

---

## Appendix 4: Cost Benefit Analysis

---

### Introduction

1. This Annex sets out the Prudential Regulation Authority's (PRA) analysis of the expected costs and benefits associated with implementing the proposals outlined in this consultation paper (CP). The Cost Benefit Analysis (CBA) is underpinned by a set of assumptions that reflect the available data and the PRA's proportionate approach to estimating firm-level impacts. Where it is reasonable and cost-effective to do so, the PRA has produced quantitative cost estimates. Where the PRA considers it would not be practicable or possible to quantify costs and benefits, those costs and benefits are described qualitatively.

### CBA Panel feedback

2. The PRA's Panel challenged the PRA's analysis, provided valuable feedback and suggested several additions and changes, which are reflected in this CP. The core challenges identified by the panel were:

- **Case for action:** The Panel recommended the PRA to expand and clarify the market failures analysis, including differences between large and small firms and the role of moral hazard. The Case for action section now addresses these points.
- **Baseline:** Panel members queried the extent to which firms already undertake some of the activities required by the proposals, and for this to be reflected in the Baseline section and resulting assessment of costs and benefits. The relevant sections have been updated accordingly.
- **Direct costs:** The Panel requested a clearer breakdown of the cost estimates and questioned the balance between one-off and ongoing costs. The Panel also observed that some implementation activities—such as stress testing and contingency planning—already occur within existing Recovery and Resolution frameworks. Firms may draw on this to meet the new expectations, meaning one-off costs may have been overestimated. The revised section on direct costs now includes a more detailed cost breakdown, clarified assumptions, and updated cost estimates, which are lower relative to the estimates reviewed by the Panel.
- **Benefits and overall assessment:** The Panel requested more quantitative information on benefits and clearer comparison of costs and benefits. In response, the PRA incorporated additional details on the costs and impacts observed during the March 2023 stress scenario, while noting that—although this episode provides a helpful reference point—it may not be fully replicable, and firms' own risk-based judgement remains essential. The benefits section now includes the stress test result which provide an indication of the scope for benefits. The overall assessment section now

contextualises the estimated costs relative to the benefits of avoiding the failure of a medium-sized firm.

### Case for action

3. The PRA's existing liquidity framework aims to ensure that firms hold sufficient liquidity resources, and have sufficient funding, to mitigate liquidity risk on an individual firm basis. Effective liquidity regulation is essential for financial stability.

4. The existing liquidity framework has played an important role in promoting confidence and stability in the financial system, including during stress such as that from the Covid-19 pandemic. It has strengthened firms' ability to withstand liquidity shocks, reduced reliance on emergency central bank support and promoted more prudent liquidity risk management.

5. The March 2023 banking turmoil was a significant system-wide episode of liquidity stress that key risks to firms' safety and soundness that are not sufficiently addressed by the existing liquidity regulatory and supervisory framework:<sup>1</sup>

- the scale and speed of liquidity outflows in a stress may be significantly faster and larger than the LCR assumes, and can be amplified by digital deposit access and digital communications);<sup>2</sup>
- firms may not be able to monetise liquidity resources as anticipated in a stress, and may not consider monetisation risk sufficiently when determining the appropriate composition of their liquidity resources;
- operational frictions to accessing private markets and central bank facilities for asset monetisation can significantly delay liquidity provision at a time when rapid action is essential; and
- firms may not be sufficiently prepared to deal with more severe stress scenarios, through ready, effective access to central bank facilities and pre-positioned collateral (PPC).

6. In light of this, it is unclear how future liquidity shocks and further technological developments in digital deposit access and communications might interact with idiosyncratic factors to drive outflow rates. Under the existing Internal Liquidity Adequacy Assessment Part of the PRA Rulebook, firms are not required explicitly to consider how these factors and uncertainties could manifest, given the nature, scale and complexity of their businesses and risks.

---

<sup>1</sup> In addition to the issues set out below, a lack of monetisation testing of Level 1 HQLA could result in potential frictions not being identified, or monetisation plans being insufficiently informed by practical experience of such testing.

