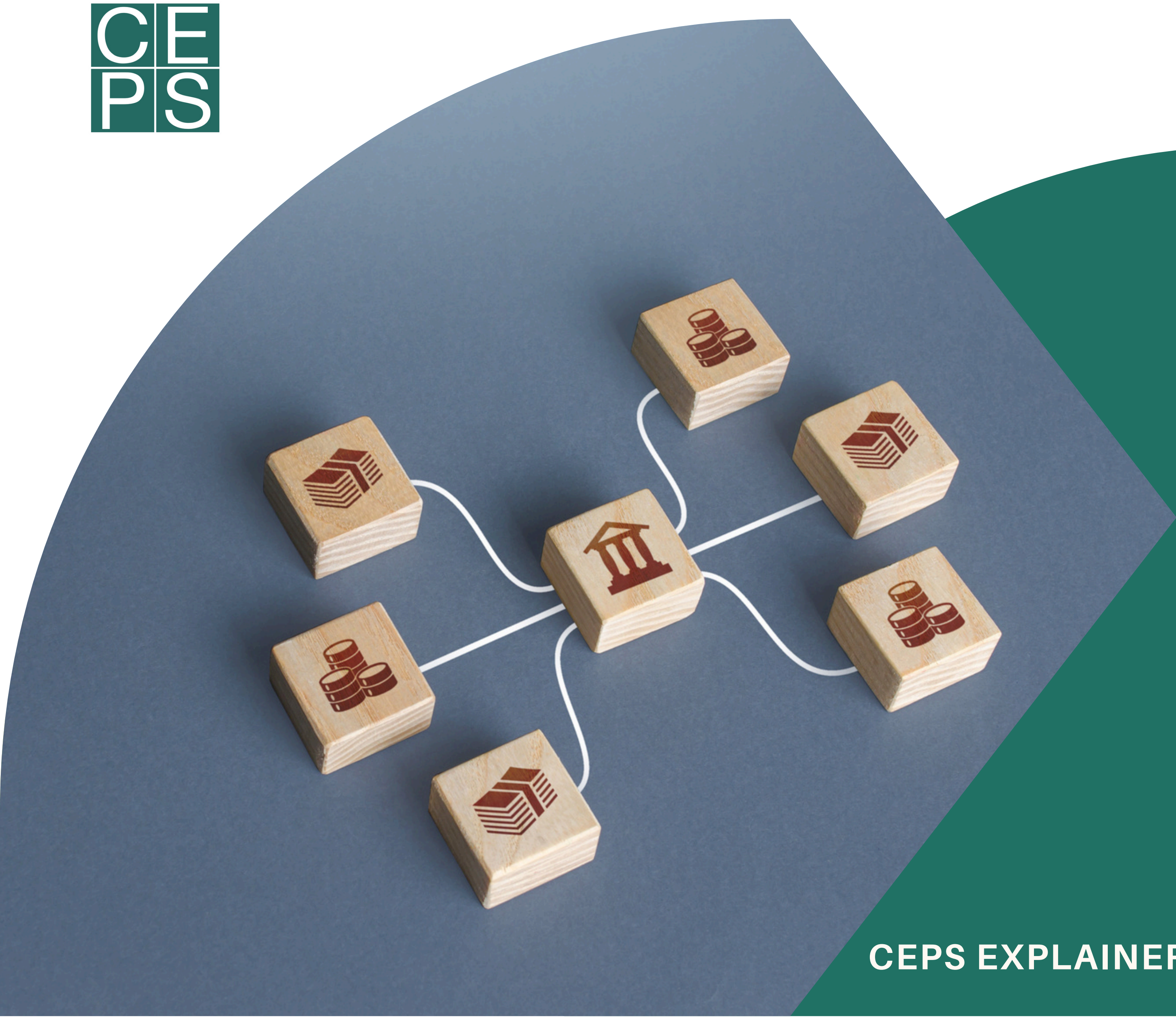

CEPS EXPLAINER

UNPACKING THE STACK: HOW LAYERED CAPITAL REQUIREMENTS SHAPE EUROPEAN BANKING CAPACITY

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SUMMARY

The EU's banking capital framework comprises multiple layers – microprudential requirements, macroprudential buffers and resolution capacity – each calibrated by different authorities that are pursuing distinct objectives. While individually coherent, these layers generate overlaps that constrain banks' balance-sheet capacity beyond what any single policymaker intended. Common Equity Tier 1 simultaneously has multiple purposes, the same risks are capitalised more than once and fragmented governance prevents the systematic assessment of cumulative effects.

