

Supervisory capital policy Pillar 1 and Pillar 2 capital overlays

30th October, 2023

Executive Summary

The bank capital requirements across the Pillar 1 and Pillar 2 frameworks are constructed as being complementary. However, when looking at the capital framework holistically with all its components, it becomes evident that capital is generally additive and in parts conflicting. This is as the regulatory policies deprioritised the desire for a risk-based and sensitive framework for more absolute capital at the aftermath of the financial crisis. In other words, the rush to increase capital in the system without counterbalancing the framework with risk sensitivity rendered the framework disproportionate with the risk of being unintentionally ineffective in important aspects.

The total supervisory capital stacks, including all Pillar 2 requirements and other buffers are close to the same size as the Pillar 1 requirement. The combined requirements amplify the impact of RWA and Pillar 1 capital increases, which can lead to material increases in capital requirements and deterioration of actual capital ratios, which is further exacerbated when internal costs relating to administration of the requirements, including management buffers are also considered. Evidence suggests that banks have a relevant sensitivity to Pillar 2 requirements which leads directly to adjusting their balance sheets and risk exposure. The adjustment to business lines is driven by the need to maintain profitability over time when facing higher overall capital requirements.

The final Basel III post-crisis reform package is currently being transposed in the EU and UK, with expected implementation dates 1st January 2025 and 1st July 2025 respectively. In the EU, it is expected that implementing the revisions in CRR3 will lead to 12.8% increase in risk-based RWAs for large (Group 1) EU banks. Similarly, the PRA expects the Pillar 1 RWAs to increase by 13% in the UK. In the absence of new risks that should be captured via Pillar 2 requirements, the material increase in Pillar 1 requirements should be offset by a reduction in additional supervisory capital requirements that address paucities in the Pillar 1 risk capture. The UK PRA takes this into account in its cost-benefit analysis, by suggesting that Pillar 2 reductions will offset the 13% RWA impact to less than 5% increase in overall supervisory capital requirements.

This is a critical observation, as the current Pillar 2 framework is established to count for the paucities in risk coverage under the existing Pillar 1 framework. Therefore, many risks will be covered twice, unless the Pillar 2 framework is thoroughly assessed against the revised Pillar 1 and amended to mitigate capital overlays. This is crucially important in ensuring that capital remain commensurate to risks.

Based on the analysis in this report, there is a need to address the significant reduction in use of internal models across the framework, impact of the output floor, as well as the increased risk weights, the model floor parameters applied and the stress calibration of many of the Pillar 1 risk weights. To address the changes appropriately, it will be important to do a fundamental review of the overall Pillar 2 framework. A, risk class level review will not be sufficient, given that the combination of changes to the Pillar 1 framework need to be considered at overall RWA level due to the output floor, as well as together with the leverage ratio-based P2 charges.

At risk type-level, the key issues across the Pillar 1 changes to risk capture that should be considered in the Pillar 2 reviews are highlighted in this paper. Most notably, The legislative proposals in the EU and UK both would implement the SA-OR without the ILM component, whereby the BIC determines the capital charge. This results in an aggregate increase of appr. 20% in operational risk RWAs mainly for large banks that are most

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likely to also be subject to P2 charges due to the marginal coefficient, or size-based multiplier in the BIC. When the Pillar 2 requirements for operational risk are revised, it is important to capture the increase in the Pillar 1 charges. The P2 framework should also consider the updated operational risk management guidelines as well as improvements banks have made to mitigate potential future operational losses for example by recognising the use of insurance policies as risk mitigants. Notwithstanding this, this paper also highlights other areas where potential capital overlays can occur, and makes more detailed recommendations.

Separately to the evolution of the Pillar 1 framework, this paper also addresses the inherent complexities and overlays in the capital buffer framework. The current buffer structure has conflicting objectives and methodical overlaps, and has led to situations when supervisors cannot encourage banks to release capital buffers at times of stress. Concerns are also raised regarding the MDA restrictions and how the buffer structure interacts with them. Setting the MDA trigger points too high may lead to systemic fragility and loss of banks' ability to provide financing when it is most needed.

Specifically, the complexity of micro and macroprudential capital stacks in some jurisdictions within the EEA/EU may lead to overlaps in risk coverage and methodologies applied across the standards, particularly as there are expected to be overlaps between P2G and (some of the) macroprudential buffers. Coherence of these buffer requirements should be carefully assessed. It is also important to look at the combination of buffers and other macroprudential measures that impact the Pillar 1 RWAs, and how these interact across Europe. Cross-border banks are likely to be charged multiple times for the same risks due to the combination of country-specific macroprudential RWA floors and consolidated level P2R, P2G and systemic risk measures. AFME recommends that policymakers and supervisory authorities revisit the macroprudential framework and the tools utilised (especially the appropriateness of stress tests) in light of the positive-neutral countercyclical capital buffers, Pillar 2 guidance, as well as the systemic risks related to size and interconnectedness already included in the Pillar 2 requirements framework. Alternatively, systemic risks that are addressed by the macroprudential tools should be carved out from the Pillar 2 framework.

Finally, AFME encourages the supervisory authorities to provide more granularity within the SREP documents and to specify the assessment methodology for sub-categories that contribute to the overall risk category (e.g. splits within risk types for different elements of the trading book). For the upcoming Pillar 2 reviews, the key objectives should be:

- Greater transparency of how P2 requirements and guidance are set;
- Maintaining overall regulatory capital neutrality;
- Guidance should be provided on how the change in Pillar 1 and consequent Pillar 2 updates should be included in bank capital plans during the transition period before the updated Pillar 2 methodologies are completed in 2024; and
- The process should have inbuilt granularity in the feedback process, when Pillar 2 decisions are made by supervisors. This feedback should be consistent across firms and provide all information that resulted in changes to Pillar 2 outcomes, whether qualitative or quantitative.

Further to these key issues highlighted in this section, recommendations are made throughout sections four and five of this paper. A list of all recommendations can be found in Annex 5.

Both the ECB's SSM and the UK PRA are planning to review their respective Pillar 2 methodologies in 2024 to address regulatory overlaps before the CRR3/Basel 3.1 go-live date of January 2025. AFME encourages these reviews to be holistic and commence as soon as possible. It is important that there is clarity well in advance of the 2025 implementation timelines, with updates required to the related supervisory policies which firms will also need to embed into their SREP / ICAAP processes that run over multi-year horizons and over the implementation period.

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1. Overview

This note describes the implications of the changes to the Pillar 1 (P1) risk-weighting framework resulting from implementation of the final Basel III package, as set out in the Commission's and PRA's proposals, for the Pillar 2 (P2) framework.

The key issues this note addresses are four-fold. Firstly, the paper summarises the origins of the Pillar 2 concept, in particular in relation to the other pillars introduced under the Basel Accords. Secondly, the paper takes stock of the capital definitions applied, risks covered and assessment methodologies under each pillar, where P1 is analysed as if Basel 3 reforms were implemented. Thirdly, we define where the capital buffer structures, in combination of the revised P1 and the current P2 frameworks may result in overlays or where the combined capital stacks and MDA triggers may lead to undesired complexity. Finally, we identify overlays that might lead to overconsumption of capital, and which adjustments would be needed to avoid undue overlays that reduce the efficiency of capital allocation. The assessment spans across the two major supervisory and regulatory jurisdictions in Europe, i.e. the Single Supervisory Mechanism and UK Prudential Regulation Authority.

It is noted that Pillar 2 comprises of a multitude of supervisory powers and requirements. For the sake of this note we focus on commonly applied Pillar 2 methodologies that aim at assessing capital adequacy either via bank internal assessment requirements or publicly known supervisory add-ons.

It is also noted that we do not include BRRD requirements in the assessment.

2. Introduction to the Basel capital framework

The Basel framework, also known as the Basel Accords, is a set of international banking regulations and standards developed by the Basel Committee on Banking Supervision (BCBS). The framework is designed to ensure that banks maintain adequate capital levels to absorb potential losses arising from credit, market, and operational risks they face in their operations.

There have been three major iterations of the Basel framework:

- Basel I: The original Basel Accord was introduced in 1988 and focused primarily on credit risk. It required banks to hold a minimum capital amount of 8% of their risk-weighted assets, with a specific weight assigned to each asset class based on its perceived riskiness.
- Basel II: Released in 2004, Basel II was a more comprehensive framework that expanded the risk categories to include credit risk, market risk, and operational risk. It allowed banks to use their risk management systems and internal models to determine their capital requirements, subject to regulatory approval.
- Basel III: After the global financial crisis (GFC) of 2008, the BCBS developed Basel III, which aimed to strengthen the banking sector further and increase its resilience to economic downturns. Basel III introduced stricter capital requirements, including a higher minimum common equity capital ratio, additional capital buffers, and leverage ratios. It also introduced liquidity requirements and enhanced risk management standards.

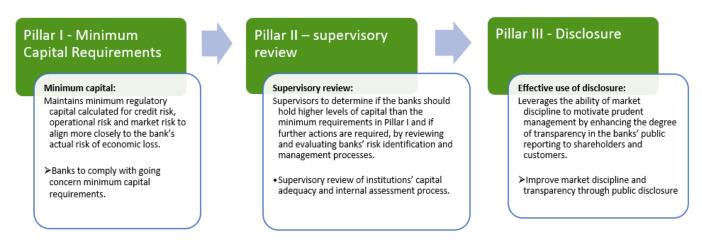
The implementation of Basel II accord in 2007 introduced the concept of Pillar 2 capital requirements for banks.

The updates to Basel Accords formalise a range of supervisory tools available for regulators to tackle the paucities in the Pillar 1 framework and to address bank specific concerns¹. These include legal provisions for supervisors to for example: (1) intensify monitoring, (2) restrict the payment of dividends, (3) require the

¹ See Annex I for details.

preparation and implementation of a satisfactory capital-adequacy restoration plan, and (4) require the bank to raise additional capital immediately at supervisory discretion.

Table 1: Three pillars of the BCBS framework



The evolution of Pillar 2 capital requirements has been influenced by a range of factors, including structural changes, (e.g. establishment of European Supervisory Agencies (ESA), the Single Supervisory Mechanism (SSM) and UKs Prudential Regulation Authority (PRA)), regulatory developments, market developments, and lessons learned from the GFC. Other factors that have influenced the evolution of Pillar 2 capital requirements include the increasing complexity of banking activities, new risks (e.g. ESG, cyber), advances in risk measurement and management techniques, and the growing range of supervisory tools.

Separately, the Basel III reforms introduced more stringent capital conservation and countercyclical buffer requirements, which aim to ensure that banks have sufficient capital to absorb losses during periods of stress. In addition, the reforms in Europe introduced new capital buffers, the systemic risk and systemic institution buffers, which are designed to address the risks associated with macroprudential risks and systemically important banks not captured by the Global Systemically Important Institution definition.

3. Comparison of own funds and capital definition

This section of the paper describes the capital definition for Pillar 1, Pillar 2 and the regulatory buffers in terms of capital quality. It also summarises why clear definitions matter to banks, and why avoidance of excessive overlays or duplicative requirements can negatively impact banks and by extension the broader economy.

