Bank of England

Financial Policy Summary and Record of the Financial Policy Committee meeting on 23 March 2023

29 March 2023

This is the record of the Financial Policy Committee meeting held on 23 March 2023.

It is also available on the Financial Policy Summary and Record page of our website: **https://www.bankofengland.co.uk/financial-policy-summary-and-record/2023/march-2023**

The Financial Policy Committee (FPC) was established under the Bank of England Act 1998, through amendments made in the Financial Services Act 2012. The legislation establishing the FPC came into force on 1 April 2013. The objectives of the Committee are to exercise its functions with a view to contributing to the achievement by the Bank of England of its Financial Stability Objective and, subject to that, supporting the economic policy of His Majesty's Government, including its objectives for growth and employment. The responsibility of the Committee, with regard to the Financial Stability Objective, relates primarily to the identification of, monitoring of, and taking of action to remove or reduce systemic risks with a view to protecting and enhancing the resilience of the UK financial system. The FPC is a committee of the Bank of England.

The FPC's next Policy meeting will be on 22 June 2023 and the record of that meeting will be published on 12 July 2023.

Financial Policy Summary

The Financial Policy Committee (FPC) seeks to ensure the UK financial system is prepared for, and resilient to, the wide range of risks it could face – so that the system is able to absorb rather than amplify shocks, and serve UK households and businesses.

Global economic and financial market developments

The outlook for global activity remains uncertain, despite support from lower energy prices since the December Financial Stability Report (FSR). Material geopolitical risks remain, as does the risk that inflationary pressures are more persistent than anticipated.

The global financial system is continuing to adjust to higher interest rates and tighter financial conditions. In March 2023, this contributed to severe stress in some banks. Investor risk appetite fell sharply and volatility in financial markets increased. These events followed the severe stress in liability-driven investment (LDI) funds in autumn 2022. Financial markets remain focused on whether other vulnerabilities related to higher interest rates might crystallise.

The UK banking system maintains robust capital and strong liquidity positions. It is well placed to continue supporting the economy throughout a wide range of economic scenarios, including in a period of higher interest rates.

Banking sector resilience

Recent weeks have seen a number of banks fail or come under severe stress.

Silicon Valley Bank (SVB), the 16th biggest US bank, failed following a rapid and very large withdrawal of uninsured deposits. Over previous quarters, higher interest rates had led to significant falls in the value of unhedged long-dated bonds held at cost. These significant depositor withdrawals led to a need to sell assets quickly, at losses greater than the bank's capital could absorb. Problems with the US parent led to a loss of confidence in Silicon Valley Bank UK (SVB UK), and the Bank of England used its resolution powers for stabilising failing banks to write-down the firm's AT1 and Tier 2 capital instruments, and transfer the shares in SVB UK to a private sector purchaser, HSBC UK Bank plc. The smaller US-based Signature Bank was also forced to close by the US authorities following SVB's failure. Some other regional US banks continue to be under stress.

Over the autumn, unrelated to the problems facing SVB, Credit Suisse had been experiencing a liquidity stress and significant outflows of client funds. These were associated with long-running concerns about the bank's risk management and profitability. When this

liquidity stress and client outflows intensified in March, it led to an agreed takeover by UBS, following an intervention by the Swiss authorities.

The FPC has been closely monitoring these events and judges that the UK banking system remains resilient.

Since the global financial crisis of 2008, international authorities have established significantly more robust regulatory standards, including for bank capital and liquidity. The UK authorities have put in place a range of robust prudential standards, designed to ensure levels of resilience which are at least as great as those required by international baseline standards. These include a liquidity framework and capital requirements that are calibrated to the risks faced by individual firms. They apply to all UK banks.

The Prudential Regulation Authority (PRA) assesses all UK banks on their resilience to interest rate risk. This includes their need to hold capital against interest rate risks on banking book assets, including any net open bond positions – regardless of whether they are held at cost or fair value. Capital requirements associated with this risk are calibrated using large shocks to the interest rate yield curve. Many UK banks also actively manage their interest rate risk – taking into account the maturity and variability of interest rates on their funding and assets as a whole – using derivatives such as interest rate swaps.

The UK banking system is well capitalised. The aggregate Common Equity Tier 1 (CET1) ratio for major UK banks stands at 14.6%, and smaller lenders have an aggregate CET1 ratio of around 18%. Asset quality is stronger now than in the run up to the global financial crisis. And stress tests have shown that the banking system is resilient to a wide range of severe economic outcomes, including in a period of higher interest rates.

Major UK banks have large liquid asset buffers, around two-thirds of which are currently either in the form of cash or central bank reserves. And net stable funding requirements ensure that banks maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities.

The profitability of UK banks has increased recently, reflecting higher net interest income as interest rates have increased. UK banks are not exposed to material direct losses associated with the failure of SVB and takeover of Credit Suisse, and they have very limited direct exposure to regional US banks.

The UK banking system therefore has the capacity to support the economy in a period of higher interest rates even if economic conditions are worse than expected.

The FPC will continue to monitor developments closely, in particular for the risk that indirect spillovers impact the wider UK financial system. There remain channels through which UK economic conditions could be affected by recent and possible future strains from banks outside the UK. These include any lasting impact on bank funding costs, which

increased moderately following recent events, and the potential for that to raise the cost and reduce the availability of borrowing for UK households and businesses. Tighter credit conditions overseas could also weigh on economic activity abroad, impacting UK banks' foreign assets and UK trade.

Global and UK debt vulnerabilities

Tighter financial conditions continue to weigh on the ability of households, businesses and governments globally to service their debts, with the full impact taking time to feed through for many borrowers. Heightened geopolitical risks increase the likelihood of financial vulnerabilities crystallising. Higher debt servicing costs could lead to credit losses for banks, including in the UK.

Riskier corporate borrowing in financial markets is likely to be particularly vulnerable to tighter financial conditions. In aggregate, the global high-yield bond, leveraged loan and private credit markets have almost doubled in size over the past decade. Within that, estimates suggest that private credit has tripled in size over the same period. The opacity of the private credit market complicates the assessment of potential risks for both regulators and market participants.