This CEPS Explainer dives into why all this matters for Europe's strategic priorities, including financing the green transition, infrastructure and defence capabilities, all of which require banking capacity that the current stack currently constrains. Improving regulatory efficiency, through better coordination, enhanced buffer usability and targeted simplification, would strengthen both Europe's resilience and its investment capacity.

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Introduction

The EU's banking capital framework is built like a stack. Imagine that at its base sits Pillar 1, the harmonised minimum capital requirement. Above it, Pillar 2R addresses institution-specific risks. Further up, Pillar 2G provides an additional stress-test cushion. On top of that, macroprudential buffers guard against systemic vulnerabilities. And running parallel to the entire structure, resolution requirements ensure that banks can be wound down without the need for taxpayer support. Each layer pursues a distinct policy objective. Each one is calibrated by a different authority. And each one, viewed separately, appears reasonable and well designed.

The problem is that they don't exist in isolation. The same euro of capital – particularly Common Equity Tier 1 – is expected to serve multiple purposes simultaneously. The same set of risks is capitalised more than once. And decisions taken by one authority can tighten the overall stack in ways that the other authorities would never anticipate. The result is a system that is coherent in its individual components but complex and constraining when it comes to its aggregate effects.

This matters not just for banks but for Europe's overall capacity to finance its strategic priorities – the green transition, digital infrastructure, strategic supply chains and defence.

To be clear, this isn't an argument for deregulation. European banks are demonstrably more resilient than they were before the 2008-09 financial crisis and that resilience is worth preserving. But resilience and efficiency are not mutually exclusive. The question is whether the current stack achieves its stability objectives as efficiently as possible or whether overlaps and fragmentation have created dead weight – namely capital tied up not because it enhances financial stability but because the system's architecture inadvertently requires the same capacity multiple times over.

This CEPS Explainer maps the EU banking capital stack from the ground up and argues that making the stack work better isn't just sound prudential policy. Rather, it's a precondition for European competitiveness during an era of transformative economic and geopolitical challenges.

The building blocks – regulatory capital and eligible liabilities

Understanding the EU capital framework requires understanding the instruments that make up regulatory capital and eligible liabilities. These instruments differ in seniority, loss-absorption features and their role in *going concern* (an assumption that a business is operating and making a profit) versus *gone concern* (when a business is defunct or soon to be defunct) situations.

Common Equity Tier 1 (CET1)

CET1 is the highest-quality form of capital, consisting mainly of ordinary shares, share premiums, retained earnings and other comprehensive income, subject to prudential deductions. It absorbs losses immediately and in full and is therefore the only instrument eligible for all microprudential buffers and supervisory expectations.

Additional Tier 1 (AT1)

AT1 instruments are perpetual, deeply subordinated bonds with discretionary coupons. They absorb losses by being converted into CET1 or are permanently written down upon breaching a contractual trigger. AT1 provides going concern loss-absorption but sits below CET1 in terms of quality.

Tier 2 (T2)

Tier 2 capital consists mainly of subordinated debt with a minimum maturity of five years. It doesn't absorb losses in going concern but is written down or converted in resolution. Tier 2 therefore plays a primarily gone concern role, although it's a part of regulatory 'Own Funds'.

