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Understanding the banking sector capital framework in the European Union

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Abstract

This paper describes and evaluates the European Union (EU) banking sector capital framework, focusing on how the international standards set by the Basel Committee on Banking Supervision have been implemented within the EU. Using granular supervisory data for significant institutions under the Single Supervisory Mechanism (SSM), we quantify the capital impact of EU-specific regulatory choices, supervisory measures and macroprudential policies. We show that most EU capital requirements stem from Basel standards, which encompass both prescriptive “Pillar 1” components and elements that are expected to be designed and calibrated at the jurisdictional level. The paper describes the evolution of capital ratios and requirements since the inception of the SSM and discusses the relationship between changes in capital levels and indicators of banking sector performance. To provide a comparative perspective, a model-based counterfactual exercise compares capital requirements of EU banks with those that would arise if EU banks were subject to the main prudential regulations that currently apply in the United States, which vary depending on the size of the bank. The results show that for the largest EU banks, the current US rules would entail stricter requirements, whereas mid-sized EU banks would be subject to less stringent requirements. Our findings show that EU capital requirements are broadly comparable to those in other jurisdictions and are largely in line with international standards. When assessing broader indicators of bank performance, we highlight the importance of considering not only private costs and benefits, but also intended effects and broader societal objectives. Against this background, we emphasise the benefits of maintaining a level playing field at the global level through the consistent implementation of international standards, rather than seeking competitive advantages through the relaxation of regulatory standards, which could undermine financial stability.

Keywords: Basel III; bank capital regulation; European Union banking sector; banking supervision; supervisory policy

JEL classification: G21, G28, F36

Non-technical summary

This paper describes and evaluates the European Union’s bank capital framework, focusing on how the internationally agreed Basel standards have been implemented in the EU. It addresses three questions: first, how the EU has implemented Basel standards across a diverse banking sector and a multi-level institutional setting; second, the extent to which EU-specific choices – both stricter and looser than Basel – affect banks’ required capital; and third, whether EU capital requirements are stricter or less strict than those that apply in the United States.

It addresses three questions: first, how the EU has implemented Basel standards across a diverse banking sector and a multi-level institutional setting; second, the extent to which EU-specific choices – both stricter and looser than Basel – affect banks’ required capital; and third, whether EU capital requirements are stricter or less strict than those that apply in the United States.

The paper describes the key features of the EU’s implementation of Basel standards. This includes the ways in which the EU’s single rulebook is adapted to a diverse banking sector, allowing banks of different sizes and business models to comply with rules of varying complexity, and providing various options and discretions to accommodate specific arrangements. This paper also outlines the supervisory arrangements in place under the Single Supervisory Mechanism, notably the common Supervisory Review and Evaluation Process, bank-specific Pillar 2 requirements and forward-looking Pillar 2 guidance, alongside a decentralised macroprudential framework where national authorities remain primarily responsible for setting capital buffers, which the ECB may “top up”.

This paper quantifies the cumulative impact of EU-specific choices on minimum required capital for significant institutions, based on granular supervisory data. In doing so, the paper develops a taxonomy that groups EU rules into different buckets: prescriptive Basel elements, non-prescriptive Basel elements calibrated at EU level, “super-equivalences” that are stricter than Basel, and “deviations” that are less strict. The estimates suggest that the majority of EU requirements derive directly from prescriptive elements of the Basel standards – i.e., the Pillar 1 minimum requirements and certain capital buffers. Non-prescriptive Basel elements account for around one-third of total requirements, while super-equivalences and deviations have a more limited impact. The paper also discusses the impact of bank-specific decisions relating to banks’ use of internal models for risk-weighting their assets, which are a key determinant of Pillar 1 requirements. The Basel framework is explicitly designed as a set of minimum standards that jurisdictions are free to go beyond. However, the cumulative picture presented in this paper does not support the claim that EU requirements are systemically stricter than the Basel standards (i.e. “gold-plated”).

The paper also traces the trajectory of capital ratios and requirements since the inception of the SSM. Banks have built up strong capital positions, with CET1 and Tier 1 ratios having risen markedly over the past decade. Aggregate requirements rose during the initial Basel III phase-in period, fell temporarily during the pandemic as authorities temporarily released buffers, and have since 2024 returned to pre-pandemic levels due to increases in macroprudential buffers. The initial impact of the final Basel III reforms, which affect the measurement of risk-weighted assets, has been muted. Looking ahead, the fully phased-in Basel III

“output floor” – which limits the capital benefits banks can obtain from using internal models to risk-weight their assets – is expected to have a limited average impact through to 2030. The effects will vary by bank and could increase once certain transitional measures, which temporarily lower the impact in order to allow market participants and market structure to adjust to the new rules, expire.

The paper advocates a nuanced understanding of the impact of capital requirements on indicators of banking sector performance. For most of the period since the inception of the SSM, the volume of new lending to firms and households has been rather muted when assessed in real terms, albeit with some significant fluctuations. Moreover, profitability did not return to pre-financial crisis levels until 2022, following the change in the interest rate environment. However, when considering the impact of changes in capital requirements on these outcomes, it is necessary to separate short and long-term consequences and to recognise that reforms aimed at making the banking sector less risky inevitably alter risk-return trade-offs.

To provide a comparative perspective, the paper applies a model-based counterfactual exercise. It asks how minimum requirements of significant EU institutions would change if those banks were hypothetically subject to the key features of the current US prudential framework. These features include, inter alia, the “tailoring” of requirements across banks of different sizes, the US framework for setting buffers based on stress tests, and legal limitations on the benefits banks can obtain from using internal models. On average, the counterfactual US rules would result in somewhat higher capital requirements for the whole sample. The difference would be most pronounced for the largest EU banks – those which tend to compete internationally – and would be driven by the stricter US approach for setting buffers for global systemically important banks, as well as the legal limitations on the uses of internal models. By contrast, mid-sized EU banks would be subject to less stringent requirements under the current US framework, owing to the absence under the US framework of equivalent mechanisms to certain EU capital add-ons, as well as the US practice of setting the countercyclical buffer at zero. The paper emphasises that these results should be treated with caution given data constraints, methodological assumptions, and structural differences between the EU and US banking systems.

In conclusion, the paper finds that EU capital requirements are broadly comparable to those in other jurisdictions and are largely in line with international standards. While the paper does not comprehensively review evidence on the relationship between capital requirements and banking sector performance, it cautions against interpreting performance indicators such as return on equity or lending volumes too narrowly, as this can overlook the intended effects of structural changes in regulation or outcomes that become apparent only in the longer-term. Against that background, the authors emphasise the benefits of maintaining a level playing field at the global level through consistent implementation of international standards, rather than seeking competitive advantages through the relaxation of regulatory requirements, which could undermine financial stability.

1 Introduction

The role of prudential banking regulation in shaping economic growth and competitiveness is at the centre of a growing debate.¹ Banks are central to the financing of modern economies, including those with market-based financial systems. Their resilience is a prerequisite for financial stability, which in turn underpins confidence, investment and sustainable long-term economic growth. Prudential regulation seeks to safeguard this stability by incentivising banks to internalise the risks they incur, including those they pose to the financial system and the wider economy. In doing so, prudential requirements aim to align private incentives with societal preferences, thereby influencing how risk and reward are distributed among market participants, customers and society at large. For this reason, the design and calibration of prudential requirements are often highly contested domains of public policy. To inform the debate, this paper describes and evaluates the banking sector capital framework within the European Union (EU), focusing on how the international banking standards set by the Basel Committee on Banking Supervision (BCBS) have been implemented within the EU.²

Capital adequacy requirements are the cornerstone of prudential banking regulation. They require banks to fund a portion of their assets, such as loans and securities, with their own funds rather than relying excessively on debt, such as deposits or other short-term liabilities. In the absence of regulation, banks' funding choices are likely to lead to socially suboptimal levels of capitalisation. This is because capital can be a more expensive source of funding for banks than debt for a variety of reasons, including differences in tax treatment and implicit funding subsidies arising from assumptions that governments may step in to prevent bank defaults. By requiring banks to maintain higher capital levels than they would otherwise choose, authorities seek to ensure – with a certain degree of confidence – that banks' shareholders absorb unexpected losses, rather than these being passed on to depositors or other creditors. Equally, resolution requirements, introduced in the wake of the global financial crisis, seek to ensure that banks can fail in an orderly manner, with losses allocated in a clear and predictable manner, thus avoiding systemic repercussions or taxpayer bailouts. Together, capital and resolution requirements help to build confidence in the banking system and limit the risk that losses will trigger bank runs or spill over into wider systemic crises.

In the wake of the global financial crisis, banking regulators and supervisors agreed to increase capital requirements and impose stricter conditions on the instruments that could be used to meet those requirements. The BCBS revised its capital standards to increase both the quantity and the quality of regulatory capital

¹ On the competitiveness of European banks, see Mejino-López, J. and Véron, N. (2025), “EU Banking Sector & Competitiveness – Framing the Policy Debate”, In-Depth Analysis, European Parliament, May, Brussels.

² This paper complements a recent European Banking Authority (EBA) study that compared prudential and resolution requirements (“stacking orders”) in the European Union, the United States and the United Kingdom. See EBA (2024), *Stacking orders and capital buffers reflections on management buffer practices in the EU*, July.

that banks would be required to maintain.³ It also revised its standards concerning how banks measure the risks they incur.⁴ However, the Basel standards do not have direct legal force. They must be implemented through national – or, in the case of the EU, supranational – regulatory frameworks. As a result, differences in implementation can arise across jurisdictions, as local authorities adapt rules to reflecting structural differences in financial systems, institutional arrangements and policy priorities.

This paper describes how the Basel standards have been implemented in the EU, including by quantifying the impact on banks’ capital requirements of certain EU-specific features. The EU is unique among Basel Committee member jurisdictions in that it is a supranational jurisdiction composed of 27 individual countries. It is also unique in that responsibility for the supervision and resolution of the largest banks in 21 of the 27 EU Member States has been conferred on supranational authorities, namely the European Central Bank (ECB) within the Single Supervisory Mechanism (SSM) and the Single Resolution Board (SRB) within the Single Resolution Mechanism (SRM), respectively. The diversity of the EU banking landscape, combined with the multi-level nature of the regulatory and supervisory system in the EU, helps explain many of the policy choices that have been made in implementing the Basel framework within the EU.

While cross-jurisdictional divergences are inevitable, they often become contested within discussions around banking sector performance. Critics argue that EU requirements and supervisory approaches exceed international standards, with adverse effects on bank profitability, efficiency and credit supply.⁵ However, this paper finds that claims of systematic EU “gold-plating” are largely misplaced. Most EU capital requirements derive from the Basel standards. In some areas, calibration follows prescriptive Basel parameters; in others, Basel expects national authorities to determine the calibration, based on local risk conditions. The EU framework also contains important elements that are less stringent than Basel, while areas of greater stringency (“super-equivalence”) are limited and relate mainly to certain macroprudential measures, as well as measures concerning provisioning for non-performing loans. Moreover, while this paper does not comprehensively review evidence on the relationship between capital requirements and banking sector performance, it cautions against interpreting indicators such as return on equity or lending volumes too narrowly, as this can overlook the intended effects of structural changes in regulation or outcomes that become apparent only in the longer-term.

Cross-jurisdictional differences in prudential requirements also feed into debates on banks’ competitiveness.⁶ A bank’s competitiveness depends primarily

³ See BCBS (2011), *Basel III: A global regulatory framework for more resilient banks and banking systems - revised version June 2011*.

⁴ See BCBS (2017), *Basel III: Finalising post-crisis reforms*.

⁵ Global Association of Risk Professionals (GARP), Global Benchmarking Initiative (GBI) and European Banking Federation (EBF) (2025), *2025 Cumulative Capital Demand Benchmarking Study*, May.

⁶ For a discussion on different dimensions of competitiveness, see Resti, A. (2025), “[How have European banks developed along different dimensions of international competitiveness?](#)”, *In-Depth Analysis*, European Parliament, April, Brussels. See also Buch, C. (2026), *Banks and competitiveness: promoting competition, protecting resilience*, Contribution for the Forum on Financial Supervision (LSE), 23 February 2026.

on its efficiency, productivity and, more broadly, the soundness of its business model. Many factors come into play, from internal factors such as the quality of its management to external considerations such as the size of local markets, the structure of the domestic financial system, and wider macroeconomic conditions. Regulation also influences competitiveness, although it is by no means the only factor. One of the core objectives of the Basel framework is to promote a level regulatory playing field for internationally active banks that compete across borders. Differences in the stringency of regulatory and supervisory requirements across jurisdictions therefore affect the terms of competition. They also affect international comparisons of requirements.

Recent contributions to the debate do not support the notion that capital requirements for banks in the EU are significantly more stringent than those that exist in peer jurisdictions.⁷ Supporting these conclusions, this paper presents an analysis indicating that, in aggregate, the largest EU banks would face stricter requirements under current US rules, while mid-sized EU banks would be subject to somewhat less stringent requirements.⁸ The directionality of these results casts doubt on claims that EU capital requirements place EU banks at an overall disadvantage when competing with banks from third countries. At the same time, the results should be interpreted with caution. Jurisdictions inevitably adapt local rules to the characteristics of local banks and markets. Moreover, banks will typically adjust their activities over time to align with the prevailing rules in the jurisdictions in which they operate. Accordingly, hypothetically applying one jurisdiction's rules to banks from another jurisdiction inevitably results in a certain degree of misalignment between the (notional) rules and the underlying activities of the banks to which they have been (notionally) applied.

The remainder of the paper is organised as follows. Section 2 describes the EU's implementation of the Basel framework within its multi-level regulatory and supervisory architecture. Section 3 quantifies the capital impact of EU-specific features using supervisory data. Section 4 reviews the evolution of capital adequacy and related requirements and discusses the relationship between capital requirements and key indicators of banking sector performance. Section 5 provides a cross-jurisdictional comparison between EU and US requirements, based on a model-based counterfactual exercise assessing how requirements among EU banks would change if they were subject to the main prudential regulations that apply in the United States. The conclusion underscores the value of maintaining a level playing field at the global level in terms of capital requirements, rather than pursuing competitive advantages through the dilution of regulatory requirements.

⁷ Simple cross-jurisdictional comparisons of risk-weighted capital requirements can be misleading, as they do not account for differences in prudential frameworks that affect banks' risk-weighted ratios and in differences in banks' risk profiles across jurisdictions. For a discussion, see Resti, A. (2025), *op. cit.*; Mejino-López, J. and Véron, N. (2025), *op. cit.*; Bank of England (2025), *Financial Stability in Focus: The FPC's assessment of bank capital requirements*, December.

⁸ The analysis refers to rules in place as of 31 December 2025, which is the reference date for the data used in the comparative analysis.

