



Streamlining financial regulation while safeguarding stability and tackling new risks

Speech by Pablo Hernández de Cos
General Manager, Bank for International Settlements

Public Lecture at the International Center for Monetary and Banking Studies
Geneva, Switzerland, 4 March 2026

Introduction

Good morning and thank you for inviting me to speak at the International Center for Monetary and Banking Studies. The BIS has long enjoyed a close and valued association with the Centre and the Geneva Graduate Institute more generally. Many of the questions explored here over the years, such as on financial stability, regulation and cross-border spillovers, have been central to the BIS's own work and mandate.

We are approaching the 20th anniversary of the Great Financial Crisis (GFC). Two decades may seem like a long time, but for those of us who lived through the worst financial crisis since the Great Depression, the lessons remain vivid and relevant today. They have shaped an entire generation of financial sector reforms. The costs of crises – economic, social and political – are well known and documented in the literature.¹

In my speech today, I will highlight how these reforms have made the global financial system safer, stronger and more resilient. I will lay out some considerations for streamlining and simplifying regulatory frameworks while maintaining that resilience. And I will discuss how frameworks can adapt to tackle emerging new sources of risk.

The post-crisis agenda has been one of the most comprehensive transformations of the global prudential framework in modern history. No fewer than 50 major reforms were introduced at the global level, with many more implemented domestically. And implementation of some of these reforms – including most notably parts of Basel III – is ongoing.²

What the global community achieved during this period is significant. The reforms have markedly increased the resilience of the global banking system.³ Banks today fund their assets with substantially more and better-quality capital. They hold stronger liquidity buffers and have more stable funding structures. These foundations, together with sizeable policy support (both fiscal and monetary), have enabled the system to weather successive and profound shocks, such as the

¹ For example, see Reinhart and Rogoff (2009, 2013), Laeven and Valencia (2013, 2018) and Borio et al (2023).

² See BCBS (2025) for the latest implementation update of Basel III.

³ BCBS (2022c).

Covid-19 pandemic, the economic reverberations of the Russia–Ukraine war and the banking turmoil of 2023. The increased resilience of the banking system is a significant success of international regulatory cooperation.

This is why we regulate – to protect citizens, maintain trust in the financial system and ensure the safety and soundness of banks.

But almost 20 years after the GFC, it is also important that policymakers remain open to reviewing regulatory frameworks.⁴ Indeed, back in 2017, the Financial Stability Board (FSB) Framework for Post-Implementation Evaluation of the Effects of the G20 Financial Regulatory Reforms triggered several evaluations.⁵ Then, in 2019 the Basel Committee on Banking Supervision (BCBS) developed a comprehensive work programme to evaluate the impact of its post-crisis reforms. The rationale for this work was simple: it is imperative for standard-setting bodies – and policymakers more generally – to evaluate the impact and effectiveness of any measure or reform they introduce. This should be an integral part of the policymaking process. It enhances the intellectual rigour of standard-setting by providing an ex post appraisal of the degree of success in attaining a policy objective. These evaluations complement the range of ex ante assessments conducted during the design stage. And they strengthen the accountability and credibility of policymakers by providing a transparent judgment about the impact of their reforms.

In the particular case of financial regulation, there are three important conditions for how these reviews need to be conducted.

First, any review should start with an open mind and be agnostic about the outcome. The sole requirement is that any inputs to the review be based on rigorous analysis. In principle, the case to pursue additional measures to address regulatory gaps may be as relevant as the need to fine-tune aspects of our post-crisis regulatory framework.

Second, any review has to be holistic and cover the whole financial system, including cross-sectoral interactions. This is particularly important since the post-crisis reforms focused mainly on the banking sector, while the regulation of non-bank financial intermediaries (NBFIs) has been strengthened much less. There might be a legitimate concern about whether risk exposures that have shifted from one sector to another are now subject to insufficient prudential controls.

Third, any review must start with the recognition that financial stability is a global public good that calls for cross-border cooperation. An open global financial system requires global prudential standards. Failure here could result in regulatory fragmentation, regulatory arbitrage and a potential “race to the bottom” that undermines the financial sector’s resilience. Of course, cooperation does not mean full harmonisation. A key aspect of the Basel Framework – and perhaps one of its strengths – is that it sets a common minimum global baseline. Jurisdictions can, and should, go beyond that baseline to reflect additional risk features of their banking systems and their own risk tolerance. And, of course, the Basel Framework is also compatible with incorporating proportionality elements, since rules are expected to be applied only to internationally active banks.

⁴ Hernández de Cos (2019).

⁵ FSB (2017).

Against this background, I would frame the discussion about existing frameworks around three questions: (i) Have the post-GFC reforms achieved their objective of improving the resilience of the financial sector and is there any evidence of side effects? (ii) Can we preserve current resilience levels while improving efficiency and reducing unnecessary complexity? (iii) Can the current regulatory framework ensure the resilience of a rapidly evolving financial system?

My intention today is not to provide definitive answers to these questions but to illustrate some of the main issues and factors that could be considered.

1. How can post-GFC reforms be assessed against their original objectives?

The starting point is to assess whether the post-GFC reforms have met their ex ante objectives. In particular, have post-GFC reforms enhanced the resilience of, and reduced systemic risk in, the financial sector?