Senior Non-Preferred (SNP)

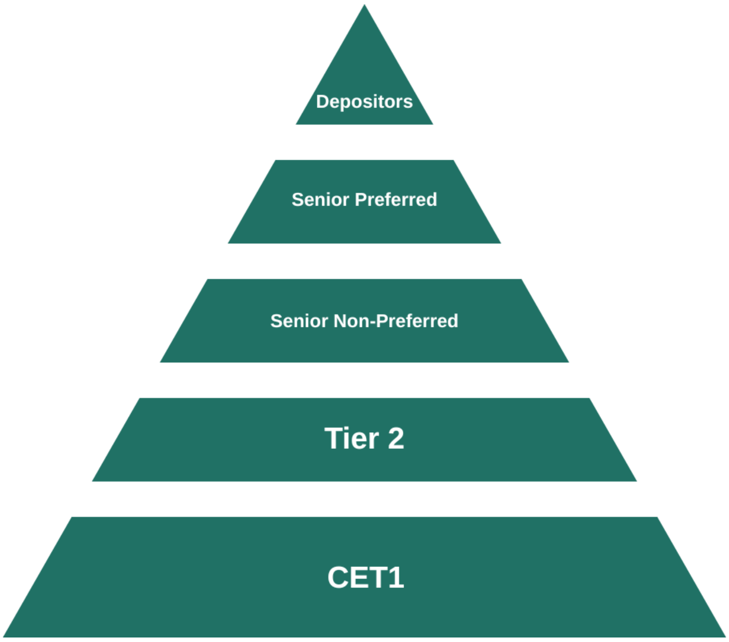
Senior non-preferred debt is a class of unsecured debt ranking below senior preferred but above Tier 2. Created to operationalise the bail-in tool, it's one of the main instruments used to meet MREL/TLAC. It provides reliable gone concern loss-absorption without diluting shareholders.

Senior Preferred (SP)

Senior preferred debt refers to banks' standard unsecured senior debt. It ranks above SNP in insolvency and is usually not eligible for the recapitalisation component of MREL, although some issuances can count towards the loss-absorption amount if they meet specific eligibility criteria.

Figure 1 provides a simplified illustration of the loss-absorption hierarchy applied in bank resolution. It depicts the order in which different liability classes bear losses, starting with the instruments that are designed to absorb losses first and then progressing to those that are the most protected. Although the hierarchy is stylised, it reflects the core sequencing embedded in the EU resolution framework and broadly applied across major jurisdictions. Understanding the hierarchy's order is essential for assessing both the resilience of banks' capital structures and the distribution of risks among investors and depositors.

Figure 1. Loss-absorption hierarchy (simplified)



Source: Author's own elaboration.

TYPOLOGY OF PRUDENTIAL AND RESOLUTION REQUIREMENTS IN THE EU

The EU framework imposes three categories of requirements – microprudential, macroprudential and resolution-related – each reflecting different policy objectives and each relying on different instruments from the hierarchy outlined above.

Microprudential requirements: Pillar 1, Pillar 2R and Pillar 2G

Microprudential requirements ensure that banks remain viable in normal times and under idiosyncratic stress. They form the foundation of the *going concern* regime.

Pillar 1, harmonised in the Capital Requirements Regulation (CRR)/Capital Requirements Directive (CRD), sets minimum capital ratios based on risk weighted assets (RWAs):

- CET1: 4.5 %
- AT1: 1.5 %
- Tier 2: 2.0 %

Together they form an 8 % total capital requirement.

Pillar 2R (P2R) is set by the European Central Bank (ECB)/Single Supervisory Mechanism (SSM) through the Supervisory Review and Evaluation Process. It covers risks not adequately reflected in Pillar 1 and can be met with a combination of CET1, AT1 and Tier 2, with a CET1 component.

Pillar 2G (P2G) is a supervisory expectation aimed at ensuring resilience under the adverse stress-test scenario. It's non-binding but must be met entirely with CET1, functioning as a *de facto* prudential buffer.

Pillar 1 and P2R constitute binding requirements, whereas P2G operates as an expected capital margin.

Macroprudential buffers – the Combined Buffer Requirement (CBR)

Macroprudential buffers strengthen the banking system's resilience against systemic and structural vulnerabilities. They form the Combined Buffer Requirement, which must be met exclusively with CET1.

The CBR comprises:

- The **Capital Conservation Buffer (CCoB)** (2.5 % CET1).
- The **Countercyclical Capital Buffer (CCyB)**, varying by country and credit conditions.
- The **Systemic Risk Buffer (SyRB)** to address structural vulnerabilities.
- The **G-SII buffer**, applicable to global systemically important institutions.
- The **O-SII buffer**, applied to domestically important institutions.