2 The EU's implementation of international banking standards

2.1 A Single Rulebook, adapted for a diverse banking sector

The Basel framework is implemented in the EU via the Capital Requirements Regulation (CRR) and the Capital Requirements Directive (CRD). This legislation – the centrepiece of the “Single Rulebook”⁹ for banks – applies¹⁰ to all credit institutions in the EU's internal market for banking, totalling around 4,654 institutions as of March 2026.¹¹

Proportionality is embedded in the framework. The fact that the Basel framework applies broadly across the EU does not mean that all banks are required to follow identical rules irrespective of their individual characteristics. For example, most smaller banks in the EU rely on the standardised approaches for measuring the riskiness of their assets for capital requirements purposes, where risk weights are prescribed directly in the regulation rather than being calculated using banks' own internal models. Moreover, banks that meet the criteria to be classified as “small and non-complex institutions” (SNCIs) are exempted from some rules and face significantly lighter reporting requirements.¹² In addition, the EU framework explicitly differentiates between banks based on their systemic relevance and other factors. Banks deemed systemically important – global systemically important institutions (G-SIIs) and other systemically important institutions (O-SIIs) – are expected to maintain additional capital buffers and are subject to other, more stringent standards.

Despite increasing regulatory harmonisation, the Single Rulebook accommodates diverse business models and banking structures. Adopted in 2013, the CRR-CRD package signalled a partial shift away from earlier approaches to regulatory integration based on the concepts of minimum harmonisation and mutual recognition of national laws. The package aimed to establish a common set of rules for determining capital requirements. As an EU Regulation, the CRR has immediate legal effect and does not require transposition into national law of the Member States (contrasting with the Capital Requirements Directive, which does require such transposition).

However, the CRR remains adaptable to the specificities of individual institutions. It contains around 130 options and discretions that can be exercised by supervisory authorities or Member States.¹³ Some of these are symptomatic of the

⁹ See <https://www.eba.europa.eu/single-rulebook>.

¹⁰ The CRD must be transposed in national laws before it can be implemented.

¹¹ ECB (2026), *Monetary Financial Institutions*, ECB Data Portal.

¹² While the Basel framework is relevant for internationally active banks, the Basel Committee considers it best practice for countries to apply capital requirements that are broadly consistent with the Basel framework to non-internationally active banks also. See BCBS (2024), *Basel Core Principles*, BCP 16, Additional Criterion 1, April.

¹³ See *ECB Guide on Options and Discretions available in Union Law*, July 2025.

need to accommodate diverse market structures or business models across Member States. For instance, supervisors may waive the application of requirements at various levels within banking groups, thus allowing the Single Rulebook to be applied to banks with diverse structures, such as cooperative groups or those belonging to institutional protection schemes. Other options and discretions are themselves a source of complexity, catering to very specific business arrangements that may pertain to only a handful of banks.¹⁴ In addition, options and discretions that are exercised by Member States (as opposed to the ECB in its supervisory capacity) can make the regulatory framework more complex for cross-border banks and may also make it harder for cross-border groups to transfer resources freely among different legal entities. One example would be the Member State option under Article 493c of the CRR to set national rules on large exposure limits.

The Single Rulebook also contains “deviations” from the Basel standards, meaning rules that are less strict than (or “sub-equivalent” to) the international agreement.¹⁵ Whereas international banking standards are agreed primarily by representatives of central banks and supervisory authorities, EU banking regulations are primarily set through the Ordinary Legislative Procedure, in which the European Commission issues a proposal that is then adopted by the Parliament and the Council following a series of formal procedures and, typically, informal trilateral negotiations (“trilogues”). Sometimes co-legislators choose not to implement aspects of the Basel standards, or to implement rules that are less stringent than the Basel standards. When this happens, it is typically with the aim of accommodating specific characteristics (“specificities”) of the EU economy or market structure that policymakers consider to be inadequately addressed by the international standards. Prominent deviations originating from the first CRR in 2013 include (but are not limited to):

- **Supporting factors:** The CRR allows banks to apply a “supporting factor” – that is, a measure that lowers capital requirements – to credit risk associated with exposures to small and medium-sized enterprises (SMEs).¹⁶ According to EU legislation,¹⁷ the rationale for this supporting factor is to encourage the flow of lending to EU SMEs, particularly given their limited access to non-bank sources of funding and the critical role they play in creating economic growth and employment within Europe. Similarly, since 2020, a supporting factor in the form of a 0.75 multiplier applies to exposures to infrastructure project entities that finance or operate physical structures, facilities, systems or networks providing essential public services. To qualify, these exposures must meet

¹⁴ To give an example, the CRR III introduced a new option allowing competent authorities to permit banks to calculate part of their operational risk capital requirements separately for specific subsidiaries (Article 314(3) of the CRR), subject to specific criteria being met. The ECB set out its general approach for exercising whether these criteria are met in its *Guide to options and discretions available in EU law*.

¹⁵ Throughout this paper, the term “deviations” is used to refer to areas where EU rules are less strict than (i.e. sub-equivalent to) the Basel standards.

¹⁶ A multiplier of 0.7619 is applied to SME exposures up to EUR 2.5 million, while the portion of an SME exposure exceeding this threshold receives a 0.85 multiplier.

¹⁷ Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 T, Recital 44.

specific risk mitigation criteria, including predictable cash flows and high contractual protection for lenders.¹⁸

- **Credit Valuation Adjustments:** The CRR exempts banks' transactions with non-financial counterparties and certain other entities from capital charges for risks related to credit valuation adjustments (CVA). The capital requirement for CVA risk is part of the Basel framework and reflects a key lesson from the global financial crisis, during which banks suffered significant losses on their over-the-counter (OTC) derivative portfolios owing to a deterioration in the creditworthiness of non-defaulted counterparties. The CVA exemption for non-financial counterparties under the CRR, which is not foreseen in the Basel standards, was introduced in response to concerns raised during the negotiations over the CRR in 2012-13 that applying the Basel CVA framework to EU banks would disincentivise the use of OTC derivatives to hedge interest rate or foreign exchange risks. This concern was influenced in particular by the fact that access to market funding in the EU is more bank-intermediated than in other major jurisdictions, such as the United States.¹⁹
- **Danish Compromise:** A further material deviation concerns the capital treatment of banks' investments in capital instruments issued by their insurance subsidiaries. The provision is known as the "Danish compromise" because Denmark held the European Council's rotating presidency at the time it was agreed. Whereas the Basel framework requires such investments to be deducted from banks' own regulatory capital, the CRR allows supervisors to permit banks to apply a more favourable risk-weighting treatment instead. This is conditional on the financial conglomerate (i.e. the combined banking and insurance group) being subject to supplementary supervision at the conglomerate level. This implementation choice reflects the prevalence of *bancassurance* groups in the EU, which combine banking and insurance activities within a single financial group.
- **Sovereign exposures:** A further deviation, assessed as material by the Basel Committee in 2014, concerned the regulatory treatment of sovereign exposures. Under the version of the Basel standards applicable at the time the CRR entered into force, a bank with permission to use the internal ratings-based (IRB) approach for part of its holdings would be expected to eventually extend that approach across the entire banking group, with the exception of certain immaterial exposures. The CRR, by contrast, permitted banks to permanently exclude certain exposures, including certain sovereign exposures, from IRB approaches and to apply the standardised approach instead. Many such exposures qualified for a zero per cent risk weighting under the standardised approach but would have attracted a small positive risk weight under the IRB approach. Under the Basel III standards finalised in 2017, the IRB approach is no longer expected to be applied to all significant exposure

¹⁸ The infrastructure supporting factor was originally planned for implementation on 28 June 2021 under Regulation 2019/876 ("CRR2") but this was brought forward to June 2020 during the COVID-19 pandemic under Regulation 2020/873 ("CRR quick-fix package").

¹⁹ See EBA (2015), *EBA Report On Credit Valuation Adjustment (CVA) under Article 456(2) of Regulation (EU) No 575/2013 (Capital Requirements Regulation — CRR)*, February.

classes, although it should apply to all exposures within an asset class unless certain exposures within that class are deemed immaterial. The BCBS has yet to assess the materiality of any deviation between the current CRR treatment and the revised BCBS standard.²⁰

- **The new CRR III introduces some further, albeit in some cases transitional, deviations from the Basel standards.** Notably, the CRR III introduces a range of transitional deviations in the EU implementation of the “output floor”, which is a key component of the final Basel III reforms agreed in 2017. The output floor aims to address concerns over excessive variability in risk-weighted assets (RWAs) calculated using internal models by setting a floor at 72.5% of RWAs calculated exclusively through standardised approaches. During the policy discussions that took place prior to the agreement of the CRR III, market participants cautioned that the output floor was expected to have a substantial impact on EU banks, given their heavy reliance on internal models (see Section 3.2). Reflecting these concerns, EU co-legislators agreed that, until 2033, banks could calculate the output floor using reduced risk weights for a variety of exposure categories, including, among others, certain residential mortgage exposures and corporate exposures for which external credit ratings are not available (“unrated corporates”).

The aim of the transitional deviations was to cushion the impact of the output floor by phasing it in over time, while allowing time for market participants and market structures to adapt to the new rules. As regards unrated corporate exposures, the CRR III states that the transitional period should be used to establish public or private initiatives to significantly expand the availability of ratings for EU corporates.²¹ The CRR III further clarifies that, while this development would be expected to generate positive externalities for the capital markets union initiative, achieving it would mean reconsidering the requirements related to external credit assessments, or establishing additional institutions to provide such assessments.²² The European Banking Authority (EBA) and the European Securities and Markets Authority (ESMA) were also mandated to monitor developments in rating coverage for EU corporates, with a view to helping remove impediments to expanding the availability of such ratings.²³

2.2 The multi-level supervisory framework

2.2.1 Centralised supervision

Another key feature of the EU capital framework is supranational supervision through the Single Supervisory Mechanism (SSM). The SSM was established in

²⁰ See BCBS (2014), *Regulatory Consistency Assessment Programme (RCAP): Assessment of Basel III regulations – European Union*, December.

²¹ CRR III, Recital 13.

²² CRR III, Recital 14.

²³ CRR III, Recital 14.

2014 in response to the 2008 global financial crisis and the 2010-11 European sovereign debt crisis. It is the first pillar of the banking union, with the other two pillars being the Single Resolution Mechanism (SRM) and the still-to-be-adopted European Deposit Insurance Scheme (EDIS). Within the SSM, the ECB is responsible for the direct supervision of 112 significant institutions across 21 participating Member States.²⁴ Significant institutions are broadly those with total assets exceeding EUR 30 billion, although certain other criteria can also lead to a bank being classified as a significant institution.²⁵ The ECB is also responsible for the indirect oversight of less significant institutions, which continue to be directly supervised by national competent authorities.

Significant institutions are subject to a single approach for the Supervisory Review and Evaluation Process (SREP). Supervision of significant institutions under the SSM is performed by a combination of Joint Supervisory Teams (JSTs) – front-line supervisors composed of staff from the ECB and national competent authorities – and supervisors in horizontal supervisory functions, which pool risk-specific expertise and aim to ensure the consistency of supervisory standards and decisions across banks. The SREP process enables the JSTs to form a comprehensive view of individual banks’ risk profiles, as well as their overall viability and the sustainability of their business models. Subjecting all significant institutions to a common supervisory methodology helps ensure a level playing field across the banking union and avoids the inconsistencies of the past that arose from disparate national supervisory practices. Ensuring consistent supervision across banks is also one of the roles of the ECB’s second line of defence, which evaluates the consistency and effectiveness of supervisory measures.

Significant institutions are subject to bank-specific supervisory capital additions. The Pillar 2 requirement (P2R) is tailored to the specific risk profile of each bank and captures risks not covered, or not fully covered, by Pillar 1 requirements. Under the CRD, P2R constitutes an additional capital requirement to be met on top of the minimum capital requirements set out in the CRR (i.e. Pillar 1 of the framework). Risks not captured under Pillar 1 include, among others, concentration risk and interest rate risk in the banking book, as well as other risks not sufficiently managed and covered due to shortcomings arising from governance arrangements and business models.²⁶ The ECB performs an annual benchmarking process to ensure that P2R are imposed consistently across institutions. In addition, the ECB provides Pillar 2 guidance (P2G) on the capital levels that banks should maintain beyond mandatory requirements. This guidance is designed to cover potential stress scenarios and emerging risks that may not yet be fully quantifiable or apparent. While not legally binding, P2G serves as a forward-looking measure to encourage

²⁴ ECB (2026), *List of supervised banks*, February.

²⁵ See SSM Regulation.

²⁶ P2R cover elements of credit, market and operational risks that are insufficiently covered by Pillar 1 requirements. Within the ECB’s P2R methodology, supervisory teams check for correlations between P1 and P2R risk drivers and adjust the P2R accordingly (see ECB (2025), *How the Pillar 2 requirement is set*).

banks to bolster their capital positions, thus enhancing their ability to withstand shocks.²⁷

Pillar 2 measures are a core component of the Basel standards. The “Supervisory Review Process” part of the Basel framework is principles-based. While it does not lay down concrete methodologies for calibrating capital requirements above the minimum levels set out under Pillar 1, it does specify that supervisors should regularly review banks’ internal capital adequacy assessments and strategies and take appropriate supervisory action if they are not satisfied with the outcomes of these reviews. This may include requiring banks to operate with capital levels above the minimum regulatory capital ratios specified under Pillar 1 of the framework.²⁸ The Supervisory Review and Evaluation Process, and the resulting capital measures set out under P2R and P2G, represent the way in which EU policymakers have chosen to implement these principles-based expectations under the Basel framework.

2.2.2 Decentralised macroprudential policy

In contrast to the arrangements for supervision and supervisory capital additions, macroprudential policymaking in the SSM remains largely decentralised, with primary responsibilities resting at Member State level. The EU framework includes a range of macroprudential buffers and other tools to make the financial system more resilient to shocks by addressing identified systemic risks (Figure 1). Within the SSM, national authorities and the ECB each have roles to play in identifying risks and vulnerabilities in Member States and implementing macroprudential measures to ensure financial stability. The ECB is responsible for assessing macroprudential measures adopted by national authorities, which must notify the ECB before taking any such action. Under Article 5 of the SSM Regulation, the ECB may apply stricter macroprudential measures than those adopted by national authorities if it deems this necessary.²⁹ This is known colloquially as the ECB’s macroprudential “top-up” power. The power is asymmetric: the ECB cannot lower a buffer that has been imposed by a national authority, nor does it have the power to prevent a national authority from imposing a buffer if it so wishes. The ECB’s top-up power does not apply to borrower-based measures, such as loan-to-value or loan-to-income limits, which are exercised by Member States under national law. While these measures are not subject to the mandatory notification process, they are discussed within the ECB’s Macroprudential Forum with a view to ensuring financial stability across the euro area.

²⁷ A bank that consistently fails to meet its P2G may be subject to additional (binding) supervisory requirements (P2R) – see Directive 2013/36/EU of the European Parliament and of the Council of 26 June 2013 on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, Article 104b.

²⁸ See BCBS, Basel framework, *Supervisory Review Process*.

²⁹ Council Regulation (EU) No 1024/2013 of 15 October 2013 conferring specific tasks on the European Central Bank concerning policies relating to the prudential supervision of credit institutions, Article 5.

