
- 28. In the EU, the leverage-based capital requirements are defined as a ratio relative to T1 capital. The stack consists of a minimum requirement of 3%, a potential Pillar 2 Requirement for the Leverage Ratio (P2R LR), an add-on for Global Systemically Important Institutions (LR G-SII buffer) calibrated to 50% of the G-SII buffer requirement in the solvency framework, as

well as a Pillar 2 Guidance for the Leverage Ratio (P2G LR).

Figure 5: EU leverage ratio framework



Note: Stacks are drawn to reflect the situation of a large institution (typically G-SII). To be noted that the size of the layers in the bar

11 charts are illustrative and thus are not indicative of their actual size (e.g. at the time of drafting the P2RLR is in most cases at 0%).

- 29. In terms of composition, all the capital requirements referred to above are to be met with T1 capital (22). The EBA SREP Guidelines further specify that competent authorities should communicate to institutions that the P2G LR should be met with Tier 1 capital.
- 30. A G-SII subject to the LR G-SII buffer requirement, but which does not have sufficient Tier 1 capital to meet the LR G-SII

buffer (i.e. exceeds the LR minimum and P2R LR but is below the P2G LR) falls within the LR capital conservation range and needs to calculate the L-MDA. As the solvency-based MDA, the L-MDA is an automatic restriction on distributions and limits the amounts of profits that can be used as remuneration to investors of CET1 and AT1 instruments, as well as discretionary payments to bank employees.

## MORE INFO

#### **LEVERAGE RATIO TERMS**

The Total Exposure Measure (TEM) is the denominator in the calculation of the leverage-based capital requirements. As opposed to TREA, which apply a risk-weight to exposure values, the LR is generally calculated using the exposure measure as found in an institution's accounting statement, however adjusted for particular exposures such as derivatives and SETS

In accordance with Article 429a(5), a CRR competent authority, after consultation with the relevant central bank, may allow for the **exemption of certain central bank exposures** from the TEM resulting in a higher LR for institutions holding such exposures on their balance sheet. It would concern a maximum of 1 year during unusual monetary or macroeconomic circumstances. Several conditions apply, such as the implementation of a higher LR minimum as an offset to the central

bank exposure exemption. In the Eurozone the exemption was active till March 2022. In the US it was phased out in March 2021. In the UK the central bank exposure exemption is still active, which is offset in the form of a higher LR minimum requirement (i.e. 3.25%).

**Pillar 2 Requirement for the Leverage Ratio** (P2R LR) is a mandatory capital requirement set by competent authorities on top of the 3% minimum LR requirement (<sup>23</sup>). P2R LR serves the purpose of capturing risks of excessive leverage that remain or are insufficiently captured in the 3% minimum LR requirement. P2R LR is subject to public disclosure under CRR2/CRD5.

**G-SIIs apply a G-SII leverage buffer requirement** that needs to be met in addition to their minimum leverage ratio requirements (Pillar 1 and P2R-LR, where applicable). The buffer requirement is calibrated to 50% of

<sup>(22)</sup> Article 104a(4) of the CRD specifies that P2R LR shall be met by Tier 1 capital, with a higher proportion of CET1 possible to be required by a competent authority by way of derogation. Paragraph 417 of the <u>EBA SREP GL</u> details the justification that competent authorities should apply in such an instance. Competent authorities should communicate to institutions that P2G LR is met by Tier 1 capital (paragraph 439 of the EBA SREP GL).

<sup>(23)</sup> To be determined in line with EBA/GL/2022/03.

the G-SII buffer requirement in the solvency framework.

**Pillar 2 Guidance for the Leverage Ratio** (P2G LR) is a buffer on top of the LR G-SII buffer (if applicable) which reflects supervisory expectations and which, unlike the P2R LR, is

not binding. P2G LR indicates the level of capital that institutions should maintain to be able to withstand periods of financial stress from a leverage perspective. It is communicated to an institution by its competent authority, which calculates the P2G after applying supervisory stress tests (<sup>24</sup>).



## COMPARISON WITH MAIN CHARACTERISTICS OF UK AND US LEVERAGE FRAMEWORKS

Compared to the EU, the TEM calculation in the UK framework excludes assets constituting claims on central banks, where they are matched by liabilities denominated in the same currency and of identical or longer maturity (25). This measure is in response to extraordinary circumstances that have led to a significant increase in central bank claims in the financial system; it is intended to prevent the leverage from hindering the effective implementation of monetary policy. The Bank of England keeps under review whether the circumstances that prompted the introduction of this measure remain applicable. As an offset for this exemption, the LR minimum requirement (26) is set higher at 3.25% minimum. In addition, this minimum has to be met with at least 75% CET1 capital; the rest can be met with AT1 instruments, provided they have a trigger level of at least 7% of the institution's risk-based CET1 capital ratio. The UK does not apply any

Pillar 2 add-on for the LR (though note there is a Leverage Ratio Group Add-on which may apply to groups which include ring-fenced bodies). On top of the minimum, another difference is that the UK defines the possibility for a Countercyclical Leverage Ratio Buffer (CCLB) and Additional Leverage Ratio Buffer (ALRB). The CCLB is set at 35% of an institution's CCyB rate, and the ALRB is set at 35% of the highest of an institutions G-SII or O-SII buffer rate. The ALRB may also include a Leverage Ratio Group Add-on to address the ring-fenced body group risk. All buffers on top of the LR minimum have to be met with CET1 capital compared to T1 for the EU.

The UK LR framework does not impose automatic restrictions on distributions when the LR buffer requirements are not met (L-MDA). Institutions have to notify the PRA and provide a capital plan within 5 days of this notification.

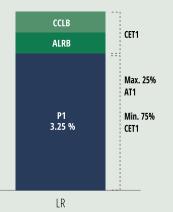
<sup>(24)</sup> To be determined in line with EBA/GL/2022/03.

<sup>(25)</sup> In the CRR (Art 429a (5) to (7)) there is also a legal provision for granting an exemption temporarily, subject to offset, but it is not active at the moment.