Breaching the CBR activates automatic restrictions on distributions (MDA) but doesn't constitute a breach of minimum capital requirements.

Resolution requirements: MREL (risk-based and leverage-based)

The Minimum Requirement for Own Funds and Eligible Liabilities (MREL) ensures that a failed bank can be resolved without taxpayer support. The Single Resolution Board (SRB) sets MREL for significant and cross-border groups.

MREL is expressed in two parallel metrics, a risk-based MREL, as a percentage of RWAs and a leverage-based MREL, as a percentage of the leverage exposure measure (LRE).

Both metrics include a loss-absorption amount, mirroring Pillar 1 and P2R, and a recapitalisation amount, required to restore the institution to viability after resolution.

MREL can be met with a broad set of instruments: CET1, AT1, Tier 2, senior non-preferred, and – under limited conditions – senior preferred. Importantly, the subordination requirement means that banks must maintain a 'subordination stack' that complicates liability management and can create cliff effects when instruments approach the end of their eligibility window.

For G-SIIs, the MREL framework incorporates the TLAC standard, which adds an additional layer of calibration complexity as institutions must simultaneously meet both the EU's resolution requirements and internationally agreed standards that were designed for a different institutional context.

WHICH INSTRUMENTS COUNT FOR WHICH REQUIREMENTS?

The table below summarises how instruments are allocated across prudential and resolution requirements. It shows that nearly all microprudential buffers must be met with CET1 alone, whereas MREL admits a much broader range of eligible liabilities. This asymmetry lies at the core of several overlaps and tensions discussed in the next section.

Table 1. Summary outlining which instruments count for which prudential/resolution requirements

Requirement	Objective	CET1	AT1	T2	SNP	SP
Pillar 1	Minimum prudential capital	✓	✓	✓	✗	✗
P2R	Institution-specific risks	✓ (partial)	✓	✓	✗	✗
P2G	Stress-test resilience	✓ only	✗	✗	✗	✗
CBR	System-level buffers	✓ only	✗	✗	✗	✗
MREL (risk-based)	Loss-absorption + recapitalisation	✓	✓	✓	✓	(limited)
MREL (leverage-based)	Parallel leverage safeguard	✓	✓	✓	✓	(limited)

Source: Author's own elaboration.

OVERLAPS, INTERACTIONS AND GOVERNANCE FRAGMENTATION

The coexistence of microprudential, macroprudential and resolution requirements creates a capital framework that's coherent in its individual components but complex in its aggregate effects.

Although each layer of the regime pursues a distinct policy objective, the way these requirements interact in practice generates overlaps that aren't always apparent in the legal architecture. These overlaps stem from the instruments used to meet the various requirements, from convergences in their underlying objectives and from the distribution of responsibilities across different authorities.

Understanding these interactions is essential for assessing how the capital stack affects banks' behaviour and, ultimately, their capacity to support the EU's broader economic and investment priorities.

Instrument-based overlaps – a single euro of CET1 serving multiple purposes

The first layer of overlap derives from the instruments that banks are permitted to use to meet regulatory requirements. CET1 plays a uniquely prominent role – it's the only instrument eligible for all microprudential buffers and supervisory expectations, and it's also accepted for part of the loss-absorption component of MREL. Consequently, the same euro of CET1 is expected to fulfil a wide range of purposes, from meeting the Pillar 1 minimum to satisfying Pillar 2R, covering the entirety of Pillar 2G and absorbing all macroprudential buffers within the Combined Buffer Requirement.

CET1's multi-use nature blurs the conceptual boundary between going concern and gone concern capital. It can also weaken the perceived usability of buffers, as banks may be reluctant to draw them down during periods of stress if doing so risks breaching other overlapping requirements.

Moreover, this creates a 'stacking problem' – while individual requirements may appear reasonable in isolation, their cumulative effect can result in effective capital ratios significantly higher than any single policymaker intended, particularly when banks add their own management buffers above regulatory minimums to avoid breaching MDA thresholds.