The decentralised macroprudential policymaking framework reflects the fact that diverse macroprudential risks can arise at Member State level and may require country-specific responses. Macroprudential requirements complement the harmonised microprudential framework set out in the CRR (and its subsequent amendments). Differences in macroeconomic conditions and varying levels of financial development within the EU provided the original rationale for allowing Member States and national authorities to depart from harmonised rules in order to address local financial stability considerations.³⁰ Furthermore, the decentralised approach acknowledges that macroprudential capital buffers should be well coordinated with other aspects of national economic policy, such as those relating to housing, to ensure coherence within national contexts.³¹

There is an inherent tension between the decentralised macroprudential framework and the need for uniformity to support the internal market. As recognised by the ECB Governing Council’s High Level Task Force on simplification, a more consistent and harmonised application of prudential tools is needed within the EU.³² Within a decentralised policymaking framework, differences in methodological approaches and risk appetite are inevitable. EU legislation allows for only limited centralised coordination and harmonisation in the use of macroprudential tools. For instance, the CRD permits national authorities to impose buffers within certain ranges without requiring the involvement or agreement of EU authorities. The European Commission has noted that flexibility in the rules for setting the systemic risk buffer “can give rise to concerns about arbitrariness and duplicative prudential requirements”.³³ Similarly, the EBA has pointed to disparities in the treatment of domestic systemically important banks (known as “other systemically important institutions”, or O-SIIs) that are not fully justified by country-specific factors such as market size or concentration.³⁴ While the ECB has established a common methodology to guide its top-up powers for O-SII buffers set by national authorities, given the ECB’s asymmetric macroprudential remit, it does not have authority to lower an O-SII buffer that may be too high relative to a bank’s systemic importance.³⁵

Heterogeneity in macroprudential capital requirements adds to the complexity of the framework, especially for cross-border banks. For example, it can complicate capital planning for banks operating in multiple countries. Complexity may increase further under voluntary reciprocity arrangements, where authorities in one Member State request authorities in other states to apply similar measures so that cross-border banks are subject to comparable requirements to those applied to

³⁰ ECB (2023), “The role of financial stability considerations in monetary policy and the interaction with macroprudential policy in the euro area”, Work stream on macroprudential policy, monetary policy and financial stability, *Occasional Paper Series*, No 272, June.

³¹ IMF (2011), *Macroprudential Policy: An Organizing Framework*, March.

³² ECB (2025), *Simplification of the European prudential regulatory, supervisory and reporting framework*, December; see, for example, Recommendation 4.

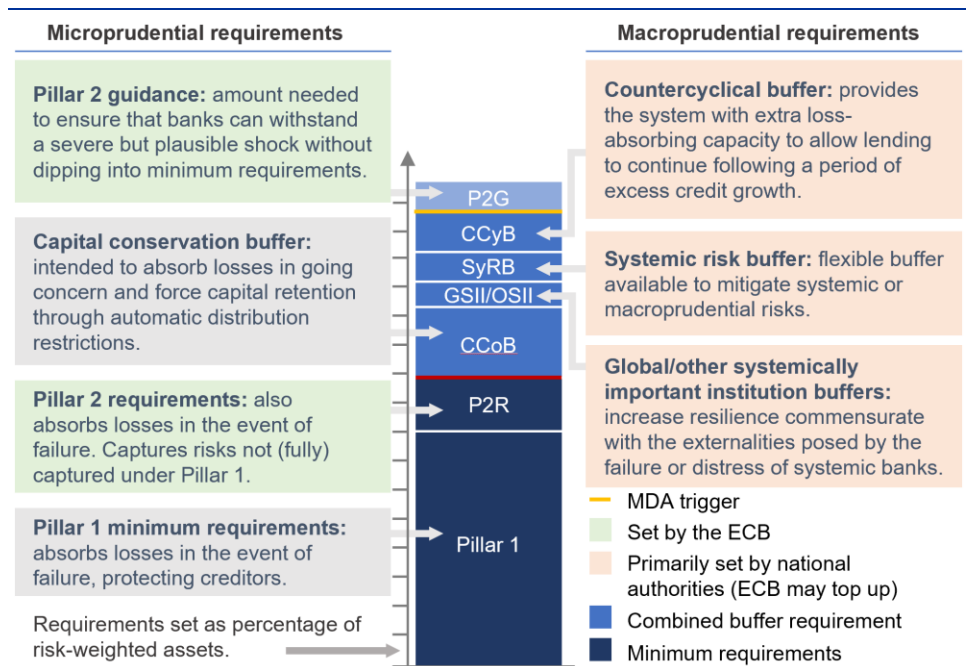
³³ European Commission (2024), *Report from the Commission to the European Parliament and the Council on the macroprudential review for credit institutions, the systemic risks relating to Non-Bank Financial Intermediaries (NBFIs) and their interconnectedness with credit institutions*, January.

³⁴ EBA (2020), *EBA Report on the appropriate methodology to calibrate O-SII buffer rates*, EBA/Rep/2020/38, 22 December.

³⁵ See Grodzicki, M. et al. (2025), “Enhancing the ECB’s O-SII framework”, *ECB Macroprudential Bulletin*, August.

domestic banks.³⁶ This can result in certain banks being subject to multiple requirements, each based on different methodologies and policy designs. Moreover, where macroprudential buffers applied to cross-border subsidiaries are stricter than those applied at Member State level, they can contribute to risks related to group-wide capital allocation. Loss-absorbing capacity may become concentrated in specific entities, thus making the rest of the group less resilient, particularly the parent entity.³⁷

Figure 1
The risk-based capital stack applicable to significant institutions



³⁶ The European Central Bank's High Level Task Force on Simplification recommended making reciprocation of macroprudential measures automatic under the CRR, up to a certain threshold, conditional on more standardised application of macroprudential tools. See ECB (2025), *Simplification of the European prudential regulatory, supervisory and reporting framework*, December – see, for example, Recommendation 4.

³⁷ See Ervin, D.W. (2017), "The risky business of ring-fencing", available at SSRN 3085649.

3 The capital impact of EU specificities

3.1 Quantifying EU implementation choices

This section analyses the cumulative impact of EU specificities and implementation choices with a view to understanding the overall level of capital requirements in the EU relative to what is set out in the Basel standards. It should be noted that in its formal assessments of compliance, the Basel Committee does not allow areas of “super-equivalence” to offset the impact of areas of “sub-equivalence” (i.e. deviations).³⁸ This is because such formal assessments aim to promote the full and consistent adoption of the internationally agreed Basel framework by identifying provisions in domestic regulations that are not aligned with the letter and spirit of the relevant Basel standards. However, outside the context of a formal compliance assessment, such a cumulative assessment can offer insights into the overall stringency of the capital regime, at least in aggregate terms.

For the purposes of this analysis, the rules comprising the EU prudential framework can be categorised as follows (Table 1):

1. **Rules derived from prescriptive Basel standards.** Many EU rules derive directly from quantitatively prescribed elements set out in the Basel standards. For instance, this category captures many of the rules for how banks risk-weight their assets, as well as the core elements of the capital stack, specifically the required ratios for minimum Pillar 1 requirements, the capital conservation buffer (CCoB) and the global systemically important institution (G-SII) buffer.
2. **Rules derived from non-prescriptive Basel standards.** Other rules also derive from the Basel standards but are designed and calibrated at the EU level. Indeed, many parts of the Basel standards are principles-based or otherwise provide flexibility to member jurisdictions as to how they should be implemented. As noted, Pillar 2 is a core component of the Basel framework and thus P2R and P2G fall into this category. Similarly, the Basel framework expects jurisdictions to apply macroprudential buffers such as the countercyclical capital buffer and buffers for domestic systemically important banks, but gives authorities leeway to determine when and how to impose them. The EU has implemented these measures via the countercyclical capital buffer (CCyB) and O-SII buffer frameworks, respectively.
3. **“Super-equivalences”.** This category denotes EU rules that are explicitly stricter than (quantitatively prescribed) Basel standards or that otherwise have no direct counterpart in the Basel framework. Examples include macroprudential risk-weight measures that set floors or otherwise increase (typically modelled) RWAs. The systemic risk buffer (SyRB) and the prudential

³⁸ See BCBS (2025), *Regulatory Consistency Assessment Programme (RCAP) - Handbook for jurisdictional assessments*, December.

non-performing exposure (NPE) backstop are also examples of EU measures with no direct counterpart in the Basel framework. It should be noted that super-equivalences are fully consistent with the principle that the Basel standards constitute minimum standards that authorities are free to – and frequently do – exceed.

4. **“Deviations”**. The final category concerns rules that are less strict than (or “sub-equivalent” to) those prescribed under the international standards. As described in Section 2, EU deviations have tended to occur within the rules for determining RWAs, although other forms of deviations exist.

Table 1

Selected EU implementation choices

Category	Examples
Prescriptive elements of the Basel standards	RWA definitions, minimum capital requirements, capital conservation buffer (CCoB), global systemically important institution (G-SII) buffer
Non-prescriptive elements of the Basel standards	P2R, P2G; macroprudential buffers (countercyclical capital buffer (CCyB), O-SII buffer), prudent valuation adjustments
Super-equivalences	Macroprudential risk-weight add-ons, SyRB, NPE backstop
Deviations	Small and medium-sized enterprise (SME) supporting factor, infrastructure supporting factor, CVA exemptions, output floor transition arrangements, Danish compromise deviations

The remainder of this section assesses the quantitative impact of these EU implementation choices on banks’ CET1 minimum required capital.³⁹ The assessment is conducted using Q2 2025 bank-level data for a sample of 113 SSM significant institutions. The analysis begins by estimating the hypothetical CET1 minimum required capital level for these banks under a “narrow” Basel scenario in which no deviations or super-equivalences apply, and where non-prescriptive Basel elements have not been implemented. This narrow Basel scenario is represented by the first three red columns on the left in Figure 2. This hypothetical set of requirements is calculated for 2030, by which time the Basel III output floor will be fully phased-in according to the timetable set out in CRR III. Subsequently, the impact of non-prescriptive Basel elements (the fourth to seventh red bars in Figure 2), super-equivalences (green bars) and EU deviations (yellow bars) is assessed. This approach also makes it possible to quantify the magnitude of transitional deviations relating to the calculation of the output floor, which will remain in place until 2033.⁴⁰

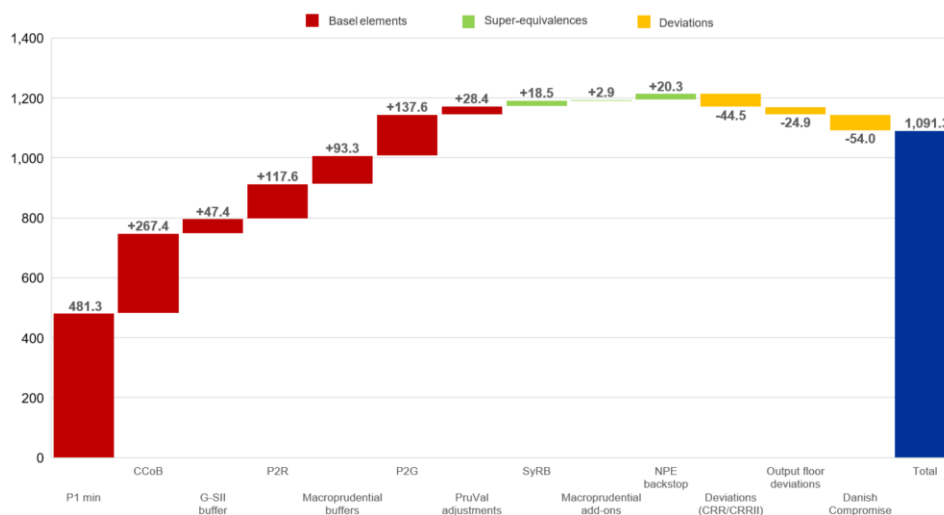
³⁹ CET1 “minimum required capital” is referred to throughout this paper as the minimum amount of CET1 capital needed to meet the minimum requirements (P1 and P2R), the combined buffer requirement and P2G. It does not consider the impact of the leverage ratio, which is a requirement specified in terms of Tier 1 capital.

⁴⁰ The European framework also features certain prudential filters and deductions from regulatory capital. These adjustments affect the definition of regulatory capital rather than RWAs or required capital ratios. As such, their capital impact is not immediately apparent when comparing headline capital ratios or required capital ratios. To gauge their significance in a way that is comparable to EU implementation choices affecting RWAs, we convert these deductions into “RWA-equivalent” amounts, i.e. the level of additional RWAs that would generate an equivalent capital need.

Figure 2

European specificities – Impact on CET1 minimum required capital, 2030

(EUR billions)



Sources: COREP and authors' calculations. Reference period: 2025Q2.

Notes: Sample of 113 significant institutions as at 1 September 2025. Values are calculated assuming that P2R, P2G and macroprudential buffers are calibrated as at 2025Q2, while the output floor is fully phased-in (as at 2030) and Basel III market risk rules (FRTB) are implemented without amendment. "CET1 minimum required capital" (MRC) refers to the amount of CET1 needed to meet minimum capital requirements, buffers and P2G without considering the potential effects of the leverage ratio. Individual elements of the chart refer to the incremental change in CET1 MRC in euro billions. The red bars are calculated excluding the impact of super-equivalences and deviations, which increase (lower) all sub-components of banks' requirements but are shown here separately in the green and yellow bars. "Macroprudential buffers" refers to the CCyB and the O-SII buffer – the O-SII buffer contributes to requirements only where it exceeds the respective G-SII buffer, if any, for a given bank. "PruVal Adjustments" refers to CET1 adjustments for prudential valuation. "Macroprudential add-ons" refers to risk-weight measures under Articles 458 and 459 of the CRR. "NPE backstop" refers to the non-performing exposures backstop under Pillars 1 and 2. "Deviations (CRR/CRR II)" refers to the SME supporting factor, infrastructure supporting factor and CVA exemptions. "Output floor deviations" refers to the transitional deviations in the output floor set to expire at the end of 2032, including the treatment of exposures to unrated corporates, the preferential treatment of exposures to residential real estate and the lower calibration of the standardised approach for exposures to securitisation. "Danish Compromise" refers to reduced capital requirements for holdings in insurance undertakings pursuant to Article 49(1) of the CRR. The list of deviations assessed is not exhaustive. For example, the postponement of minimum collateral haircut floors for securities financing transactions, and the CRR III treatment of trade finance credit conversion factors and of the revaluation of real estate exposures are not assessed.

The prescriptive elements of the Basel standards make up the majority of EU requirements. Before considering the impact of super-equivalences and deviations, the Pillar 1 minimum requirement, the CCoB and the G-SII buffer would collectively contribute EUR 796bn to total capital requirements – or 73% of total requirements (the blue bar in Figure 2). Once the impact of super-equivalences and deviations is taken into account (which together lower the final amounts of each of the elements shown in the red bars), Pillar 1, the CCoB and the G-SII buffer account for around two thirds of total requirements.