<sup>2</sup> For example, the Basel Committee's progress report on the 2023 banking turmoil and liquidity risk (October 2024) states that Silicon Valley Bank would have experienced 85% of total deposit outflows over 2 days, and Credit Suisse experienced 25% of total deposit outflows over 7 days.

7. These events also show that some market-failure dynamics have become more pronounced in today's environment, which could leave some firms insufficiently prepared and increase the likelihood of fire-sale dynamics. In particular:

- Information asymmetries can arise when depositors or market participants only have incomplete or unclear signals about a bank's real condition. In such cases, even a small shock to confidence can be highly disruptive and trigger panic-driven bank runs. The digitalisation of finance and the increased speed of information flow—amplified by social media—have intensified these pressures, and once confidence begins to erode, outflows can accelerate in self-reinforcing ways.
- Externalities also play a role. The failure of a single bank can undermine trust in others, generating systemic risk externalities, with spillovers propagating more quickly and across more channels. Strengthening the prudential framework helps reinforce public confidence in the banking sector, especially as firms do not take full account of externalities in their decision-making. Although some firms have taken on board the lessons from recent stress episodes, others continue to view these risks as one-off occurrences. The proposed policy aims to address these gaps more explicitly.

8. There is also a moral hazard dimension: banks may be incentivised to take excessive risks by relying on the central bank intervention during stress. This risk can be mitigated by strengthening firms' liquidity preparedness. The proposed policy—by emphasising operational readiness for central bank facilities and targeted Pillar 2 enhancements—helps ensure that firms take responsibility for managing their own liquidity risks rather than relying too heavily on central bank support, while maintaining the resilience benefits of being operationally prepared when such facilities are needed.

9. The Bank is transitioning to a demand-driven repo-led framework for supplying reserves. This will result in a lower level of reserves in the system, with firms relying on collateral placed at the Bank to access liquidity through its facilities. During this transition, firms will need to adjust their management of liquidity and monetisation risks to reflect the lower supply of reserves and the means of obtaining them. If they were not to reflect these developments appropriately in their assessment of monetisation capability, frictions, and stress testing assumptions, there is a risk they could overestimate their resiliency to future liquidity shocks.

10. The existing recovery and resolution framework already requires firms to consider severe, but plausible, stress scenarios that test vulnerabilities in funding, liquidity, and operations. While these scenarios provide some overlap with the liquidity framework that firms may be able to leverage, the proposed liquidity policy modifications would require firms to consider additional factors such as the speed and scale of outflows, the frictions to monetisation of assets as well as their access to central bank facilities, therefore enhancing firms' liquidity risk management.

## The baseline

11. The baseline for comparison is that the proposed liquidity policies are not introduced, and firms would continue to follow existing PRA rules and supervisory expectations (including SS24/15). There is uncertainty around firms' current practices. Some may already be going beyond the requirements set out in SS24/15, while others may not. Supervisors observe that smaller firms, in particular, typically do not undertake initial day stress tests, and may not focus sufficiently on monetisation frictions, access to central bank reserves and PPC. In other words, some firms may not hold liquidity resources with the appropriate composition, may be less prepared to address monetisation risk in severe short-term stress, and may not be able to mobilise collateral sufficiently quickly to access private markets or central bank facilities. As the supply of reserves normalises under Quantitative Tightening and the Bank's evolving monetary operating framework, these gaps could amplify systemic vulnerabilities. Firms' focus on monetisation risk and operational preparedness may remain inconsistent, with greater risks for those that did not address these risks sufficiently.

12. Without the proposals—and with the transition to the Bank's repo-led monetary operating framework—firms may adapt by rebalancing High-Quality Liquid Assets (HQLA), expanding secured funding capacity, and planning greater use of central bank facilities. In routine liquidity management, firms could use facilities to source reserves, but some firms may underinvest in operational readiness, retain optimistic monetisation assumptions, or face frictions using facilities at speed. There is also a risk that the liquidity resources available in stress could decrease for firms drawing on non-HQLA collateral without repositioning more, rather than acquiring and drawing against HQLA or securities. This variation across firms could amplify vulnerabilities as reserves normalise under Quantitative Tightening, even if compliance with the existing framework is maintained.