<sup>(26)</sup> In the UK only firms exceeding either £50 billion in retail deposits or £10 billion in foreign assets are required to meet the minimum leverage ratio requirements. Firms below this threshold are still expected to comply with the minimum, but this is not a fixed requirement.

#### **Figure 6:** UK leverage ratio framework

#### **No MDA Trigger**



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SII). To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

In the US framework the LR framework is equally different, with two leverage requirements existing in parallel. All banks are subject to a simple leverage ratio which

compares T1 capital to average balance sheet assets, with a 4% (<sup>27</sup>) minimum requirement. Banks using the advanced approach (Category I and II) and Category III banks have to also comply with the Basel LR requirement ('Supplementary LR' (SLR) in the US) which consists of a 3% minimum requirement. The SLR has to be met with Tier 1 capital.

On top of the 3%, category I banks (G-SIBs) have to comply with an enhanced leverage requirement, called the eSLR representing an additional 2% (also in Tier 1) (28). Differently from the EU framework this buffer portion does not depend on the size of the G-SIB surcharge (or any other bank-specific consideration such as with P2R LR in the EU). An automatic maximum payout trigger (equivalent to the trigger in the solvency ratio) applies to the SLR (i.e. located on top of the eSLR at 5%).

Figure 7: US leverage ratio framework



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SIB). To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

<sup>(27)</sup> Defined as the ratio of the regulated institution's tier 1 capital to the regulated institution's average total consolidated assets. The Supplementary leverage ratio's denominator is the regulated institution's leverage exposure (including off balance sheet exposures) please see reference to 12 CFR\$217.10 here.

<sup>(28)</sup> The ordinary 2% G-SII buffer component of the SLR is raised to 3% for foreign subsidiaries of G-SIIs.

### 2.3 Resolution requirements

- 31. The aim of the resolution framework is to ensure banks have sufficient loss-absorbing and recapitalisation capacity available to implement an orderly resolution that minimises any impact on financial stability, ensures the continuity of critical functions, and avoids exposing taxpayers to loss with a high degree of confidence. Resolution groups and stand-alone resolution entities are subject to an external MREL, and for G-SIIs, also a minimum Total Loss-Absorbing Capacity (TLAC) to ensure the above objectives plus an effective and credible application of the preferred resolution strategy in accordance with the BRRD.
- 32. Resolution authorities calculate an institution's MREL requirements in line with the applicable resolution strategy: institutions that are to be resolved (i.e. resolution entities) are required to hold an amount of MREL that is sufficient to ensure that (1) losses expected to be incurred are fully absorbed (LAA); and (2) that the institution, after the application of the resolution tools, is sufficiently recapitalised to a level that enables it to carry out its activities while complying with all capital requirements (RCA). Institutions that would not be resolved but wound up in normal insolvency procedures have a LAA, but no RCA as they do not need to be recapitalised.
- 33. Similar to the capital requirements above, LAA and RCA are defined from a risk-based as well as from a leverage perspective (relative to TREA and TEM, respectively). From a risk-based perspective, the LAA would generally be set equal to a resolution entity's Pillar 1 TC requirement plus P2R, and the RCA would be set to the amount necessary to replenish a resolution entity's Pillar 1 TC requirement

- and P2R after implementing the preferred resolution strategy. The RCA may include an additional market confidence charge (MCC). The latter would as a baseline be set equal to the CBR that is to apply after the application of the resolution tools, minus the CCyB. From a leverage perspective, the LAA would generally be set equal to the LR minimum requirement, and the RCA would be set to the amount necessary to allow a resolution entity to meet the minimum leverage ratio requirement after implementing the preferred resolution strategy. The estimation of the RCA by the resolution authorities takes into account adjustments of the TREA and TEM, as well as the P2R after application of the resolution strategy.
- 34. G-SIIs are required to meet or exceed at all times the minimum TLAC requirement of 18% of TREA and 6.75% of TEM (<sup>29</sup>). For Top Tier and Fished banks, the minimum MREL requirement is set to at least 13.5% of TREA and 5% of TEM. The CBR is to be met in addition to the risk-based MREL/TLAC requirements.
- 35. In terms of composition, MREL and TLAC requirements shall be met by own funds and eligible liabilities (30). Resolution entities that are G-SIIs, Top Tier Banks or Fished Banks are subject to a subordination requirement and therefore have to fulfil part of their MREL/TLAC with own funds, subordinated eligible instruments, or liabilities as referred to in Article 45b(3) BRRD. This requirement is set relative to a resolution entity's Total Liabilities and Own Funds (TLOF), which is generally determined based on 8% of TLOF and expressed relative to TREA and TEM (31).

<sup>(29)</sup> By way of derogation, a resolution authority may permit to resolution entities under certain circumstances to recognise other liabilities as eligible liabilities up to 3.5% of TREA, or up to 5% of TLAC under the Hold-Co allowance called the **Senior Debt Allowance**.

<sup>(30)</sup> Eligible Liabilities items need to meet the criteria of Article 72a, 72b and 72c CRR.

<sup>(31)</sup> The 8% TLOF reference point originates from the requirement to meeting 8% TLOF to access the Government financial stabilisation tools or resolution financing arrangements (cf. Article 37(10) and Article 44(5) BRRD).

#### **METHODOLOGY**



#### SUBORDINATION REQUIREMENTS

For G-SIIs, the minimum subordination requirement is calibrated as the maximum between the two TLAC requirements in the form of 18% TREA plus CBR and 6.75% TEM, and 8% TLOF.

For Top Tier Banks and Fished Banks, the minimum subordination is set at the maximum between 13.5% of TREA (plus CBR), 5% of TEM and 8% TLOF. But for Top Tier banks (not Fished ones) the subordination requirement cannot exceed 27% of TREA.

For resolution entities, that are neither G-SIIs, Top Tier banks nor Fished banks, the resolution authority may set subordination requirements based on a case-by-case assessment of no creditor worse off (NCWO) risk.