Non-prescriptive elements of the Basel standards seek to ensure that material sources of risk identified in the Basel framework are adequately mitigated.

Excluding the effects of super-equivalences and deviations, these measures would add EUR 377bn to total requirements. Accounting for super-equivalences and deviations, the non-prescriptive elements contribute just over 30% of total requirements. Within this category, P2R and P2G, which together with P1 ensure that banks capture all material risks to which they are exposed and have sufficient loss-absorbing capacity to withstand severe but plausible adverse scenarios, account for 10% and 11% of the total requirements, respectively. The EU approach to implementing the countercyclical capital buffer and surcharges for domestic

systemically important banks contributes 8% to the total. Implementation choices affecting the definition of capital due to prudential valuation adjustments account for 2% of the total required capital.

The impact of super-equivalences such as macroprudential risk-weight measures, the NPE backstop and the systemic risk buffer is limited. On average across the whole sample, the impact of such measures on total requirements is relatively small (EUR 41.7bn excluding the impact of deviations; 3% of total requirements after including the impact of deviations). This reflects the fact that macroprudential authorities within the SSM have tended to rely more on the CCyB, which derives from the Basel standards, than on the SyRB or on risk-weight measures. For example, 17 of the 21 SSM countries currently have positive rates in place for the CCyB.⁴¹ While ten countries have introduced a SyRB, six of these countries use it in combination with the CCyB. The prudential NPE backstop requires banks to build up minimum loss coverage for newly originated NPEs within specified timeframes. Pillar 1 rules impose harmonised, automatic capital deductions. Under Pillar 2, competent authorities may set further institution-specific supervisory expectations and additional own funds requirements.

EU deviations affecting the definition of RWAs or the treatment of insurance subsidiaries reduce required capital by approximately 10% (equivalent to EUR 123.4bn). Of this, Basel deviations affecting the definition of RWAs that pre-date the most recent reforms introduced by CRR III (specifically the SME supporting factor, the infrastructure supporting factor, specific exemptions in the CVA framework) provide a capital relief of EUR 44.5bn. Additional deviations introduced in CRR III linked to the implementation of the output floor, offset the total by a further EUR 24.9bn. It should be noted that these output floor related deviations account for a sizeable portion of the net impact of implementing the final elements of the Basel III rules in the EU framework (Section 4.2). The Danish compromise⁴² reduces the requirements by a further EUR 54bn. These deviations can create pockets of under-capitalisation in specific risk segments by systematically lowering capital charges for assets whose underlying risk profile is not necessarily reduced to the same extent. Deviations can also weaken the risk-sensitivity of the framework, potentially encouraging risk-taking in those segments.

While EU requirements overall (right-hand column in Figure 2) exceed the prescriptive elements of the Basel standards (first three columns on the left-hand side of Figure 2), this does not imply that the EU framework is more conservative than the Basel framework implies it should be. This is because: (i) the Basel standards are explicitly intended to provide for minimum international harmonisation around a common baseline of standards which member jurisdictions can, and often do, exceed; and (ii) the impact of non-prescriptive elements, super-equivalences and deviations naturally varies significantly across banks depending on

⁴¹ Of the 17 countries to have implemented the CCyB, ten have introduced frameworks whereby the CCyB is raised to a positive level even where credit conditions are not judged to be elevated. The BCBS has stated that it “supports and sees benefits in the ability of authorities to set a positive cycle-neutral CCyB rate on a voluntary basis”; see BCBS (2022), *Newsletter on positive cycle-neutral countercyclical capital buffer rates*, October.

⁴² As discussed in Section 2.1.

their individual characteristics and risk profiles, including their specific balance sheet composition, business models and systemic importance.

3.2 Determinants of Pillar 1 capital requirements

Consistent with Basel standards, the CRR offers banks the choice between using simpler standardised approaches for determining risk weights or relying on more complex and risk-sensitive modelling approaches. As of September 2025, around two-thirds of significant institutions were using internal models covering credit risk, counterparty credit risk, market risk or credit valuation adjustment, with IRB models for credit risk being the most prevalent type. Using internal models to calculate risk-sensitive capital requirements can be attractive for EU banks, which tend to retain the loans they originate on their balance sheets rather than distributing them to outside investors, and which also tend to hold large volumes of assets (such as residential mortgage loans) that attract lower risk weights under the IRB approach than under the standardised approach. Moreover, given the relatively lower level of capital market development in the EU, it is less common for SMEs, and even many large corporates, to request a rating from an external credit rating agency. This makes it attractive for banks with exposures to unrated non-financial corporates to use IRB approaches to determine the risk weights for those exposures, rather than relying on generally higher standardised risk weights for such exposures.

In recent years, the use of internal models by EU banks has been subject to heightened supervisory attention. Following the global financial crisis and the European sovereign debt crisis, the reliability of internal models came under increased regulatory and supervisory scrutiny. Between 2017 and 2021, the ECB performed a Targeted Review of Internal Models (TRIM) to ensure that banks were using models consistently and that their outputs were reliable. The EBA also issued and revised its technical standards and guidelines following a regulatory review of the IRB approach (known as the EBA “IRB repair” initiative). These reviews led to a substantial number of requests from banks seeking approval of model changes, which in turn required the ECB to conduct a large number of internal model investigations (around 75 to 100 per year since 2022).

Supervisory decisions, including quantitative limitations on the use of internal models, are intended to address the underestimation of risks by banks. Banks often achieve significant reductions in capital requirements by applying internal models. For instance, as of 2025, the average standardised risk weight for corporate exposures was 83%, compared with 43% under IRB approaches; for real estate exposures, the average standardised risk weight was 48%, compared with 13% under the IRB approach.⁴³ Supervisory decisions on the use of internal models are designed to ensure that banks comply with the relevant requirements for the use of such models, as laid out in the CRR, and thus avoid underestimating risk. They may include limitations that increase capital requirements where the assessments identify model weaknesses that institutions have failed to adequately cover with a margin of

⁴³ See ECB (2025), *Supervisory Banking Statistics for significant institutions, Third quarter 2025*, December.

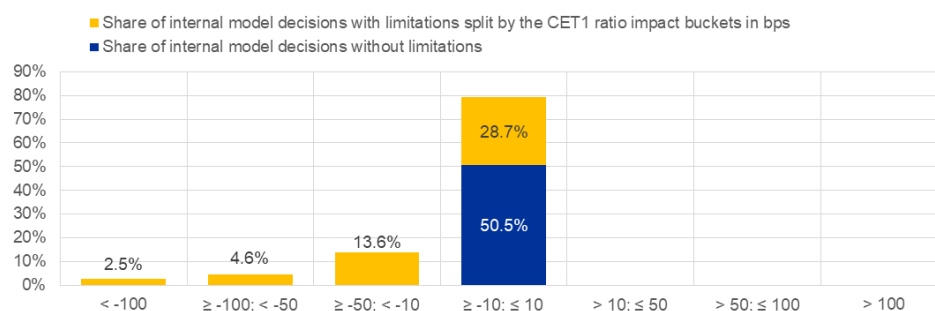
conservatism. Since these measures ensure compliance with agreed Pillar 1 standards, they are of a qualitatively different nature from P2R or macroprudential add-ons, which, conversely, aim to capture risks not covered under prescriptively defined Pillar 1 requirements.

An assessment of the limitations imposed by the ECB on the basis of internal model investigations suggests that such limitations have had a relatively modest impact. Around 21% of all internal model decisions impose limitations to address severe shortcomings that lead to a reduction of more than 10 basis points in the CET1 capital ratio, in addition to the impact of the model change (Figure 3). Moreover, the ECB's supervisory approach to internal models has remained stable in recent years, both in terms of its assessment of regulatory requirements and the impact of limitations.⁴⁴

Figure 3

Total impact of internal model decisions (including and excluding limitations) and the impact of limitations on the CET1 ratio

(percentages)



Source: Authors' calculations.

Note: X-axis categories expressed in basis points of the CET1 capital ratio. ECB decisions issued between January 2021 and September 2025 as a result of internal model investigations, excluding decisions taken in the context of TRIM.

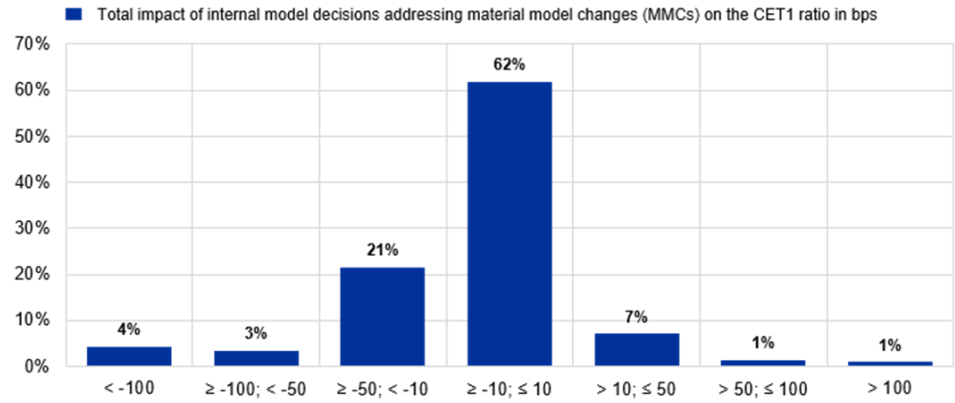
Moreover, the adequacy of such limitations can be observed by assessing the impact on banks' capital ratios when they are removed. To remove limitations, banks need to change their models to bring them into line with the underlying requirements. Where the model change is classified as a so-called “non-material model change”, banks must notify their supervisor. Data collected since the beginning of 2020 indicate that non-material model changes aimed at removing limitations do not systematically improve the CET1 ratio. In fact, such changes tend to reduce this ratio, with an average impact of about -2 basis points, after accounting for outliers. Only a small fraction (2%) of non-material model changes result in improved CET1 ratios above 10 basis points. For “material” model changes, which involve more substantial changes to rating systems and which may also remove limitations, the overall impact on the CET1 ratio is typically between +/- 10 basis points, with 9% of such material model changes leading to improved an CET1 ratio by more than 10 basis points (Figure 4).

⁴⁴ This finding is based on additional year-by-year analysis of the impacts of model changes and limitations since 2021.

Figure 4

Total impact of internal model decisions addressing material model changes (MMCs) on banks' CET1 capital ratio

(percentages)



Source: Authors' calculations.

Notes: X-axis categories expressed in basis points of the CET1 capital ratio. ECB decisions issued between January 2021 and September 2025 addressing material model changes (MMCs), excluding decisions taken in the context of TRIM.

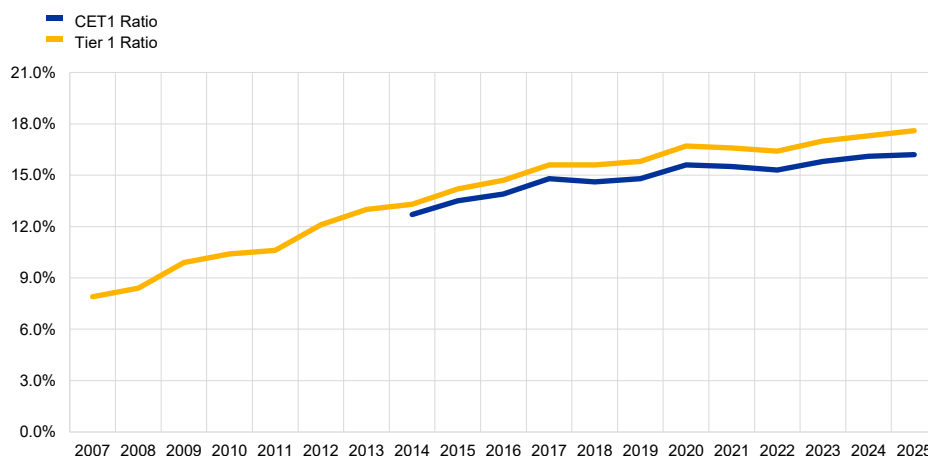
4 The evolution of capital adequacy, related requirements and indicators of banking sector performance

4.1 Capital adequacy

Since the 2008 global banking crisis, European banks' risk-based capital adequacy ratios have increased markedly. Looking at the euro area banking sector as a whole, the broadly defined aggregate Tier 1 capital increased from 8% of RWAs in 2007 to around 17% in 2025.⁴⁵ A similar trend emerges for the more narrowly defined Common Equity Tier 1 (CET1) ratio. This regulatory concept was introduced in 2014 as a measure of the most loss-absorbing form of capital relative to RWAs. The aggregate CET1 ratio increased from around 12.7% in 2014 to over 16% in 2025 (Figure 5).⁴⁶

Figure 5
Risk-based capital ratios, euro area, % of risk-weighted assets

(percentages of CET1/Tier 1 capital)



Source: ECB Consolidated Banking Data 2 (CBD2), authors' calculations.

Note: Aggregate data refer to the population of reporting banks contributing to the CBD2. As of 2025Q3, this amounted to 336 banking groups and 2289 standalone institutions.

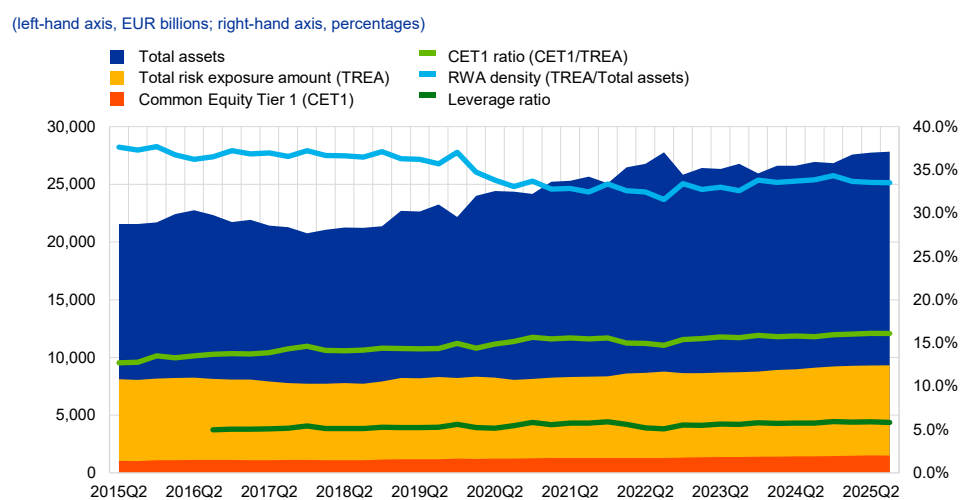
The increase in capital adequacy appears less substantial when viewed from a non-risk-based perspective. Looking at the significant institutions that exist within the SSM, the leverage ratio increased from around 5% in 2016 to just below 6% in

⁴⁵ Under the CRR, Tier 1 capital comprises Common Equity Tier 1 and Additional Tier 1. Prior to the entry into force of the CRR in 2014, Tier 1 capital was defined under Directive 2006/48/EC, known as the Capital Requirements Directive (CRD I). CRD I permitted a range of hybrid debt-equity instruments to be included alongside higher quality funding sources, such as paid-up share capital and retained earnings.