3.1. Pillar 1 capital

Own funds eligible for regulatory purposes are defined under the Basel standard and implemented accordingly in the regions to ensure ability to absorb losses. In Europe, own funds are broadly defined in the Capital Requirement Regulation (Regulation (EU) No 575/2013, Articles 25 to 91) and further iterated in the Regulatory Technical Standards published by the EBA2. In the UK, the CRR rules regarding own funds have been fully (including the Level 2 instruments by the EBA) on-shored as part of the Brexit deal (retained EU law).

Tier 1 capital represents a bank's core capital and consists of two components:

² https://www.eba.europa.eu/regulation-and-policy/own-funds/draft-regulatory-technical-standards-on-own-funds

- **Common Equity Tier 1** (CET1) Capital: It includes common shares, retained earnings, and other comprehensive income. CET1 capital is the highest quality capital as it absorbs losses without triggering liquidation.
- Additional Tier 1 (AT1) Capital: It comprises instruments that provide additional loss absorption capacity, such as perpetual non-cumulative preference shares or contingent convertible securities (CoCos). AT1 capital is less permanent than CET1 capital but still contributes to a bank's overall capital strength.

Tier 2 capital represents supplementary capital and includes items such as subordinated debt, hybrid capital instruments, and loan loss reserves. Tier 2 capital provides a secondary level of loss absorption after Tier 1 capital.

The minimum Pillar 1 requirements defined in Article 92 of the CRR impose a minimum CET1 capital ratio of 4.5% of a bank's total risk exposure amount (TREA, formerly risk weighted assets (RWA)), a Tier 1 (the sum of CET1 and AT 1) capital ratio of 6% of RWAs and a total capital ratio (the sum of T1 and T2) of 8% of RWAs.

3.2. Pillar 2 capital

While the capital instruments used for meeting Pillar 1 and 2 requirements are the same, the Pillar 2 view is based on the economic exposure rather than a point in time ratio of capital to risk-weighted assets applied under the P1 framework. Banks are required to hold Pillar 2 capital to mitigate against risks that are not sufficiently covered by Pillar 1 capital requirements. Pillar 2 capital is also intended to provide a buffer against macroeconomic and other external shocks that may affect a bank's financial performance, also in a forward looking basis.

Broadly speaking, the Pillar 2 framework is divided into two components, the amount of capital supervisors require banks to have above the Pillar 1 called the Pillar 2 requirement (P2R in the EU and P2A in the UK) and the additional supervisory buffer that supervisors expect banks to hold in addition to the P1 and the P2 requirements. The P2 guidance as implemented in the EU (P2G) and the UK (P2B) is not a legally binding requirement, but supervisors expect banks to operate above the set guidance during normal times.

The capital eligible to be used to cover Pillar 2 risks is defined in the CRD 5 Article 104a and supervisory publications (both in the EU and UK). Until end of 2019, P2R and P2A had to be fulfilled with CET1. However, the 'quick fix' changes in the aftermath of the global pandemic to the CRD resulted in broader acceptance of capital instruments for the purposes of meeting the P2R in Europe³ and the UK. The additional own funds requirement imposed by the competent authority under point (a) of Article 104(1) with own funds needs to satisfy the following conditions:

- (a) at least three quarters of the additional own funds requirement shall be met with Tier 1 capital;
- (b) at least three quarters of the Tier 1 capital referred to in point (a) shall be composed of Common Equity Tier 1 capital (overall 56.25% CET1).

3.3. Other Capital buffers

There are five separate risk-weighted capital buffers that constitute the combined buffer requirement. The capital buffers are aimed at strengthening the going-concern loss absorbency of the banking system, with each having specific objectives. The capital conservation buffer (CCoB) of 2.5% of RWAs is a constant capital cushion above risk-weighted minimum requirements.

The countercyclical capital buffer (CCyB) specifically is intended to make the banking sector resilient in the face of systemic risks associated with the credit cycle. The idea behind the CCyB is to increase the loss-

 $^{^{3}\,\}underline{\text{https://www.lazardassetmanagement.com/docs/-m0-/121904/FocusOnTheAT1MarketPart2_LazardInvestmentFocus_en.pdf}$

absorbing capacity of banks during good times so that there is capacity that can be released at times of stress. The maximum CCyB capital buffer is 2.5%⁴. It targets cyclical systemic risks associated with credit growth and is designed to be released when the credit cycle turns.

The buffers for G-SIIs and other systemically important institutions (O-SIIs) target structural systemic risk by reducing the "too-big-to-fail" status of systemically important institutions. Under the FSB methodology⁵, systematically important institutions are allocated to buffer buckets annually (highest bucket 3.5%)⁶.

The systemic risk buffer (SyRB) is not part of the Basel buffer framework. It was introduced in the European banking regulation to address systemic risks not already covered by macroprudential requirements in the Pillar 1 or by CCoB, CCyB and the G-SII/O-SII buffers. In addition to being applicable to either the entire or a subset of the banking sector, SyRB can be applied to total RWAs or to a subset of risk-weighted exposures.

Other than CCoB and G-SIIs surcharge, macro-prudential capital buffers are set by the relevant national authority independently.

In the aftermath of the pandemic, concerns have been raised about the usability of the macroprudential capital buffers, and the international regulatory community has started a review of the framework in order to make it more useful at times of stress⁷.

4. Risk coverage

This section describes the Pillar 1, Pillar 2 and capital buffer frameworks from a risk coverage viewpoint. The section describes the key components of the risk assessment and capital calculation methodologies, and concludes with a summary of where the frameworks overlap and risks can be double-counted for, unless revised to accommodate for example for the substantial changes to the Pillar 1 framework and evolution of methodologies under the macroprudential framework.

4.1. Pillar 1

Pillar 1 establishes minimum capital requirements that banks must maintain to support their risk-taking activities. The risk coverage has been significantly enhanced by the updated Basel III accord to be implemented in the EU and UK in 2025. This is a critical observation, as the current Pillar 2 framework is established to count for the paucities in risk coverage under the existing Pillar 1 framework, and therefore will duplicate risks substantially when the risk coverage of the Pillar 1 standard improves.

In terms of RWAs, according to the latest EBA Basel monitoring report⁸ the new Pillar 1 framework will increase RWAs when all EU-specific adjustments are made by 12.8 % for large banks, and by 17.1 % for EU G-SIIs that are also subject to SSM Pillar 2 requirements and all applicable buffers. For largest institutions, the key components that drive up the RWAs in EBA's assessment are the output floor, market risk, operational

⁴ In the EU that is Title VII Chapter 4 of the CRD IV Articles 133 – 134 and CRR Article 458, and in the UK the domestic equivalent. The capital eligible to be used for macroprudential purposes consists of <u>CET1 instruments only</u>, and is meant to provide a buffer against macroeconomic and systemic shocks.

⁵FSB's G-SIB framework: https://www.bis.org/bcbs/gsib/

⁶ In the EU, the own funds required to cushion the system against risks posed by large banks is included in the CRD Article 131. It has to consist of <u>CET1 capital only</u>, similarly to the other non-supervisory capital buffers mandated by the Basel Committee.

⁷ See for example: Bank of England: https://www.bankofengland.co.uk/speech/2022/april/sam-woods-speaking-at-city-week-2022-developments-in-prudential-regulation-in-the-uk, and ECB: https://www.ecb.europa.eu/pub/financial-stability/macroprudential-bulletin/html/ecb.mpbu202010_1~01c4f1a5f4.en.html#toc7
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https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Reports/2022/Basel%20III%20monitoring%20report/1039929/Annex%20%20EU%20specific%20analysis.pdf

risk, credit risk and CVA. The increase in RWAs is not just due to more conservative calibration of the framework, but also due to increased risk coverage in areas where weaknesses were observed after the GFC.

The risks covered by the new Pillar 1 framework, focusing on the enhancements made in the Basel III final rules are described below:

1. Output floor

The output floor (OF) is a measure to reduce unwarranted variability in RWAs observed across different banks when using internal models compared to similar portfolios measured under the SA. The OF will be phased in over five years, resulting in a floor of 72.5% for internally modelled RWAs, based on RWAs calculated on standardised approaches only. The OF is the main contributor to the increase in RWAs under the revised framework, resulting in a significant increase in RWAs for the largest banks in the UK and EU.

In terms of Pillar 2 overlays, the output floor will interact with multiple areas of the existing P2 framework, as the capital benefits of internal models are reduced by the floor to maximum of 72.5% of the aggregate SA-based RWAs.

One of the key areas where implementation of the OF can lead to duplicative capital charges is the use of floored RWAs as the basis for Pillar 2 requirements/buffers, which amplifies the effect of the OF. In the EU and UK, the legislative proposals envisage that the floored RWAs are the basis of the full regulatory capital stack, including Pillar 2 requirements and regulatory capital buffers. This is not described in the Basel Accord, which only applies the floor to P1 stack at a consolidated level. Secondly, the P2 requirements include model risk, and applying the floored RWAs (instead of the modelled RWAs) to the Pillar 2 stack will lead to double-counting of model risk. the OF reduces model risk at an aggregate level, particularly for banks to which it becomes a binding constraint. In other words, when banks' internal models produce an aggregate RWA outcome that is lower than the 72.5% SA floor. **Accordingly, the P2 model risk add-on should be abolished or reduced.**

Thirdly, the BCBS considers applying the floor at a consolidated level only, while the UK and EU frameworks will in some cases result in applying the floor at an unconsolidated level. By design, application of the OF at lower consolidation levels drives up capital required at the group level. In view of the Banking Union, consolidated application should be prioritised, and respective adjustments made.

Fourthly, the BCBS, SSM and UK PRA have been increasingly focusing on risks stemming from non-bank financial intermediation (NBFI) and the risks that these activities pose on regulated banks should large NBFIs fail. This concern manifests itself in increased P2 focus on leveraged finance through derivatives and secured financing transactions (SFTs) in support of highly leveraged clients, with implementation of the P2 leverage ratio requirement and contingent leverage add-ons⁹.

The new P1 framework has a significant impact on the RWAs applied to such transactions, therefore capitalising more risk under the P1 framework. For SFTs, the SA-CR risk weights that underpin the SA-CCR used for the leverage ratio calculation are conservative and not commensurate to the short-term maturity and quality of collateral backing these low-risk transactions. Similarly, for derivative contracts, SA-CR risk weights do not reflect that counterparty downgrade risk is captured by the CVA risk framework and thus the risk weights duplicate capital charges across these parts of the Basel framework. Thus, the new leveraged finance related P2 Leverage Ratio charges should be reviewed in light of the high capital consumption and risk coverage for these transactions under the revised P1 framework.

⁹ See for example PRA PS5/23: https://www.bankofengland.co.uk/prudential-regulation/publication/2023/may/risks-from-contingent-leverage#:~:text=1.13%20The%20PRA%20considers%20that.material%20to%20a%20firm's%20business.

¹º Based on industry quantitative impact studies, the risk weights are several times higher than under the current modelled approach. The SA-CR risk weights are determined by Articles 120 and 121 for rated and unrated exposures, without maturity adjustment for SFTs similar to under the F-IRB under Article 162.