One way to answer this question is to look at the evolution of regulatory ratios and market-based measures of resilience and systemic risk. In the case of the banking sector, the available evidence shows that the post-GFC reforms have indeed made the system more resilient.⁶ Let me give some examples:

- Banks have significantly strengthened their capital positions. Risk-based Common Equity Tier 1 (CET1) ratios now stand at 14.3%, compared with less than 10% in 2011. During this period, banks' equity as a percentage of total assets increased from 3.5% to 6.1%.⁷
- Liquidity positions have improved. The share of high-quality liquid assets held by banks has increased by 55% between 2012 and 2025 and stands at 21% today. Furthermore, banks have reduced their dependence on unstable short-term funding, with the share of stable funding increasing by almost 40% during the same period to around 56% of total exposures today.⁸
- The available evidence also suggests that this improvement in resilience was indeed linked to the Basel III reforms. Moreover, it shows that the improvement is significant not only at the system-wide level: the reforms have had a particularly strong impact on banks with relatively weak initial capital and liquidity positions. Put differently, the Basel III standards have raised the resilience bar across banks.⁹
- Market-based resilience measures based on bank equity prices and spreads on marketable

⁶ See BCBS (2022c) for a review.

⁷ BCBS (2025). For a sample of 69 (risk-based ratio) and 52 (leverage ratio) internationally active banks.

⁸ BCBS (2025). For a sample of 31 internationally active banks. Stable funding as defined in the Net Stable Funding Ratio.

⁹ See BCBS (2022c) for more details.

instruments have also improved sharply since post-GFC reforms were implemented, consistent with the improved bank resilience brought by Basel III. At the same time, the evidence on the contribution of liquidity reforms to bank resilience as measured using market-based indicators is weaker, which probably reflects lower data availability.

- Similarly, market-based measures of systemic risk that gauge how shocks propagate across banks have declined. This suggests that banks and the financial system have become less vulnerable to the distress of individual banks and that interconnectedness within the financial system has been reduced. Furthermore, a deeper dive analysis of stress periods shows that systemic risk increased less during crisis periods after capital and liquidity reforms were introduced. The results also suggest that higher risk-based capital and leverage ratios are associated with lower systemic risk levels of banks across the entire sample period.
- Too-big-to-fail reforms tell a similar story.¹⁰ The funding advantage of global systemically important banks (G-SIBs) has fallen. Market discipline has improved, with the sensitivity of G-SIBs' credit default swap prices to their risk increasing since the GFC. These developments point towards meaningful progress in reducing the systemic footprint of the largest institutions.

A related question is: have the reforms had any side effects? To determine this, one can examine how banks' lending behaviour, and the cost of their equity and debt funding, responded to the reforms.

On the effects of capital on bank lending, some studies suggest that stricter capital requirements are, at least in the short term, associated with reduced lending by some banks. This could perhaps reflect bank management's preference to meet higher capital requirements by lending less rather than by bolstering capital.¹¹

However, these analyses do not indicate that the reforms have reduced the aggregate supply of credit to the economy, since the overall level of bank lending expanded in most jurisdictions during the implementation of the reforms. In various settings, studies have shown that when banks subject to stricter capital or liquidity requirements retrench, less affected and initially better capitalised banks expand their lending.¹² Similar evidence indicates that non-banks fill at least some of the regulation-induced gaps in bank lending.¹³

Perhaps more importantly, empirical studies find that, over the medium term, higher bank capital is associated with greater lending.¹⁴ This underscores the notion that any observed adverse effects

¹⁰ See, for example, FSB (2021) and Goel et al (2019).

¹¹ See, for example, Aiyar et al (2014), Gropp et al (2019), Fraise et al (2020) and Favara et al (2021).

¹² See, for example, Cortés et al (2020) and Sundaresan and Xiao (2024).

¹³ See, for example, Berrospide and Edge (2024), Irani et al (2021), Lee et al (2024) and Doerr et al (2026).

¹⁴ See, for example, Gambacorta and Shin (2018). The explanation for the positive impact of bank capital on lending is intuitive. Well-capitalised banks are perceived as less risky and therefore have access to cheaper forms of funding (Belkhir et al (2021)). They are better able to absorb losses, maintain market access and preserve confidence when conditions deteriorate. Thinly capitalised banks tend to retrench sharply in downturns, amplifying macroeconomic fluctuations (see, for example, Berger and

of tighter capital requirements on lending may be largely transitory.¹⁵ Moreover, the level of bank capital can affect not just the quantity but also the quality of lending during and in the aftermath of crises. Better-capitalised banks are less likely to engage in so-called evergreening, ie to delay loss recognition and roll over credit to non-viable borrowers.¹⁶

In a similar vein, the FSB found no material and persistent negative effects on small and medium-sized enterprise financing in general, although there are some differences across jurisdictions.¹⁷ It also found that the effect of post-GFC reforms on infrastructure finance had been of secondary importance relative to other factors, such as the macro-financial environment and government policy.¹⁸