⁴⁶ Incremental reforms since 2008 complicate efforts to trace requirements over time. For instance, the ECB introduced a new framework for collecting consolidated banking data in 2014 following the implementation of technical implementing standards on supervisory reporting that harmonised the collection of supervisory data across European banks.

2025 (Figure 6). This reduction in system-wide leverage can also be seen from the different trajectories taken by total assets and nominal CET1 capital over the same period, which increased by around 29% and 46%, respectively. At the same time, in absolute terms, the banking system remains highly leveraged overall, reflecting the nature of bank business models, which are based on leverage and maturity transformation.⁴⁷

Figure 6
Significant institutions, capital and assets



Source: ECB Supervisory Banking Statistics, authors' calculations.
Note: Aggregate data refer to the population of significant institutions in the Single Supervisory Mechanism; 113 institutions as of 2025Q3.

The relationship between risk-based and non-risk-based capital requirements has also changed over time. Risk weight density measures a bank's risk-weighted assets relative to its total assets. For euro area banks, it fell from around 37% in 2015 to around 33% in 2020 and has remained relatively stable since then (Figure 6). This development should not be interpreted as reflecting a relaxation of prudential capital requirements. Rather, changes in risk-weight density may reflect changes in the composition of banks' portfolios, macroeconomic factors affecting the riskiness of assets, or changes in how risks are measured. EBA benchmarking studies indicate that the downward drift in RWA density in the 2010s was primarily driven by changes in banks' portfolios and a shrinking share of defaulted exposures, as banks worked to reduce their stock of non-performing loans. It was also supported by lower default and loss rates and improvements in asset quality.⁴⁸

During the COVID-19 pandemic, average risk weights and probabilities of default decreased for most high-default portfolios. This seemingly counterintuitive outcome was a product of fiscal support measures, such as state guarantee schemes, state-supported payment moratoria and other loss-sharing arrangements that absorbed part of the credit risk that would otherwise have been borne by banks. Since the pandemic, risk weight density has remained relatively

⁴⁷ See Thedéen, E. (2024), *Charting the course: prudential regulation and supervision for smooth sailing*, October.

⁴⁸ See EBA (2019), *EBA Report from the 2019 Low default and high default portfolios exercise*.

stable, likely due to a combination of factors including the impact of the ECB's and the EBA's efforts to address unwarranted variability in IRB risk weights while ensuring appropriate sensitivity to increases in risk in certain areas.⁴⁹ It likely also reflects the effects of government support measures, such as those introduced to cushion the impact of energy supply shocks, which have helped mitigate vulnerabilities among euro area households.⁵⁰

4.2 Capital requirements

Stronger capitalisation of banks is consistent with the intended outcomes of the post-crisis reform agenda. In the aftermath of the 2008 crisis, supervisory authorities agreed to significantly increase both the quality and the quantity of capital that banks are required to maintain. The first elements of the Basel III Accord, agreed in 2010, were phased in within the EU from 2016 to 2019. During that period, the aggregate CET1 requirement among significant institutions increased from 10.2% in 2016 to 11.2% in 2020 (Figure 7).

The requirements were relaxed in 2020 at the onset of the COVID-19 pandemic to make it easier for banks to continue lending to the real economy. The ECB and national authorities took action at the outset of the pandemic to help ensure that banks would have additional capital headroom to be able to continue lending throughout the crisis, even if they began to sustain losses. The ECB brought forward the implementation of a regulatory change affecting the required composition of its supervisory capital requirements, i.e. the Pillar 2 requirement. This permanently reduced the amount of CET1 that banks are required to maintain on top of their Pillar 1 minimum requirement.⁵¹ This was an ad hoc measure, whereby a microprudential regulatory change was brought forward for macroprudential purposes. It reflected the fact that, while many national authorities also released macroprudential buffers at the onset of the pandemic, the overall amount of releasable macroprudential buffers was limited. The ECB also encouraged banks to draw down on their regulatory buffers as necessary, and to use capital maintained to meet the Pillar 2 guidance if needed.⁵² Furthermore, it recommended that banks refrain or limit dividends until September 2021.⁵³ While these measures have supported lending⁵⁴, only six banks made use of

⁴⁹ See EBA (2024), *EBA Report on the 2024 credit risk benchmarking exercise*.

⁵⁰ See ECB (2024), *Financial Stability Review*, May; Ferdinandusse, M. and Delgado-Téllez, M. (2024), "Fiscal policy measures in response to the energy and inflation shock and climate change", published as part of the *ECB Economic Bulletin*, Issue 1/2024.

⁵¹ This change affected the required composition of regulatory capital while leaving total capital requirements (a measure including CET1, Additional Tier 1 and Tier 2) unchanged.

⁵² While prudential relief measures freed up EUR 140 billion in the euro area at the beginning of the pandemic, only EUR 20 billion came from macroprudential buffer releases, of which EUR 12 billion came from CCyB releases (see the ECB's *Financial Stability Review*, May 2020). See also ECB (2020), *ECB Banking Supervision provides temporary capital and operational relief in reaction to coronavirus*, 12 March.

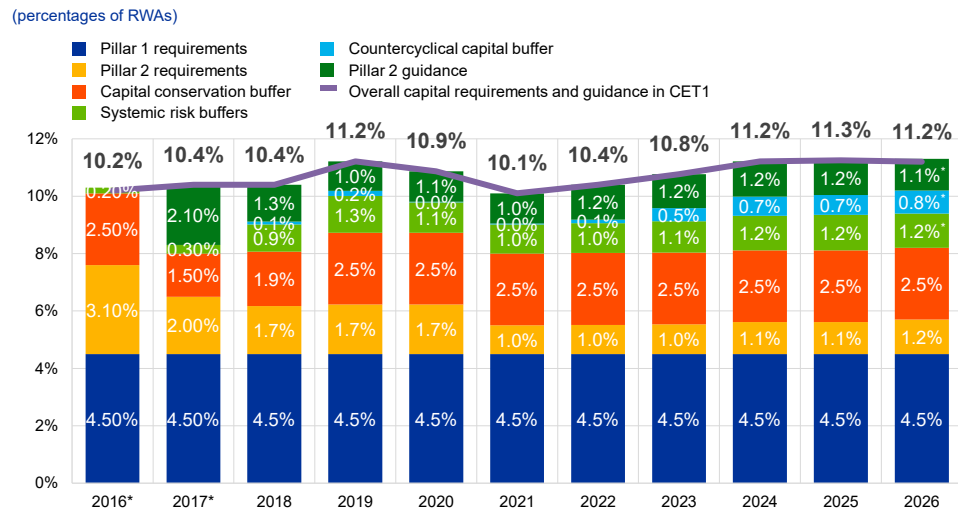
⁵³ See ECB (2020), *ECB asks banks not to pay dividends until at least October 2020*, press release, March; and ECB (2020), *ECB asks banks to refrain from or limit dividends until September 2021*, press release, December.

⁵⁴ See Couaillier, C. et al. (2022), "How to release capital requirements during a pandemic? Evidence from euro area banks", *Journal of Financial Intermediation*, Vol. 63, July, 101148.

their P2G during the pandemic, and they did so because of pre-existing structural issues. The limited impact of the pandemic on capital ratios was largely due to the fiscal and monetary support provided to banks' clients, which helped prevent the materialisation of large-scale losses.

Since the pandemic, the ECB's supervisory requirements have remained broadly stable, while macroprudential authorities have reinstated and gradually increased certain macroprudential buffers. The P2R has hovered around 1.0%-1.1% since 2020. For 2026, it will increase marginally to 1.2% after rounding. The P2G, which reflects the amount of capital the ECB expects banks to maintain above their minimum requirements and regulatory buffers, went from 1.1% in 2020 to 1.3% in 2022 and has remained stable since then, but will fall back to 1.1% in 2026. By contrast, macroprudential buffers have steadily increased: the aggregate CCyB was raised from close to zero during the pandemic to around 0.8% in 2026. This reflects a lesson learned from the pandemic that increasing banks' headroom over distribution restrictions by releasing macroprudential buffers can help support macroeconomic stabilisation during severe shocks by stimulating more lending, especially for banks with capital ratios that are relatively close to buffer thresholds.⁵⁵ Overall, CET1 capital requirements are now broadly in line with the pre-pandemic level of 11.2%.

Figure 7
Developments in overall CET1 requirements and P2G among significant institutions



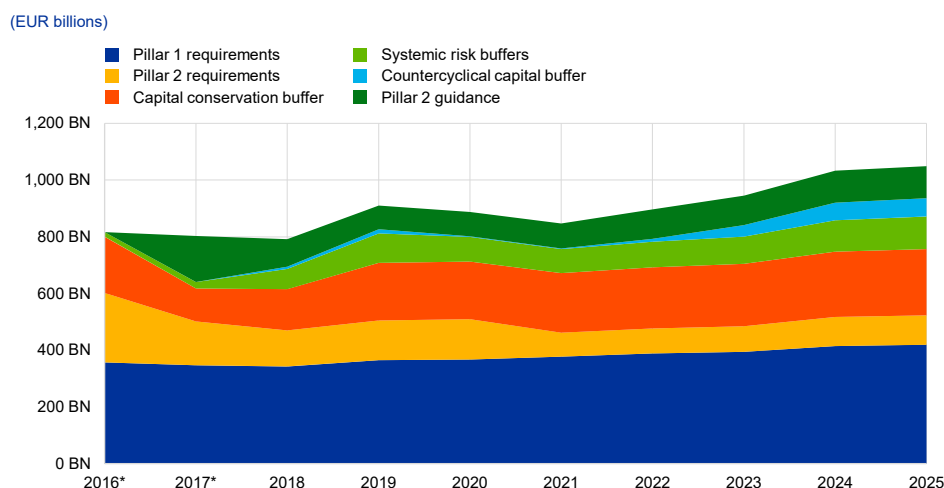
Sources: ECB Supervisory Banking Statistics, ECB SREP database and authors' calculations.

⁵⁵ See, for instance, Avezum, L., Oliveira, V. and Serra, D., "Assessment of the effectiveness of the macroprudential measures implemented in the context of the Covid-19 pandemic", *International Review of Economics & Finance*, Vol. 93 (2024), pp. 1542-1555; and Couaillier, C. et al. (2022), op. cit..

Notes: The data refer to the requirements applicable as of the fourth quarter of each year. For 2026, buffers are estimated based on announced rates currently applicable; estimated values are marked with an asterisk. The sample includes all significant institutions (with a changing composition). "Overall capital requirements and guidance in CET1" refers to the minimum CET1 requirements under Pillar 1 and P2R, the capital conservation buffer, systemic buffers (G-SII, O-SII and SyRB), the CCyB and P2G. Rounding differences may apply. The chart shows RWA-weighted data. However, due to data constraints for 2016 and 2017 (indicated by an asterisk) the values are simple averages rather than weighted averages. In the 2015 SREP, in which the ECB determined the requirements applicable in 2016, the ECB front-loaded the imposition of the capital conservation buffer, which was otherwise scheduled to be phased in under the CRR between 2016 and 2019. In the 2016 SREP, the ECB revised its requirements to allow for the introduction of P2G.

The application of CRR III, which implements the final Basel III framework in the EU, had only a muted impact on capital requirements in the short term following its entry into force. CRR III has mainly affected the calculation of risk-weighted assets, rather than required capital ratios, so its impact cannot be gauged by looking at changes in capital ratio requirements. The nominal amounts shown in Figure 8 below reveal that Basel III finalisation did not cause a surge in capital requirements in the short term. In fact, at the aggregate level, between 2024Q4 (CRR II) and 2025Q2 (initial CRR III), RWAs remained almost unchanged (+0.2%), despite a rise in accounting assets of 2.8%.

Figure 8
Developments in the nominal overall CET1 requirements and Pillar 2 guidance among significant institutions



Sources: ECB Supervisory Banking Statistics, ECB SREP database and authors' calculations.

Notes: The data refer to the requirements applicable as of the fourth quarter of each year. Sample selection follows the internal SSM significant institutions filter and varies each year. The figure shows CET1 risk-based nominal capital requirements in euro, calculated as the relevant risk-weighted asset-weighted requirement value expressed as a percentage multiplied by total risk-weighted assets for the whole sample of significant institutions. However, due to data constraints for 2016 and 2017 (indicated by an asterisk), the values used are simple averages rather than weighted averages. P2G is added on top of the overall capital requirements. The methodology changed in 2015 to accommodate P2G and the phase-in of the capital conservation buffer. Under CRD V, which came into effect on 1 January 2021, P2R capital should have the same composition as under Pillar 1 – i.e. at least 56.25% should consist of CET1 capital and at least 75% should consist of Tier 1 capital, in line with the minimum requirements. By way of derogation from the first subparagraph of paragraph 4, Article 104a of CRD V, the competent authority may require the institution to meet its additional own funds requirements with a higher portion of Tier 1 capital or CET1 capital, where necessary and having regard to the specific circumstances of the institution.

In the long term, the average capital impact at the end of the phase-in for the output floor in 2030 is expected to be limited. More precisely, the overall impact on minimum required capital is expected to be +2.6% for significant institutions as a whole, and +3.3% for global systemically important banks (G-SIBs). As noted in Section 3.1, transitional deviations for the output floor are relatively significant. Their expiry in 2033 would (almost) double the average impact (+5.0%, up from +2.6% in 2030) and more than double the estimates for G-SIBs (+6.9% vs +3.3%). These figures can be expected to decline over time as banks dynamically adapt to the new

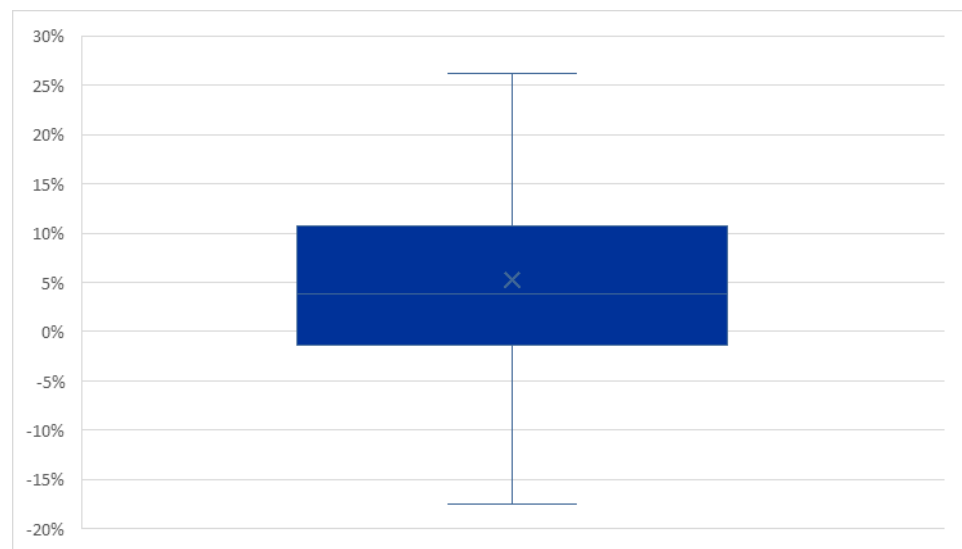
rules and constraints. This is particularly the case for the output floor, where the five-year phase-in and eight-year transitional measures give banks ample time to adjust. Dynamic adjustments also help explain why, in many cases, the actual capital impact of the new Basel standards has turned out to be far smaller than estimated.⁵⁶

Impacts among individual banks show significant dispersion. Once transitional deviations expire, CRR III would actually lower, rather than increase, capital requirements for almost one-third of SSM significant institutions, when compared with CRR II.⁵⁷ A reduction in measured credit risk – chiefly due to changes in certain IRB parameters – is the primary driver of this dynamic. All in all, the impacts are expected to lead to a closer alignment between capital requirements and underlying risks, with increased requirements tending to affect banks that have achieved relatively greater capital reductions through the use of internal models in the past.