Overlaps in prudential objectives: Blurred lines between micro-, macro- and resolution policy

A second form of interaction arises from the objectives that the different layers of the framework are designed to serve. Microprudential requirements focus on the resilience of individual institutions, macroprudential buffers target system-wide vulnerabilities and MREL ensures that failing banks can be resolved without needing public support. In practice, however, these objectives often intersect. Macroprudential buffers, although conceived at the system level, are imposed on individual institutions and thus function as additional microprudential constraints. Meanwhile, the loss-absorption amount of MREL, largely mirrors the risks already capitalised under Pillar 1 and Pillar 2R, effectively requiring banks to demonstrate their capacity to absorb the same set of losses twice.

These overlaps make it more complicated to interpret the capital framework, as it becomes increasingly difficult to distinguish which requirement is binding in each circumstance and which prudential objective is driving banks' behaviour at the margin.

GOVERNANCE FRAGMENTATION: MULTIPLE AUTHORITIES SHAPING THE SAME CAPITAL STACK

A third source of complexity stems from the governance structure underlying the EU capital regime. Different components of the stack are set by different authorities, each with its own mandate, analytical framework and timeline. Pillar 1 is established through EU legislation and the SSM is responsible for assessing its proper implementation that can lead to increased capital requirements by reviewing the amount of RWA; Pillar 2R and Pillar 2G are determined by the ECB/SSM; macroprudential buffers such as the CCyB, SyRB and O-SII buffer are set by national authorities; the G-SIB buffer is set by the FSB; MREL is calibrated by the SRB and G-SIBs are also mandated to comply with TLAC.

In principle, these responsibilities are complementary. In practice, decisions taken by one authority may tighten or loosen the overall stack in ways that were not anticipated by the others. The absence of a single institution responsible for ensuring the framework's coherence means that interactions between requirements are often only detected retrospectively, once banks have adjusted their issuance strategies or their capital planning.

WHY OVERLAPS AND FRAGMENTATION MATTER FOR EUROPE'S INVESTMENT CAPACITY

The combined effect of instrument overlap, objective overlap and governance fragmentation has real implications for the economy.

When CET1 is implicitly expected to fulfil multiple functions, banks may become hesitant to use their buffers during downturns, undermining the framework's countercyclical design. Uncertainty about the future calibration of overlapping requirements can push banks to issue debt preemptively, particularly senior non-preferred instruments, which raises funding costs and influences lending conditions. Over time, these dynamics can erode balance-sheet capacity and dampen banks' willingness to provide long-term finance.

This matters for the EU's broader policy agenda because banks are expected to play a central role in financing the green transition, digital infrastructure, strategic supply chains and defence-related investment. A capital framework that's cumulatively tighter or more unpredictable than intended can thus become an unintended constraint on Europe's strategic ambitions.

Policy options: Towards a more coherent capital and resolution framework

The existence of overlaps and fragmented governance has prompted a growing debate on whether the EU's capital and resolution framework should be adjusted to improve its coherence, predictability and overall effectiveness. This debate has produced a spectrum of proposals, ranging from fundamentally restructuring the capital stack to incremental refinements designed to ease the unintended interactions identified above.

Although the political momentum for large-scale reform is limited, the underlying issues are sufficiently structural to justify a careful examination of the main approaches currently being discussed.

Structural proposals – A clearer separation between going concern and gone concern capital

One of the most prominent proposals, articulated most explicitly by the Bundesbank, the Financial Stability Institute and by parts of the German banking community, calls for a cleaner separation between going concern capital and gone concern loss-absorbing capacity.

Under this approach, the prudential regime would rely almost entirely on CET1, while the resolution regime would be met predominantly through subordinated instruments such as AT1, Tier 2 and senior non-preferred debt. In conceptual terms, this would restore a sharp boundary between capital intended to absorb losses while the bank remains a going concern and liabilities intended to absorb losses or facilitate recapitalisation once the bank has entered resolution.