As for the impact of post-GFC reforms on banks' cost of capital, the available analyses do not indicate a significant negative side effect. Rather, they indicate that banks' cost of capital fell after the adoption of Basel III. The effect was strongest for banks with lower initial capital ratios.¹⁹ Banks' cost of capital decreased when the reforms were announced, with an even stronger effect for banks with lower initial ratios. This suggests that markets recognised improvements in banks' resilience resulting from Basel III by lowering the cost of accessing capital markets.²⁰ Furthermore, while bank business models have shifted significantly over the past 20 years, empirically it is difficult to connect this directly with the Basel III reforms.²¹

All this evidence suggests that the post-GFC regulatory reforms have yielded substantial net benefits. One way to further reinforce this conclusion is by estimating the optimal level of capital and liquidity requirements and comparing these optimal levels with the actual levels observed.²² However, the literature provides a wide range of estimates for the optimal level of capital, with results being very sensitive to assumptions and modelling techniques. The confidence bands around these estimates are high, which matters in particular during a period of structural change such as the one we are observing now.²³ In any case, the vast majority of empirical exercises that aim to estimate the optimal level of capital and liquidity requirements from a macro perspective, including the most recent ones, reach values that are within the range of current regulatory ratios.²⁴

Bouwman (2013) and Carlson et al (2013)). The effects of higher capital will likely depend on initial levels: once capital levels are very high and solvency concerns very low, further capital increases will likely have a lower impact on lending.

¹⁵ See Mendicino et al (2020) for a formalisation of this trade-off and Eickmeier et al (2018) for empirical evidence along these lines.

¹⁶ Blattner et al (2023).

¹⁷ FSB (2019). The FSB found some evidence that the Basel III risk-based capital requirements slowed the pace and, in some jurisdictions, tightened the conditions of small and medium-sized enterprise lending for banks that were least capitalised ex ante relative to other banks. But it found that these effects were not homogeneous across jurisdictions and were generally found to be temporary.

¹⁸ FSB (2018).

¹⁹ For effects of post-GFC regulatory reforms in the United States on banks' cost of capital, see Kovner and Van Tassel (2022).

²⁰ In terms of bank profitability, recent euro area bank profitability as measured by returns on assets is at 25-year record highs, and that in the United States is in line with historical levels. The KBW Nasdaq Bank Index has reached record levels, and EURO STOXX Banks index exceeds post-GFC maxima.

²¹ See BCBS (2022c) for more details.

²² The extensive literature usually weighs the macroeconomic costs of capital, which stem from the potential impact of higher capital on banks' borrowing costs, against the benefits of capital, which arise because higher bank capital reduces the likelihood and costs of financial crises.

²³ BCBS (2019a).

²⁴ See BCBS (2010), BCBS (2019) and Bank of England (2025), for example.

That being said, evidence also indicates that not everything has worked exactly as intended.

The experience of the Covid-19 shock showed that capital buffers, while conceptually sound, may not always be used as intended during stress.²⁵ Banks may be unwilling to draw down buffers to absorb shocks and maintain lending due to their own internal risk management appetite, expectations from market participants and/or a perceived stigma effect. In contrast, buffers that can be formally “released” by authorities may help address some of these impediments. Empirical studies find some evidence that, during the Covid-19 pandemic, capital releases had a positive additional effect on bank lending.²⁶ In contrast, banks were less willing to use other non-releasable buffers.²⁷

And, as I will discuss further later, there are open questions about the robustness of the design of the capital framework. This includes the “capital stack” of overlaying (and at times potentially overlapping) capital requirements, which could also impede buffer usability.²⁸ Questions have also been raised about the role and design of Additional Tier 1 (AT1) instruments.²⁹

Importantly, the 2023 turmoil showed the need to explore how authorities can be better prepared for the increased speed of bank runs due to, for example, 24/7 payments, mobile banking and the use of social media. The intensity of the observed bank runs points to the need to reflect on possible enhancements of the current framework. Among the topics to be explored are possible technical improvements in the definition and calibration of the prudential requirements, current practices for the supervision of liquidity risk, the role of deposit insurance and the operational readiness of banks to access central banks’ liquidity provision facilities.

Similarly, the FSB’s review of the 2023 turmoil highlighted gaps in resolution frameworks for G-SIBs.³⁰ Among these are the need for an effective public sector liquidity backstop for banks in resolution. In addition, the FSB noted that firms and authorities need to prepare for the adoption of a range of resolution options, such as the transfer and sale of business tools alone or in combination with bail-in. They also need to seek ways to ensure the smooth execution of bail-in in a cross-border context. Importantly, other things being equal, the presence of an effective resolution regime allows banks to operate with a lower capital ratio requirement than otherwise.

In addition, the turmoil also showed that banks that are not G-SIBs can still be systemically significant or critical upon failure. For instance, the failure of such institutions could give rise to customer and counterparty behaviour that adversely affects other institutions perceived by the market as peers. In particular, contagion effects could emerge more from the similarity of business models or funding models with other banks than from the size of the failing bank. That might call

²⁵ BCBS (2021) and BCBS (2022b). See also Borio and Restoy (2020).

²⁶ BCBS (2022b).

²⁷ Bank of England (2025).

²⁸ European Central Bank (2025).