Figure 9

Impact of fully-loaded CRR III on Tier 1 minimum required capital among significant institutions

(percentages)



Source: ECB Supervisory Banking Statistics, ECB SREP database and authors' calculations.

Note: The chart shows the estimated bank-level impact of the fully loaded CRR III scenario on Tier 1 minimum required capital (MRC) in 2033, after the expiry of transitional deviations from the output floor. Data as reported for 2024 Q4 are used as the starting point under CRR II, and data for 2025 Q2 are used as the endpoint under the CRR III scenario. The chart displays the median (central line), mean (cross), interquartile range (IQR, box from the 25th to the 75th percentile), and whiskers (values within 1.5 times the IQR from the quartiles). Outliers (observations beyond the whiskers) are excluded.

⁵⁶ See Esho, N. (2025), *Just get it done*, speech delivered at the 20th High-Level Meeting on Financial Stability and Regulatory and Supervisory Priorities, 10 December 2025, Abu Dhabi.

⁵⁷ These estimates are based on what SSM significant institutions reported in COREP as of 2025Q2 and compared to CRR II values in 2024Q4. They assume the absence of any dynamic adjustments by banks in response to the new rules.

4.3 Indicators of banking sector performance

Assessing the adequacy of capital requirements requires an understanding of the broader drivers of banking sector performance. For policymakers tasked with calibrating requirements, the challenge lies in balancing resilience with other aspects of banking sector performance, such as profitability, attractiveness to investors, and banks' capacity to supply intermediation services to firms and households at competitive prices. From a macroeconomic perspective, understanding the relationship between capital requirements and the supply of credit is of particular importance. As regards profitability and attractiveness to investors, return on equity (RoE) has historically received the most attention, although, as discussed below, it overlooks important aspects of the sustainability of banks' revenue generation, such as risk-taking and leverage.⁵⁸

A large body of research has investigated the impact of regulatory interventions on lending.⁵⁹ Recent ECB research based on granular, bank-firm-level data for the euro area shows that macroprudential capital buffer increases since the COVID-19 pandemic have had only a modest impact on aggregate credit supply, as banks' capital headroom has allowed them to absorb higher requirements without cutting back on lending.⁶⁰ This finding aligns with evidence that banks do not transmit increases in requirements one-for-one into higher publicly-announced capital targets⁶¹, and that the impact of changes in requirements on bank lending (and behaviour) is state-dependent, with increases during periods of good profitability having a significantly lower impact on lending than increases in periods of stress.⁶² Research also suggests that changes in capital requirements have had limited impact on lending rates relative to changes in monetary policy.⁶³ Nevertheless, it must be acknowledged that there remains significant heterogeneity across studies of the impact of capital on lending, reflecting differences in empirical approaches, model specifications and time periods.⁶⁴

Aggregate lending trends are an important indicator, but require careful assessment to avoid misinterpretation. Lending volumes expanded in the run-up to the global financial crisis, shrank significantly in its immediate aftermath, and

⁵⁸ See ECB (2010), "Beyond RoE: How to measure banks' performance", *appendix to the report on EU banking structures*, September.

⁵⁹ See Bank for International Settlements, *Financial Regulation Assessment: Meta Exercise (FRAME)*, which is a repository of studies on the effects of capital and liquidity regulation as well as the too-big-to-fail reforms.

⁶⁰ See Behn, M. (2024), "Buying insurance at low economic cost – the effects of bank capital buffer increases since the pandemic", *ECB Working Paper Series*, No 2951.

⁶¹ See Couaillier, C. (2021), "What are banks' actual capital targets?", *ECB Working Paper Series*, No 2618, December.

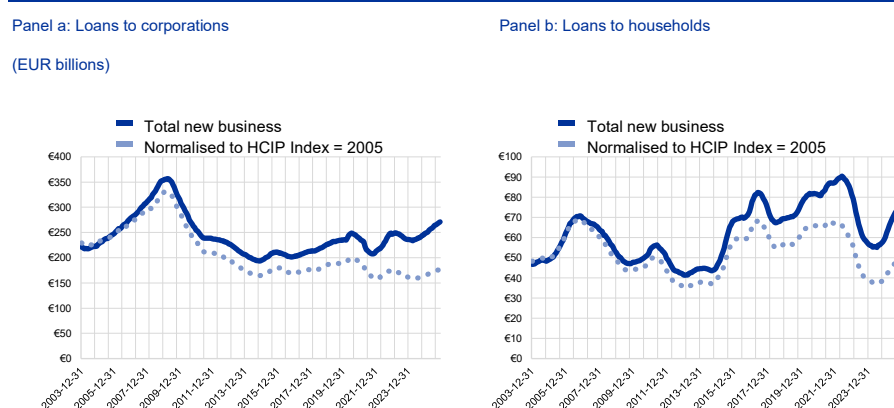
⁶² Lang, J. and Menno, D. (2025), "The state-dependent impact of changes in bank capital requirements", *ECB Working Paper Series*, No 2828.

⁶³ Herbst, T. (2025), "The impact of monetary policy and macroprudential policy on corporate lending rates in the Euro area", *ECB Working Paper Series*, No 3057.

⁶⁴ Malovaña, S. et al. (2024), "Bank capital, lending, and regulation: A meta-analysis", *Journal of Economic Surveys*, Vol. 38, Issue 3.

remained subdued in real terms thereafter (Figure 10). Muted real lending growth coincided with the phase-in of higher capital requirements following the initial Basel III reforms. While it may be tempting to interpret this as evidence of capital holding back lending, in reality many factors influence credit supply and the influence of capital requirements cannot be inferred solely from the aggregate trend. Importantly, the rapid expansion of lending before the crisis proved to be unsustainable and led to a period of deleveraging. This period should not, therefore, be considered a benchmark for an appropriate long-term trend.

Figure 10
Bank new business volumes – loans to corporations and loans to households for house purchase



Source: ECB (Monetary Financial Institutions (MFI) Interest Rate Statistics) and authors' calculations.

Notes: Loans to non-financial corporations other than revolving loans and overdrafts, convenience and extended credit card debt in the euro area (changing composition), with monthly production summed over the period (annual moving averages). The chart also shows the following subsets of new business volumes: the level of renegotiated loans, the level of "pure new business", as well as the level of loans with floating interest rates or with an interest rate fixation period of up to one year. Loans to households for house purchase, excluding revolving loans and overdrafts, convenience and extended credit card debt in euro area (changing composition), with monthly production summed over the period (annual moving averages). The chart also shows the following subsets of new business volumes: the level of renegotiated loans, the level of "pure new business", as well as the level of loans with floating interest rates or with an interest rate fixation period of up to one year.

When considering the impact of capital requirements on lending, the timeframe considered can make a major difference. In the short term, higher capital requirements may lead to constrained lending, especially for banks that are undercapitalised or that have limited capacity to absorb higher requirements through a reduction in capital "headroom" above minimum requirements. Over the long term, better-capitalised banks tend to lend more sustainably and consistently across economic cycles.⁶⁵ There is evidence, for instance, that the early, robust recapitalisation of US banks following the global financial crisis enhanced their capacity to absorb risks and facilitated a recovery in lending supply by 2011, whereas the lower initial capitalisation of European banks necessitated a period of deleveraging as they adjusted to stricter regulatory standards.⁶⁶

Lending conditions are another important indicator that requires a nuanced interpretation. Changes in the specific terms, margins and collateral standards that banks apply to loans are driven by many factors. Supply-side factors include banks'

⁶⁵ See Boissay F., Cantú, C., Claessens, C. and Villegas, A. (2019), "Impact of financial regulations: insights from an online repository of studies", *BIS Quarterly Review*, March.

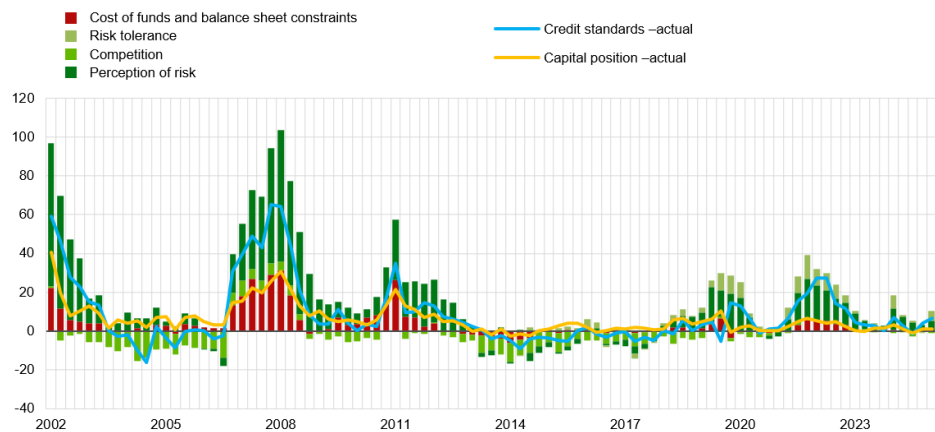
⁶⁶ See Ben Naceur, S., Marton, K. and Roulet, C. (2018), "Basel III and bank-lending: Evidence from the United States and Europe", *Journal of Financial Stability*, Vol. 39, pp. 1-27.

risk perceptions, risk tolerance and balance sheet constraints. Demand-side factors include general interest rate levels and borrowers' specific financing needs for investments or consumption. Regulatory changes can also affect lending conditions by changing the risk-return trade-offs of certain activities, potentially increasing the cost of riskier ones. While this may appear unfavourable, it bears repeating that an intended consequence of risk-based regulation is the repricing of risk to incentivise prudent decision-making and discourage excessive risk-taking.

While credit standards have tightened in recent years, there is limited evidence that regulatory changes have played a significant part in that. Data from the ECB's bank lending survey suggest that "costs of funds and balance sheet constraints" – a category that includes the impact of the capital position – have not been a major factor in driving changes in lending standards since around 2014, once the acute phases of the European sovereign debt and banking crisis had been overcome (Figure 11).⁶⁷ Moreover, whereas in the immediate post-crisis years banks tended to report that "regulatory and supervisory actions" were leading to reductions in risk-weighted assets, since around 2017 this indicator has usually been positive. While it turned negative in 2025, it is expected to head back into positive territory in 2026 (Figure 12).

Figure 11
Changes in credit standards among NFCs and contributing factors

(net percentages of banks reporting a tightening of credit standards, and contributing factors)



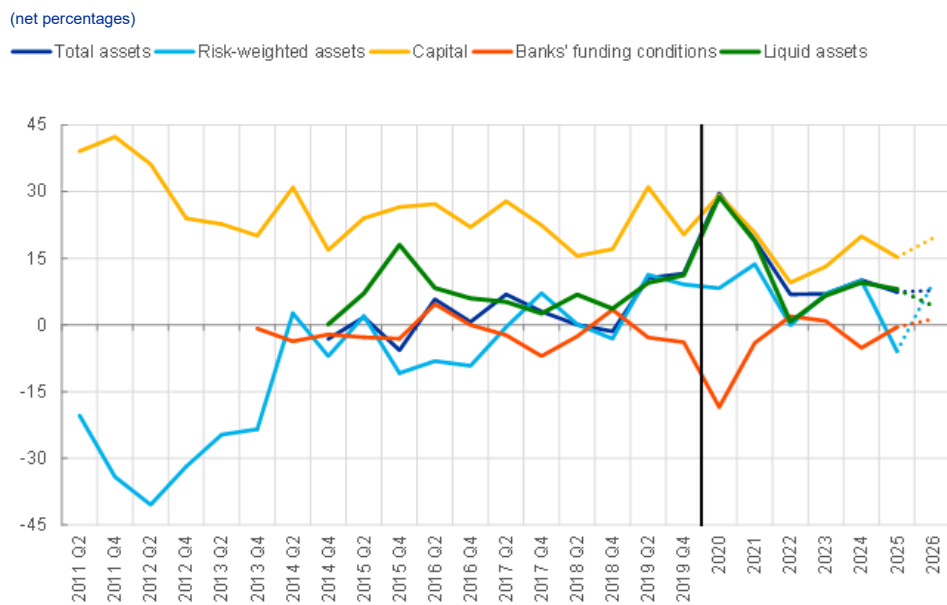
Source: ECB Bank lending survey and authors' calculations.

Note: "Cost of funds and balance sheet constraints" amalgamates responses to survey questions concerning the impact of capital positions, access to market financing and liquidity positions on banks' credit terms and conditions.

⁶⁷ The Bank Lending Survey reports changes from the previous quarter. Unless there are visible changes in regulation, banks are not supposed to reply every quarter that conditions are tighter (or easier), as the comparison refers to the preceding quarter.

Figure 12

Impact of regulatory or supervisory actions on banks assets, capital and funding conditions



Source: ECB Bank lending survey and authors' calculations.

Notes: For "Total assets", "Risk-weighted assets", "Liquid assets" and "Capital", the net percentages are defined as the difference between the sum of the percentages of banks responding "increased considerably" or "increased somewhat" and the sum of the percentages of those responding "decreased somewhat" or "decreased considerably". For "Banks' funding conditions", the net percentages are defined as the difference between the sum of the percentages of banks responding "experienced a considerable tightening" or "experienced a moderate tightening" and the sum of the percentages of those responding "experienced a moderate easing" or "experienced a considerable easing". The last period denotes the expectations indicated by banks in the current round.

As with lending, European banks' profitability, measured by RoE, has generally remained below pre-crisis levels throughout the post-crisis period (Figure 13). Again, however, the pre-crisis trend should not be taken as a

benchmark for a sustainable target for RoE, given the extent to which it reflected unsustainable pre-crisis risk-taking. Indeed, lower RoE since the financial crisis can be seen, at least in part, as a by-product of deliberate public policy choices. Increasing capitalisation mechanically reduces RoE, as capital is the denominator in the RoE equation. Moreover, reducing risk-taking necessarily lowers returns. These are predictable, intended outcomes of reforms designed to make the banking sector more resilient.