## Benefits and costs

### Direct benefits to firm resilience

13. The PRA has undertaken a predominantly qualitative assessment of the benefits. Where possible, supporting quantitative evidence has been provided to illustrate the scale of potential benefits. Direct quantification of the benefits was considered not reasonably practicable at this stage, as realised benefits will depend on firms' business models, liquidity profiles, and internal stress testing practices. The PRA recognises the differences between firms' business models and, therefore, the policy proposals apply proportionality whilst ensuring a common standard. This common standard is important to realise the benefits of the proposals, in particular, ensuring sufficient market confidence during periods of stress.

14. Sudden and severe stresses have historically required substantial public-sector interventions. The PRA has used previous examples of liquidity stresses as illustrative scenarios, but this policy package is not intended to control for those specific scenarios, but rather strengthen firms' operational readiness and monetisation capacity across a range of severe but plausible conditions. In the US, Silicon Valley Bank's failure resulted in an

estimated \$16.1 billion loss<sup>3</sup> to the FDIC's Deposit Insurance Fund (later recouped from banks via a special assessment<sup>4</sup>). In Switzerland, during the Credit Suisse resolution, authorities stood up state-guaranteed SNB liquidity up to CHF 100 billion<sup>5</sup> and a CHF 9 billion federal loss protection for UBS;<sup>6</sup> both were later terminated without losses to the state through adequate resolution.<sup>7</sup> While intended to safeguard financial stability and avoid direct fiscal outlays, such interventions require significant operational effort and create contingent public-sector commitments that, in adverse cases, can crystallise into taxpayer costs.

15. Raising quantitative requirements would provide a clear and transparent minimum standard, but it could also create significant costs for firms—particularly smaller ones—and may constrain intermediation. In contrast, the proposed supervisory approach offers greater flexibility and proportionality, allowing requirements to reflect each firm's specific liquidity risks and business model.

16. Requiring firms to assess the composition of total liquidity resources—drawing on their own understanding of liquidity risk and stress scenarios—alongside clarified collateral management rules in ILAA rule 7.3 of the PRA Rulebook, strengthens focus on the nature and adequacy of liquidity resources. Internal analysis of an illustrative sudden and severe stress suggests that a small number of firms may not fully withstand the scenario, even with additional central bank liquidity support. Other firms could encounter operational frictions arising from limited available reserves or delays in asset monetisation. This indicates clear opportunities to strengthen operational readiness.

17. Removing the LCR operational requirement exemption for government bonds from monetisation testing would improve alignment with the Basel framework and ensure consistency of approach with the PRA's other proposals. While this may offer a modest compliance benefit for firms operating in Basel-aligned jurisdictions, the effect is not expected to be material. Including these bonds in firms' regular monetisation testing, would also strengthen operational readiness, and annual LCR operational testing would enhance execution discipline without affecting gilt or repo market structures.

18. The framework is expected to help create a more level playing field by improving consistency in how firms manage monetisation risk and broader liquidity risks. Greater consistency should enhance the quality and efficiency of supervisory dialogue. Enhanced reporting on monetisation profiles within the ILAAP document minimises obstacles

---

<sup>3</sup> SVB loss to the Deposit Insurance Fund (USD 16.1 billion) Federal Reserve Office of Inspector General. [Material Loss Review of Silicon Valley Bank](#) (Board Report 2023-SR-B-013). September 25, 2023.

<sup>4</sup> Updated aggregate cost for SVB + Signature to be recovered (USD 16.7 billion as of 30 Sep 2025) FDIC. [Special Assessment Pursuant to Systemic Risk Determination](#) (program page, updated). As of September 30, 2025 [supports size/mechanics of the special assessment at final rule date].