²⁹ In particular, a review of the 2023 banking turmoil by the BCBS suggests that investors did not fully internalise the triggers associated with AT1 instruments, despite explicit language in the Basel Framework (BCCS (2023)). More generally, there is a concern that AT1 instruments, as currently designed, may not effectively perform the loss-absorbing function as expected for all Tier 1 capital instruments (for example, see Coelho et al (2023)).

³⁰ FSB (2023).

for extending resolution planning obligations beyond G-SIBs.³¹

Lastly, the failure of banks during the turmoil provided some evidence that there could be scope to strengthen supervisory frameworks. In particular, some jurisdictions seem to have significant scope to make supervision more focused and risk sensitive. Additionally, there are often opportunities to enhance the oversight of areas like interest rate and liquidity risk, business model sustainability and governance. The crucial role of governance, in particular, is sometimes underappreciated but is critical in shaping bank risk-taking.

To summarise: the post-GFC reforms have delivered significant net benefits and largely achieved their objectives. They have been carefully calibrated so that the benefits of increased banking sector resilience outweigh any costs. But open questions remain, and these deserve careful, continued evidence-based consideration.

2. Can we improve efficiency and reduce unnecessary complexity while maintaining current resilience levels?

While the post-GFC reforms have undoubtedly strengthened the resilience of the global financial system, it is also true that regulation has become more complex. The Basel Framework now stands at around 1,850 pages, which is longer than *The Complete Works of William Shakespeare*.³² Basel III is more linguistically complex than its predecessors.³³ And some of its elements are more complex computationally: the revised standardised approach of the market risk framework requires approximately twice as many input parameters than the Basel II approach.³⁴

This reflects in part the complexity of banks themselves. Admittedly, some measures of complexity – such as the notional amount of over-the-counter derivatives, trading securities and “Level 3” assets held by banks – have declined for G-SIBs since 2013. But they have increased significantly for other banks.³⁵ More generally, measures of bank organisational complexity – such as the number of intragroup legal entities and banks’ business and geographic scope – are broadly unchanged relative to their pre-GFC levels.³⁶

A risk-sensitive framework aims to reflect the multidimensional risk profile of banks – encompassing both financial and non-financial risks – from both a bottom up (microprudential) and top down (macroprudential) perspective. And no regulatory measure is perfect, with each having strengths and weaknesses. This is why Basel III was developed as a “multiple metrics” framework, which is more robust to arbitrage and erosion over time, as each measure offsets the

³¹ Baudino et al (2025).

³² The Barnes & Noble Omnibus Edition of the latter comprises 1,280 pages. See Shakespeare (2016).

³³ For example, it has a Flesch-Kincaid grade level readability score of 18.8, compared with 15.7 for Basel II. It also has twice as many cross-references as Basel II. See BCBS (2022c).

³⁴ BCBS (2022c).

³⁵ BCBS (2024a)

³⁶ Correa and Goldberg (2022).

shortcomings and adverse incentives of the others.³⁷

Having said that, regulatory complexity is not just a theoretical concern but has real-world costs. Regulation must instil trust in the financial system and be an anchor for market participants to gauge the resilience of institutions. Excessive complexity can impose operational burdens on banks and supervisors, reduce transparency for market participants and thereby weaken market discipline. Complexity ultimately undermines the ability of a bank – including its board and senior management – and its supervisor to effectively oversee and manage its risk profile.³⁸

Furthermore, complex rules applied to simple banking activities may limit competition, giving advantages to larger and more complex banks, potentially providing incentives for banks to become even more complex and aggravating the “too big to fail” problem. In addition, the operational complexity of implementing standards could result in fragmented or delayed implementation, undermining the level playing field that global standards are meant to provide.

Lastly, the complexity of the current capital framework and limitations in the loss-absorbing capacity of some of its components can reduce the effectiveness of bank regulation in achieving core microprudential, macroprudential and resolution objectives.³⁹

It is therefore important that we ask ourselves whether there are areas where we can consider reducing undue regulatory complexity and improve efficiency without diluting the resilience of the global financial system. In this regard, a natural question is: can simple heuristics outperform more complex methods for modelling and regulating the financial system?⁴⁰ A related question is: how can we use technology to achieve this goal of improving efficiency?

Let me mention a few examples, purely in the spirit of promoting a discussion among interested stakeholders. These should not be construed as policy recommendations.

First, there is merit in asking whether bank capital requirements can be simplified while preserving their key functions. The current so-called “capital stack” at both the global and domestic levels includes multiple capital requirements, spanning minimum and buffer requirements, going- and gone-concern objectives, Pillar 1 and Pillar 2 charges, and both micro- and macroprudential components.⁴¹ Some of these elements were developed in a piecemeal and sequential basis. So it makes sense to ask whether we can rethink the capital stack to achieve a simpler design with better alignment between objectives, requirements and eligible instruments for each requirement.⁴²

Second, technology offers new opportunities for reducing compliance costs and increasing

³⁷ See Hernández de Cos (2023). For example, the leverage ratio provides a cap on leverage but, by itself, could incentivise banks to increase their holdings of higher-risk assets. The risk-weighted framework compensates for this, as it constrains banks that materially increase their risk profile without any commensurate regulatory capital to fund their balance sheets. And the liquidity standards require banks to maintain a prudent buffer of high-quality liquid assets and restrict the degree of maturity mismatch.