However, lower RoE cannot be attributed to policy choices alone. After all, the need to strengthen balance sheets was not unique to EU banks, and yet a persistent profitability gap has emerged between EU banks and large US banks. This gap can be attributed to a range of cyclical and structural variables. Cyclical differences include the slower pace of recovery in the EU, the persistent credit-to-GDP gap in most EU countries, and a more favourable interest rate environment in the United States.⁶⁸ Structurally, US banks have also benefited from the larger domestic market, which allows for greater economies of scale, including higher levels of

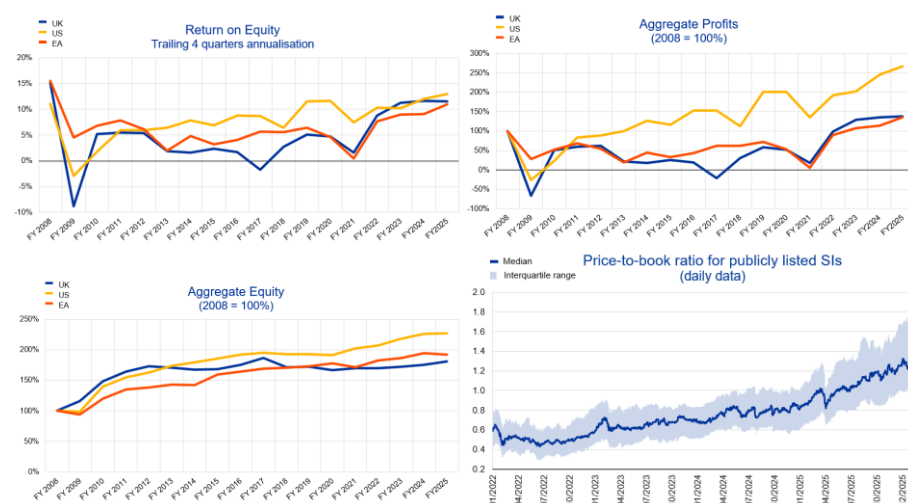
⁶⁸ See Di Vito, L. et al. (2023), "Understanding the profitability gap between euro area and US global systemically important banks", *ECB Occasional Paper Series*, No 327. See also ECB (2015), "Bank profitability challenges in euro area banks: the role of cyclical and structural factors", *Financial Stability Review*.

investment in IT infrastructure and greater remuneration budgets, thus helping them attract and retain talent. Large US banks typically also generate higher income than their EU peers from fees and commissions and trading activities. The “sovereign-bank nexus” is also believed to have weighed on EU banks’ profitability, both via losses and valuation effects on their sovereign exposures and via higher funding costs.

In recent years, stronger capital positions have proven compatible with improved bank profitability. Euro area banks’ profitability has surged in recent years owing, among other factors, to the more favourable interest rate environment since the COVID-19 pandemic (see Figure 13). Significant institutions achieved an annualised RoE of 9.8% in the period 2023-2025, compared with 5.5% in the low interest rate period (2015-2022). Valuations and price to book ratios have improved significantly. Importantly, research suggests that the relationship between capital and profitability has been either insignificant or even positive.⁶⁹

Figure 13
Key indicators of EU banks’ performance relative to US and UK banks

(percentages)



Sources: Bloomberg and authors’ calculations.

The foregoing discussion is not meant to provide a comprehensive review of the determinants of banking sector performance or the impacts of regulatory changes. Evaluating the effects of regulation requires structured frameworks, such as those developed by the Basel Committee and the Financial Stability Board (FSB).⁷⁰ Although a structured assessment of the impacts of post-crisis reforms lies beyond the scope of this paper, this section has underlined the importance of considering the manifold structural and cyclical influences on indicators of banking sector performance, beyond regulatory changes. From a public policy perspective, it

⁷⁰ See Buchholz, M., Loeffler, A. and Sigel, P. (2025), “Do capital requirements and their international differences affect banks’ profitability?”, *Deutsche Bundesbank Discussion Paper*, No 31/2025.

⁷⁰ See BCBS (2022), *Evaluation of the impact and efficacy of the Basel III reforms*, December; and FSB (2021), *Evaluation of the effects of too-big-to-fail reforms: Final Report*, March.

is essential to balance private costs and benefits with intended outcomes and broader societal objectives. Moreover, when assessing performance trends, it is important to recognise that the pre-global financial crisis boom was marked by unsustainable lending growth and excessive risk-taking, making it an unsuitable benchmark for replication.

5 The capital framework in international comparison

Several analyses have attempted to compare the capital requirements of EU banks with those of their US peers. However, the methodologies and findings often differ. For instance, a 2023 study by Oliver Wyman found capital requirements to be more demanding in the EU than in the United States.⁷¹ More recent contributions have found no evidence that capital requirements for banks in the EU are significantly more stringent than those in the United States, at least as regards large, internationally active banks.⁷² For instance, Resti (2025) finds that EU lenders are not burdened with disproportionately high supervisory requirements.⁷³ Likewise, Mejino-López and Véron (2025) find that large banks under SSM supervision do not face significantly different requirements from their US peers.⁷⁴ When evaluating whether European banks are more regulated than their competitors, Berg et al. (2025) conclude that while compliance costs among EU banks are high, their regulation is less stringent than in the United States, in particular because the United States imposes certain stricter capital requirements than Basel III on its G-SIBs.⁷⁵

Differences in local rules concerning the calculation of RWAs and the definition of regulatory capital limit the meaningfulness of simple comparisons of required capital ratios among banks. A recent Bank of England study controls for differences in the calculation of RWAs across jurisdictions. The study is premised on the fact that the US risk-weighting approach typically results in higher measured RWAs than the approaches followed in the United Kingdom or EU. In these two regions, gaps in risk coverage under Pillar 1 are compensated for with add-ons, in the form of Pillar 2A (in the United Kingdom) or P2R (in the EU). To adjust for this, the Bank of England study converts relevant P2A/P2R requirements into notional amounts of additional RWAs, thereby allowing for notionally adjusted capital ratios for UK and EU banks to be calculated. This allows for a more like-for-like comparison of requirements between these jurisdictions and the United States. The study finds that risk-based capital requirements for large banks in the United Kingdom are broadly similar to those in the euro area and somewhat lower than those in the United States.⁷⁶

A further approach for comparing capital frameworks quantitatively is to estimate how the requirements applicable to banks in one jurisdiction would

⁷¹ Oliver Wyman (2023), *The EU Banking Regulatory Framework and Its Impact on Banks and the Economy*, Brussels, European Banking Federation.

⁷² See Restoy, F. (2025), *Financial regulation and growth: what should be the European policy priorities?*, FinSAC conference “Financial sector stability in times of geopolitical turbulence”, 27 May 2025, Vienna, Austria.

⁷³ Resti, A. (2025), *op. cit.*

⁷⁴ Mejino-López, J. and Véron, N. (2025), *op. cit.*

⁷⁵ Berg, J., Boivin, N. and Geeroms, H. (2025), “The quickly fading memory of why and when bank capital is important”, *Working Paper 04/2025*, Bruegel.

⁷⁶ See Bank of England (2025), *Financial Stability in Focus: The FPC’s assessment of bank capital requirements*, 2 December.

change if the banks were hypothetically subject to the rules of another. This approach allows for (some) differences in the regulatory framework to be controlled for. The key benefit of this approach – relative to comparing aggregated requirements of selected samples of banks across jurisdictions – is that it abstracts from underlying differences between the samples of banks themselves, which inevitably influence the requirements that apply to those banks in their respective jurisdictions. In essence, under the hypothetical exercise, we do not compare two sets of banks’ respective requirements. Rather, we apply the rules of one jurisdiction to a set of banks in another, to understand whether those banks would face higher or lower requirements under the other jurisdiction’s rules.

Such an approach poses certain limitations. Due to both data constraints and the sheer complexity of regulatory, supervisory, legal and accounting frameworks, it is impossible to consider every single difference between two jurisdictions. Moreover, there is a strong two-way relationship between the banking rules that apply in a given jurisdiction and the structure of the local banking sector to which they apply. It is therefore unsurprising that hypothetically applying the rules of one jurisdiction to the banks of another may yield some outsized differences between actual and notional requirements. In reality, policymakers typically seek to avoid such outsized effects by calibrating requirements to fit the specificities of their respective banking sectors. Likewise, banks avoid such impacts by adapting their balance sheets to the rules applicable in their home jurisdiction.

The EU and US banking systems operate in distinct structural and cyclical environments. Differences include, but are not limited to, genuinely integrated retail and corporate markets in the United States, differences in the pricing of banking services and credit, and a different balance between bank-based and market-based intermediation. These and other institutional features, such as more developed securitisation markets and the greater use of originate-to-distribute models in the United States, influence the costs and benefits for banks of (changes in) capital regulations. In turn, such structural differences illustrate the need for significant caution in interpreting the results of hypothetically applying US requirements to EU banks.

The remainder of this section analyses how capital requirements of a sample of significant institutions would change if those institutions were subjected to the key elements of the US capital requirements framework. This constitutes a model-based, hypothetical counterfactual policy experiment in which EU banks are assumed to be subject to US regulatory parameters. The estimations are based on applying US requirements applicable as of end-2025. The exercise is meant to illustrate the implications of alternative regulatory designs. First, a sample of significant institutions is categorised according to the US “tailoring rules”, based on size and cross-border activity.⁷⁷ This first step determines the set of requirements

⁷⁷ See, for example, Board of Governors of the Federal Reserve System (2019), *Tailoring Rule Visual*, October.

that would apply to each significant institution if they were subject to the US framework (see the Appendix for further details).⁷⁸

On average, the requirements that EU banks would hypothetically face under current US rules would be somewhat higher than those to which they are subject in the EU. A set of inputs is used to calculate an average counterfactual CET1 minimum required capital for significant institutions. This value corresponds to the minimum amount that a significant institution would be required to maintain if its RWAs and overall capital requirement were determined under US regulations. When the average *actual* minimum required capital value is compared with the average *counterfactual* minimum required capital of the sample, a modest positive difference (+4.7%) is observed (see Figure 14, left hand column).⁷⁹

Figure 14

Minimum required capital under a counterfactual US framework versus the actual EU framework, by category of significant institutions

(percentages)



Sources: COREP, FINREP and authors' calculations.

Notes: All values refer to 31 December 2025. The risk-based minimum required capital measure is the minimum amount of CET1 capital required against an institution's minimum capital requirements and buffers, under the actual and counterfactual scenario, respectively, without considering the potential effects of the leverage ratio. The chart shows the impact on minimum required capital as the weighted average of the difference between the value applying European rules (actual scenario) and the corresponding US rules (counterfactual scenario) to SSM significant institutions (SIs). Column (a): total SI sample. Column (b): SIs classified in Categories I-II. Column (c): SIs classified in Categories III, IV and Other. All columns: the dot represents the average impact in the central case. The shaded area represents the Q1-Q3 interval of the average impacts for alternative configurations derived from using one or more of the following alternative definitions: (i) Stress Capital Buffer estimated using the minimum EBA stress test CET1R depletion in the counterfactual scenario; (ii) P2G removed from the actual scenario; (iii) actual CCyB value introduced into the counterfactual scenario; (iv) a portion of residential mortgage credit risk exposures is assumed to be securitised and subject to a lower risk weight. A positive percentage difference means the EU banks would ceteris paribus face higher capital requirements under US rules, while a negative percentage difference means the EU banks would ceteris paribus face lower requirements under US rules.

The resulting average minimum required capital for the entire sample masks significant differences among significant institutions. For SSM G-SIBs and other large internationally-active significant institutions, the US framework would result in significantly higher requirements than under the EU framework (Figure 14, central column). These banks are those that tend to compete directly with

⁷⁸ For a description of the US framework, see EBA (2024), op. cit..

⁷⁹ The minimum required capital impact value represents the percentage change going from actual to counterfactual CET1 minimum required capital.

internationally-active banks from third countries. This finding can be attributed to two main drivers. First, for capital buffers, the US framework offers a second method for determining G-SIB buffer levels. This “US Method 2” complements the Basel-based methodology and results in materially higher buffer values. Secondly, as regards RWAs, these significant institutions tend to have the largest share of IRB RWAs. As a result, these banks would be heavily affected by the US “Collins floor”, which is a legislative restriction under the US Dodd-Frank Act mandating that capital requirements calculated using internal models (known as “advanced approaches” in the US regime) cannot be lower than those calculated using US standardised approaches. Conversely, for smaller significant institutions, the EU framework results in higher minimum capital requirements than the US framework (Figure 14, right hand column). This result is driven primarily by differences in the buffer framework: the US regime has no equivalent of the EU’s O-SII buffer. Moreover, the US authorities have never set a positive rate for the countercyclical capital buffer. In broad terms, smaller banks tend to be less internationally active, which implies that international level playing field concerns (vis-à-vis smaller banks from third countries) may be less relevant.

The results are sensitive to inputs and assumptions. These findings refer to a central case, which relies on assumptions regarding key input parameters. To check the sensitivity of the results to different assumptions, one benchmark specification is selected as the central case within the counterfactual scenario, and the remaining parameter configurations are used to gauge a range of plausible outcomes around it (Appendix). When assessing the range of outcomes, the results for the central case are directionally confirmed, with no clear pattern emerging when checking for the alternative configurations. This applies to both the whole sample and the two sub-samples (Figure 14, all columns, shaded areas). The key role of assumptions in driving results is, however, fully confirmed.

In March 2026, US federal regulatory agencies⁸⁰ proposed new rules to implement the final phase of Basel III in the United States. The proposals, which are subject to consultation until June 2026, aim to remove overlapping requirements, recalibrate capital standards to align them more closely with underlying risks, and close long-standing gaps in the US prudential framework.⁸¹ The three proposals would revise: (i) the risk-based capital framework applicable to the largest, most internationally active firms and to firms with significant trading activity (Basel III proposal); (ii) the calculation of the capital add-on for global systemically important banks (G-SIB surcharge proposal); and (iii) the US standardised approach in the capital rule (standardised approach proposal).⁸²

The proposals are expected to result in a slight reduction in requirements for the largest US banks. The Basel III proposal is expected to result in a small increase in requirements for the largest banks, while the G-SIB surcharge proposal

⁸⁰ Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Office of the Comptroller of the Currency.

⁸¹ See Bowman, M. (2026), *Capital Rules for the Real Economy*, remarks at the Cato Institute Policy Forum: Basel III and Bank Capital Rules, March 12.

⁸² See Board of Governors of the Federal Reserve System (2026), *Basel III proposal, GSIB surcharge proposal, and standardized approach proposal*, March 19.

would lead to a modest reduction in surcharges. Taken together, these proposals would lead to a small net decrease in requirements, which would be further affected by proposed changes to the stress testing framework.⁸³ In the EU, by contrast, requirements are expected to increase once all CRR III elements are in place and all transitional arrangements expire (see Section 4.2). For G-SIBs, slightly lighter US rules and slightly higher steady-state EU requirements would narrow the current gap between the respective frameworks that the analysis of this section has estimated.