Finally, there are specific risk categories to which the output floor, due to the conservativeness of the SA risk weights, will lead to higher distortions in terms of the cost of capital when calculated on the floored approach or according to internally modelled capital requirements than in other areas. These areas include for example retail residential mortgages, corporate lending and securitisations¹¹.

AFME recommends offsetting model risk P2 charges against any OF uplift above modelled approach outputs, as well as reviewing the overlay impacts of applying the OF to the full capital stack.

Market Risk

The internal models framework under Basel 2 for market risk has relied on the Value at Risk (VaR) measure, which measures the potential loss in the value of a portfolio, based generally on historical data series. The assigned confidence interval of 99% (the loss that is likely to be exceeded only 1% of the time) was assigned to the total trading book, across all desks and asset classes.

To address the weaknesses in the internal models approach (IMA) approach unearthed during the financial crisis, the Basel 2.5 reforms revised the framework to include requirements for banks to hold capital also against default risk and ratings migration risk for credit products¹². The reforms also required banks to calculate an additional value-at-risk capital charge calibrated to stressed market conditions ("stressed VaR"). Separately, to address the sub-prime risks, Basel 2.5 removed most securitisation exposures from internal models and, instead, required them to be treated as if held in the banking book. However, the Basel 2.5 was largely seen as a stop-gap measure, to be superseded by a more robust standard.

The Fundamental Review of the Trading Book (FRTB) replaces the Basel 2.5 framework, which is the basis for the additional risk capture in the current Pillar 2 framework. The implementation of the FRTB will materially adjust the P1 framework, with many supervisory concerns being addressed within P1, such as model approvals at desk level, risk factor liquidity and modellability, as well as correlations across desks and liquidity horizons. These changes increase capital requirements for banks with market making activities, with longstanding BCBS and industry study averages indicating around 40 – 60% increase in RWAs, assuming current model approvals. This is unlikely to be the case, and the SSM estimates¹³ for example that only appr. 40% of banks currently using models will continue to do so under the FRTB. Furthermore, roughly half of these banks will only include a subset of desks under IMA. In this context, it is also important to highlight that the new SA will approximately double the RWA consumption compared to the current SA on aggregate basis. Further examples of potential duplicative areas are provided in the table 2 below. AFME considers that these areas should be carefully considered in the review of the SREP assessment.

Table 2: Overview of market risk methodologies

Concept/ exposure	Methods available under the new market risk standards	Change in available methods relative to current market risk standard
Internal models risk measure	Expected shortfall: A measure of the average of all potential losses exceeding a confidence level (97.5%), which makes up for VaR's shortcomings in capturing the risk of extreme losses (i.e. tail risk). Limits diversification benefits by equally weighting an "unconstrained" bank-wide ES charge with diversification benefit recognised across all risk classes; and a constrained partial ES charges – one for each of the broad regulatory risk classes added up	Several weaknesses with the current VaR-based framework. A measure of the worst expected loss over a 10-day liquidity horizon up to a pre-defined confidence level (no extreme tail risk capture). Additionally, permits unrestrained diversification benefits.

¹¹ Based on industry QIS analyses, available for regulatory authorities upon request. Key industry positions can be accessed via AFME CRR3 positions: https://www.afme.eu/key-issues/crr3

Basel explanatory note: https://www.bis.org/bcbs/publ/d352_note.pdf

¹³ https://www.bankingsupervision.europa.eu/press/publications/newsletter/2020/html/ssm.nl200212_2.en.html

	as a simple sum with no cross-risk class diversification benefit recognised.	
Inability to capture the risk of market illiquidity	Specific liquidity horizons (10 – 120 days) for all major risk factors are applied to address the concentration and liquidity risks of trading positions that are less liquid. The liquidity horizon is the time stipulated in the rules for a transaction to execute in a stressed market condition without impacting the price of the hedging instrument. Furthermore, the calculation of the capital charge does not allow for correlation across the LH buckets.	Basel 2.5 framework is based on the assumption that individual banks can exit or hedge their trading book exposures over a 10-day period without affecting market prices. Pillar 2 capital often takes into account this weakness in the current standard.
Use and validation of internal models Model approval/removal determined at the trading desk level. The FRTB also introduces desk level backtesting and profit and loss attribution requirements to ensure risk are adequately captured and that poorly performing models not used for regulatory capital purposes. Failing desks will capitalise risk based on the standardised approach. FRTB also includes a stringent profit and loss attribution test, which ensures that the risk model captures all risks also impacting the profit and loss of the trading desk, and underperforming models are		Model approval/removal determined on a bank-wide basis. Model approval processes were poorly positioned to deny or remove approval for trading desks that fail to capture risks adequately.
Risk factor modellability	Separate, more stringent capital requirements for risks not appropriate for modelling ("non-modellable risk factors" or NMRFs), as well as a criteria for risk factor eligibility. These metrics ensure that banks can only model risks that they have adequate data for. FRTB also establishes stringent and operationally complex standards for equity investments in funds business, whereby banks need to better understand the underlying exposures of the funds, to be able to use internal models or the more advanced standardised approach methods. The rules also contain a conservative fallback approach.	Risk factor modellability criteria is not developed and there are no incremental capital charges for poor data quality underpinning bank internal models.
Default risk charge	The simplified default risk charge is designed to capture 'jump-to-default-risk', i.e. the loss that would be suffered if the issuer were to default. The default risk charge is calculated for every instrument separately and is a function of the face (notional) amount, the market value of the instrument, and the Loss Given Default (LGD) of the underlying bond, CDS or equity. As a further constraint, the DRC places limitations on the types of risk factors and correlations that can be used within the model.	The incremental risk charge designed to capture migration and default risk for CDS and bond positions. It was observed that complex IRC models were a large source of variability in banks RWAs for market risk.
Standardised approach	A risk-sensitivity driven method, capturing delta, vega and curvature risks and losses banks could suffer under a defined stress scenario. It also includes a default risk charge and a residual risk add-on for exotic positions for which the sensitivities-based method does not capture risk appropriately.	Risk measurement is based on exposure-by-exposure building block approach, which is insufficiently risk sensitive for more complex trading activities. It is not a credible fall-back to internal models, should they fail.
Trading and banking book boundary	A defined boundary for instruments to be assigned in either trading or banking books, including a clear re-classification rules and capital surcharge to avoid regulatory arbitrage and supervisory powers and reporting requirements to enforce appropriate designation.	Boundary is based on intent to trade, a subjective criterion made difficult to enforce by the lack of sufficient



Source, AFME

In addition to the Basel rules, the UK and EU supervisors have added Risk not in VaR (RNIV) and Risk not in Model Engines (RNIME) components to the current IMA framework. These components and the risk coverage within them needs to be reviewed as part of the supervisory implementation process, as nearly all risks intended to be captured under the RNIV and RNIME frameworks will transition to the FRTB RWA calculations.

The Basel 2.5 standard is the basis for the current P2 framework for market risk, and considering the above, it is clear that the P2 methodology and risk indicators need to be carefully reviewed and adjusted to take account of the changes in P1 framework and avoid excessive capital overlays. This is particularly relevant to illiquidity risks where the revised framework captures the risks far better than the current framework.

In addition, many of the metrics for example in the SSM supervisory manual will need to be reviewed as the risk capture of the P1 framework and the relative RWA consumption of the new market risk framework versus the rest of the P1 framework increases. For example, the manual refers to materiality and proportion of capital and assets in the trading book vs total capital/assets of the bank as key risk indicators. Similarly, application of the desk level P1 calculation, combined with profit and loss attribution and risk factor modellability tests will render some of the SSM indicators such as the correlation metric and concerns regarding profit and loss attribution within the risk models obsolete.

Considering that many of the SSM's current metrics relate to the relative size of the trading operation and counterparties to the activity, potential overlays with the systemic risk buffer (G-SII and O-SII) framework should be assessed.

3. Operational Risk

The new operational risk framework removes all existing approaches to calculate operational risk RWAs, including the advanced measurement approaches (internal models). The new standard approach (SA-OR) calculates the capital requirements through two variables - the Business Indicator Component (BIC) and the Internal Loss Multiplier (ILM). However, the Basel framework also includes a national discretion that allows jurisdictions to calculate the capital requirements as a function of the BIC, by setting the ILM at 1.

The legislative proposals in the EU and UK both would implement the SA-OR without the ILM component, whereby the BIC determines the capital charge. This results in an aggregate increase of appr. 20% in operational risk RWAs mainly for large banks that are most likely to also be subject to P2 charges due to the marginal coefficient, or size-based multiplier in the BIC. When the Pillar 2 requirements for operational risk are revised, it is important to capture the increase in the Pillar 1 charges. The P2 framework should also consider the updated operational risk management guidelines as well as improvements banks have made to mitigate potential future operational losses for example by recognising the use of insurance policies as risk mitigants.

4. Credit Risk:

The aim of a credit risk P1 framework is to ensure that banks maintain adequate capital levels to absorb potential, unexpected losses arising from credit risk exposure. The framework promotes prudent risk management practices and encourages banks to assess and monitor their credit risk exposure, implement effective risk management strategies, and allocate appropriate capital based on the level of risk associated with their lending activities.

There are two main internal ratings-based (IRB) approaches in the Basel III standard: Foundation IRB (F-IRB) and Advanced IRB (A-IRB). The revised IRB framework removes the use of the A-IRB approach for asset

classes that the regulators deem cannot be modelled in a robust and prudent manner. These include exposures to large and mid-sized corporates, as well as banks and other financial institutions. As a result, banks with supervisory approval for these portfolios will use the F-IRB approach, which removes the two important sources of RWA variability as it applies fixed values to the LGD and EAD parameters. The revised IRB framework also introduces minimum "floor" values for bank-estimated IRB parameters that are used as inputs for the calculation of RWA. These include PD floors for both the F-IRB and A-IRB approaches, and LGD and EAD floors for the A-IRB approach. In some cases, these floors consist of recalibrated values of the existing Basel II floors. In other cases, the floors represent new constraints for banks' IRB models.

The loss of EAD and LGD modelling and flooring the inputs for a large proportion of the credit portfolios will increase conservatism in the RWA calculations, and this should be taken into account in P2. Where the revised credit risk framework applies SA-CR charges or floors to specific risk classes that are already addressed in the current P2 framework, authorities should offset this in the P2 charges.

All IRB approaches are being removed for exposures to equities, which are typically a small component of the credit risk of banks. This should be considered in the calculation of equity risk in the P2 framework for equities.

To the extent to which accounting standards have developed such that associated prudential standards can be adjusted. For instance, introduction of IFRS9 has meant that expected losses are captured via accounting provisions, rather than being based on an incurred loss model as was the case under IAS39. Whilst accounting provisions have increased in this regard, there has been no commensurate offset in standardised risk weights. Risk weights should be reduced to account for IFRS 9, in the absence of which there should be an offset to any Pillar 2 add-ons and buffer requirements for loss absorption capacity and credit quality to account for this accounting offset.