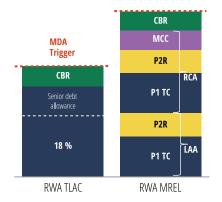
For a subset of G-SIIs, Top Tier and Fished banks (limited at 30% of the population)

the resolution authority may set, subject to conditions, a higher subordination requirement, up to  $2 \times P1$  TC Requirement+ $2 \times P2R + CBR$ .

Via the **senior debt allowance**, under certain conditions, resolution authorities may permit resolution entities that are G-SIIs to recognise other liabilities up to an aggregate amount of 3.5% of TREA as TLAC eligible resources ( $^{32}$ ). Similarly, via the **reduced 8% TLOF**, resolution authorities can reduce the 8% TLOF part of the calibration of subordination for G-SIIs, Top-Tier banks and Fished banks by a factor of  $(^{1-(^{3.5\% TREA}/_{(18\% TREA+CBR)})})$  provided that certain conditions are met.

Alternatively, and also under certain conditions, resolution authorities may permit resolution entities that are G-SIIs to recognise as TLAC certain liabilities (33).

Figure 8: EU resolution requirements framework





**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SII). Risk-based on the left and leverage-based on the right. To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size. While the MREL stacks can be subdivided in a subordinated and non-subordinated part, for simplicity neither the subordinated stacks, expressed as % TREA and %TEM, nor the 8% TLOF rule have been included in the figure.

<sup>(32)</sup> Under the conditions provided in Article 72b(3) CRR.

<sup>(33)</sup> Under the conditions provided in Article 72b(4) CRR.

- 36. While institutions can use CET1, AT1 and T2 capital to meet their MREL/TLAC requirement, CET1 resources used to meet the CBR cannot be counted by resolution entities to meet the risk-based MREL/TLAC requirement. The CBR is a separate (and additional) requirement to the MREL/TLAC, in accordance with Article 16a(1) BRRD (34).
- 37. An institution that does not have sufficient CET1 to meet the CBR on top of the risk-based MREL/TLAC (i.e. exceeds the risk-based MREL/TLAC requirement and prudential requirements but does not fully meet the CBR on top of the risk-based MREL

requirement) needs to notify the resolution authority which will assess whether to impose the MREL Maximum Distributable Amount (M-MDA). The M-MDA is a restriction on distributions that resolution authorities can apply on a discretionary basis after having assessed specific criteria and the situation of the institution. There is a presumption that after 9 months the M-MDA should be imposed, unless some market conditions make it possible to conclude otherwise. The M-MDA limits the amounts of distributions of a resolution entity and is calculated using the same method as under the prudential MDA regime.

#### **MORE INFO**



#### TERMS RELATED TO RESOLUTION REQUIREMENTS

For the purposes of resolution, institutions fall within different categories. Pillar 1 banks refer to resolution entities of G-SIIs, Top Tier banks, and Fished banks in the context of the BRRD. Pillar 1 banks are subject to subordination requirements. Top Tier banks are resolution entities not subject to Article 92a CRR but part of a resolution group whose assets exceed € 100 billion.

For the purposes of this report, the term **Fished banks** refers to:

resolution entities whose failure may pose
 a systemic risk but that are not subject
 to Article 92a CRR and that are part of a
 resolution group whose assets do not exceed
 € 100 billion, as well as

 resolution entities holding non-subordinated liabilities that may pose problems in resolution.

In the EU, subordination can be assured in three different ways: (1) contractual provisions governing the liabilities specify that the claim on the principal amount of the instruments ranks below claims arising from any of the excluded liabilities (contractual subordination); (2) the applicable law specifies that for normal insolvency proceedings, the claim on the principal amount of the instruments ranks below claims arising from any of the excluded liabilities (statutory subordination); or (3) the instruments are issued by a resolution entity which does not have on its balance sheet any excluded liabilities that rank pari passu or junior to eligible liabilities instruments (structural subordination).

<sup>(34)</sup> However regarding TLOF, resources that are used in the CBR are not excluded from counting towards the 8% TLOF requirement in accordance with Article 45b BRRD.

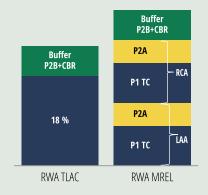


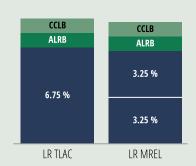
## COMPARISON WITH MAIN CHARACTERISTICS OF UK AND US RESOLUTION FRAMEWORKS

The UK resolution framework is generally similar to the EU framework, with the MREL requirements divided into a LAA and a RCA, which are set depending on the resolution strategy of the institution. Focusing on the calibration for institutions subject to a bail-in strategy, both the risk-based and the leverage-based MRELs, as in the EU, generally consist of a LAA and a RCA part and each equals minimum capital requirements.

Similarly to the EU, in the UK framework, one of the statutory resolution objectives is to protect and enhance public confidence in the financial system's stability, but the MCC is not defined as a separate charge (market confidence charge in the EU is indicatively set at CBR minus CCyB). Where a firm does not have sufficient CET1 to meet the above in addition to MREL, automatic restrictions will not apply (35). In this case, the firm can expect enhanced supervisory action and should prepare a capital restoration plan.

Figure 9: UK resolution requirements framework





**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SII). Risk-based on the left and leverage-based on the right. To be noted that the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

In terms of composition, a difference with the EU is that in the UK the external TLAC/MREL subordination requirement for bail-in firms shall be met with structural subordination i.e. with instruments issued at the Holding Company (Holdco) level, which are, from a structural point of view, subordinated to all other liabilities. As a consequence, the whole MREL stack is effectively subordinated, for banks with a bail-in resolution strategy. To note that, building societies can meet their MREL subordination

requirement by using contractual or statutory subordination.

For the leverage-based MREL/TLAC, in the UK, for O-SII with a bail-in resolution strategy, the requirement would be generally set at least at a level that is twice the applicable LR requirement or, for a G-SII, the higher between i) twice the applicable LR requirement or ii) 6.75% TEM (provided the institution is subject to the LR requirement in the first place).