³⁸ BCBS (2013).

³⁹ Borio et al (2025).

⁴⁰ Aikman et al (2021).

⁴¹ See, for example, Borio et al (2020).

⁴² Borio et al (2025).

efficiencies. Estimates suggest that compliance costs in Europe from supervisory reporting amount to approximately 1.5% of banks' total operating costs. Technology can help alleviate these burdens without compromising prudential objectives. Regulatory technology and supervisory technology initiatives, including the BIS Innovation Hub's Project Mandala – which aims to encode regulatory compliance procedures into a common protocol – demonstrate how automated compliance, real-time data validation and greater transparency can meaningfully reduce costs.

Third, can more be done to apply regulation in a proportionate way? The Basel Core Principles embed the role of proportionality, including that “supervisory practices should be commensurate with the risk profile and systemic importance of the banks being supervised”.⁴³ These principles are relevant for all banks and jurisdictions around the world and provide the basis for a resilient banking system. The Basel Committee supports the use of proportionality in implementing the Basel Framework in a manner consistent with the Core Principles.⁴⁴ Indeed, the Basel Framework envisions a range of approaches, from simpler standardised approaches to advanced ones. Moreover, the Committee has issued high-level illustrative examples of proportionality to support jurisdictions that wish to pursue such an approach.⁴⁵ Importantly, a proportionate regulatory framework should not reduce the resilience of banks or dilute the prudential regulatory framework. It should instead reflect the relative differences in risk and complexity across banks and the markets in which they operate, and – as mentioned above – address the potential systemic importance of smaller banks in some cases.

Lastly, a very important question: have we struck the right balance between regulation and supervision? Can some of the complexity in regulation be moved towards supervision in a way that could deliver similar prudential outcomes more efficiently? In principle, supervision can allow for a more bank-specific and targeted assessment of risks. Therefore, an effective supervisory framework could help mitigate the need to develop complex regulatory requirements to be met across the board. Yet supervisory effectiveness relies heavily on the ability of authorities to identify banks' relevant vulnerabilities and to act in a timely way. To do that, supervisors require appropriate powers, tools, resources and procedures. These procedures should allow constrained judgment, sensible risk assessment methods, clear escalation procedures and a good balance between qualitative and quantitative measures.⁴⁶ Importantly, a supervisory culture needs to be developed that would support risk-sensitivity and prioritisation.

At the same time, greater reliance on supervision could result in greater heterogeneity – and potentially less transparency – in banks' prudential requirements if supervisory approaches differ significantly across jurisdictions. While it would be counterproductive to fully harmonise supervisory criteria and procedures across authorities in different jurisdictions, there is clear room to develop further international guidance that could help improve the quality of supervision worldwide as well as mitigate unwarranted international supervisory heterogeneity. That is why I fully endorse the BCBS's increased focus on providing supervisors with guidance and toolkits.

⁴³ BCBS (2024a).

⁴⁴ BCBS (2019b).

⁴⁵ BCBS (2022a).

⁴⁶ Balan et al (2025).

3. Does our regulatory framework adequately capture emerging and structural risks?

The financial system is evolving rapidly. While the banking system is in a much stronger position than it was 20 years ago, we are witnessing a fundamental shift in the source and nature of systemic risks. Looking ahead, the financial stability challenges of the future will not be carbon copies of the past. Today, it is not just a question of whether the financial system as a whole is more or less exposed to risk, but rather how vulnerabilities are shifting and evolving. Vulnerabilities are being shaped not only by developments within the banking system but also by deep structural changes in the macro-financial landscape.

First, the macroeconomic environment itself is evolving in ways that affect banks' operating conditions and risk profiles. Geopolitical fragmentation is reshaping trade flows, capital allocation and cross-border financial linkages. Supply chains are being rewired, in some cases by design, in others by necessity, with implications for corporate balance sheets and sectoral credit risks. Demographic changes are altering household saving and investment behaviour and redefining the long-term demand for financial intermediation. These changes suggest that historical relationships may be less reliable guides to future performance. Risk is increasingly situational and contingent on how firms, markets and policymakers adapt to these structural realignments. Put differently, historical correlations can weaken and risks can crystallise through unfamiliar channels. For supervisors, this complicates the task of assessing resilience under stress and requires more, not less, cross-border cooperation.

Second, the financial system itself has become more diverse, with a growing share of intermediation now taking place outside the traditional banking sector in some jurisdictions.⁴⁷ The expansion of NBFIs has brought important benefits: deeper capital markets, additional funding channels and greater choice for households and firms. But it has also created complex ecosystems of leverage, liquidity transformation and duration risk beyond the traditional prudential perimeter.⁴⁸

In some NBFIs, leverage is embedded not only in balance sheets but through derivatives, margining and collateralised financing. Liquidity promises are sometimes implicit rather than explicit, setting up expectations for rapid withdrawals even when these are backed by assets whose market depth can evaporate during stress. And bank-NBFI linkages are now multifaceted: banks are lenders, counterparties, service providers and, at times, backstops to non-bank entities.⁴⁹ For example, banks are the main source of repo financing for hedge funds' leveraged trading strategies, often on favourable terms. Hedge funds have been able to borrow amounts equal to, or higher than, the market value of the collateral provided to banks. This leaves banks exposed to adverse shocks in such markets. More generally, prime brokerage has become a key business line for major banks, fuelled by the rapid expansion of hedge funds, multi-manager platforms and alternative investments. The Archegos collapse in 2021 underscored the counterparty risks inherent in these activities. We have also seen the rapid growth of synthetic risk

⁴⁷ See, for example, BIS (2025) and Hernández de Cos (2025).