Leveraged loan and private credit default rates are currently low compared to historical levels. Signs of stress in these markets could cause a rapid re-assessment of risks by investors, potentially resulting in sharp revaluations; this occurred, for example, when high-yield corporate bond spreads rose sharply following the failure of SVB and in the run up to the agreed takeover of Credit Suisse. While near term refinancing needs appear limited, a severe reduction in investor risk appetite could result in refinancing challenges for riskier corporates over time, including in the UK.

Commercial real estate remains a potentially vulnerable sector globally, as higher interest rates reduce property values along with borrowers' ability to service debt.

In aggregate, UK businesses remain resilient. The proportion of large to mid-sized businesses with high interest coverage ratios is low, and is expected to stay well below previous peaks. Smaller businesses are more exposed to rising debt servicing costs, though a significant share of debt extended since the start of 2020 has been Government guaranteed, with relatively low fixed interest rates.

UK household finances are still being stretched by increased living costs and mortgage payments. However, fewer households are projected to have high cost-of-living adjusted debt service ratios than was expected at the time of the December 2022 FSR, mainly because of lower energy prices and an improvement in the outlook for UK unemployment.

The FPC continues to judge that major UK banks are resilient to global and domestic debt vulnerabilities.

UK Countercyclical Capital Buffer rate decision

The FPC is maintaining the UK Countercyclical Capital Buffer (CCyB) rate at 2%. Vulnerabilities that could amplify future economic shocks remain. A 'neutral' setting of the UK CCyB rate in the region of 2% helps to ensure that banks have sufficient capacity to absorb unexpected future shocks without unduly restricting lending.

Given the considerable uncertainty around the outlook, the FPC will continue to monitor the situation closely and stands ready to vary the UK CCyB rate – in either direction – in line with the evolution of economic and financial conditions, underlying vulnerabilities and the overall risk environment.

The resilience of market-based-finance

There remain vulnerabilities in certain parts of market-based finance (MBF), which could crystallise should there be further volatility or sharp movements in asset prices, amplifying any tightening in credit conditions. And interlinkages within the system of MBF mean that actions taken in particular sectors can materially increase stress across the system as a whole. For example, having increased their positioning in US rates markets prior to March, some hedge funds subsequently experienced material losses as yields fell sharply and volatility rose. Actions taken by hedge funds to reduce these exposures appear to have amplified recent interest rate market volatility.

There is an urgent need to increase resilience in market-based finance. Alongside international policy work led by the Financial Stability Board, the UK authorities are working to reduce vulnerabilities domestically where effective and practical.

Liability Driven Investment funds

In late 2022, a rapid and unprecedented increase in UK gilt yields exposed vulnerabilities in LDI funds in which many pension schemes invest. These led to a vicious spiral of collateral calls and forced gilt sales that risked further market dysfunction and a material risk to UK financial stability. In response, the Bank took temporary and targeted action to restore market functioning and give LDI funds time to build their resilience to future volatility in the gilt market. Gilts purchased by the Bank as part of this action have since been sold.

Following this episode, the FPC recommended that The Pensions Regulator (TPR), in coordination with the Financial Conduct Authority (FCA) and overseas regulators, put in place arrangements to ensure that LDI funds maintain the levels of resilience they had built up and that appropriate steady-state minimum levels of resilience for LDI funds be put into place.

LDI funds should be able to: withstand severe but plausible stresses in the gilt market; meet margin and collateral calls without engaging in asset sales that could trigger feedback loops; and improve their operational processes to meet margin and collateral calls swiftly when needed. LDI funds should be resilient to stresses which account for both historical volatility in gilt yields, and the potential for their forced sales to amplify market stress and disrupt gilt market functioning. If LDI funds were not resilient to such a shock, their defensive actions could tighten credit conditions for UK households and businesses.

The FPC recommends that TPR takes action as soon as possible to mitigate financial stability risks by specifying the minimum levels of resilience for the LDI funds and LDI mandates in which pension scheme trustees may invest. The FPC judges that these factors imply that LDI funds should be resilient to a yield shock of around 250 basis points, at a minimum, in addition to the resilience required to manage other risks and day-to-day movements in yields.

In making this recommendation, the FPC noted that TPR should continue its effective collaboration with other domestic and overseas regulators. Until this framework is put in place, TPR, in coordination with the FCA and other overseas regulators, should continue to ensure that LDI funds maintain the resilience that has been built up, as set out in the FPC's 2022 Q4 recommendation.

To better allow TPR to implement and enforce guidance on LDI resilience over the long term, and in the context of TPR's other objectives, the FPC recommends that TPR should have the remit to take into account financial stability considerations on a continuing basis. This might be achieved, for example, by including a requirement to have regard to financial stability in its objectives, which should be given equal weight alongside other factors to which TPR is required to have regard. The FPC noted that in order to achieve this, TPR would need appropriate capacity and capability.

For further information on the FPC's recommendations regarding LDI funds see the 2023 Q1 FPC Record and Bank staff paper: LDI minimum resilience – recommendation and explainer.

Money market funds

Increasing the resilience of money market funds (MMFs) is necessary to reduce systemic risk in the UK and global financial system. The UK authorities will launch a consultation paper on MMF regulation later this year.

The FPC judges that MMFs should be able to withstand severe but plausible levels of investor outflows without amplifying stress and increasing risks to financial stability. MMFs should be resilient to outflows at least as large as those seen in the dash for cash and

LDI stress events, when central bank actions also helped to limit outflows. Such central bank interventions increase risks to public funds and should not be relied upon.

MMF redemption policies should be consistent with the liquidity of the underlying assets held by a fund, and redeeming investors should bear the full liquidity costs of any asset sales needed to meet redemptions. As MMFs generally hold assets to maturity, significantly more liquid assets are an effective way to increase MMF resilience and so reduce risks to financial stability. The forthcoming consultation should explore these issues.

System-wide exploratory scenario

The Bank's system-wide exploratory scenario will investigate the behaviours of banks and non-bank financial institutions following a severe but plausible stress to financial markets. It will consider both what drives these behaviours and their consequences, and will focus on the potential for these actions to interact and to amplify shocks in ways that might cause adverse outcomes in UK financial markets core to UK financial stability.