The attraction of this approach lies in its clarity and internal consistency. A CET1-centric prudential regime would eliminate the ambiguity surrounding buffer usability and remove the implicit double counting of CET1 for prudential and resolution purposes. Likewise, confining the bulk of MREL to subordinated instruments would simplify the design of the bail-in tool and ensure that gone concern resources are both credible and readily identifiable.

From a theoretical standpoint, this model aligns with the original rationale for TLAC and provides a transparent hierarchy of loss-absorbing instruments. It would also reduce the procyclicality embedded in the current system, where stress periods simultaneously deplete CET1 and trigger concerns about both prudential and resolution adequacy, potentially amplifying rather than dampening the credit cycle.

Yet the practical challenges are significant. A strict separation could require a substantial recapitalisation of the resolution stack through issuing additional senior non-preferred or subordinated debt. It could also result in an obligation to increase CET1 if AT and T2 are required to be replaced by CET1 in the capital ratio. This would raise funding costs in the short to medium term, particularly for large retail-funded banks, and could also spur distributional effects across Member States that have different market structures.

This solution would also require revisiting key aspects of the CRR, CRD and Bank Recovery and Resolution Directive, as well as recalibrating the interaction between Pillar 2, macroprudential buffers and the loss-absorption component of MREL. While conceptually elegant, such a reform would represent a major regulatory shift that would only be feasible with a political consensus that's currently lacking.

Moreover, the transition period itself would also create uncertainty. Banks would need clarity on grandfathering arrangements, phase-in schedules and the treatment of existing instruments, all while maintaining investor confidence in their MREL stacks. The experience with MREL's initial implementation suggests that such a transition is rarely smooth and can generate unintended market dynamics.

Incremental proposals – improving the usability and coherence of the existing framework

More incremental proposals seek to improve the functioning of the existing system without altering its core architecture. The first line of reform focuses on enhancing buffer usability, ensuring that CET1 buffers can be drawn down in periods of stress without jeopardising compliance with other parts of the stack. This could involve clarifying the interaction between MREL and the prudential buffers, refining supervisory communication or adjusting the calibration of leverage-based constraints whose binding nature can inadvertently undermine buffer use.

A second line of incremental reform centres on rebalancing MREL's composition, ensuring that an adequate share of resolution needs is met through subordinated instruments rather than CET1. This approach doesn't prohibit the use of CET1 for MREL purposes but introduces guardrails that limit excessive overlap. Improving the transparency and predictability of MREL decisions could also prove very beneficial, with clearer multi-year trajectories and more explicit links to banks' resolvability assessments.

A third strand of incremental proposals calls for strengthening coordination between authorities. Better alignment between microprudential, macroprudential and resolution policy could help prevent unintended tightening of the capital stack and provide banks with greater clarity regarding the objectives that drive changes in each layer. While enhanced coordination requires no legislative overhaul, it would demand a shift towards more systematic horizontal dialogue between the SSM, national macroprudential authorities and the SRB.

Concretely, this could involve establishing a formal coordination mechanism where changes to any component of the stack trigger an automatic assessment of cumulative effects, like the 'comply or explain' approach used in some macroprudential frameworks. It could also entail synchronised multi-year planning horizons across authorities, reducing the risk that banks face conflicting signals or sequential calibration adjustments that compound rather than offset each other.

Targeted simplification – or streamlining the resolution regime

Simplifying the resolution regime itself could also help reduce complexity. One idea would be to streamline the relationship between TLAC/MREL. For G-SIIs, TLAC is already embedded within MREL and in practice the two requirements converge. A more formal consolidation could reduce redundancy and simplify banks' issuance strategies, particularly for cross-border groups operating in multiple jurisdictions.

This approach wouldn't resolve the underlying overlap between prudential and resolution requirements but it could make the system more transparent and reduce the cumulative compliance burden.

Assessing the trade-offs

Each proposal involves trade-offs. Structural reforms promise conceptual clarity but require significant transition costs and political coordination. Incremental adjustments are more feasible but may only partially mitigate the underlying interactions. Simplifying the resolution component could enhance transparency yet doesn't fully address the multi-layered nature of the prudential stack. A realistic reform path may therefore require a combination of measures – reinforcing buffer usability, improving cross-authority coordination, introducing calibrated limits on the use of CET1 for MREL, and exploring targeted simplification where feasible.