⁴⁸ See, for example, BCBS (2025a).

⁴⁹ BCBS (2025a) and Hernández de Cos (2025).

transfers, whereby banks “transfer” risks to NBFIs, which in turn may depend on banks for funding and leverage.⁵⁰ In periods of stress, all these different bank-NBFI linkages have the potential to convert localised liquidity imbalances into system-wide strains through margin calls, fire sales and abrupt shifts in repo and funding markets.

The upshot of these dynamics is that, while the growth of NBFIs can give the appearance of diversification in tranquil times, that same diversification can turn into amplification in times of stress. Recent episodes of NBFI distress demonstrated that leverage and liquidity mismatches in the NBFI sector could reverberate back into the banking system. Other evidence shows that during crises NBFIs cut their lending to non-financial corporates by substantially more than banks, starving firms of credit when they need it most.⁵¹

Therefore, shifts in the distribution of risks across banks and NBFIs might have financial stability implications. While regulatory standards are and should remain heterogeneous across sectors, there is a need to ensure that risks assumed by NBFIs are subject to appropriate prudential controls. Tools like minimum haircuts on securities financing transactions – envisioned in the Basel Framework but not widely implemented in practice – and central clearing could help limit excessive leverage and enhance system-wide resilience.⁵²

This brings me to the third and perhaps most dynamic source of structural change: digitalisation. Digitalisation is transforming both the structure and the tempo of financial activity.⁵³ The diffusion of technology-enabled finance – whether in the form of cryptoassets, stablecoins or tokenised markets – is reshaping how financial functions are performed and by whom. Some of these arrangements replicate money-like or bank-like activities without the safeguards that have long underpinned confidence in the financial system, creating potential for liquidity runs, cross-border contagion and regulatory arbitrage. Moreover, increased competition from tech-savvy entrants may induce banks to engage in greater risk-taking.⁵⁴

And, as mentioned above, there are also questions about the implications of digitalisation on banks’ liquidity risk profile. For example, technological innovations can provide new means for depositors to obtain information about banks, which could result in greater deposit instability.⁵⁵

At the same time, artificial intelligence (AI) is changing how decisions are made in credit underwriting, trading, compliance and risk management.⁵⁶ AI can materially enhance efficiency and insight, and support supervisors and regulators in their tasks. But it can also amplify model risk, correlated behaviours and opaque decision chains, especially when the models used by market participants are trained from similar data or aim to optimise similar objectives. In stress, these dynamics can accelerate herding and procyclical adjustments. Moreover, AI-powered trading may yield collusion among traders, undermining competition and market efficiency.⁵⁷

⁵⁰ Thedéen (2024).

⁵¹ Aldasoro et al (2025).

⁵² FSB (2020).

⁵³ BIS (2025) and BCBS (2024c).

⁵⁴ Bogaard et al (2024).

⁵⁵ BCBS (2026).

⁵⁶ BCBS (2024b).

⁵⁷ BIS (2024), Hernández de Cos (2024).

In a similar vein, the financial system's increasing reliance on a small number of third-party service providers presents another structural challenge.⁵⁸ These service providers now underpin critical banking and market infrastructures across multiple jurisdictions. The resulting concentration and dependency risks are not purely operational but can morph into financial stability concerns if disruptions affect multiple institutions simultaneously. Cyber threats compound this challenge, exploiting these shared technological dependencies.

Across all of these developments runs a common thread: the regulatory and supervisory framework has not evolved uniformly across sectors and jurisdictions. The banking system benefits from a globally consistent and well-tested prudential architecture. In contrast, other parts of the financial system – including parts of NBF activity and key nodes in the digital ecosystem – remain subject to fragmented or patchy oversight.

In such an environment, the distribution of risk across institutions and sectors does not necessarily bring all the theoretical benefits associated with diversification. This is because risks are migrating to insufficiently regulated corners of the system, where vulnerabilities accumulate and where stress is more likely to spill back into banks and core markets.

A precondition for better understanding and monitoring such vulnerabilities is the availability of adequate data, which are generally lacking. These include, among other things, more granular and timely information on NBF leverage; better visibility into bank-NBF interconnectedness and counterparty exposures, particularly through prime brokerage and repo channels; and more comprehensive data on private credit.

The task ahead should therefore be to ensure that the resilience built into the banking sector is matched by adequate policy action at the financial system level. This means closing gaps in the regulatory landscape, strengthening oversight of cross-sectoral linkages and leverage, addressing concentration and dependency risks in critical third-party services and ensuring that innovation does not outpace safeguards. Only then can the benefits of diversification be realised – rather than eroded – by the fault lines of an uneven regulatory framework.