This will be an exploratory exercise focused on market resilience and its importance for financial stability; it will not be a test of individual firms' resilience.

The Bank will ask a range of institutions whose activity it judges to be most relevant to core UK financial markets to participate in this exercise. Firms approached to participate are strongly encouraged to prioritise this work, which will improve understanding and contribute towards the remediation of vulnerabilities that continue to pose risks to UK financial stability. The Bank will publish more detailed information on the exercise in Q2.

Operational resilience and the 2022 cyber stress test

The FPC has updated its impact tolerance for critical payments, based in part on the findings of the 2022 cyber stress test. **In March 2021, the FPC set its impact tolerance: that the financial system should be able to make payments on the date they are due (i.e. by the end of the 'value date').**

However, the FPC also acknowledged that there might be instances where the disruption caused by an incident was such that, despite prior planning, attempting to recover by the end of the value date could have a more adverse impact on financial stability than failing to do so. Findings from the 2022 cyber stress test reinforced this view. The test also indicated that there might be scenarios where it is not possible for firms to restore their services before recovery of a third party (e.g. where a financial market infrastructure is disrupted). The FPC impact tolerance has therefore been updated to factor in both these situations.

Firms should plan, prepare and test for such situations, and invest so that their response can effectively mitigate any impact on financial stability until service delivery is restored.

The FPC has also set its impact tolerance with regard to all operational disruptions to firms' ability to make critical payments, whether they arise from a cyber incident or otherwise.

Firms that are required to consider risks to UK financial stability under Bank, PRA and FCA operational resilience policies should consider the FPC's impact tolerance for critical payments when formulating their own payment impact tolerances, alongside other applicable requirements.

The Bank, PRA and FCA will continue to engage with firms on their ability to respond to and recover from operational incidents through their supervisory work, and will consider the lessons from this test to inform future work.

Record of the Financial Policy Committee on 23 March 2023

1. The Committee met on 23 March 2023 to agree its view on the outlook for UK financial stability and, on that basis, its intended policy action. The FPC discussed the risks faced by the UK financial system and assessed the resilience of the system to those risks. The FPC seeks to ensure the UK financial system is prepared for, and resilient to, the wide range of risks it could face – so that the system is able to absorb rather than amplify shocks and serve UK households and businesses.

Global economic and financial market developments

2. The FPC judged that the outlook for global activity remained uncertain, despite support from lower energy prices since the December 2022 FSR. Material geopolitical risks remained as did the risk that inflationary pressures would be more persistent than anticipated.

3. The global financial system was continuing to adjust to higher interest rates and tighter financial conditions. In March 2023, this had contributed to severe stress in some banks. Investor risk appetite had fallen sharply and volatility in financial markets had increased. These events had followed the severe stress in liability-driven investment (LDI) funds in autumn 2022. Financial markets remained focused on whether other vulnerabilities related to higher interest rates might crystallise.

Banking sector resilience

Global banking sector developments

4. Over recent weeks, a number of banks had failed or come under severe stress. The FPC had been briefed regularly by Bank staff on these developments in the global banking sector, and had considered the extent to which they impacted the wider UK financial system.

5. Silicon Valley Bank (SVB), the 16th largest bank in the US, failed and was transferred to a bridge bank by the US authorities. SVB had experienced net outflows for several quarters to March 2023. This led the bank to announce actions aimed to strengthen its financial position, which included the sale of substantially all of its Available for Sale securities portfolio at a post-tax earnings loss of around $1.8bn. The bonds in question (long-term fixed-rate investments) had declined in value as interest rates had moved higher. Losses were crystallised only at the point the bonds were sold, however, due to the accounting and capital treatment involved. SVB's announcement led to the large-scale, sudden withdrawal of uninsured deposits, ultimately leading to the bank's failure. As a US Category IV bank, SVB was not subject to full application of some international regulatory standards for capital and liquidity. The failure of SVB illustrated the speed and scale at which deposit withdrawals,

particularly of uninsured deposits, could take place. Signature Bank, a much smaller US bank, was also closed by the authorities on 12 March.

6. On 12 March, the US Treasury, Federal Reserve and the Federal Deposit Insurance Corporation (FDIC) jointly announced measures to strengthen public confidence in the US banking system. Depositors at both banks would be fully protected and the Federal Reserve introduced a new Bank Term Funding Program (BTFP) to provide an additional source of liquidity to banks and other eligible depository institutions. The BTFP offered loans of up to one year in length to eligible depository institutions pledging eligible collateral, such as U.S. Treasuries, U.S. agency securities, and U.S. agency mortgage-backed securities. These assets would be valued at par.

7. Problems with the US parent led to a loss of confidence in Silicon Valley Bank UK (SVB UK), the UK subsidiary of the US bank, and material deposit outflows. At the point of failure, SVB UK had a total balance sheet size of approximately £8.8bn, and a deposit base of approximately £6.7bn. The scale of the deterioration of liquidity and confidence had meant that, in the view of the Bank of England ("Bank") and the Prudential Regulation Authority (PRA), the position was not recoverable. The Bank decided, in consultation with HM Treasury (HMT), PRA and the Financial Conduct Authority (FCA), to use its resolution powers for stabilising failing banks that were brought in following the financial crisis. When using or considering the use of these tools, the Bank must balance the objectives for the resolution framework set out in the Banking Act 2009. Those objectives were designed, amongst other things, to protect and enhance UK financial stability, ensure the continuity of banking services, protect public funds and impose losses on investors in failed banks.

8. On 13 March, the Bank was able to use its resolution powers to extinguish the interests of SVB UK's sole shareholder (its US parent) in SVB UK by transferring SVB UK to HSBC UK Bank Plc, and writing down SVB UK's Additional Tier 1 (AT1) and Tier 2 (T2) capital instruments.[1] SVB UK's business, including its deposit and lending services, had since continued to operate.