<sup>(35)</sup> Unlike the EU where there is guided discretion combined with the presumption that after 9 months the M-MDA should be imposed, unless some market conditions allow to conclude otherwise.

In the US framework resolution requirements are set by the US TLAC Rule (36) which requires the G-SIBs to comply with an external TLAC (37), composed of Tier 1 capital and certain long-term debt instruments. It should be the greater of (i) 18% of the institution's TREA and (ii) 7.5% of the institution's total leverage exposure (different from the EU where it is 6.75%). As in the UK, in terms of composition, the subordination requirement shall be met with structural subordination.

In addition, the TLAC rule requires the G-SIBs to meet an external LTD requirement (38) targeting instruments of maturity exceeding 1 year. This is the greater of (i) 6% TREA plus the applicable G-SIB surcharge (i.e. the higher buffer resulting from Method 1 or Method 2 mentioned in the box: Comparison with main characteristics of UK and US risk-based frameworks) and (ii) 4.5% of the TEM. This is to make sure that an institution would not rely unduly on available own funds to meet its TLAC requirement.

In addition, G-SIBs must hold an external TLAC buffer on top of the external TLAC risk-weighted or leverage requirements. The TLAC risk-based buffer consists of 2.5% plus the G-SIB surcharge applicable to the institution and the CCyB (which so far was not yet activated). The

risk-based TLAC buffer must be composed solely of CET1 capital. The leverage-based TLAC buffer amounts to 2% and must be composed solely of Tier 1 capital. There is no buffer for the LTD requirement. Overall, a G-SIB would be subject to the lower of the external risk-based TLAC requirement (including the buffer) and the external leverage-based TLAC requirement (including the buffer) (39).

The MDA trigger is on top of the buffer requirement. Unlike in the EU (where it is discretionary) if a bank does not comply with its external TLAC requirement, restrictions on distributions apply automatically, such as dividend withholdings and limitations to discretionary bonus payments. However, the Federal Reserve Board may permit an institution that is not complying with its external TLAC requirement to make distributions if it determines that such distribution (including bonus payments) would not affect the safety and soundness of the institution.

Generally, with no equivalent to the MREL in the EU, and the application of TLAC and LTD requirement being limited to US G-SIBs or toptier US subsidiaries of foreign G-SIBs, there are no requirements for bail-inable resources for other banks.

Figure 10: US resolution requirements framework



**Note:** Stacks are drawn to reflect the situation of a large institution (typically G-SIB). Risk-based on the left and leverage-based on the right. Finally, the size of the layers in the bar charts are illustrative and thus are not indicative of their actual size.

<sup>(36) 12</sup> CFR §252.60 - §252.65.

<sup>(37) 12</sup> CFR 252.63.

<sup>(38) 12</sup> CFR §252.62.

<sup>(39) 12</sup> CFR §252.63 paragraph (c)(5)(i).

# 3. ANALYSIS OF PRACTICES ON MANAGEMENT BUFFERS

#### **KEY TAKEAWAYS OF THIS SECTION**



#### ANALYSIS OF PRACTICES ON MANAGEMENT BUFFERS

Institutions' practices on management buffers are well established across the EU, but with differences regarding the drivers that motivate institutions to hold additional capital above the regulatory requirements. Differences were also spotted in the level of management buffers across institutions and within the same institution across different stacks.

A key objective of the EBA survey was to better understand on top of which stacks management buffers are set. Overall, almost all institutions (92%) set at least one management buffer target, with larger institutions covering most stacks. Of the institutions with at least one management buffer target, 94% set a management buffer target on the risk-based CET1 stack. Many institutions also set targets on the risk-based TC and T1 stacks (84% and 61% respectively) and on the leverage ratio (55%). Among the gone concern stacks, institutions set management buffer targets mostly on TLAC % TREA (88%) and MREL % TREA (67%).

Figure 11: Banks with management buffer targets (as % of banks that set at least one MB target)

Stack	%	Stack	%
CET1 % TREA	94%	Leverage ratio	55%
T1 % TREA	61%	TLAC % TREA	88%
TC % TREA	84%	MREL % TREA	67%

The survey results show differences in the definition of management buffers (e.g. 'excess of the capital over requirements') that were applied by banks. However, there was a general tendency to compare the management buffer to the highest reference point in each regulatory stack on which the bank has defined a management buffer (e.g. P2G in the risk-based CET1 ratio). From the surveyed institutions with a non-zero P2G, two thirds (67%) expressed their management buffer target in the CET1 %

TREA above P2G, whereas one quarter (24%) of them reference the CBR.

About half of the surveyed institutions were disclosing their internal management buffer targets, either to signal the amount of excess capital to the market, to communicate the risk appetite of the bank, or due to peer pressure or investor requests and market pressure. Disclosure is more common for larger institutions.

In their responses institutions indicated that their management buffers were above their recovery plan trigger thresholds in approximately two thirds (70%) of cases, which may help prevent an activation of recovery plans.

In terms of calibration, nearly all institutions listed managerial considerations as a key methodology, closely followed by internal stress tests and the general idea of maintaining a margin above the most binding stack (above the highest regulatory reference point). An 'expectation that the supervisor has formulated' played a role in more than one third (39%) of the cases.

Institutions indicated that, in determining their management buffers, both internal/intrinsic motivations are important (e.g. management of unexpected risks and strategic/business opportunities) as well as external ones, both from supervisors/regulators (supervisory expectations or not to breach regulatory requirements) and other stakeholders (e.g. rating agencies, plans for future distributions or peer pressure).

Fewer than half of institutions distinguished between normal and stressed scenarios in setting their management buffers, which were mostly also institutions that set multiple (high and low) targets for a single stack. Almost all institutions reported that the size of the management buffer has varied over the past 5 years, providing as a main reason the changes in the underlying capital requirements (e.g. CCyB build-up/release, P2R changes).