4. How do we move forward?

Let me conclude with some reflections on the path ahead.

First, we must finish the job of locking-in the benefits from post-GFC reforms. Full and consistent implementation of Basel III and other post-GFC reforms must remain our priority. Only once reforms are fully implemented can we rigorously evaluate their long-term effects.

Second, we need careful analysis before action. Ongoing analytical work by the Basel Committee, the FSB and other global forums will help provide a solid analytical foundation. Reviews should build on this evidence, not precede it.

⁵⁸ BCBS (2025b).



Third, the BIS has a unique role to play. It offers a global analytical anchor, integrating microprudential and macroprudential perspectives. It provides practical solutions through its Innovation Hub, helping to reduce compliance burdens and enhance supervisory efficiency. And it provides the convening benefits of standard-setting bodies and global forums to help foster dialogue, cooperation and capacity-building across jurisdictions.

Finally, we must remember why we regulate. We regulate to protect citizens, to maintain trust in the financial system and to ensure that finance serves the real economy. These principles are timeless, even as the financial system and regulation evolves.

The global financial system has become safer, stronger and more resilient. But the work is not finished. Prudence demands that we continue to refine, adapt and modernise our frameworks while preserving the hard-won gains of the past 20 years. If we do so with discipline, cooperation and analytical rigour, we will continue to build a financial system worthy of the societies it serves.

Thank you.

References

Aikman, D, M Galesic, G Gigerenzer, S Kapadia, K Katsikopoulos, A Kothiyal, E Murphy and T Neumann (2021): "Taking uncertainty seriously: simplicity versus complexity in financial regulation", *Industrial and Corporate Change*, vol 30, no 2, April.

Aiyar, S, C Calomiris, J Hooley, Y Korniyenko and T Wieladek (2014): "The international transmission of bank capital requirements: evidence from the UK", *Journal of Financial Economics*, vol 113, no 3.

Aldasoro, I, S Doerr and H Zhou (2025): "Non-bank lending during crises", *Review of Finance*, vol 9, no 6.

Balan, M, F Restoy and R Zamil (2025): "Act early or pay later: the role of qualitative measures in effective supervisory frameworks", *FSI Insights on policy implementation*, no 66, April.

Bank for International Settlements (BIS) (2024): *Annual Economic Review 2024*, June.

——— (2025): *Annual Economic Review 2025*, June.

Bank of England (2025): *Financial stability in focus: the FPC's assessment of bank capital requirements*, December.

Basel Committee on Banking Supervision (BCBS) (2010): *An assessment of the long-term economic impact of stronger capital and liquidity requirements*, August.

——— (2013): *The regulatory framework: balancing risk sensitivity, simplicity and comparability – discussion paper*, July.

——— (2019a): "The costs and benefits of bank capital – a review of the literature", *BCBS Working Papers*, no 37, June.

——— (2019b): *Joint BCBS-BCG statement on proportionality*, November.

——— (2021): *Early lessons from the Covid-19 pandemic on the Basel reforms*, July.

——— (2022a): *High-level considerations on proportionality*, July.

——— (2022b): *Buffer usability and cyclicity in the Basel framework*, October.

——— (2022c): *Evaluation of the impact and efficacy of the Basel III reforms*, December.

——— (2023): *Report on the 2023 banking turmoil*, October.

——— (2024a): *G-SIB denominators and scores dynamics: a ten year-assessment*, March.

——— (2024b): *Core principles for effective banking supervision*, April.

——— (2024c): *Digitalisation of finance*, May.

——— (2025a): *Banks' interconnections with non-bank financial intermediaries*, July.

——— (2025b): *Principles for the sound management of third-party risk*, December.

——— (2026): "Literature review on non-maturity deposit stability: established factors and recent developments", *BCBS Working Papers*, no 47, February.

Baudino, P, J Merkley and R Walters (2025): "Loss-absorbing capacity requirements for resolution: beyond G-SIBs", *FSI Insights on policy implementation*, no 69, November.

Belkhir, M, S Ben Naceur, R Chami and A Samet (2021): "Bank capital and the cost of equity", *Journal of Financial Stability*, vol 53, April.

Berger, A and C Bouwman (2013): "How does capital affect bank performance during financial crises?", *Journal of Financial Economics*, vol 109, no 1.

Berrospide, J M and R M Edge (2024), "Bank capital buffers and lending, firm financing and spending: what can we learn from five years of stress test results?", *Journal of Financial Intermediation*, vol 57, no 101061.

Blattner, L, L Farinha and F Rebelo (2023): "When losses turn into loans: the cost of weak banks", *American Economic Review*, vol 113, no 6.

Bogaard, H and others (2024): "Literature review on financial technology and competition for banking services", *BCBS Working Papers*, no 43.

Borio, C, R Coelho, F Restoy and N Tarashev (2025): "Revisiting the regulatory capital stack", *FSI Briefs*, no 28, November.

Borio, C, M Farag and N Tarashev (2020): "Post-crisis international financial regulatory reforms: a primer", *BIS Working Papers*, no 859, April.