9. Other banks' equity prices and wholesale funding costs were impacted following the announcement of the closure of SVB. Falls were seen in the equity prices of other US banks and in particular amongst other US regional banks perceived to have similar reliance on uninsured deposits or unrealised losses on bond portfolios, some of whom continued to be under stress. Share prices of banks in other jurisdictions had also fallen. Banks' credit default swap (CDS) spreads and measures of their wholesale funding costs increased on aggregate, by more than those of other corporates.

10. Over the autumn, Credit Suisse had experienced liquidity stress with significant outflows of client funds as a result of concerns over the firm's risk management practices and

[1] **Statement on Silicon Valley Bank | Bank of England**

profitability. Credit Suisse had also delayed the publication of its 2022 Annual Report which, when it was released on 14 March, stated that 'material weaknesses' had been identified in the firm's internal controls over financial reporting as of 2021 and 2022. These events triggered a worsening of the liquidity stress that Credit Suisse had been facing, and an intensification of client outflows, ultimately leading to the takeover of Credit Suisse by UBS being announced on 19 March, following an intervention by the Swiss authorities. The extraordinary government support involved triggered a complete write-down of the nominal value of all AT1 debt of Credit Suisse in the amount of around CHF 16 billion.

11. Following the full write-down of AT1 debt as part of the agreed takeover of Credit Suisse by UBS, spreads on AT1 bond markets widened, rising substantially on the morning of 20 March as investor concerns about the creditor hierarchy intensified. The Bank published a statement clarifying the status of creditor hierarchy, as did other authorities including the ECB.[2] In the UK, the bank resolution framework has a clear statutory order in which shareholders and creditors would bear losses in a resolution or insolvency scenario. Within that, AT1 instruments rank ahead of CET1 and behind T2 in the hierarchy. Holders of such instruments should expect to be exposed to losses in resolution or insolvency in the order of their positions in this hierarchy. Following these announcements, AT1 spreads of major UK banks fell and closed 20 March around 50 basis points above 17 March levels. They subsequently declined further, to 17 March levels.

12. Central banks had also taken a series of other actions to support investor confidence and promote financial stability. This included a co-ordinated initiative among central banks with dollar swap line facilities to increase the availability of dollar funding. As part of this initiative, on 19 March, the Bank announced that it would increase the frequency of its dollar auctions from weekly to daily.[3]

UK bank resilience

13. The FPC reflected on the resilience of the UK banking system in light of the developments within the US banking system.

14. The FPC judged that the UK banking system was well regulated and subject to robust prudential supervision. Since the global financial crisis (GFC) of 2008, international authorities had established significantly more robust regulatory standards, including for bank capital and liquidity. The UK authorities had put in place a range of robust prudential standards, designed to ensure levels of resilience which were at least as great as those required by international baseline standards.

15. The UK regulatory regime included rules designed to ensure that UK banks held capital against interest rate risks in their banking book. Interest rate risk refers to the current or

[2] Bank of England Statement: UK creditor hierarchy | Bank of England

[3] Coordinated central bank action to enhance the provision of U.S. dollar liquidity | Bank of England

prospective risk to the bank's capital and earnings arising from adverse movements in interest rates that affect the bank's banking book positions. When interest rates change, the present value and timing of future cash flows change. This in turn changes the underlying value of a bank's assets, liabilities and off-balance sheet items and hence its economic value. Changes in interest rates also affect a bank's earnings by altering interest rate-sensitive income and expenses, affecting its net interest income (NII). Many banks actively manage their interest rate risk – taking into account the maturity and variability of interest rates on their funding and assets as a whole – using derivatives such as interest rate swaps.

16. The PRA assessed all UK banks on their resilience to interest rate risk, including their need to hold capital against interest rate risks on banking book assets, including any net open bond positions – regardless of whether they were held at cost or fair value. This was done via an explicit capital charge in the Pillar 2A part of the capital framework, against 'interest rate risk in the banking book' (IRRBB). It was calibrated on forward-looking estimates of the impact of large shocks to the interest rate yield curve on the net position of their banking book. Details of the PRA's approach, and the other methodologies they used to set firm-specific elements of capital requirements, were set out in 'The PRA's methodologies for setting Pillar 2 capital'.[4]

17. The UK's liquidity framework had been designed in line with international standards and applied to all UK banks and building societies. This included the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). The LCR promoted the short-term resilience of the liquidity risk profile of banks, by requiring them to hold a large enough stock of high quality liquid assets to meet their payment obligations in the case of a severe short-term stress. The NSFR was intended to ensure that banks maintained a stable funding profile in relation to the composition of their assets and off-balance sheet activities. The NSFR focused on protecting against liquidity risks over a longer horizon than the LCR metric.

18. The PRA's supervisory work on UK banks, which included small banks and building societies, was intended to ensure that firms held sufficient capital and liquidity to withstand severe but plausible stresses. This included regular reviews of firms' capital and liquidity positions as well as sensitivities to interest changes on firms' assets and liabilities. As part of PRA rules, firms were expected to manage risks within clearly articulated risk appetites and capital allocated against aggregate risk exposures as part of the UK capital setting framework. This approach mitigated the accumulation of large unhedged risk positions on firms' balance sheets. Furthermore, the Senior Managers and Certification Regime (SM&CR), provided further safeguards by allocating responsibilities on a bank's business model, financial information and risk management (amongst other things) to the senior executive management and directors of banks.

[4] **The PRA's methodologies for setting Pillar 2 capital | Bank of England**

19.The FPC judged that the UK banking system was well capitalised. Major UK banks had increased their provision coverage in 2022 Q4 to a little above pre-Covid levels in aggregate reflecting increased impairments in recent quarters as forward-looking indicators of asset quality had begun to deteriorate. Nevertheless, the aggregate CET1 capital ratio for the major UK banks and building societies had increased to 14.6% in 2022 Q4. This reflected underlying profitability which had increased over 2022 reflecting higher net interest income as interest rates had increased. The outlook for profitability suggested that the major UK banks could absorb further increases in expected credit losses without adversely impacting their capital positions.