⁸³ The Board of Governors of the Federal Reserve System (2026) estimates that the cumulative impact of all proposals on risk-based capital requirements – including proposed stress-testing changes – would lower the CET1 requirements of Category I and II firms by 4.8%. The standardised approach proposal would decrease the aggregate requirements of Category III and IV firms by 3.0% and of smaller banking organisations by 7.8%.

6 Conclusion

This paper has sought to support discussions on the capital framework for banks in the EU amid ongoing debates on the relationship between capital requirements and economic performance. It has assessed the impact of specific implementation choices made by EU policymakers when implementing the Basel standards, examined how capital adequacy and capital requirements have changed over time, and discussed how observed changes in bank performance should be interpreted. It has also benchmarked EU banks' capital requirements against those applicable in the United States.

The EU capital framework builds upon the Basel framework, but incorporates additional layers and refinements, reflecting the diversity of the EU banking sector. In some areas, the capital framework deviates from the Basel standards, notably via adjustments in exposure definitions and risk weight calibrations. These deviations are often driven by wider economic policy objectives, such as supporting credit supply to certain categories of borrower or economic activities. The EU framework faithfully implements the Basel standards on the supervisory review process, enabling supervisory authorities – the ECB in the case of the largest banks in the SSM – to ensure robust risk management and that banks are resilient to severe but plausible stress events. The EU has actively used macroprudential tools to address risks to financial stability. Mostly, these tools also derive from (non-prescriptive) parts of the Basel standards. Only a few EU rules are entirely “super-equivalent” to the Basel standards.

Following the global financial crisis, the capital adequacy of European banks improved significantly, with Tier 1 risk-based capital ratios nearly doubling. Aggregate CET1 ratios also increased markedly since the introduction of CET1 as a measure of regulatory capital in 2014. Likewise, the aggregate Tier 1 leverage ratio of significant institutions, which measures capitalisation in non-risk-based terms, has increased by around a fifth since 2016, when consistent reporting of this indicator became available. Since the inception of the SSM in 2014, capital requirements have remained broadly stable, with Pillar 2 requirements and guidance showing small year-to-year changes at the aggregate level, which also reflects broad stability in individual banks' SREP outcomes. The overall level of capital requirements has fluctuated more, due to regulatory changes, reductions during the COVID-19 pandemic and the subsequent reinstatement of macroprudential buffers. Nevertheless, the aggregate required CET1 ratio of significant institutions in 2026 stood at 11.2%, approximately the same level as in 2019. Recent regulatory changes, including the implementation of CRR3, have had a muted impact on capital requirements, and long-term effects are expected to be limited.

Importantly, while increases in capital requirements contribute to bank resilience, their impact on lending and profitability warrants careful evaluation. In the short term, higher capital requirements may constrain lending, particularly for undercapitalised banks. However, over the longer term, better-capitalised banks tend

to lend more sustainably and consistently across economic cycles. Although increasing capital requirements mechanically affects RoE by raising the denominator and may reduce risk-taking, research finds no consistent evidence of a negative relationship between capital requirements and profitability. Crucially, structural and cyclical factors such as market size, interest rate environments and sovereign-bank linkages also play a significant role in shaping banking sector performance, underscoring the need for policymakers to adopt nuanced interpretations of relevant indicators.

Ultimately, the EU's regulatory framework strikes a balance between international standards and regional adaptations, shaped by macroprudential considerations, institutional constraints and broader policy goals. The findings of this paper show that the EU framework does not universally result in more conservative requirements than those found in peer jurisdictions, nor than those prescribed by international standards. This paper also casts doubt on claims that restoring resilience following the global financial crisis hindered the ability of EU banks to support the economy or acted as a primary drag on profitability. Based on the evidence and considerations presented in this paper, the authors caution against diluting regulatory requirements or deviating from international standards in the pursuit of competitive advantages. Such actions, while potentially offering short-term benefits for specific banks, could ultimately undermine the global public good of achieving convergence in international capital standards, thus increasing risks to financial stability whilst also potentially undermining banks' competitiveness over the longer term.

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8 Appendix

This appendix provides further details on the analysis presented in Section 5.

It presents an approach and a methodology that involves asking how EU banks' requirements would change if they were hypothetically subject to the key features of the US framework.⁸⁴ The Appendix also further elaborates on the limitations of that approach and discusses the role of methodological assumptions in shaping its results.

Sample

This analysis combines data from several supervisory sources for a sample of 111 significant institutions (SIs). The final sample covers the total assets of SIs operating in the SSM at the end of 2025. More precisely, it includes 63 SIs using the IRB approach for credit risk (Table A1, top panel).

The SIs included in the sample are classified according to the US tailoring categories used in the US regulatory framework. This step dictates which specific rules are applicable to a given SI. SIs are categorised on the basis of two indicators: their size and their cross-jurisdictional activity (Table A.1, top panel). The sample contains the seven SSM G-SIBs (which notionally correspond to Category I in the US framework). Category II captures significant institutions with assets exceeding \$700 billion (equivalent to EUR 596 billion) or that are active on a cross-border basis with at least \$75 billion (EUR 63.8 billion) in cross-jurisdictional activity and assets exceeding \$100 billion (EUR 85.1 billion). This second category contains a total of 19 SIs. The remaining 85 SIs are classified into Categories III, IV and Other (Table A.1, top panel).

Inputs

Several inputs must first be defined to compute capital requirements (see Table A.1 below):

- Risk-weighted assets (RWAs) are assessed under the US framework's dual-stack approach. For SIs that notionally fall into Categories I and II, estimates are made of what the RWAs would be under either the US advanced approaches or the US standardised approaches.⁸⁵ These estimates determine

⁸⁴ This analysis focuses on the hypothetical impact of applying certain key features of the US framework to EU banks, as described in Table A.1 (bottom panel). These features include regulatory tailoring, the Collins floor, the US approach for setting capital buffers on the basis of stress tests, and the US G-SIB buffer framework. The analysis does not consider other differences between the US and EU frameworks, except for EU deviations. The analysis does not consider the March 2026 proposals from US agencies. Certain more granular differences, for example concerning the implementation of Basel standards for credit risk and market risk at the exposure or sectoral level, or differences in the requirements around securitisations, are not considered due to data constraints. Similarly, liquidity or gone-concern frameworks fall outside the scope of this analysis.

⁸⁵ Category I and II banks must comply with "parallel stacks" of requirements, based on RWAs computed under advanced approaches (AA) and standardised approaches (SA). AA present two key features: they require the use of internal models and cover all risks (credit, market and operational risk, as well as CVA risks). Meanwhile, SA require the use of risk weights predetermined in regulation and cover a narrower set of risks (including only credit and market risks).

whether the Collins floor would be binding for each individual SI. For SIs notionally falling into Categories III and below, estimates are made of what the RWAs would be under the US standardised approaches.

- Regulatory capital. Regarding the definition of capital, the counterfactual Common Equity Tier 1 (CET1) capital is defined by adjusting the actual CET1 capital to reflect elements that are deducted under EU regulations, but not under US rules.⁸⁶
- Supervisory requirements. The analysis evaluates the size of the stress capital buffer (SCB) that would apply to EU SIs that would notionally fall under Categories I to IV in the US regime. In the central case (see below), the estimate for the SCB among EU SIs is made by following the US rules for determining the SCB. This requires taking the maximum capital ratio depletion under supervisory stress tests as the starting point and then adding an amount to capture banks' planned distributions. The central case in the counterfactual scenario uses capital ratio depletion in the EU (EBA) stress tests as a proxy for the capital ratio depletion calculated under the US stress tests.⁸⁷
- Structural macroprudential buffers. Under the US framework, the G-SIB buffer is the only buffer requirement other than the SCB. There is no equivalent of the EU's O-SII buffer or systemic risk buffer. However, under the US framework, there are two methods for computing G-SIB buffers. An estimate is made of what the G-SIB buffers of SSM G-SIBs would be if they were subject to the US G-SIB framework, particularly the so-called "Method 2", which is generally stricter than the G-SIB buffers defined in the Basel framework.
- Time-varying macroprudential buffers. The impact of setting the countercyclical capital buffer (CCyB) to zero is assessed, consistent with the observed practice among US authorities, which have set the CCyB at 0%.

Table A.1. Breakdown of categories and working assumptions

		Category I	Category II	Category III	Category IV	Other	Total SI sample
Sample	Total Assets thresholds (EUR billions)*	G-SIBs	>700	[250; 700]	[100; 250]	<100	-

⁸⁶ Notably, the EU framework requires the deduction of prudential valuation adjustments, while this is not the case in the United States. The counterfactual CET1 value also includes the value of the IRB shortfall for those SIs that would be bound by SA in the counterfactual scenario. Deductions related to software are disregarded.

⁸⁷ The results of the biennial European Stress Test (see [here](#) for further details) are utilised in this Appendix to replicate the computations prescribed under the US framework. The counterfactual SCB is calculated using the outcome of the 2025 EBA-ECB stress test for the 53 Category I-IV SIs included in the sample. Its value is equal to the sum of two elements: (i) the maximum CET1 ratio depletion within the relevant planning horizon; and (ii) the ratio between the forecast dividends and RWAs. Replicating the US approach, the planned dividends are calculated before taking into account MDA restrictions and refer to the second year of the stress test horizon. Forecast RWAs refer to the year in which each SI records its lowest projected CET1 capital ratio. The estimation of the counterfactual value of the SCB for SSM SIs is not affected by the evolution of SCB values among US banks.

	Alternative thresholds (EUR billions)*	-	CJA > 75 and TA > 100	-	-	-	-
	Number of significant institutions in sample	7	19	5	22	58	111
	Credit risk IRB share of total credit risk RWA	57%	51%	52%	29%	30%	49%
	Number of significant institutions bound by AA RWAs	0	5	0	0	0	5
	Assumptions						
Capital framework	Max (AA; SA)	Max (AA; SA)	Only SA	Only SA	Only SA	-	
OpRisk RWAs	No for SA	No for SA	No	No	No	-	
Market risk RWAs	Yes	Yes	Yes, if material [3 SIs excluded]	Yes, if material [6 SIs excluded]	Yes, if material [18 SIs excluded]	-	
CCyB	Yes, but = 0%	Yes, but = 0%	Yes, but = 0%	No	No	-	
Stress capital buffer $\geq 2.5\%$	Yes	Yes	Yes	Yes	Fixed at 2.5%	-	

Notes: Thresholds are expressed in USD, but converted to EUR values in the analysis. CJA: cross-jurisdictional activities. AA: the advanced approach used to compute risk-weighted assets; it requires the use of internal models and covers all risks (credit, market and operational, as well as CVA risks). SA: the standardised approach used to compute risk-weighted assets; it requires the use of the risk weights predetermined in regulation and covers a narrower set of risks (including only credit and market risks). Note that CVA risk is included in credit risk in the United States. Market risk RWAs are disregarded if they are below both the absolute and relative materiality thresholds.

Outcome and sensitivity analysis

These inputs are used to calculate the impact on minimum required capital,⁸⁸ with this impact being the difference between two values: the value that SIs reported at the end of 2025 under the existing European rules⁸⁹, and a counterfactual value assuming the application of certain features of the US framework (herein, the “central case”).⁹⁰

The central case of the counterfactual scenario relies on strong assumptions regarding key input parameters. To check the sensitivity of the results to different

⁸⁸ Minimum required capital is a metric routinely employed in quantitative impact assessments, as it encompasses both RWAs and all components (micro- and macro-prudential) of the capital requirements. It is defined here as the minimum amount of CET1 capital needed to meet the minimum risk-based capital requirements and buffers, in the actual and counterfactual scenarios, respectively. It is calculated by multiplying RWAs, which are computed for each risk, by the overall capital requirements. The current analysis does not consider the role of leverage ratio requirements.

⁸⁹ In the central case, the starting point (“actual requirements”) includes all buffers and requirements under the EU regime. On the macroprudential side, this means the higher of the G-SII and the O-SII buffers, plus the SyRB and the CCyB. On the microprudential side, it means the P2R and the P2G as well as the capital conservation buffer, which is fixed at 2.5% of RWAs for all banks. All these requirements are expressed in CET1 terms and are additional to the Pillar 1 minimum requirement of 4.5% of RWAs.

⁹⁰ In the central case, the counterfactual requirements rely on the SCB and the G-SIB buffer in addition to the 4.5% RWA minimum requirement. The hypothetical SCBs and G-SIB buffers are estimated as discussed above: SCB are estimated from the maximum CET1 depletion of SIs in the sample under the adverse scenario of the European stress tests, plus planned distributions; G-SIB buffers for SSM G-SIBs are estimated using the US Method 2 approach. Moreover, the EU deviations listed in Section 3.1 are removed. The assumptions that define the central case are relaxed when performing the sensitivity analysis.

assumptions, the impact of alternative assumptions for specific inputs was estimated, either in isolation or combined with each other (see Table A.2).

Table A.2. Breakdown of categories and working assumptions

Inputs	Central case	Alternative approach	Commentary
Counterfactual stress capital buffers	Maximum EBA stress test depletion	More lenient stress test results using the minimum depletion	The EBA stress test relies on different assumptions from those used under the US framework. However, in the US framework, the SCB plays the role of several instruments that exist within the European framework
P2G	Included	Excluded	Non-binding P2G (failure to comply with the level of P2G does not automatically incur distribution restrictions)
CCyB	Excluded	Positive rate	The US CCyB has never been set at a positive rate. However, if US rules were hypothetically applied in the EU, the CCyB rate should reflect local financial cycle conditions ⁹¹
Securitisation	EU approach	A fraction of mortgage exposures assumed to be securitised and subject to different risk weights ⁹²	Different market structures for mortgage financing

The assumption of a static balance sheet constitutes the most significant caveat of this approach. Rules shape markets and market participants shape rules.⁹³ Had the rules been different in the EU, the SIs themselves would have been different. The counterfactual analysis does not account for this fact, nor does it allow for dynamic modelling of changes to banks' balance sheets that a behavioural response to different rules would have incentivised. This limitation affects the representativeness of the results. Specifically, the SIs would have exhibited different sizes and business mixes had they been subject to the US framework instead of CRR III/CRD VI. For instance, the incentives among European banks to invest in IRB models might have been lower had they been required to comply with a 100% output floor, as mandated by the Collins floor.

⁹¹ For Cat IV and other banks in the United States, the CCyB does not apply (*Bank Holding Company Supervision Manual*).

⁹² This sensitivity analysis relies on COREP data and assumes that 65% of SI residential mortgages are securitised. The 65% value is used on the basis of the work of [Fuster et al. \(2022\)](#) on mortgage-backed securities.

⁹³ Moreover, the scope of this analysis does not include differences in accounting standards, gone-concern frameworks, liquidity frameworks, leverage ratio frameworks or certain prudential requirements. Additionally, the counterfactual tailoring of applicable rules for SSM SIs relies on unadjusted US rule thresholds.

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