Borio, C, M Farag and F Zampolli (2023): "Tackling the fiscal policy-financial stability nexus", *BIS Working Papers*, no 1090, April.

Borio, C and F Restoy (2020): "Reflections on regulatory responses to the Covid-19 pandemic", *FSI Briefs*, no 1, April.

Carlson, M, H Shan and M Warusawitharana (2013): "Capital ratios and bank lending: a matched bank approach", *Journal of Financial Intermediation*, vol 22, no 4.

Coelho, R, J Taneja and R Vrbaski (2023): "Upside down: when AT1 instruments absorb losses before equity", *FSI Briefs*, no 21, September.

Correa, R and L Goldberg (2022): "Bank complexity, governance and risk", *Journal of Banking and Finance*, vol 134, January.

Cortés, K, Y Demyanyk, L Li, E Loutskina and P Strahan (2020): "Stress tests and small business lending", *Journal of Financial Economics*, vol 136, no 1.

Doerr, S, G Gelos and V Pursiainen (2026): "Liquidity regulation and private credit", *Working Paper*.

Eickmeier, S, B Kolb and E Prieto (2018): "Macroeconomic effects of bank capital regulation", *Discussion Papers*, no 44/2018, Deutsche Bundesbank.

European Central Bank (2025): *Simplification of the European prudential regulatory, supervisory and reporting framework*, December.

Favara, G, I Ivanov and M Rezende (2021): "GSIB surcharges and bank lending: evidence from US corporate loan data", *Journal of Financial Economics*, vol 142, no 3.

Financial Stability Board (2017): *Framework for post-implementation evaluation of the effects of the G20 Financial Regulatory Reforms*, July.

——— (2018): *Evaluation of the effects of financial regulatory reforms on infrastructure finance*, November.

——— (2019): *Evaluation of the effects of financial regulatory reforms on small and medium-sized enterprise financing: final report*, November.

——— (2020): *Regulatory framework for haircuts on non-centrally cleared securities financing transactions*, September.

——— (2021): *Evaluation of the effects of too-big-to-fail reforms: final report*, March.

——— (2023): *2023 bank failures: preliminary lessons learnt for resolution*, October.

Fraisse, H, M Lé and D Thesmar (2020): "The real effects of bank capital requirements", *Management Science*, vol 66, no 1.

Gambacorta, L and H S Shin (2018): "Why bank capital matters for monetary policy", *Journal of Financial Intermediation*, vol 35.

Goel, T, U Lewrick and A Mathur (2019): "Playing it safe: global systemically important banks after the crisis", *BIS Quarterly Review*, September.

Gropp, R, T Mosk, S Ongena and C Wix (2019): "Banks' response to higher capital requirements: evidence from a quasi-natural experiment", *Review of Financial Studies*, vol 32, no 1.

Hernández de Cos, P (2019): “Post-BaseI III: time for evaluation”, keynote address at the 14th ASBA-BCBS-FSI High-Level Meeting on Global and Regional Supervisory Priorities, Lima, 1 October.

——— (2022): “Implementing Basel III”, speech at the European Economic and Social Committee public hearing on “The EU banking reform package”, 8 February.

——— (2023): “Back to the (macroprudential) future: reflections and questions on macroprudential policy”, keynote speech at the HKMA-BIS joint conference on “Future-proof supervision for an innovative banking world”, Hong Kong SAR, 24 March.

——— (2024): “Managing AI in banking: are we ready to cooperate?”, keynote speech at the Institute of International Finance Global Outlook Forum, Washington DC, 17 April.

——— (2025): “Fiscal threats in a changing global system”, lecture at the London School of Economics, London, 27 November.

Irani, R, R Iyer, R Meisenzahl and J L Peydró (2021): “The rise of shadow banking: evidence from capital regulation”, *Review of Financial Studies*, vol 34, no 5.

Kovner, A and P Van Tassel (2022): “Evaluating regulatory reform: banks’ cost of capital and lending”, *Journal of Money, Credit and Banking*, vol 54, no 5.

Laeven, L and F Valencia (2013): “Systemic banking crises database”, *IMF Economic Review*, vol 61.

——— (2018): “Systemic banking crises revisited”, *IMF Working Papers*, no 18/206.

Lee, H, S Lee and R Paluszynski (2024): “Capital regulation and shadow finance: a quantitative analysis”, *Review of Economic Studies*, vol 91, no 5.

Mendicino, C, K Nikolov, J Suarez and D Supera (2020): “Bank capital in the short and in the long run”, *Journal of Monetary Economics*, vol 115, November.

Reinhart, C and K Rogoff (2009): *This time is different: eight centuries of financial folly*, Princeton University Press.

——— (2013): “Banking crises: an equal opportunity menace”, *Journal of Banking and Finance*, vol 37, no 11.

Sundaresan, S and K Xiao (2024): “Liquidity regulation and banks: theory and evidence”, *Journal of Financial Economics*, vol 151, no 1, article 103747.

Thedéen, E (2024): “Charting the course: prudential regulation and supervision for smooth sailing”, keynote speech at the Institute of International Finance Annual Membership Meeting, Washington DC, 23 October.