20.The FPC judged that the UK banking system continued to maintain ample liquidity. In aggregate, major UK banks' liquidity coverage ratio was 149%, with liquid asset buffers comprising central bank reserves and other high quality liquid assets. Around two-thirds of major UK banks' liquid asset buffers were held in central bank reserves. Smaller firms typically ran larger liquidity surpluses over regulatory standards, and in aggregate had a weighted average LCR of 246%. Around three-quarters of smaller firms' liquid asset buffers were held in cash. In aggregate, major UK banks had a NSFR of 136% and smaller firms had a NSFR of 147% in Q2, providing resilience to deposit outflows.

21.Stress tests of the UK banking system had shown it was resilient to a wide range of severe economic outcomes. Past Annual Cyclical Scenario (ACS) stress tests of major UK banks have included testing the impact of higher Bank Rate on the credit quality of banks' assets, their net interest income, and on the value of securities held in their trading and banking books at fair value. The FPC was assessing major UK banks against a further severe shock in the 2022 ACS. The results of the 2022 ACS would be published in summer 2023.

22.In summary, the FPC judged that the UK banking system maintained robust capital and strong liquidity positions, and was well placed to continue supporting the economy throughout a wide range of economic scenarios, including in a period of higher interest rates.

23.The FPC would continue to monitor developments closely, in particular for the risk that indirect spillovers impact the wider UK financial system. There remained channels through which UK economic conditions could be affected including through any further stress from banks outside the UK. These included any lasting impact on bank funding costs, which had increased moderately following recent events, and the potential for that to raise the cost and reduce the availability of borrowing for UK households and businesses. It was also possible that deposit outflows from banks in other jurisdictions might lead to reduced lending in those jurisdictions, which would impact negatively on economic activity. A weaker GDP outlook abroad could affect UK banks directly through their own asset exposures and indirectly through trade linkages between countries. In addition, further volatility and/or sharp moves in asset prices could trigger the crystallisation of previously identified vulnerabilities in market-

based finance, amplifying any tightening in credit conditions. The FPC would monitor developments closely and update its assessment of the UK financial system as appropriate.

24. The FPC discussed that it intended to draw lessons from these recent events, including the failure of SVB and resolution of SVB UK, to support the pursuit of its objectives to protect and enhance the resilience of the UK financial system.

25. In a written response to questions from the Treasury Select Committee on the resolution of SVB UK, the Governor of the Bank of England had provided the Bank's assessment of the UK banking system (Annex 2).[5] The Bank's Financial Policy Committee had also communicated its assessment to the Monetary Policy Committee (MPC) ahead of the policy decision taken at the MPC's Final Meeting on 22 March.

Recent developments in financial markets

26. The FPC judged that the economic and market environment was highly uncertain and that there were a range of factors that could trigger further sharp adjustments and volatility in asset prices. These included a re-assessment of the global macro-economic outlook, as well as wider contagion from the developments in the banking sector globally. The FPC also discussed potential specific triggers for a further adjustment, including geopolitical risks and developments around the US debt ceiling.

27. Between December 2022 and early March 2023, global advanced economy yields had risen by 20-65 basis points, as market participants' initial expectations that global central banks were nearing the peak of their hiking cycles were challenged by inflation and economic data. Over the same period, most risky asset prices had increased, and market volatility fell from the highs seen in 2022. As a result, risk premia had compressed, especially in credit markets. Spreads on high-yield advanced economy corporate bonds had fallen by 25-110 basis points. And spreads on floating-rate leveraged loans had narrowed from the upper quartile of their historic distribution towards the middle.

28. "Flight-to-safety" dynamics following recent developments in the global banking sector challenged risky asset valuations, with risky asset prices falling sharply, largely unwinding the gains since the December 2022 FSR, and market volatility increasing markedly. Spreads on high-yield advanced economy corporate bonds increased by c. 60-100 basis points since the failure of SVB. There was strong demand for "safe haven" assets, as two-year advanced economy government bond yields were c. 50-70 basis points lower over the same period. And US interest rate implied volatility reached its highest level since 2008. The failure of SVB in the US illustrated that shocks originating in one jurisdiction were unlikely to be restricted to that jurisdiction in the context of challenging market conditions.

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[5] **Bank of England and Government respond to Treasury Committee on collapse and rescue of Silicon Valley Bank UK - Committees - UK Parliament**

29.The FPC noted that no further vulnerabilities within the system of market-based finance (MBF) had crystallised since the December 2022 FSR to pose risks to UK financial stability, including during the volatile period following recent developments in the global banking sector. Sterling MMFs and LDI funds had maintained high resilience levels. Across sterling MMFs, weekly liquidity levels were just under 50% of assets on average. And liquidity in UK government bond and corporate bond markets had improved materially from the stress seen in 2022 Q4, albeit in line with the elevated volatility there was some deterioration during the banking sector stress. The FPC noted increasing hedge fund positioning in US rates markets prior to the March volatility. Due to the recent sharp fall in yields, some of these positions experienced material losses. Actions taken by hedge funds to reduce these exposures appeared to have amplified recent interest rate market volatility.

30.The Committee noted that shocks in recent years had highlighted how disruption to core markets, including core sterling rates markets, could have implications for UK financial stability, impacting financing conditions for households and businesses. And many of the vulnerabilities which had crystallised during previous stress episodes, such as the 'dash for cash' in March 2020, remained largely unaddressed and could amplify further sharp adjustments in asset prices. As the global financial system continued to adjust to higher interest rates and tighter financial conditions, accompanied by the episodes of elevated market volatility, additional pockets of vulnerabilities might crystallise. The FPC noted that riskier corporate credit markets, such as those for leveraged loans and private credit, might be particularly vulnerable in this context (see section "Risky corporate credit markets including private credit" in the Record).

31.It was therefore vital that work to increase resilience in MBF continued at pace. In 2023 international and domestic regulators urgently needed to develop and implement appropriate policy responses to address the risks from MBF. In this context, the FPC strongly supported the Bank and FCA's continued engagement with the international policy work led by the Financial Stability Board, and noted that the UK authorities were working to reduce vulnerabilities domestically where effective and practical. The FPC would set out its approach to assessing risks in MBF later this year.