The survey responses on the height of management buffer targets allow for a quantitative analysis by evaluating how they compare to the regulatory expectations (CBR, P2G etc.) and how they compare to the actual position of available resources on the relevant stacks. Importantly, for a single stack, a majority of institutions set different levels for their management buffer targets. For example, just for the risk-based CET1 ratio, 61% of institutions indicated having a high target, 73% a medium/ early-warning target, and 63% a low/hard limit (59% of institutions had more than one target for the risk-based CET1 ratio). In most cases this low/hard limit remained above the P2G. This practice of having multiple levels is also found to be relevant for the other stacks, meaning for example that G-SIIs which on average target seven stacks can have up to three targets for each (i.e.  $7 \times 3 = 21$  management buffer targets).

It can be observed (see table below) that for the risk-based CET1 ratio the average management buffer target was 2.4%, with an average surplus of 1.7% on top (i.e. amounting to a total headroom above P2G of 4.1%), while for the risk-based T1 and TC stacks a high management buffer target is less common. The average management buffer target set in the leverage ratio stack was significant as well at around 0.6% TEM. For the risk-based MREL stack, the management buffer target on average was at around 1% TREA (above CBR). The management buffer target on average set by G-SIIs for the risk-based TLAC stack was just below 1.8%. Further, it is to be noted that the average surpluses of available resources exceeded the management buffer targets by 1.5% or more in almost every stack (40).

<sup>(40)</sup> Non Systemically Important Institution (neither GSII nor OSII).

Figure 12: Resources and targets above highest reference point

Stack	Resources above ref. point	Target above ref. point	Stack	Resources above ref. point	Target above ref. point
CET1 % TREA	4.10%	2.40%	Leverage ratio	1.90%	0.60%
T1 % TREA	3.80%	1.00%	TLAC % TREA	3.30%	1.80%
TC % TREA	3.90%	1.00%	MREL % TREA	4.40%	1.00%

Regarding their lower management buffer targets (those that are hard limits), while some institutions put them below P2G, the weighted average of the hard limit for the entire sample was just above the P2G (or OLRR for LR). In contrast, for the leverage-based MREL ratio the weighted average early warning (and consequently the hard limit) target was set below the minimum requirement.

The high management buffer targets may be partially explained by the survey responses on institutions' perception of usability of management buffers. Most considered management buffers to be more usable than capital held to meet the CBR. Some institutions indicated they count on using P2G, if need be, while others practically considered P2G rather as a hard requirement in the context of the management buffer.

## 3.1 Survey results

38. The EBA examined institutions' practices on management buffers with a dedicated survey completed by 53 EU institutions and an industry roundtable meeting. The objective

was to better understand institution's practices on management buffers. The following subsections offer more detailed insights into the survey results.

#### **METHODOLOGY**



#### **MANAGEMENT BUFFER SURVEY**

The survey on management buffers was held in the course of 2023 and had a near-to-full

response rate. The sample was constituted as follows:

Figure 13: Survey sample - by size

Number of banks 8 28 17 53	By size	G-SIIs	O-SIIs	Non-SIIs	Total
	Number of banks	8	28	17	53

Figure 14: Survey sample - by resolution type

By resolution type	G-SIIs	Top Tier / Fished	Other	Total banks with MREL requirement
Number of banks	8	15	19	42

The survey covered 24 countries. The minimum coverage was of 1 bank per country and the maximum was of 7 banks. The survey, which can be found in a separate Annex, included 21 main questions and was organised into three sections, with Section 2 further divided into eight subsections. Section 1 focuses on institutions' definition of the concept of management buffer and whether they set at least one target for it. Section 2 asked the institutions which stacks they set management buffer targets on, the level of these targets, to which part of the stack they compare such targets to (e.g. the overall capital requirement (OCR) or P2G), interactions between targets

and ICAAP, disclosure and the build-up of resources for different stacks. This section also included questions on the methodology used by the bank to define the targets, if these refer to normal or stress conditions, the usability of resources and the drivers to set management buffer targets or to hold a surplus above them. Finally, Section 3 included questions on the interaction between management buffer targets and related concepts (e.g. Risk Appetite Framework (RAF), Risk Appetite Statement (RAS) and recovery plan).

The analysis in this section combines data from the survey, COREP and MREL reporting templates, all as of December 2022.

## 3.1.1 PREVALENCE AND CHARACTER OF MANAGEMENT BUFFERS

- 39. A key objective of the survey was to better understand on top of which stacks management buffers are set, their general rationale (managerial considerations or quantitative stress test) for doing so, and the difference in buffer target between normal and stress periods. Interaction with related concepts (RAF, RAS and recovery triggers) are examined, as well as the importance of possible drivers for the management buffer target (or excess), such as determination/reinforcement of P2G, changes in the regulatory framework, upcoming instrument disqualifications and strategic reasons.
- 40. The survey responses show that nearly all institutions (92%) (41) set at least one target for the management buffer. The

- average number of stacks involved is around 4 to 5, mostly relating to the going concern capital requirements. While larger institutions and G-SIIs often covered nearly all possible regulatory stacks (i.e. 7 or 8), smaller institutions and those that do not have subordination requirements tended to have far fewer management buffer targets. Generally, management buffers were inherent to the ICAAP process informing their management buffer needs.
- 41. Figure 15 shows that a higher number of institutions set a management buffer target in the going concern space. Both, in going and gone concern spaces, targets are more frequently set in the different stacks computed in terms of TREA. In particular, 94% of the institutions with at least one management buffer target, set a management buffer target on the

<sup>(41)</sup> To be noted that amongst the four institutions that did not have a management buffer, two mentioned that they are in the process of developing one.

CET1 as a percentage of TREA stack. Many institutions also set targets on TC and T1 capital as a percentage of TREA (84% and 61% of institutions, respectively) and on the leverage ratio (55% of institutions). Among the gone concern stacks, institutions set management buffer targets mostly on MREL as a percentage of TREA (67%). Almost all institutions subject to TLAC requirements set

- a management buffer target with respect to the TLAC as a percentage of TREA and half of them for TLAC as a percentage of TEM.
- 42. All banks that have a management buffer on leverage ratio also have a management buffer on risk-based CET1 ratio. The same observation applies for MREL and TLAC stacks.