<sup>5</sup> NB emergency liquidity & federal guarantees (PLB up to CHF 100 billion + additional CHF 100 billion line) Swiss National Bank (SNB). [Swiss National Bank provides substantial liquidity assistance to support UBS takeover of Credit Suisse](#). March 19, 2023.

<sup>6</sup> Federal loss-protection for UBS (CHF 9 billion). Swiss Federal Council. [Safeguarding financial market stability: Federal Council welcomes and supports UBS takeover of Credit Suisse](#). March 19, 2023.

<sup>7</sup> Outcome: guarantees terminated; no loss to the Confederation; ~CHF 200 million receipts. Swiss Federal Council. [Credit Suisse/UBS: all federal guarantees terminated](#). August 11, 2023 [supports the termination/no-loss/receipts].

to timely action and supports more effective engagement. To rationalise reporting and avoid duplication, the PRA proposes to discontinue the PRA110 monetisation actions' section and rely on firms' ILAAP documents for monetisation assumptions and evidence. Overall, these proposals should improve supervisory monitoring of monetisation risk while enabling supervisors to operate within existing resources.

## Costs

19. The PRA has derived quantitative estimates for the direct compliance costs. These costs are assessed across the 177 PRA-authorized firms within the scope of application of the proposals. Although all firms would be within the scope of the proposals, the proposals are designed to apply proportionately so some of the requirements and expectations that are less relevant for a firm could be satisfied by simpler analysis or explanation. To the extent that some firms may already be going above the current requirements, the overall compliance costs of the proposal will be lower than the estimates provided here. The estimated compliance costs are based on supervisory judgement and use of the PRA's standard cost model (SCM). The SCM helps to quantify direct costs to firms using assumptions including average salaries, the person days required to implement a policy change, and technology or other costs on firms.

20. The PRA estimates the proposed design and implementation of a sudden and severe stress test would entail an average one-off compliance and operational cost of around £7.2 million across all firms (see Table 1) with a range of £6.1 million–£8.3 million based on a sensitivity analysis to account for uncertainties around how the new expectations will impact different business models, risk profiles and operational approaches.

21. The proposed changes would build on existing stress testing, and where appropriate, firms would be encouraged to leverage other stress scenarios — such as recovery and resolution scenarios and other Pillar 2 processes rather than creating entirely new methods. The PRA would expect the marginal resources needed to apply changes and run the additional stress tests (once developed) to be relatively limited. The PRA estimates the ongoing costs of applying its proposals to be around £0.59 million per annum across firms, with firms spending between 10 to 5 days a year on adhering to the elements of this package, including updating the new stress scenario.

Table 1: Estimated **average** one-off costs of the most significant elements of the Modernising the Liquidity Policy Framework requirements per entity and by cost type.

Costs	Central estimates of one-off costs per firm (£000s)		
	Small firms	Medium firms	Large firms
Familiarisation	5	7	12

Changing internal policies and processes – including design of new stress scenario	14	43	71
Staff training and communication	2	5	9
Technology	10	15	20
<b>Total costs (per firm)</b>	31	70	112
<b>Total costs (all firms)</b>	4,500	1,400	1,300
<b>Total industry</b>	7,200		

22. In addition to these direct compliance costs, the proposals could influence changes in the nature of firms' balance sheets. These effects would depend on individual firms' strategies and choices, as well as the pricing of reserves. For example, choices on rebalancing HQLA buffers in response to the Bank's changes to the monetary operating framework. There are other external variables that influence a firm's choice of asset composition, including but not limited to, the pricing and availability of central bank facilities, and firms' risk appetite and choices on the appropriate mix of central bank reserves and non-reserve HQLA in their liquidity resources. This will also affect the relative cost of holding liquidity resources in the form of reserves rather than other types HQLA.

23. Firms would be likely to incur costs related to adjusting policies and procedures, monitoring of central bank facilities, and any related governance, stress test system changes, and reporting and operational adjustments to meet the proposed requirements and expectations. These costs would include potential enhancements to collateral systems and potential resource allocation for compliance and stress testing.