Global debt vulnerabilities

32.The outlook for global activity remained uncertain, despite support from lower energy prices since the December 2022 FSR. Global GDP growth had been subdued as tighter financial conditions and the impact of previous increases in the prices of energy and other goods fed through. However, global growth in 2023 Q1 was expected to be stronger than anticipated in the February 2023 Monetary Policy Report (MPR), given the sharp rebound in Chinese GDP as well as upside news to demand in the United States and in the euro area. Downside risks to the outlook nevertheless remained. While headline inflation rates in many countries might have peaked, they remained elevated and inflationary pressures might be

more persistent than anticipated, which could exacerbate debt vulnerabilities if they led to a further tightening in financial conditions.

33. The Committee judged that global risks that could spill over to UK financial stability had increased over the past year. Weaker global growth and tighter financial conditions had increased the risks associated with global debt vulnerabilities, and material geopolitical risks remained. These developments had increased risks in all regions of the world. Further stress in the global banking sector or a re-emergence of vulnerabilities in market-based finance that had been identified in past episodes could amplify global debt vulnerabilities.

34. Higher debt servicing costs could lead to a further tightening of financial conditions and credit losses for banks, including in the United Kingdom.

35. Tighter financial conditions continued to weigh on the ability of households, businesses and governments globally to service their debts. The full impact would take time to feed through for many borrowers. Riskier corporate borrowing was likely to be particularly vulnerable, and there were some early signs of distress in US leveraged lending. Such lending was typically floating rate and so sensitive to increasing interest rates. In its November 2022 Financial Stability Report, the Federal Reserve had noted a deterioration in the credit quality of leveraged loans. The stock of outstanding US leveraged lending was around $3½ trillion (including revolving credit facilities) in Q4 2022, accounting for around three-quarters of the global stock. Household debt vulnerabilities in advanced economies could also be amplified and credit losses could crystallise if a more pronounced slowdown in economic growth led to a sharp rise in unemployment. Commercial real estate was a potentially vulnerable sector globally, for banks and market-based finance, as higher interest rates reduced property values along with borrowers' ability to service debt.

36. As the FPC had noted previously, analysis by euro-area and US authorities had suggested that their core banking systems were likely to remain resilient in aggregate to potential increases in losses on lending. However, the recent failure of SVB and stress among some other US banks had increased awareness of vulnerabilities to rising interest rates in other ways, such as losses on bond portfolios. The failure of Credit Suisse due to long-running concerns about the bank's risk management and profitability had added to heightened concerns about the banking system. The US authorities had taken measures to strengthen public confidence in the US banking system and the Swiss authorities had taken action to resolve the problems at Credit Suisse. There remained channels through which these events could indirectly affect UK economic conditions, for example if they led to a global tightening in credit conditions.

37. There had been reports of deposit flows away from smaller US banks and at the same time flows into MMFs had increased. This could, if sustained, lead to these banks reducing lending to the real economy which could in turn affect economic activity adversely, for example if businesses found it harder to take out or refinance loans. The FPC would monitor

developments in the banking sector globally, including around how concerns over losses on securities or other assets, might interact with bank funding conditions and lending behaviour, and so economic activity.

38.The FPC had also previously highlighted vulnerabilities created by high public debt levels in the euro area, including interlinkages between banks and sovereigns. Yields on 10-year Italian government bonds had risen by around 300 basis points since the start of 2022, consistent with the general increase in euro area bond yields, to around 4¼ %, increasing debt servicing costs. Spreads over Bunds had increased by around 50 basis points to 180 basis points although this was lower than the peak seen in the second half of 2022. Yields on Greek government bonds were at a similar level, while those on Spanish and Portuguese bonds were significantly lower. Most large non-China emerging market economies had remained resilient relative to previous global tightening cycles but risks of disruptive capital outflows remained.

39.Debt vulnerabilities in the Chinese property sector had crystallised, following the liquidity challenges faced by a number of property developers initially in late 2021, although there had been limited impact on financial stability via trade or financial spillovers to date. Measures taken by the Chinese authorities had reduced the risk of a disorderly adjustment in the sector, though property prices remained below their 2021 Q3 peak. Broader risks associated with high debt levels in China remained elevated, and could be amplified by a further deterioration in geopolitical tensions.

40.Heightened geopolitical risks increased the likelihood of financial vulnerabilities crystallising. The Russian invasion of Ukraine had led to volatility in energy prices and disrupted supply chains. A further escalation of the war could amplify these effects. More broadly, increased geopolitical tensions could disrupt global trade and generate financial market volatility. The prices of a range of traded goods could increase, pushing up inflation, putting upwards pressure on interest rates and depressing activity around the world, including the UK. Such tensions could also pose risks to UK banks' direct exposures to the affected regions.

41.The FPC would continue to monitor geopolitical and other risks closely and take them into account when assessing the resilience of the UK financial system.

Risky corporate credit markets including private credit

42.The Committee noted that riskier corporate credit markets, comprising of leveraged loans, high-yield bonds and private credit, had almost doubled in size over the past decade, as accommodative financial conditions and investors searching for yield in a low interest rate environment had supported growth in corporate leverage. Within that, estimates suggested that private credit – defined as lending bilaterally negotiated between borrowers and lenders and typically arranged by non-banks – had tripled in size globally over the same period. The

Committee noted that the opacity of the private credit market complicated the assessment of potential risks for both regulators and market participants.

43. In some respects, the features of private credit such as its floating rate nature and links to private equity sponsored activity, were comparable to leveraged loans. But certain characteristics of private credit, such as the typically un-rated nature and smaller size of borrowers might make the asset class more vulnerable to a deteriorating macro environment. In addition, the FPC highlighted that illiquidity and infrequent re-pricing of private credit assets created uncertainty over dynamics in this market and might expose investors to sharp revaluations and losses if signs of stress started to emerge. Nevertheless, some features of private credit, including the ability of lenders to re-negotiate terms should borrowers experience difficulty and typically stronger covenants relative to leveraged loans, might help mitigate distress in this market.

44. 2022 had been challenging for riskier corporate credit markets. Leveraged loan spreads widened materially over H2, amidst investor concerns about higher debt servicing costs for floating-rate borrowers and a weakening macro outlook. Despite this, both data and market intelligence indicated that leveraged loan and private credit default rates were low compared to historical levels. However, the Committee noted that a prolonged period of negative growth amidst persistently high rates could lead to a material increase in expected default rates in these markets and sharp falls in prices.