5. Counterparty Credit Risk

Counterparty credit risk (CCR) relates to the risk that a counterparty to a transaction may default or fail to fulfil its contractual obligations before the final settlement of the transaction's cash flows occurs. The new Standardised Approach for Counterparty Credit Risk (SA-CCR) replaced the Current Exposure Method (CEM) and the Standardized Method (SM) for the calculation of Counterparty Credit Risk (CCR) exposures arising from derivatives and SFT transactions. More risk-sensitive than its predecessor standardised approaches, it leads to significant increases in capital requirements for banks¹⁴ for multiple reasons.

Among the major reasons for the disproportionate impact of SA-CCR are its design and flawed calibration. The alpha factor of the SA-CCR formula, which is a simple multiplier that increases exposures by 40%, was set at in 2005 by the Basel Committee to be used to account for general wrong-way risk and perceived flaws in internal models, not for standardised approaches. The other areas where it interacts with other requirements are listed below:

- The SA-CCR feeds into the OF, and therefore may result in capital overlaps with the P2 framework related to IMM-based charges, due to the significant gap between the SA-CCR and IMM based RWAs.
- Leverage Ratio: The punitive impact of the alpha factor within the SA-CCR feeds into many calculations outside the risk-based P1 framework. As the SA-CCR results in higher RWAs for directional portfolios where netting plays limited role, it increases the capital consumption in areas where it is used as a regulatory metric. It creates capital overlays for example for the leverage ratio G-SIB surcharge, P2 metrics and due to the leverage ratio-based TLAC calibration. The impact of SA-CCR should be reviewed in the context of its implications to P2 and leverage buffer frameworks.

¹⁴ According to IGFMA and ISDA estimates, the exposure calculated under SA-CCR will be significantly higher than under both he tIMM (1.9 – 2.5 times higher) and CEM (2-4 times higher). This is before considering the impact of the Output floor. (See: Link)

• Large Exposures framework: the intent of the Large Exposures framework is to measure the propensity for concentration. The increased exposure values resulting from the use of SA-CCR (banks are no longer able to use IMM) will ultimately reduce the maximum large exposure amounts significantly, with impacts on exposures that are potentially captured in the Pillar 2 framework at the moment. **AFME recommends** that the P2 framework for large exposures is reviewed in relation to calculation of the counterparty credit risk under the SA-CCR instead of the IMM.

6. Securitisation

In recent years securitisation has been the focus of several changes, both in Basel and in the EU as part of the STS securitisation framework¹⁵. In terms of market risk, the FRTB introduces conservative capital charges for correlation trading portfolios for default and credit spread risks and severely limits banks' ability to recognise hedges for regulatory purposes. While this was somewhat justified for certain types of securitisations at the aftermath of the sub-prime mortgage crisis, it effectively disincentivises activity in all types of securitisation trading activities.

With regards to the banking book (credit risk), the main driver of higher risk capture in Pillar 1 is the calibration of the SEC-SA, which is significantly more conservative than the SEC-IRBA formula. The key element that needs to be considered in relation to the output floor and the Pillar 2 overlaps is the p-factor. It particularly impacts own account synthetic securitisations used to transfer credit risk to third parties, structured to transfer the unexpected loss of the securitized pool and to retain the senior tranche on the bank balance sheet. When applying the SEC-SA to the asset pool, the RW obtained on the retained senior tranche (that represent roughly 90% of the capital structure) can be four or five times higher under SEC-IRBA. This practically disincentivises banks from securitising portfolios (while the floor wouldn't be a constraint if the pool had not been securitized).

In the context of the SSM and provided that securitisations are a key component of the Capital Markets Union in Europe¹⁶, the **current Pillar 2 charges should be revisited in a targeted way to avoid undue costs for this important asset class. AFME also recommends that the punitive treatment of securitisations in the 2023 EBA stress tests is revised for future exercises.**

The PRA should also review its market risk related securitisation P2 add-ons, as well as those related to the credit risk framework.

7. Other Pillar 1 revisions regarding model risk: margins of uncertainty in internal models

In terms of the existing Pillar 1 framework and internal models, a lot of work has already gone into improving the risk capture and to reduce RWA variability.

• Modelling standards have been improved through for example the ECB's Targeted Review of Internal Models (TRIM, including credit risk IRB repair programmes), evolution of risk not in models frameworks both in the EU and UK, as well as via supervisory benchmarking exercises for market risk. For example, the impact of the TRIM exercise on RWAs has been considerable, leading to an increase of €275 billion¹7 in RWAs across large SSM supervised banks. In this context, it is worth noting that the ECB expects the IRB repair programmes slow down as a consequence of the implementation of final Basel III reforms, as the revisions constrain the use of internal models in several dimensions¹8. AFME recommends that the SSM reviews this part of the manual/calculation to mitigate any P2 charges that were due to IRB RWA variability that no longer exists.

¹⁵ ESMA guide: https://www.esma.europa.eu/esmas-activities/markets-and-infrastructure/securitisation

¹⁶ Commission's CMU Action Plan 6: https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/capital-markets-union/capital-markets-union-2020-action-plan/action-6-helping-banks-lend-more-real-economy_en_

¹⁷ https://www.bankingsupervision.europa.eu/press/speeches/date/2021/html/ssm.sp210908_1~2f82d84760.en.html

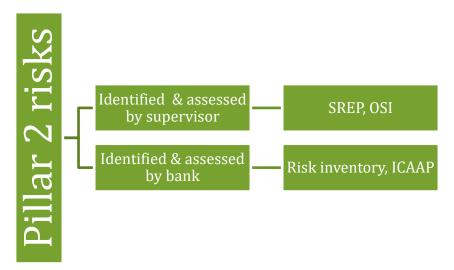
¹⁸ Andrea Enria speech: https://www.bankingsupervision.europa.eu/press/speeches/date/2023/html/ssm.sp230328-1797047d39.en.html

- Improvements in accounting standards such as IFRS9 have led to expected losses being captured through accounting provisions rather than via incurred loss model.
- While the PRA has published guidance on IFRS9 accounting provisions (see annex 2 for details), it is not evident if these improvements in risk capture have resulted in any reduction in Pillar 2 requirements or guidance in the SSM's Pillar 2 assessments.

4.2. Pillar 2 risk coverage

The Pillar 2 capital framework was developed to ensure that banks have adequate capital to cover risk that can cause economic losses beyond the minimum requirements set out in the Pillar 1 framework. Pillar 2 aims to ensure that banks have sufficient capital to cover both expected and unexpected losses. It evaluates the adequacy of a bank's overall capital in relation to its risk profile, risk management practices, and internal capital assessment process. Pillar 2 risks include financial and non-financial risks which might or might not be quantifiable.

Pillar 2 risks are either identified by the supervisor based on supervisory (i.e. SREP) methodologies and insights (e.g. on-site inspections) or by banks themselves in the context of their internal risk governance, risk inventories and the ICAAP. The quality of banks governance and insights from the ICAAP inform the supervisory assessment, which creates an interdependence.



The key methodologies in the international Pillar 2 framework that supervisors use are summarised below:

- 1. Risk Assessment: Supervisory authorities assess the risk profiles of banks and conduct comprehensive reviews of their risk management frameworks. This involves evaluating banks' risk identification, measurement, and mitigation processes, as well as their governance and controls related to risk management.
- 2. Internal Capital Adequacy Assessment Process: Banks are required to develop an ICAAP, which is an internal process to assess the adequacy of their capital compared to their risk profile over a multi-year period. Bank need to establish a risk appetite framework that defines the level of risk they are willing to accept and the strategies for managing risk. The objective of defining the risk appetite is to help banks align risk-taking activities with the overall business objectives. Regulatory authorities assess the risk profiles of banks and conduct comprehensive reviews of their risk management frameworks. This involves evaluating banks' risk identification, measurement, and mitigation processes, as well as their governance and controls related to risk management to evaluate their ability to withstand idiosyncratic and macroeconomic shocks (internal stress tests) typically over at least 3-year horizon.

- 3. Stress testing: Supervisory authorities in the EU and UK require banks to conduct stress tests under baseline and adverse scenarios, to assess their resilience to adverse economic and financial conditions. Regulators review and challenge banks' stress test results and the control framework to ensure they are comprehensive and adequately capture risks and the severity of the scenario.
- 4. Risk integration: Supervisors examine the governance structures, risk culture, and board oversight of banks to assess the effectiveness of their risk management practices. This includes evaluating the independence of board members and role of the risk committees, as well as the overall risk awareness and risk management culture within the institution.
- 5. Risk Mitigation Techniques: Banks develop strategies and techniques to mitigate identified risks. These may include diversification of risk, hedging strategies, risk transfer mechanisms, and contingency plans, which are assessed by supervisors.
- 6. Regular reporting and dialogue: The Pillar 2 framework also involves an ongoing dialogue between banks and their regulatory supervisors. Banks are required to engage regularly with the supervisors through the supervisory review process to discuss their risk management practices, risk models, and capital adequacy. As part of the process, regulators establish reporting requirements for banks to provide them with relevant risk-specific information. This allows for continuous dialogue and evolution of risks relevant to the bank, its capital adequacy, and compliance with regulatory standards.

These techniques are used differently by each supervisory authority, with significant variation on supervisory processes across jurisdictions. Annexes 2 and 3 describe the SSM and PRA processes in more detail.

4.3. Macroprudential buffer risk coverage

The macroprudential buffer framework aims to prevent the build-up of excessive risk in the financial system as a whole and mitigate the impact of systemic risks on the broader economy. Under the macroprudential framework, various methodologies and tools are employed to monitor and address systemic risks in the financial system. These methodologies are designed to assess and manage risks at the macroeconomic and systemic level. It is important to note that the specific methodologies and tools employed under a macroprudential framework can vary across jurisdictions based on the regulatory frameworks and specific risks.

Macroprudential instruments can be used to reduce both cyclical and structural systemic risks, and there are macroprudential instruments that are suitable for reducing cyclical systemic risks are, e.g., the countercyclical capital buffer requirement and the maximum loan-to-value ratio for mortgages or an input floor under the IRB P1 approach allowed under CRR Article 458. Furthermore, structural systemic risks can be reduced by imposing additional capital requirements on systemically important financial institutions, including G-SII and O-SII buffers.

The key risk of excessive capital overlays stems from the methodologies used to apply the macroprudential buffers. For example, some macroprudential authorities use system-wide stress test exercises to calibrate the target level for combined capital buffer and then deciding on the policy mix to get there (e.g. Finland and Norway), while others apply stress tests to calibrate risk-weight floors¹⁹. For pan-European banks, such divergences in policies will ultimately result in capital layering even within the macroprudential framework.

¹⁹ For example: Finland and Norway calibrate the combined buffer on system-wide indicators and Sweden and Estonia calibrate RWA floors based on stress scenarios.

Finland combined buffer: p. 15 and 16:

https://www.finanssivalvonta.fi/contentassets/84ea9cf01a5d4f7f96a506311d71343d/mv_29032023/liite_maaraamisen_perusteet_indikaattorit_julkaistavat_tiedot_en.

Norway: https://www.norges-bank.no/contentassets/de4ea09b10694ddd9128af5c596cd5f4/financial_stability_2022.pdf?v=11/09/2022162223

The policies will also result in overlays with the P2 guidance in the EU, as it is determined by the EBA stress test which relies on adverse economic scenario and stresses to largely the same portfolios²⁰.