Figure 15: Number of banks that set a management buffer target by stack – Full sample (53 banks)

Goin	g concern	Gon	e concern
Stack	%	Stack	%
CET1 % TREA	46 out of 49 (94%)	TLAC % TREA	7 out of 8 (88%)
T1 % TREA	30 out of 49 (61%)	TLAC % TEM	4 out of 8 (50%)
Leverage ratio	27 out of 49 (55%)	MREL % TREA	28 out of 42 (67%)
TC % TREA	41 out of 49 (84%)	Sub. MREL % TREA	12 out of 35 (34%)
		MREL % TEM	16 out of 42 (38%)
Other	10 out of 49 (20%)	Sub. MREL % TEM	9 out of 34 (26%)

**Note:** Banks that do not have a specific stack as a requirement have been excluded from the denominator. For example, only 42 institutions out of 53 have a MREL % TREA requirement. All of these 42 institutions have set at least one management buffer target, but only 28 out of 42 have set a target specifically on MREL % TREA. To be noted that for a few institutions it could only be determined that they could be subject to MREL or Subordination requirements, but due to lack of data on these institutions, they are excluded from the figures below.

43. While many of the institutions do not have a very clearly circumscribed definition of management buffers (e.g. 'excess of the capital over requirements') there is a tendency to express the management buffer as an internal target compared to the highest (or nearly highest) reference point in each regulatory stack for which the bank has defined a management buffer (42). Among the institutions that set a management buffer on the CET1 % TREA, 57% compared their CET1 target to the top of the OCR (43) plus

P2G, while 35% of institutions with a CET1 % TREA management buffer were comparing their management buffer targets only to the OCR (<sup>44</sup>). It is to be noted however that 40% of the 35% of institutions that took OCR as a reference point did not report a P2G (other than zero) in the supervisory reporting. When taking just the surveyed institutions with a non-zero P2G, 67% expressed their management buffer target in the CET1 % TREA above P2G, whereas 24% of them referenced CBR. For stacks where P2G did

<sup>(42)</sup> For the purpose of this report the 'highest regulatory reference point' in a stack is defined as the top of P2G for the risk-based own funds stacks, OLRR (+P2GLR) for the LR stack, top of CBR for risk-based MREL stack and the leverage-based MREL decision for the leverage-based MREL stack.

<sup>(43)</sup> The OCR comprises the Total SREP Capital Requirement (Pillar 1 and Pillar 2 Requirement) plus CBR (capital conservation buffer, CCyB and systemic buffers).

<sup>(44)</sup> No institutions referred to management buffer as above TSCR (P1R + P2R) and 9% referred to other types of measures to compare the management buffer.

- not apply (this in many cases holds for P2G in the LR at the reference date and the gone concern stacks), the management buffer target was typically set in comparison to the CBR (e.g. above TLAC/MREL) or the overall leverage ratio requirement (OLRR).
- Half of the surveyed institutions were disclosing their internal management buffer targets, either to signal the amount of excess capital to the market in order to communicate the risk appetite of the bank, or due to peer pressure, investor requests or market pressure. Most G-SIIs were disclosing their management buffer targets, whereas only around half of the O-SIIs and other banks did. The data did not show a correlation between the decision to disclose the management buffer targets and the size or surplus of an institution's management buffer (in terms of target above the required amount or the available resources above the target).

## 3.1.2 INSTITUTION'S CALIBRATION METHODS AND DRIVERS

45. Generally, institutions' management buffers were integrated in their RAF and determination of recovery plan indicator thresholds. Approximately, 30% of management buffer targets were set at the same level as the recovery target and

- 70% above them. Accordingly, the higher management buffer triggers appear to prevent an activation of the recovery plan.
- 46. In terms of calibration, nearly all institutions listed managerial considerations as a key factor, closely followed by internal stress tests and the general idea of maintaining a margin above the most binding stack (above the highest regulatory reference point). An 'Expectation that the supervisor has formulated' played a role in 39% of the cases.
- In determining whether to set management buffer targets, institutions indicated that both internal motivations are important (management of unexpected risks, strategic or business opportunities and links with the internal RAF), as well as external ones, both from supervisors and regulators (supervisory expectations (45), ease dialogue with the supervisor, sufficient buffer not to breach regulatory requirements or anticipation of regulatory changes) and other stakeholders (e.g. rating agencies, distributions considerations, peer pressure or show of strength and sustainability to the market). The box below provides a more detailed breakdown of drivers, which generally indicate no large difference between factors that drove institutions to set a high management buffer target versus drivers for a high surplus above the target.

<sup>(45)</sup> The SSM's ICAAP guide includes an expectation for a management buffer above regulatory and supervisory minima, while noting that such expectation does not set new minimum capital requirements above the existing legal minima. The SSM's ICAAP guide further states that although it is generally expected that management buffers will be larger than zero, in theory an institution may also be able to argue that, depending on the scenario assessed, a management buffer of zero would still allow it to sustainably follow its business model.

## **MORE INFO**

#### DRIVERS FOR MANAGEMENT BUFFER TARGETS VS FOR SURPLUSES ABOVE THE **TARGETS**

The survey requested institutions to rank about 10 pre-set drivers according to their importance in setting management buffers. It distinguished between drivers to set high management buffer targets versus drivers to set a high surplus above the management buffer target. The results of these questions are summarised in Figure 16 for drivers that were important in determining the management buffer target and Figure 17 for the drivers important in determining the surpluses above such target.

The left Y axis (via the bars) indicates how many institutions put various drivers in a first, second or third position. On the right Y axis (via the line) the drivers are ordered based on a ranking index that takes into account how many times each driver has been put in each position by the survey respondents (first, second, third and

so on), with higher positions weighting more. Anticipation of regulatory changes was ranked as the first and most important driver by 33% of respondents when determining management buffer targets and ranked most important driver by 18% of institutions when deciding to hold a surplus above such target. To be noted that among the reasons to hold a surplus above the target 'risk management reasons' and 'macroeconomic uncertainty' were also very common (46).