45. Signs of stress in these markets could cause a rapid re-assessment of risks by investors, potentially resulting in sharp revaluations. This had occurred, for example, when high-yield corporate bond spreads rose sharply following the failure of SVB and in the run up to the agreed takeover of Credit Suisse. The FPC judged there were several key channels through which vulnerabilities in riskier corporate credit markets could pose risks to UK financial stability.

- Non-banks, such as global open-ended funds, pension funds, insurers and hedge funds, were significant investors in riskier corporate credit markets. Sharp falls in prices could trigger asset fire-sales amplifying losses across the system, including for systemic institutions. The FPC noted that structural features of private credit, such as the closed-ended structure of funds facilitating investment in this asset class and its typically buy-and-hold nature, might mitigate such fire-sale dynamics.

- UK banks had large exposures to leveraged loans and had indirect exposures to riskier credit via lending to non-bank investors. Banks’ exposures to leveraged loans were tested as part of the 2021 Solvency Stress test, and were being tested again as part of the 2022 ACS. UK insurers also had some exposures to riskier credit, including via investing in alternative investment funds.

- A severe reduction in investor risk appetite in response to actual or anticipated losses on riskier credit could result in refinancing challenges and, at the extreme, defaults for riskier corporates impacting the UK real economy. Riskier corporate credit markets played an important role in financing the UK corporate sector. However, the FPC noted that near-term refinancing needs appeared limited, with a small proportion of outstanding riskier corporate credit maturing over the next two years.

- Given riskier corporate credit markets were very large outside the UK, especially in the US, crystallisation of risks abroad could spill over to the UK via disruption in global riskier credit markets, and through UK exposures to affected global counterparties, including foreign banks.

46.The FPC would continue to monitor closely developments in riskier corporate credit markets. Bank staff would undertake further work to size the private credit market and better understand potential risks to UK financial stability.

UK economic outlook

47.The FPC noted that the MPC expected UK GDP to increase slightly in the second quarter, compared with the 0.4% decline anticipated in the February MPR but that there were considerable uncertainties around the medium-term outlook.

48.The FPC considered that developments in credit conditions had been mixed. There had had been a further reduction in UK owner-occupied fixed-term mortgage rates since the MPC's meeting in February 2023, although rates remained materially higher than in summer 2022. There were no clear signs as yet that the recent increase in UK bank funding costs had affected mortgage rates.

49.The FPC noted that bank wholesale funding costs had risen in the UK and other advanced economies reflecting the recent developments in the global banking sector, and it was unclear how credit conditions and economic activity might be affected by recent banking sector stress in a number of advanced economies.

UK debt vulnerabilities

UK household resilience

50.UK household finances remained stretched by increased living costs and rising mortgage payments, and these pressures were expected to continue increasing through 2023. Rising costs would make it harder for households to service debt, and increased the risk that indebted households default on loans, or sharply reduce their spending. Around 2.5 million more owner-occupier mortgagors would be exposed to higher mortgage rates during 2023. Those whose fixed rate deals were due to expire during this year would face average

monthly repayment increases of around £250. Based on market expectations for Bank Rate as at late February, the share of households with high mortgage cost-of-living-adjusted debt service ratios (DSRs) was projected to increase over 2023 from 1.6% to 2.0% of all households, an increase of around 110,000 households. That was lower than had been expected at the time of the December 2022 FSR, largely due to an improved central outlook for energy price inflation and unemployment in the MPC's February forecast.

51. Widespread signs of financial difficulty among UK households with debt had not emerged. Mortgage arrears remained subdued by historical standards and lenders had not realised large losses on mortgage lending. The proportion of mortgages more than three months in arrears remained very low in historical terms in 2022 Q4, at 0.7%, which was comparable with pre-Covid levels. The FPC noted that households were continuing to adjust their spending behaviour in response to higher costs of living.

52. UK house prices had begun to fall and mortgage approvals had dropped sharply. The UK house price index had decreased by 0.6% from December 2022 to January 2023, and in February timelier indicators from Halifax and Nationwide stood around 3% to 4% below their recent peak levels. Mortgage approvals had fallen in both December 2022 and January 2023, standing at the lowest level since May 2020, reflecting the increase in mortgage rates over the last year, the squeeze in household incomes and a weak macroeconomic outlook. The outlook for mortgage approvals was expected to remain weak in the near term.

53. The FPC judged that the increased pressure on UK households and the weakening housing market were not expected to challenge directly the resilience of the UK banking system. Households in aggregate were less indebted compared with the peak that preceded the GFC. The unemployment rate, which was a strong indicator of household distress, was very low in historical terms, at 3.7%, although it was expected to rise to 4.4% by 2024 Q1. In aggregate, the loan-to-value (LTV) profile of UK banks' mortgage portfolios was very strong, reflecting a long period of house price growth and more prudent lending practices than those preceding previous downturns.

54. Following the withdrawal of the FPC's affordability test Recommendation, effective from 1 August 2022, major UK lenders had gradually reduced their stress buffers over reversion rates, as expected. The affordability test had required mortgage lenders to assess whether borrowers could still afford their mortgages if, at any point over the first five years of the loan, their mortgage rate were to be 3 percentage points higher than the reversion rate specified in the mortgage contract at the time of origination. Following its consultation[6] last year, the FPC judged that the FCA's Mortgage Conduct of Business (MCOB) rules on responsible lending, alongside the continuing application of its loan-to-income (LTI) flow limit, ought to deliver the appropriate level of resilience to the financial system. Intelligence from the UK's largest lenders indicated that the average stress buffer for mortgages where the initial rate is fixed

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[6] **Consultation Paper** on the Withdrawal of the FPC's affordability test Recommendation.

for less than five years had decreased from 2.7 percentage points in September 2022 to 1.4 percentage points in February 2023, above the minimum of 100 basis points required by the MCOB responsible lending rules. The average standard variable rate had risen from around 5% to around 7% during the same period, leaving overall stress rates only a little higher. New lending at LTI ratios of 4.5 or greater was 8.5% in 2022 Q4, well below the FPC's limit.