24. These costs are also likely to be driven by the number of legal entities within a firm, particularly where monetisation risk varies across subsidiaries. Clarity around treatment of central bank collateral may increase monitoring and collateral mobilisation costs, particularly for firms with less integrated systems and processes.

25. The PRA anticipates minimal additional supervisory resource for reviewing enhanced ILAAP submissions and PPC monitoring, because the proposals make relatively limited changes to existing supervisory process. The costs would primarily involve supervisory engagement and monitoring.

26. While the proposed supervisory approach in this policy offers more proportionality in expectations, the potential drawback of this approach is that operational readiness may be less transparent to the market. This could raise concerns around accountability and the effect on depositor confidence could be limited beyond the requirements for firms.

## Implications for Markets and the Financial System

27. The PRA expects the introduction of the policy package would have minimal aggregate impact on interbank, gilt, repo, and money markets. The proposals are neutral on the role of reserves in HQLA and do not alter structural incentives for any asset type. Firms may rebalance the composition of liquidity resources as they internalise monetisation frictions. However, such adjustments are expected to be incremental and heterogeneous across firms, and modest relative to overall market depth and daily volumes.

28. By strengthening firms' operational resilience and liquidity risk management, the proposals should support financial stability and directionally help to support sustainable UK economic growth. Enhanced resilience improves continuity of lending and payment services during stress by reducing frictions to monetisation and clarifying the role of central bank facilities in planning, which can bolster depositor confidence and reduce the risk of disorderly failure and contagion. The aggregate materiality of these effects is difficult to assess in advance and will depend on the nature and scale of future liquidity shocks, firms' choices, and any future changes to the Bank's facility design.

### Overall assessment

29. The likelihood of the speed and severity of outflows observed in March 2023 banking turmoil is increasing with digital developments. Until all firms are sufficiently prepared, there is a risk that, in certain scenarios, the PRA's current liquidity regime would not operate as intended to support market confidence and financial stability. In those scenarios, disorderly failures may occur and given asymmetric information, concerns about gaps in firms' capabilities could become an additional factor which undermines market confidence and contributes to the propagation of financial crises with material negative impacts on PRA firms, the markets they operate in, and the wider UK economy. Systemic crises are low-probability but very high-impact events. It is challenging to quantify the exact contribution the proposals would have in reducing the likelihood of such events. However, given the scale of the economic costs when systemic crises do occur, the proposals would need to reduce the probability of occurrence by only a small amount to bring material benefit.

30. Meanwhile, we estimate the total annualised costs across all in-scope firms of addressing this risk at £1.8 million p.a. This estimate is also uncertain, given variability in current firm practices and that the policy framework changes are intended to be adaptable to different business models, risk profiles, and operational approaches. However, the estimate is not material in the context of firms' overall costs of risk management and compliance, and is significantly lower than the cost to firms of changing Pillar 1 requirements. These costs would be recouped (in terms of direct losses avoided by investors and the FSCS) if the proposals were effective in reducing the probability of failure of a single medium-sized bank by 0.05 percentage points.<sup>8</sup> This calculation does not take into account the potential benefits of the

---

<sup>8</sup> This figure is estimated based on evidence from several studies which find losses in firm failure to be c.20% of assets, which is broadly consistent with the SVB experience. For a typical medium-sized bank with assets of £20 billion, 20% would imply a loss of £4 billion, of which £1.8 million represents 0.05%. Relevant studies include Balla, E., Mazur, L., Prescott, E.S., Walter, J.R., (2019), *A comparison of community bank failures and FDIC losses in the 1986-92 and 2007-13 banking crisis*, Journal of Banking and Finance 106, 1-15 and Bennet, R.L., Unal, H. (2014), *The effects of resolution methods and industry stress on the loss on assets from bank failures*, Journal of Financial Stability, Volume 15, pages 18-

proposals to market confidence and financial stability, which could be the most material benefits of the proposals.

---

31. For SVB, investor losses totalled c. 8-9% of assets and Deposit Insurance Fund (DIF) losses c. 9.4% of assets implying a total failure cost of c.18% of assets.