To this extent, The ECB as a micro prudential supervisor has not acknowledged the macroprudential measures in its methodologies to set the P2 requirements apart from capital conservation buffer, whilst macroprudential supervisors generally do not acknowledge micro prudential measures that tackle the same risks.

AFME recommends that policymakers and supervisory authorities in the EU/EEA revisit the macroprudential framework and the tools utilised (especially the appropriateness of stress tests) in light of the positive-neutral CCyB, P2G requirements, as well as the systemic risks related to size and interconnectedness already included in the P2R framework. Alternatively, systemic risks that are addressed by the macroprudential tools should be carved out of the P2 framework.

Annex 4 will provide the background of risk capture in the macroprudential and systemic risk frameworks.

²⁰ E.g. EBA opinion on Estonia's use of stress tests to apply RW floors and how it overlaps with P2G: https://www.eba.europa.eu/sites/default/documents/files/document_library/Publications/Opinions/2023/1056333/EBA-Op-2023-04%20Opinion%20of%20the%20EBA%20on%20measures%20in%20accordance%20with%20Article%20458%20of%20Regulation%20EU%20No%205752013.pdf

5. Summary of undue overlaying across the capital stacks and risk coverage

This section summarises the areas where there are overlaps across the capital stacks as well as risk captures, considering the updates to the Pillar 1 framework.

5.1. Capital stacks and overall quantity of capital

The Pillar 2 requirements represent a significant capital add-on above the Pillar 1 requirements²¹. Given that the total supervisory capital stacks, including all other buffers are close to the same size as the Pillar 1 requirement (see below table 3), the combined requirements do put pressure on bank's profitability. Internal costs relating to administration of the requirements, including management buffers come on top of that. Sensitivity to Pillar 2 requirements – however not always driven by them - leads to adjustments of balance sheets and risk exposure to reduce the capital overlay. The adjustment to business lines is driven by the need to maintain profitability over time when facing higher (i.e. more expensive) capital requirements. This in cases distorts business decisions based on economic capital and risk assessment, which can in some cases lead to inefficient balance sheet allocation.

While the requirements across Pillar 1 and 2 as well as the macroprudential framework are constructed as being complementary, when looking at the capital framework holistically with all its components as described above, it becomes evident that capital is generally layered and additive. This is as the regulatory policies deprioritised the desire for a risk-based and coherent framework for more absolute capital at the aftermath of the financial crisis. In other words, the rush to increase capital in the system without counterbalancing the framework with risk sensitivity has rendered the framework unintentionally ineffective.

UK banks SSM banks % RWAs % RWAs £bn 4.50% 388.7 P1 CET1 (min 4.5%) 4.50% P1 CET1 (min 4.5%) 132.3 P1 AT1 (up to 1.5%) P1 AT1 (up to 1.5%) 1.50% 129.6 1.50% 44.1 P1 P1 T2 (up to 2%) 2.00% 172.8 P1 T2 (up to 2%) 2.00% 58.8 P2R CET1 (min 56.25% of total P2R) P2A CET1 (min 56.25% of total P2A) 52.9 1.10% 95.0 1.80% P2R AT1 (max 18.75% of total P2R) 31.7 P2A AT1 (max 18.75% of total P2A) 0.37% 0.60% 17.6 P2* P2R T2 (max 25% of P2R) 0.49% 42.2 P2A T2 (max 25% of P2A) 0.80% 23.5 P2G CET1 1.30% 112.3 P2B CET1 CCB (2.5%) 216.0 CCB (2.5%) 2.50% 73.5 2.50% SvB (0-2.5%) 1 10% 95.0 Buffers SRB (0-2.5%)** 1.50% 44.1 Buffers CCyB (0-2.5%) 0.20% 17.3 CCyB (0-2.5%) 2.00% 58.8 Required and guidance total capital 15.06% 1300.5 Required and guidance total capital 17.20% 505.8 Total capital ratio (reported) 1693.1 Total capital ratio (reported) 622.0 Management buffer 4.54% 392.6 Management buffe 4.00% 116.2 * based on weighted average of top 7 banks ** based on average G-SiB buffer

Table 3: Breakdown of capital stacks by pillar requirements

5.2. Risk capture overlays

While the Pillar 1 and Pillar 2 frameworks are designed to address different aspects of risk management, there can be areas of overlap or duplication where risks are counted more than once. For example, the PRA's Aggregated Cost Benefit Analysis²² shows the direct costs that it estimates will be placed on the banking system by its proposed Basel 3.1 Pillar 1 rules. The PRA's analysis estimates that banks would raise on average around 3.1% additional Common Equity Tier 1 (CET1) capital, or £14.2 billion in total across all firms. These

²¹ Bank-specific capital requirements: https://www.sciencedirect.com/science/article/pii/S1544612322007346#bib0009

²² P. 19 https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/consultationpaper/2022/november/cp1622app7.pdf

impact estimates are based on an assumption that Pillar 2 adjustments will be made as the revised P1 framework incorporates more risk components.

While the increases in minimum required capital as a result of implementing the Basel III reforms are already material, the impact on the actual Tier 1 capital ratios (including Pillar 2 charges and management buffers) will be higher due to the amplification effect of higher risk weighted assets. This is, when the Pillar 2 charges are expressed as a percentage of RWAs. AFME considers that the UK transition to nominal P2A (instead of a percentage of P1 RWAs) is potentially a helpful development. There have also been some indications that the SSM will adopt this approach, as noted by the ECB Chair of Banking Supervision²³.

We summarise in table 4 below the areas where significant elements of the Pillar 2 as it stands that will be transferred to the Pillar 1 requirements, including in areas such:

Pillar 1 and 2 overlays after final Basel III implementation

Pillar 1 category	Overlap with Pillar 2	Pillar 2 concepts
Output floor	The key areas that should be considered in relation to the Pillar 2 framework are the application of the output floor to the full regulatory capital stack vs BCBS minimum requirements only, overlap with P2 charges for model risk, as well as for specific areas where the P1 framework overcapitalises risks for specific asset classes.	Capital stack, percentage point of RWA vs. nominal P2 charge, model risk.
Operational risk	Removal of modelled approaches, higher capital charge and no forward-looking risk mitigation under Pillar 1 should be offset under the P2 framework.	Model risk, risk mitigation
Market risk	The review of the P2 framework should consider the changes in the P1 standards regarding tail risk capture, concentration risk, market illiquidity, risk coverage, risk factor modellability, risk diversification and reclassification/regulatory arbitrage, as well as generally higher risk weights for most exposures and the impact of the OF.	Concentration, liquidity and correlation risks, as well as model and price risks.
Credit risk	Higher risk weight for unrated corporate exposures, limited modelling for low default portfolios, more granular risk weights for retail exposures and both residential and commercial real estate, PD, LGD and EAD floors under IRB approaches. SA floor to limit modelling benefits. Furthermore, IFRS9 should also be taken into account as part of an overall review of the capital framework, as lifetime provisioning equates to building-up of a capital buffer. There should be an offset to any Pillar 2 add-ons and buffer requirements to account for this duplication. RWA repair programmes have also reduced model output variability.	Model risk, PD and LGD risks, accounting expected losses related buffers.

²³ Speech by Andrea Enria: https://www.bankingsupervision.europa.eu/press/speeches/date/2019/html/ssm.sp191112_1~01be3b89b0.en.html

Market risk in the banking book	The CRR2 elements of the FRTB have already addressed the risks stemming from banking book positions subject to market risk, including commodities, FX and structural FX. Furthermore, the CRR3/Basel 3.1 include provisions such as higher risk weights applied to equity exposures and strict standards for internal risk transfers and reclassifications.	Non-regulatory market risk (including equity, FX and commodities risks, as well as reclassification).
Counterparty credit risk	The review of the P2 framework should consider the SA-CCR, which results in reduced model benefits due to the SA floor, as well as impacts on large exposures and leverage ratio exposure measure (and MREL) computations.	Concentration risk, leverage exposure, interaction with gone concern requirements.

In the absence of new risks that should be captured via Pillar 2 requirements, the material increase in Pillar 1 requirements²⁴ should be balanced by a reduction in existing supervisory capital requirements that address paucities in the Pillar 1 risk capture.

In the context of capital buffers, it is also worth noting that the buffer structures should be reviewed as part of the Pillar 2/SREP reviews both in the UK and EU respectively. For example:

- Overlays with buffer risk capture and other macroprudential tools such as input floors, resulting from uncoordinated use of similar methodologies and application of P1 floors and capital buffers by different authorities and within different parts of the regulatory framework.
- Releasability of buffers that should be countercyclical by nature should be clearly defined and policies established to ensure there is sufficient transparency to banks and market participants on the application, releasability and rebuilding of buffers ahead of potential adverse events.
- The Pillar 2 requirements under SSM supervision are not sensitive to changes (as a result of the current events) in countercyclical capital (CCyB) and systemic risk buffers. They have remained largely constant despite adjustments to the buffers. Buffer usability at times of economic downturn are a key part of the post-crisis reforms, and it has been a topic of debate recently, also from the viewpoint of MDAs.
- In the UK, the recent increase in SRB (1%) automatically also increases the LR based MREL requirements. AFME believes that it would be beneficial to unearth the linkages between Pillar 2 buffers and other requirements and reduce this additivity to achieve more efficient capital usage.

Both the ECB's SSM and the UK PRA are planning to review their respective Pillar 2 methodologies in 2024 to address regulatory overlaps before the CRR3/Basel 3.1 go-live date of January 2025. AFME encourages these reviews to commence as soon as possible. It is important that there is clarity well in advance of the 2025 implementation timeline, with updates required to the related supervisory policies which firms will also need to embed into their SREP / ICAAP processes that run over multi-year horizons and over the implementation period.

AFME urges the authorities to provide more granularity within the SREP documents to specify the assessment methodology for sub-categories that contribute to the overall risk category (e.g. splits within risk types for different elements of the trading book). For the Pillar 2 reviews, the key outcomes would be:

Greater transparency of how P2 requirements and guidance are set;

²⁴ Industry studies as well as the Basel Monitoring Reports indicate that the overall P1 minimum required capital will go up by appr. 20% for large wholesale banks in the EU. In the UK, the PRA expects the across the system increase in Pillar 1 RWAs of 13%, but that Pillar 2 reductions will offset this impact restricting the increase to less than 5%.

- Maintaining overall regulatory capital neutrality;
- ➤ Guidance should be provided on how the change in Pillar 1 and consequent Pillar 2 updates should be included in bank capital plans during the transition period before the updated Pillar 2 methodologies are completed in 2024; and
- ➤ The process should have inbuilt granularity in the feedback process, when Pillar 2 decisions are made by supervisors. This feedback should be consistent across firms and provide all information that resulted in changes to Pillar 2 outcomes, whether qualitative or quantitative.