It can be observed that Figure 16 and Figure 17 are very similar, which means that there was not so much difference between factors driving institutions to set a high management buffer target versus factors driving a high surplus above target.

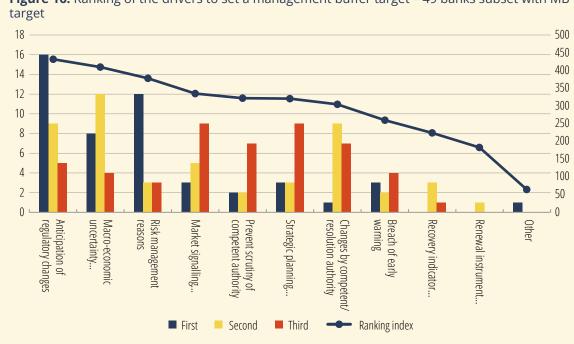
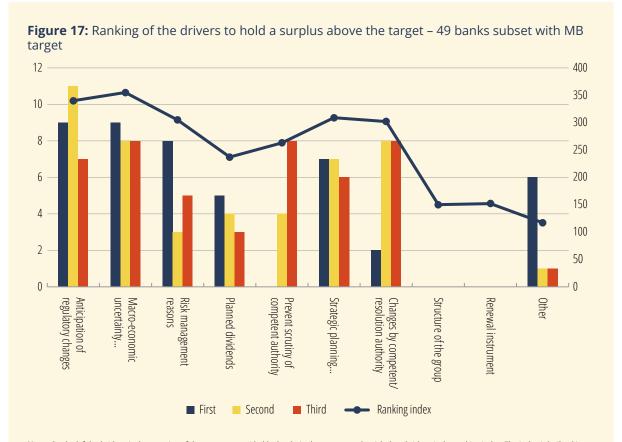


Figure 16: Ranking of the drivers to set a management buffer target – 49 banks subset with MB

(46) For a few institutions, regarding the MREL stacks, it is also important to look at renewal of instruments as a driver.



**Note:** On the left had side axis the counting of the answers provided by banks in the survey, on the right hand side axis the ranking index. The index is built taking into account how many times each driver has been put in each position by the survey respondents (first, second, third and so on), with higher positions weighting more. In this way, Anticipation of regulatory changes is the first driver (out of 10 possible drivers) for 9 banks (so 9\*10), second for 11 banks (11\*9), third for 7 banks (7\*8) and so on. The values are then summed up for each driver.

- 48. Most institutions (57%) did not distinguish between normal and stressed scenarios in setting their management buffers. Institutions that differentiated between normal and stressed scenarios usually set a target level for the management buffers, an early warning level below the target and an even lower hard limit. For institutions that do not differentiate between normal and stressed scenarios, the setting of one or multiple targets shows less of a pattern.
- 49. Almost all the institutions reported that the size of the management buffer has varied over the past 5 years, providing as the main reason the changes in the capital requirements, for example the release of P2G during COVID 19 (relaxation of capital composition) or the release of CCyB or SyRB. This is consistent with the fact that the

management buffer was generally expressed as the difference between a target and the highest point of capital demand (P2G for the risk-based CET1 ratio). In addition, other factors such as changes in expected economic outlook themselves may have contributed to changes in management buffer targets.

## 3.1.3 QUANTITATIVE ANALYSIS OF MANAGEMENT BUFFERS AND SURPLUS

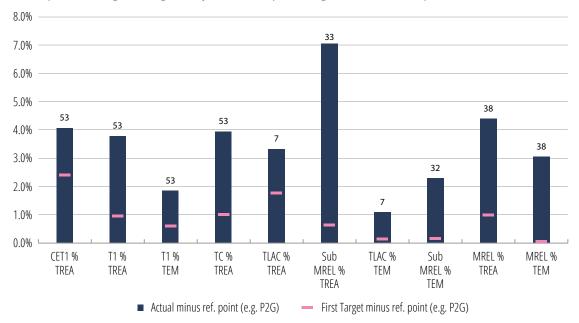
50. The survey responses on the height of management buffer targets allow for a quantitative analysis on how they compare to the regulatory requirements and expectations (compared to the highest reference point by each stack, such as CBR or P2G) and how they compare to their

actual position of available resources on the relevant stacks using supervisory reporting in reference to the December 2022 reference date and final MREL requirements (applicable as of 2024) (<sup>47</sup>).

51. Importantly, for a single stack a majority of institutions set multiple levels for their management buffer targets. For example, just for the risk-based CET1 ratio, 59% of institutions had more than one level. Considering all 46 institutions with at least

one target on CET1, 61%, 73%, and 63% of institutions had a target they characterised as a high target, medium/early warning target, low/hard limit, respectively. In most cases this low/hard limit remained above the P2G. This practice of having multiple levels is also found to be relevant for the other stacks, meaning that G-SIIs which on average targeted seven stacks can have up to three targets for each (i.e.  $7 \times 3 = 21$  management buffer targets).

**Figure 18:** Weighted averages of available resources (bar) and management buffer target (line) by stack compared to highest regulatory reference point (e.g. P2G) – Full sample (53 banks)



**Note:** Blue bars represent the weighted averages (weighted by TREA or TEM if risk-based or leverage based stack respectively) of available resources (the total value of own funds and eligible liabilities) above the highest regulatory reference points (P2G for risk-based own funds stacks, OLRR for the leverage ratio, TLAC minimum + CBR for risk-based TLAC, TLAC or MREL minimum for leverage-based TLAC and MREL stacks). Values above 0% mean that, on average, there is a surplus over highest regulatory reference point. The pink lines, inserted in each bar, are the weighted average management buffer targets. For this figure, for each institution the highest management buffer target has been selected between the first target (i.e. the highest one when the institution sets more than one), early warning (a value lower than the first target) and hard limit (a value lower than early warning and that in principle activates measures by banks to restore the management buffer). A line below 0% means that the target is below the highest regulatory reference point. The numbers above the stacks indicate the number of banks that are subject to the applicable requirement.