What matters from a policy perspective is that any reform should preserve the EU framework's core strength – its emphasis on resilience and resolvability – while addressing the cumulative rigidity and unpredictability that can arise when multiple, independently calibrated requirements interact. A more coherent and better coordinated system would help ensure that capital regulation continues to serve both prudential objectives and Europe's broader economic ambitions.

Crucially, reform shouldn't be framed as a choice between safety and growth but as an effort to eliminate inefficiencies that neither enhance financial stability nor support economic dynamism – i.e. dead weight that reduces Europe's competitive position without any corresponding prudential benefit.

WHY REFORM REMAINS DIFFICULT

Beyond technical considerations, the difficulty in achieving reform reflects deeper political economy factors. Different Member States have distinct preferences shaped by their banking sectors' characteristics. Countries with large retail-funded banks are more sensitive to senior debt issuance costs, while those with wholesale-funded institutions prioritise flexibility in liability management.

Similarly, regulatory authorities defend their respective mandates, with microprudential supervisors emphasising going concern resilience, resolution authorities prioritising resolvability and macroprudential bodies focusing on systemic stability. These divergent preferences make comprehensive reform politically costly, as any significant change would create winners and losers both across Member States and across regulatory domains.

The current framework's complexity may therefore represent not just a technical oversight but an equilibrium outcome of these competing interests, a layered system where each authority can point to its own contribution without forcing explicit trade-offs. This suggests that incremental reforms with clear, bounded objectives may be more politically sustainable than ambitious restructuring, even if the latter would be technically the better option. This is why understanding the political dimension is essential for assessing which reform pathways are genuinely feasible… rather than merely theoretically attractive.

CONCLUSIONS – REGULATORY COHERENCE IS A PRECONDITION FOR EUROPEAN COMPETITIVENESS

The EU's capital and resolution framework represents a remarkable achievement in post-crisis financial regulation. It has delivered a banking system that is demonstrably more resilient, better capitalised and more resolvable than its predecessor. Yet this CEPS Explainer has highlighted that the framework's layered architecture generates cumulative effects that weren't fully anticipated when its individual components were designed. The overlaps between microprudential, macroprudential and resolution requirements, combined with fragmented governance across multiple authorities, creates a system whose aggregate impact on banks' behaviour and balance-sheet capacity is more constraining than the sum of its parts would suggest.

This matters because the EU now faces a fundamentally different strategic situation than the period when the post-crisis regulatory agenda was constructed. The policy priorities of the mid-2020s – financing the green transition, building digital infrastructure, securing strategic supply chains and strengthening defence capabilities – demand a banking system capable of providing patient, long-term capital at scale. A capital framework that inadvertently discourages buffer drawdowns, that generates funding cost disadvantages relative to international competitors or that creates chronic uncertainty about future calibration, becomes a structural impediment to all these ambitions.

The policy debate should thus move beyond the false dichotomy between financial stability and economic growth. The question isn't whether the EU should weaken its prudential standards but whether the current framework achieves its stability objectives as efficiently as possible. Eliminating overlaps that require banks to hold capital against the same risks multiple times over, improving coordination to avoid unintended cumulative tightening and enhancing the predictability of multi-year trajectories would strengthen both resilience and capacity. These aren't concessions to industry lobbying but corrections to regulatory inefficiencies that serve neither prudential nor economic goals.

As discussed immediately above, comprehensive restructuring and reform faces formidable obstacles. Yet the incremental pathway, focused on buffer usability, cross-authority coordination and targeted simplification, remains open.

What's required is for policymakers to recognise that regulatory coherence isn't a technical detail but rather a strategic necessity. A more efficient capital framework would not only serve banks' interests but would strengthen Europe's capacity to finance its own future.

In an era of renewed geopolitical competition and transformative economic challenges, the EU simply cannot afford a regulatory system that inadvertently constrains its strategic autonomy. Making the capital framework work better is therefore not just sound prudential policy – it's an essential component of European competitiveness.

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