6. Key policy recommendations

After years of intense regulatory activity, it is time for a pause and to evaluate if the framework is working as intended. In this sense, AFME thinks that it is especially important to review the complexity of the capital framework and the interaction between the Pillar 1 and Pillar 2 in order to avoid duplicities once the new CRR 3/Basel 3.1 is implemented. In this regard, Both the ECB's SSM and the UK PRA should have a fundamental review of their respective Pillar 2 methodologies in 2024 to address regulatory overlaps before the CRR3/Basel 3.1 go-live date of January 2025. The reviews should not focus only at risk level assessments, as there are other driving factors such as the output floor, capital overlays resulting from applying the floor to the whole capital stack, including P2 requirements, as well as overlays with the leverage ratio requirements.

At risk type-level, the key issues across the Pillar 1 changes to risk capture that should be considered in the Pillar 2 reviews are highlighted in this paper. Most notably, The legislative proposals in the EU and UK both would implement the SA-OR without the ILM component, whereby the BIC determines the capital charge. This results in an aggregate increase of appr. 20% in operational risk RWAs mainly for large banks that are most likely to also be subject to P2 charges due to the marginal coefficient, or size-based multiplier in the BIC. When the Pillar 2 requirements for operational risk are revised, it is important to capture the increase in the Pillar 1 charges. The P2 framework should also consider the updated operational risk management guidelines as well as improvements banks have made to mitigate potential future operational losses for example by recognising the use of insurance policies as risk mitigants. Notwithstanding this, this paper also highlights other areas where potential capital overlays can occur, and makes more detailed recommendations.

The complexity of macro - and micro prudential capital stacks in some jurisdictions e.g. within the EEA/EU may lead to overlaps in risk coverage across the standards, particularly as there are expected to be overlaps between P2G and (some of the) macroprudential buffers explained in this paper. Coherence of these buffer requirements should be carefully assessed. It is also important to look at the combination of buffers and other macroprudential measures that impact the P1 RWAs, and how these interact across Europe. Cross-border banks are likely to be charged multiple times for the same risks due to the combination of country-specific macroprudential RWA floors and consolidated level P2R and P2G measures. AFME recommends that policymakers and supervisory authorities in the EU/EEA revisit the macroprudential framework and the tools utilised (especially the appropriateness of stress tests) in light of the positive-neutral CCyB, P2G requirements, as well as the systemic risks related to size and interconnectedness already included in the P2R framework. Alternatively, systemic risks that are addressed by the macroprudential tools should be carved out of the P2 framework.

Finally, AFME encourages the supervisory authorities to provide more granularity within the SREP documents and to specify the assessment methodology for sub-categories that contribute to the overall risk category (e.g. splits within risk types for different elements of the trading book). For the upcoming Pillar 2 reviews, the key objectives should be:

- Greater transparency of how P2 requirements and guidance are set;
- Maintaining overall regulatory capital neutrality;

- Guidance should be provided on how the change in Pillar 1 and consequent Pillar 2 updates should be included in bank capital plans during the transition period before the updated Pillar 2 methodologies are completed in 2024; and
- The process should have inbuilt granularity in the feedback process, when Pillar 2 decisions are made by supervisors. This feedback should be consistent across firms and provide all information that resulted in changes to Pillar 2 outcomes, whether qualitative or quantitative.

Further to these key issues highlighted in this section, recommendations are made throughout sections four and five of this paper. A list of all recommendations can be found in Annex 5.

Annexes:

Annex 1: BCBS's four principles of Pillar 2

Principles	's four principles of l Objective	Considerations	Supervisory tools/ actions
Principle 1 (bank responsibility)	Banks should have a process that assesses their overall capital adequacy in relation to their risk characteristics, as well as a strategy for maintaining their capital levels.	Banks' assessments of their capital adequacy should reflect the application of the principle of proportionality, ie be appropriate for a bank's size, risk profile and complexity.	 Board and senior management oversight Sound capital assessment Comprehensive assessment of risks Monitoring and reporting Internal control
Principle 2 (supervisory responsibility)	Supervisors should review a bank's internal capital adequacy assessments and follow up as needed.	Supervision of banks requires supervisory discretion and involves the application of a variety of tools. This principle can reflect the application of proportionality. The supervisory review should be undertaken in a transparent and accountable manner. Supervisory action should require banks to address any deficiencies in a timely fashion.	On-site examinations Off-site reviews Reviews of work by external auditors and other parties Periodic reporting by the banks Discussions with bank management
Principle 3 (supervisory responsibility)	Supervisors should specify their expectation for banks to operate above the minimum regulatory capital ratios.	Supervisors must make sure that non-financial risks and risks not fully captured under Pillar 1 are included in the requirement for banks to operate at capital levels above those implied by Pillar 1 minima. This principle can reflect the application of proportionality. The implementation of Pillar 2 does not require a system of automatic capital add-ons for all or individual banks.	Supervisory authorities need sufficient statutory powers.
Principle 4 (supervisory responsibility)	Supervisors should intervene at an early stage to prevent capital from falling below the level required to support a bank's risk profile.	This principle reflects the application of proportionality with supervisory actions tailored to a bank's size, risk profile and complexity. Basel III capital buffers must be adequately reflected.	 Intensifying the monitoring of banks Restricting current business activities Prohibiting new activities or acquisitions Restricting or prohibiting dividend payments Requiring banks to restore capital Requiring banks to raise additional capital

Source: BCBS²⁵

²⁵ <u>https://www.bis.org/fsi/fsisummaries/pillar2.pdf</u>

Annex 2: PRA SREP overview

The PRA's SREP is a process by which the PRA, taking into account the nature, scale and complexity of a firm's activities, reviews and evaluates the arrangements, strategies, processes and mechanisms implemented by a firm to comply with its regulatory requirements laid down in PRA rules and the CRR. It further analyses the risks to which the bank is or might be exposed, risks that the firm poses to the financial system and further risks revealed by stress testing. The PRA's Statement of Policy²⁶ of methodologies for setting P2 capital sets out the expectations and methodologies clearly, helping banks to better understand how their P2 requirements and P2 buffer are determined.

P2A (Pillar 2 requirement)

For **credit risk**, the PRA compares firms' standardized approach (SA) risk weights at a portfolio level to an internal ratings-based (IRB) risk-weight supervisory benchmark. The PRA has created two sets of benchmarks: one based on unexpected and expected losses, and the other based on unexpected losses only. The latter applies to firms using International Financial Reporting Standards (IFRS) and whose expected credit losses are already covered by the SA Pillar 1 capital charge.

The PRA's methodology allows for supervisory judgment to be exercised in cases where there are known issues with IRB models. The methodology for determining whether a firm should hold additional capital for credit risk under Pillar 2A involves an aggregate calculation. If the IRB benchmark suggests that the SA Pillar 1 capital charge is higher for a portfolio compared to the IRB data, the excess can be offset against shortfalls in portfolios where the SA capital charge is lower than the IRB charge. Supervisory judgment is then used to determine the credit risk add-on, considering factors such as firms' assessments, the IRB benchmark range, the PRA's confidence in the benchmarks, and supervisory knowledge of credit risk portfolios.

The PRA applies the Pillar 2A credit risk methodology on an exceptions-only basis, with relatively few firms expected to be subject to an add-on. Firms with significant exposures to sovereigns, high loan-to-value (LTV) mortgages, credit cards, and CRE are likely to be affected. The PRA monitors changes in IRB risk weights and may update the benchmarks to minimize data lag and limit excessive volatility.

With regards to **market risk**, the Pillar 2A approach applies to all firms and covers positions in the trading and fair value through other comprehensive income (FVOCI) books, including securitisations and covered bonds. The PRA's review of risks and risk management standards applies to both approved models and standardised approaches, although it mainly affects firms with material trading books and market risk model permissions. When there are deficiencies in advanced models that result in underestimation of Pillar 1 capital, the PRA requires firms to address the shortcomings of the Pillar 1 through the RNIV framework explained earlier in this paper, instead of setting additional Pillar 2A capital requirements.

The PRA collects information on illiquid, concentrated, and one-way positions through the Stress Testing Data Framework (STDF) and uses this information to assess capital adequacy under Pillar 2A. Firms with significant illiquidity risk in their trading books are required to submit data on market risk, either separately or as part of the STDF program, or within their ICAAP submissions. When reviewing a firm's calculations, the PRA assesses the completeness of illiquidity risk identification, the appropriateness of stress tests designed and calibrated by the firm, the suitability of proposed capital mitigants or reserves, and sets a P2A capital add-on to ensure coverage of losses at a 1-in-1,000 year confidence level. In addition to add-ons for illiquid, concentrated, and one-way positions, the PRA may request additional capital under P2A if deficiencies are identified in a firm's market risk systems and controls.

The PRA also covers **operational risk** in it's P2A methodology. The PRA's existing Pillar 1 standardised approach for operational risk uses gross income as a measure of risk, which is not risk-sensitive. The PRA therefore assesses operational risk as part of its Pillar 2A review of firms' capital adequacy and, where

²⁶ PRA SoP for Pillar 2, July 2021: https://www.bankofengland.co.uk/-/media/boe/files/prudential-regulation/statement-of-policy/2021/the-pras-methodologies-for-setting-pillar-2a-capital-jan-2022.pdf

appropriate, applies a Pillar 2A capital add-on. The PRA undertakes an overall assessment of a firm's operational risk informed by, among other factors, historical losses, a firm's Internal Capital Adequacy Assessment Process (ICAAP), and conduct and non-conduct loss estimates. From that overall assessment, supervisory judgement is used to determine a firm-specific operational risk capital requirement.

The PRA's **counterparty credit risk (CCR)** P2 methodology focuses on areas not covered by internal models, such as concentration risk and settlement risk. The PRA assesses firms' management standards for CCR against qualitative standards set in the CRR and may require additional capital under P2A to address deficiencies. Concentration risk and settlement risk are considered in the assessment. IT sufficiency and data quality are reviewed, particularly for firms using standardized approaches, and additional capital may be required to address identified deficiencies.

Settlement risk for transactions with settlement or delivery dates within the market standard is not capitalized under Pillar 1, and the PRA may require firms not managing settlement risk adequately to have additional capital under Pillar 2.

Additionally, the PRA requires firms with advanced model permissions to address wrong-way risk, collateral management and re-use, and to comprehensively stress test their exposures. The accuracy of exposures and inputs under non-advanced methods is also reviewed, and additional capital may be required under Pillar 2A to address deficiencies.

In terms of potential areas of overlap with the P1 framework, the final element captured in the P2A relates to **credit concentration risk**. The PRA exercises judgment within a range produced by concentration risk models to determine the appropriate capital add-on. Under the methodology, firms are required to calculate a credit concentration risk measure, the Herfindahl-Hirschman Index (HHI), for all relevant portfolios (single name, pre-defined industry sectors and geographic regions). Well-diversified portfolios have an HHI close to 0, whilst the most concentrated portfolios have a number close to 1. Mapping models to the table provided in the SoP for Pillar 2 methodology translates a firm's HHI into a proposed capital add-on range.

The recommended capital add-on ranges are constructed independently to avoid double counting, and the credit concentration risk add-on is the sum of the respective add-ons for each type of credit concentration risk (excluding CVA).