52. Figure 18 shows the weighted average of available supply of capital and, where appropriate, eligible liabilities (bar) and management buffer target (line) by stack compared to the relevant regulatory reference point in that stack. For this analysis, the relevant regulatory point is P2G for risk-

based own funds, OLRR for the LR, (final) MREL minimum plus CBR for the risk-based MREL stack and the minimum requirement (generally 6%) for the LR based MREL stack. Figure 18 plots the weighted averages for the full sample of 53 banks with COREP data, with the pink lines showing the highest applicable

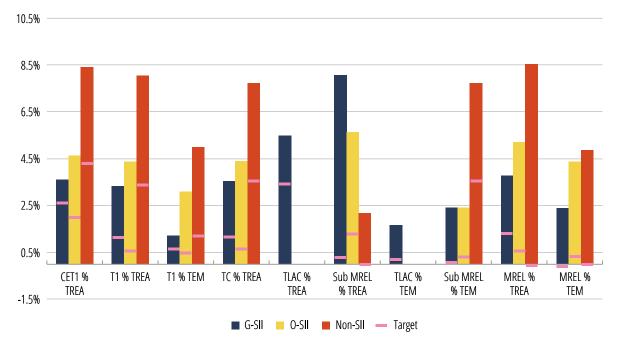
<sup>(47)</sup> Disclosure on these requirements is required from 2024 depending on the application of MREL requirements, see also EBA/ ITS/2020/06.

management buffer target (i.e. for some banks with no medium-term aim / high target the pink line represents their early warning threshold level or hard limit) compared to the above-mentioned regulatory reference points.

53. For the risk-based CET1 ratio the average management buffer target was 2.4%, with an average surplus of 1.7% on top (i.e. amounting to a total headroom above P2G of 4.1%), while for T1 and TC % TREA a high management buffer target is less common. The average management buffer target set in the leverage ratio stack is at around 0.5 % TEM. For the risk-based MREL stack,

the management buffer target on average (for the 38 institutions that are subject to this requirement) is at around 1% TREA (counting the institutions that choose to have no management buffer target for this stack at zero). However, for the leverage-based MREL stack the management buffer target on average is zero. The management buffer target on average set by G-SIIs for the risk-based TLAC stack is just below 2%. Further, when looking at the full sample, it is to be noted that the average surpluses of available own funds (blue bars) exceed the management buffer targets by 1.5% or more in almost every stack.

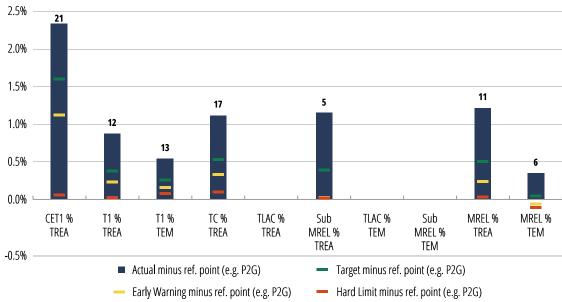
**Figure 19:** Weighted averages of available resources (bar) and management buffer target (line) by stack compared to highest regulatory reference point (e.g. P2G) – By institution size – Full sample (53 banks)



**Note:** See note on Figure 18 for a detailed explanation.

54. Breaking down the analysis by size, in Figure 19 it can be observed that larger institutions generally (apart from the risk-based subordinated MREL stack) have relatively lower available resources above the

regulatory requirements (bars). In terms of height of management buffer targets (pink lines) they are generally between O-SIIs and Non-SIIs.



**Figure 20:** Weighted averages of available resources (bar) and management buffer targets (lines) by stack compared to highest reference point (e.g. P2G) – Full sample: of which banks with three targets per stack

**Note:** Blue bars represent the weighted averages (weighted by TREA or TEM if risk-based or leverage based stack respectively) of available resources (the total value of own funds and eligible liabilities) above the highest regulatory reference points (P2G for risk-based own funds stacks, OLRR for the leverage ratio, TLAC minimum + CBR for risk-based TLAC, TLAC or MREL minimum for leverage-based TLAC and MREL stacks). Values above 0% mean that, on average, there is a surplus over highest regulatory reference point. Lines, inserted in each bar, are the weighted average management buffer targets, differentiating between the first target in green (i.e. the highest one when the institution sets more than one), early warning in yellow (a value lower than the first target) and hard limit in red (a value lower than early warning and that in principle activates measures by banks to restore the management buffer). A line below 0% means that the target is below the highest regulatory reference point for the relevant stack. The numbers above stacks indicate the number of banks that are subject to the applicable requirement and have 3 management buffer targets for the relevant stack.

- 55. Figure 20 considers only the institutions that provided all three different levels of management buffer target, with the green line indicating a high target / medium-term target, the yellow line indicating early warning target and a red line indicating a hard limit.. Of the institutions with at least one management buffer target, 43% indicated they have three levels for the risk-based CET1 ratio, whereas for the risk-based T1 ratio, the leverage ratio and risk-based TC ratio the 24%, 27% and 35%, respectively indicated having three levels. While some institutions put their hard (lowest) management buffer limit below P2G, as shown in the plot, the weighted average of the hard limit is just above the P2G (or OLRR for LR). In contrast, for the leverage-based MREL ratio it should be noted that the weighted average early warning (and consequently the hard limit) target was set below the minimum requirement.
- 56. Most of institutions have significant surpluses above even the highest of their targets, with 94% of institutions that claim this is currently the case with one or more stacks. These findings are in line with relevant research papers on capital and targets and buffers.
- 57. The high management buffer targets may be partially explained by the survey responses on institutions' perception of usability of management buffers. Most consider management buffers to be more usable than the capital for the CBR. P2G is less clearcut, as some institutions count on using it, if need be, while others practically consider it more a hard requirement in the context of the management buffer. Putting the management buffer and high surplus on top of CBR+P2G, as many institutions do, might help avoid potential breach of P2G.

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