The PRA also considers the following risks in evaluating additional Pillar 2A capital requirement:

- Interest Rate Risk on the Banking Book (IRBB) The PRA evaluates the risk based on a 200 basis point (or appropriate shift) in the yield-curve, and evaluating the Net Present Value (NPV) sensitivity covering duration risk. A separate analysis should be included for basis and optionality risks;
- Pension obligation risk to be included in case the bank provides a defined benefit pension scheme; and
- Group risk considers this to be a significant risk for subsidiaries of foreign banks, where there is significant reliance on a parent bank for business, recovery and potential reputational contagion. In addition, the PRA will also consider ring-fenced bank sub-groups independently.

Pillar 2B (PRA Buffer)

The PRA buffer, which is on top of the total capital requirement (TCR = Pillar 1 + Pillar 2A) and the Combined buffer (Capital Conservation Buffer + Countercyclical Buffer + Systemic buffer), is expected to absorb losses in the event of a severe stress. The PRA buffer is expected to avoid duplication with the Combined buffer.

In terms of evaluating the Pillar 2B, the PRA's annual stress tests²⁷ are used as the foundation for calculating the capital planning buffer. This capital planning buffer can then form the basis for identifying any additional

²⁷ https://www.bankofengland.co.uk/stress-testing/2022/stress-testing-guidance-2022-for-participants

capital buffer requirement. The PRA buffer for the own assessment should be reduced by the amount of the Combined buffer, as otherwise it would result in a double counting the capital requirement. On the contrary to the EBA stress test, the PRA stress test allows banks to consider management action and does not require to maintain a 'static balance sheet' throughout the stress period.

The Financial Policy Committee (FPC) together with the Prudential Regulation Committee (PRC) of the Bank of England designs the stress testing framework for UK banks. The FPC focusses on macro-prudential risks to the UK British financial system and hence has a comparable role to the EU ESRB. The PRA stress tests aim at measuring the resilience of banks to negative scenarios that could impend in the future.

Annex 3: SSM P2 framework

Pillar 2 requirement:

Regarding the P2R, the European Central Bank's Single Supervisory Mechanism (SSM) adopted a holistic approach within the SREP process, considering various factors. Banks are required to maintain a level of capital that aligns with their specific risk profiles, considering risks not fully captured by Pillar 1 requirements. This encompasses credit risk, market risk, operational risk, liquidity risk, and other risks such as interest rate risk, concentration risk, and business model risk.

In the 2022 SREP cycle, the risk of excessive leverage was assessed for the first time, identifying banks that may require qualitative measures or additional Pillar 2 requirements. The assessments resulted in low risk for 18 institutions, while the remaining 18 were categorized as moderate or higher risk. Following the assessments, qualitative measures were issued for four institutions.

Banks are also required to conduct their own internal capital assessment through the ICAAP process. This assessment considers various risks, including credit risk, market risk, operational risk, interest rate risk, and economic risks specific to the bank's business model and operating environment. The SSM reviews and evaluates the bank's ICAAP as part of the Pillar 2/SREP process, contributing to the overall SREP score and P2 requirement.

In addition, supervisory stress testing plays an important role in assessing the resilience of banks and their ability to withstand adverse economic scenarios, that are by design severe, but plausible. These tests evaluate the impact of severe stress on banks' capital adequacy and overall financial stability. In Europe, the results of stress tests inform the supervisory authority's decisions regarding additional P2G buffers, based on predefined methodology and scenarios.

Finally, transparency and market discipline are promoted through disclosure requirements. Large institutions are obliged to disclose their Pillar 2 requirements annually, to enhance transparency in the banking sector.

In terms of capital adequacy within the Risk Assessment (RAS), the SSM considers three separate elements, 1) the business model, 2) the governance and risk management, and 3) risks to capital.

- 1. The business model assessment focuses on evaluating the bank's risk-return profile, its alignment with the risk profile, and the sustainability of its earnings. It considers factors such as the bank's business strategy, revenue sources, cost structure, risk appetite, risk management framework, and diversification strategy. The assessment aims to identify risks that may pose a threat to the bank's long-term viability.
- 2. The internal governance and risk management assessment analyses the bank's operational and organizational structure, risk control and management framework, and technical architecture supporting risk management practices. It involves information gathering, compliance checks, and supervisory assessments to evaluate aspects such as internal governance, risk appetite framework, risk culture, risk infrastructure, data aggregation and reporting.
- 3. The third element evaluates the risks that may have an impact on a bank's capital position. It aims to assess the bank's ability to maintain adequate capital levels, absorb losses, and support its ongoing operations. The JST's determination of the capital needed by the bank to cover its capital-related risks relies on a four-step process²⁸. The blocks aim to analyse the capital position from three different and complementary angles.

In step 1, the Joint Supervisory Team (JST) determines the initial P2 requirements, based on the business model and profitability assessment, internal governance and risk management standards, and assessment of risks to capital at a specific risk level (credit risk, market risk, operational risk, and interest rate risk in the

²⁸ ECB P2 methodology update 2023: https://www.bankingsupervision.europa.eu/banking/srep/html/p2r_methodology.en.html

banking book). The JST selects the appropriate initial Pillar 2 requirement from a bucket of possible values based on the assessment of the overall risk to the bank's capital. This assessment relies on applying weighting factors for P2 risks to the scores of the above elements, and by using expert judgement to take into account the bank's specific situation, including the ICAAP.

In step 2, the JST splits the initial P2R into risk-by-risk add-ons for risks linked to business model, internal governance and risk management, and risks to capital. The risk-by-risk breakdown takes into consideration information from the bank's ICAAP and its Pillar 1 requirement to avoid risks already covered by Pillar 1 being counted twice. To accommodate for a wide range of ICAAP practices, the JST can use its discretion on how to reflect the ICAAP at the overall assessment and for each aforementioned category.

The step 3 includes the JSTs challenging the initial add-ons by considering different sources of information, such as key risk indicators, the bank's ICAAP outcomes, peer analysis and findings from on-site inspections and deep dives. This step involves considering all available information with a view to ensuring that individual risk-by-risk add-ons sufficiently cover all relevant risks and are consistent across banks carrying out similar activities, also from a horizontal supervisory angle.

In step 4, the JST determines the final risk-by-risk add-ons that lead to the definitive Pillar 2 requirement. It uses expert judgement, based on the outcome of Step 3, to decide on the appropriate size of each risk-by-risk add-on, substantiated by the Pillar 2 risk drivers behind each risk-by-risk add-on.

The final risk-by-risk add-ons are a further result of the JST assessing the bank's specific situation. For example, a risk add-on may reflect shortcomings detected in an on-site inspection. Individual add-ons may also be adjusted to eliminate possible double-counting where the same risk drivers are addressed under several different risk categories, and consideration may be given to other supervisory measures taken to address the bank's specific situation.

Pillar 2 Guidance (P2G)

With regards to the P2G, the EBA stress tests provide key inputs for the SREP decision for each bank²⁹. the EBA conducts EU-wide stress tests every two years in cooperation with the ECB, the European Systemic Risk Board (ESRB) and the NCAs to assess bank specific P2G buffer needs. The ESRB designs the macroeconomic stress test scenarios jointly with the ECB, and the EBA is in charge of applying these scenarios to the significant institutions directly supervised by the ECB that are subject to these exercises³⁰. The EBA performs these stress tests mainly in a bottom-up fashion, using the methodology and the scenarios developed in cooperation with the ESRB, the ECB and the European Commission (EC)³¹. The tests assess how severe negative macroeconomic scenarios would impact on the solvency of EU banks. They indicate if capital provisions, including buffers accumulated during normal times, are sufficient to cover projected losses and let banks survive during a prolonged distress. The results of these stress tests are input for the SREP and result in bank being allocated to different buckets as a result of the bank specific capital depletion under the adverse scenario. While the stress tests have become incrementally more severe over the years, it is worth noting that the ECB takes into consideration the severity, before allocating the P2G buffers to banks according to the bucketing approach.

AFME and its members recommend that the EBA should take a fresh look at the stress test methodology and remove or at least recalibrate some of the existing constraints that often override banks' bottom-up projections. The EBA stress test follows a constrained bottom-up approach, involving banks in identifying risks using their own models to encourage better risk management practices. A successful stress test should find a balance between supervisory standardisation and accommodating individual bank characteristics, to avoid a one-size-fits-all exercise that is more likely to duplicate risks already covered elsewhere in the framework (such as macroprudential and systemic buffers, stressed risk weight calibration and ICAAP). The

²⁹ ECB FAQs: https://www.bankingsupervision.europa.eu/press/publications/html/ssm.faq_stress_test_2023~abaa00b672.en.html

https://www.bankingsupervision.europa.eu/banking/tasks/stresstests/html/index.en.html

https://www.eba.europa.eu/risk-analysis-and-data/eu-wide-stress-testing

new banking package (CRR3/CRD6) will warrant a comprehensive review of the EU stress test framework as the structural changes to the calibration of the P1 framework combined with other overlaps across the Pillar 1 and Pillar 2 capital risk coverage can lead to more significant overlaps across the supervisory frameworks and buffers.

Looking ahead, the European Central Bank published a report in March 2023 by the SREP Independent Review Expert Group, which made explicit observations and recommendations. The recommendations include refining the methodology to focus more directly on risks not sufficiently covered by Pillar 1, adopting best practices from other jurisdictions (such as the UK and the USA), and conducting thorough annual discussions on aggregated Pillar 2 requirements. Future developments are also expected to involve a review of the impact of regulatory requirements and the integration of macroprudential considerations into the supervisory framework.

Annex 4: Macroprudential and systemic risk frameworks

Macroprudential framework

The macroprudential buffer framework aims to prevent the build-up of excessive risk in the financial system as a whole and mitigate the impact of systemic risks on the broader economy. Macroprudential capital requirements provide a mechanism to counterbalance risks that cannot be addressed adequately through micro prudential supervision or monetary policy and to deal with risks form the potential unintended effects of monetary policy.

Under the macroprudential framework, various methodologies and tools are employed to monitor and address systemic risks in the financial system. These methodologies are designed to assess and manage risks at the macroeconomic and systemic level. It is important to note that the specific methodologies and tools employed under a macroprudential framework can vary across jurisdictions based on the regulatory frameworks and specific risks. In some cases, such as in the UK, the central bank has both the micro- and macroprudential powers, and in other jurisdictions a Designated Authority tasked with the analysis and implementation of macroprudential policy may exist separately from the central bank and supervisory authority. An example of three separate entities exists in the case of the Haut Conseil de Stabilité Financière, Banque de France, and ACPR in France. In the EU, the macroprudential framework has been strengthened and enhanced significantly through the analytical and advisory role of ESRB³² and from the levels of coordination and challenge provided by the ECB. The ESRB in particular has helped improve understanding and analysis of sources of systemic risk within the financial system in the EU, ranging from the real estate sector to insurance and investment funds. It has also helped improve the quality and availability of supervisory data and supported implementing the EBA bank solvency stress tests³³. Furthermore, it has been at the forefront of analysing new financial risks related to climate change and cyber risk, for example proposing, as early as 2016, that climate risk stress tests be implemented.

Most notably for the context of this paper, the macroprudential tools include a countercyclical capital buffer (CCyB). It allows for dynamic provisioning that is used for setting aside provisions during periods of economic expansion to build up buffers that can be used during downturns. This countercyclical measure aims to enhance the resilience of banks and mitigate excessive risk-taking during favourable economic conditions. Banks are also required to hold CCyBs, which take into account macroeconomic conditions. CCyBs can be built up in times of economic stability and released during downturns in order to maintain liquidity and credit provision.

In addition to the buffers, there are other macroprudential measures in the European legislation. These include ongoing monitoring and analysis of systemic risks and vulnerabilities in the financial system, additional own funds requirements, enhanced disclosure and liquidity requirements, as well as higher risk weightings for certain exposure classes. Article 458 of the CRR permits EU Member States to impose such measures to address systemic risk or risks to the real economy, once identified. Furthermore, Loan-to-Value (LTV) and Debt-to-Income (DTI) Ratios are macroprudential tools used to manage housing market risks that are often at the heart of financial shocks and curb excessive pro-cyclical mortgage lending. These ratios set limits on the amount of loans that can be granted relative to the value of collateral (LTV) or borrower's income (DTI), with the aim of preventing the buildup of unsustainable levels of debt that can result in system-wide stresses and recessions. These ratios can constrain the riskiness of mortgage exposures and therefore interact directly with the P1 framework.

³² https://www.esrb.europa.eu/pub/pdf/other/esrb.handbook_mp180115.en.pdf

G-SIIs and O-SIIs framework

The G-SII and O-SII frameworks aim to enhance the stability and resilience of the financial system by subjecting systemically important institutions to additional regulatory requirements and oversight. Under the frameworks for G-SIIs and O-SIIs, regulatory authorities employ various methodologies to assess and manage the risks posed by these banks. While the specific methodologies differ across jurisdictions, the risks covered by the G-SII global standards and regional O-SII frameworks include:

- 1. Size Risk: Both frameworks consider the size of institutions as a risk factor, due to the possibility that larger institutions have the potential to cause greater disruptions if they encounter financial difficulties. The frameworks aim to ensure that these institutions maintain sufficient capital and other resources to mitigate the risks associated with their size.
- 2. Interconnectedness: G-SII and O-SII frameworks focus on banks whose distress or failure could have a significant negative impact on the stability of the wider financial system. These frameworks aim to identify and address risks associated with the interconnectedness of these institutions and their potential to transmit shocks across the system.
- 3. Substitutability Risk: This is aimed at banks whose functions and services are critically important, difficult to replace or whose failure would result in significant disruptions to the financial system. The frameworks aim is to identify such institutions through the scoring mechanism and subject them to additional scrutiny and regulatory measures, including capital add-ons and recovery and resolution planning to mitigate these risks.
- 4. Complexity Risk: Banks with complex organisational structures, business models, or financial products can pose risks to the financial system. The G-SII and O-SII frameworks assess the complexity of banks and subject them to meet additional regulatory requirements to address these risks.
- 5. Cross-jurisdictional: Banks with significant cross-border activities can create challenges for regulators and pose risks to multiple jurisdictions at a point of failure. The G-SII framework considers the extent and complexity of cross-border operations to address potential risks.

For the purposes of the annual G-SII assessment by the FSB, the risk scores for the above are added together and banks are assigned to one of the four buckets to determine the relevant capital add-on.

Annex 5: Summary of recommendations

Topic	Recommendation	Page	Authorities to consider
Output floor	The P2 requirements include model risk, and applying the floored RWAs (instead of the modelled RWAs) to the Pillar 2 stack will lead to double-counting of model risk. the OF reduces model risk at an aggregate level, particularly for banks to which it becomes a binding constraint. In other words, when banks' internal models produce an aggregate RWA outcome that is lower than the 72.5% SA floor. Accordingly, the P2 model risk add-on should be abolished or reduced accordingly.	8	EBA/SSM/PRA
Output floor	The new P1 framework has a significant impact on the RWAs applied to transactions that are also subject to contagent leverage capital charges under the P2 framework. For SFTs, the SA-CR risk weights that underpin the SA-CCR used for the leverage ratio calculation are conservative and not commensurate to the short-term maturity and quality of collateral backing these low-risk transactions. Similarly, for derivative contracts, SA-CR risk weights do not reflect that counterparty downgrade risk is captured by the CVA risk framework and thus the risk weights duplicate capital charges across these parts of the Basel framework. Thus, the new leveraged finance related P2 Leverage Ratio charges should be reviewed in light of the high capital consumption and risk coverage for these transactions under the revised P1 framework.	8	SSM/PRA
Output floor	AFME recommends offsetting model risk P2 charges against any OF uplift above modelled approach outputs, as well as reviewing the overlay impacts of applying the OF to the full capital stack.	9	EBA/SSM/PRA
Market risk	AFME considers that these areas should be carefully considered in the review of the SREP assessment: P2 methodology and risk indicators need to be carefully reviewed and adjusted to take account of the changes in P1 framework and avoid excessive capital overlays. This is particularly relevant to illiquidity risks where the revised framework captures the risks far better than the current framework. Considering that many of the SSM's current metrics relate to the relative size of the trading operation and counterparties to the activity, potential overlays with	11	EBA/SSM/PRA

	the systemic risk buffer (G-SII and O-SII) framework should be assessed.		
Operational risk	When the Pillar 2 requirements for operational risk are revised, it is important to capture the increase in the Pillar 1 charges. The P2 framework should also consider the updated operational risk management guidelines as well as improvements banks have made to mitigate potential future operational losses for example by recognising the use of insurance policies as risk mitigants.	11	EBA/SSM/PRA
Credit risk	The loss of EAD and LGD modelling and flooring the inputs for a large proportion of the credit portfolios will increase conservatism in the RWA calculations, and this should be taken into account in P2. Where the revised credit risk framework applies SA-CR charges to specific risk classes that are overly conservative, authorities should offset this in the P2 charges.	12	EBA/SSM/PRA
CCR	Leverage ratio: The punitive impact of the alpha factor within the SA-CCR feeds into many calculations outside the risk-based P1 framework. As the SA-CCR results in higher RWAs for directional portfolios where netting plays limited role, it increases the capital consumption in areas where it is used as a regulatory metric. It creates capital overlays for example for the leverage ratio G-SIB surcharge, P2 metrics and to the leverage ratio-based TLAC calibration. The impact of SA-CCR should be reviewed in the context of its implications to P2 and leverage buffer frameworks.	12	EBA/SSM/PRA

CCR	Large Exposures framework: the intent of the Large Exposures framework is to measure the propensity for concentration. The increased exposure values resulting from the use of SA-CCR (banks are no longer able to use IMM) will ultimately reduce the maximum large exposure amounts significantly, with impacts on exposures that are potentially captured in the Pillar 2 framework at the moment. AFME recommends that the P2 framework for large exposures is reviewed in relation to calculation of the counterparty credit risk under the SA-CCR instead of the IMM.	12	EBA/SSM/PRA
Securitisations	In the context of the SSM and provided that securitisations are a key component of the Capital Markets Union in Europe, the current Pillar 2 charges should be revisited in a targeted way to avoid undue costs for this important asset class. AFME also recommends that the punitive treatment of securitisations in the 2023 EBA stress tests is revised for future exercises.	13	EBA/SSM
Other P1 revisions:	Modelling standards have been improved through for example the ECB's Targeted Review of Internal Models (TRIM, including credit risk IRB repair programmes), evolution of risk not in models frameworks both in the EU and UK, as well as via supervisory benchmarking exercises for market risk. For example, the impact of the TRIM exercise on RWAs has been considerable, leading to an increase of €275 billion in RWAs across large SSM supervised banks. In this context, it is worth noting that the ECB expects the IRB repair programmes slow down as a consequence of the implementation of final Basel III reforms, as the revisions constrain the use of internal models in several dimensions . AFME recommends that the SSM reviews this part of the manual/calculation to mitigate any P2 charges that were due to IRB RWA variability that no longer exists. Improvements in accounting standards such as IFRS9 have led to expected losses being captured through accounting provisions rather than via incurred loss model. While the PRA has published guidance on IFRS9 accounting provisions (see annex 2 for details), it is not evident if these improvements in risk capture have resulted in any reduction in Pillar 2 requirements or guidance in the SSM's Pillar 2 assessments. This should be considered by the SSM.	13-14	SSM/EBA SREP guidelines/PRA

Macroprudentia l buffers	AFME recommends that policymakers and supervisory authorities in the EU/EEA revisit the macroprudential framework and the tools utilised (especially the appropriateness of stress tests) in light of the positive-neutral CCyB, P2G requirements, as well as the systemic risks related to size and interconnectedness already included in the P2R framework. Alternatively, systemic risks that are addressed by the macroprudential tools should be carved out of the P2 framework.	16	EBA/SSM/Commissio n
Buffer framework:	In the context of capital buffers, it is also worth noting that the buffer structures should be reviewed as part of the Pillar 2/SREP reviews both in the UK and EU respectively. For example: • Overlays with buffer risk capture and other macroprudential tools such as input floors, resulting from uncoordinated use of similar methodologies and application of P1 floors and capital buffers by different authorities and within different parts of the regulatory framework. • Releasability of buffers that should be countercyclical by nature should be clearly defined and policies established to ensure there is sufficient transparency to banks and market participants on the application, releasability and rebuilding of buffers ahead of potential adverse events. • The Pillar 2 requirements under SSM supervision are not sensitive to changes (as a result of the current events) in countercyclical capital (CCyB) and systemic risk buffers. They have remained largely constant despite adjustments to the buffers. Buffer usability at times of economic downturn are a key part of the post-crisis reforms, and it has been a topic of debate recently, also from the viewpoint of MDAs. • In the UK, the recent increase in SRB (1%) automatically also increases the LR based MREL requirements. AFME believes that it would be beneficial to unearth the linkages between Pillar 2 buffers and other requirements and reduce this additivity to achieve more efficient capital usage.	19	EBA/SSM/PRA

F			
Pillar 2	For the Pillar 2 reviews, the key outcomes would be:	19-	EBA/SSM
decisions and	- Greater transparency of how P2 requirements and	20	
transparency:	guidance are set;		
Feedback and	- Maintaining overall regulatory capital neutrality;		
granularity of	- Guidance should be provided on how the change in		
the SREP	Pillar 1 and consequent Pillar 2 updates should be		
documents	included in bank capital plans during the transition		
	period before the updated Pillar 2 methodologies are		
	completed in 2024; and		
	- The process should have inbuilt granularity in the		
	feedback process, when Pillar 2 decisions are made by		
	supervisors. This feedback should be consistent across		
	firms and provide all information that resulted in		
	changes to Pillar 2 outcomes, whether qualitative or		
	quantitative.		
MDA	The MDA trigger points in relation to the buffer	20	EBA/SSM/PRA
MDII	structure should be reviewed. This could have negative	20	LDIT/ SSM/ TIME
	financial stability consequences if investors react		
	strongly to bank specific restrictions at times of stress.		
	strongly to bank specific restrictions at times of stress.		

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