UK corporate resilience

55. The FPC judged that, in aggregate, UK businesses remained resilient. Businesses had continued to repay more finance from banks and financial markets than they raised in 2022 and corporate earnings had also increased. In the most recent data, the aggregate corporate debt-to-earnings ratio for UK businesses had fallen to around 315% in 2022 Q2, below the pandemic peak of 345% and the GFC peak of nearly 370%.

56. Nevertheless, the FPC also judged that businesses were under pressure from higher rates and the weak macroeconomic environment. The proportion of large to mid-sized businesses with high interest coverage ratios was low and was expected to stay well below previous peaks. Smaller businesses were more exposed to rising debt servicing costs, though a significant share of debt extended since the start of 2020 had been government guaranteed, with relatively low interest rates that were fixed for six years or longer. However, over 70% of the stock of SME bank debt had been issued outside government loan schemes and was exposed to interest rate increases. Some SMEs were also expected to suffer as cash buffers were expected to run down through 2023.

57. Using earnings and interest rate paths consistent with the February 2022 MPR, staff had estimated that the debt-weighted share of mid to large-cap companies with ICRs below 2.5 – a threshold below which staff estimated that firms are more likely to experience difficulty with repayments – might rise from 30% in 2022 to closer to 45% by end-2023, but below the GFC peak of over 50%.

58. The FPC noted that pressures on earnings would be felt unevenly across corporates. The fall in household real incomes could reduce demand significantly in sectors that provided non-essential household goods and services. And sectors with large exposures to energy or fuel prices, such as transport, construction and manufacturing, could remain under significant cost pressures as recent wholesale energy price falls would take time to feed through.

59. Overall, the Committee judged that the risk of firms defaulting on debt had increased, in line with expectations, and corporates were showing some signs of stress. In particular, insolvencies had continued to increase in recent months to above pre-pandemic levels. While the insolvency rate remained low compared to historic levels, insolvencies were likely to rise further over coming quarters, reflecting the deteriorating financial health of firms and the weak economic outlook. The large majority of the increase in insolvencies had been among

very small, younger entities that held little debt, and a high proportion of this debt was government guaranteed.

60. In common with the outlook on household debt, increased corporate distress was not expected to challenge the resilience of the banking system directly, but financial stability risks from corporates could be amplified by an increasing reliance on market-based finance; the share of corporate borrowing sourced through markets was now over 50%, up from 40% before the GFC. More generally, the Committee noted that a significant contraction in the supply of corporate finance, from banks or non-banks, would amplify pressures on businesses and could lead to an inability to refinance maturing debt.

The UK countercyclical capital buffer rate

61. The FPC discussed its setting of the UK countercyclical capital buffer (CCyB) rate. The Committee reiterated that its primary objective in setting the UK CCyB rate was to ensure that the banking system was able to withstand stress without restricting essential services, such as the supply of credit, to the real economy. Its policy was to vary the rate in line with the risk, at the system level, that banks would incur losses on UK exposures in a manner that might lead them to defend their capital positions by restricting lending in a counterproductive way. This approach therefore included an assessment of major banks' capacity to absorb losses on their UK exposures and their sensitivity to shocks.

62. In considering the appropriate setting of the UK CCyB rate, the FPC discussed its judgements around underlying vulnerabilities that could amplify economic shocks as set out above. The Committee judged that those underlying vulnerabilities were still consistent with a UK CCyB rate at its neutral setting of 2%.[7]

63. The Committee noted that there was some evidence of the major UK banks tightening their lending standards. The FPC judged that the tightening in lending conditions seen to date appeared to be in line with expected changes in credit quality related to the macroeconomic outlook and did not reflect banks restricting lending in order to defend their capital positions. Supervisory intelligence and the recent Credit Conditions Survey suggested tightening by banks had been concentrated in riskier borrowers or forms of riskier lending. The FPC would closely monitor any changes in lending conditions following from the recent developments in the global banking sector.

64. Given the major UK banks' strong capital positions, supported by increased profitability, the FPC judged that the UK banking system was in a position to continue to meet credit demand from creditworthy households and businesses. Higher interest rates and the weaker and more uncertain macroeconomic outlook could also lead to a reduction in credit demand. Maintaining a neutral setting of the UK CCyB rate in the region of 2% would help to ensure

[7] See **here** for details of the FPC's approach to setting the CCyB and the CCyB core indicators

that banks continued to have capacity to absorb unexpected future shocks without restricting lending in a counterproductive way. The FPC would continue to monitor UK credit conditions for signs of unwarranted tightening.

65. In view of these considerations, the FPC agreed to maintain the UK CCyB rate at 2%, due to come into effect on 5 July 2023.

66. The Committee reiterated that it would continue to monitor the situation closely and stood ready to vary the UK CCyB rate – in either direction – in line with the evolution of economic and financial conditions, underlying vulnerabilities, and the overall risk environment. If vulnerabilities that could amplify future economic shocks increased to an elevated level, so as to pose greater risks to banks' resilience, the FPC would be prepared to raise the UK CCyB rate above 2%. If conditions deteriorated by significantly more than currently expected, in a manner that might otherwise lead banks to restrict lending to defend their capital ratios, the FPC would be prepared to cut the UK CCyB rate as necessary. This would enable banks to use the released buffer to absorb losses – which, all else equal, would now be recognised earlier in a stress under International Financial Reporting Standard 9 (IFRS 9) – and so be able to support lending.

The resilience of market-based finance

Liability-driven investment funds

67. In late 2022, a rapid and unprecedented increase in UK gilt yields exposed vulnerabilities in liability-driven investment (LDI) funds (in this document, "LDI funds" refers to leveraged LDI funds and LDI mandates) in which many pension schemes invest. These led to a vicious spiral of collateral calls and forced gilt sales that risked further market dysfunction and a material risk to UK financial stability. In response, the FPC recommended that action be taken, and welcomed the Bank's plans for a temporary and targeted programme of purchases of long-dated UK government bonds to restore market functioning and give LDI funds time to build their resilience to future volatility in the gilt market. The FPC had welcomed the timely and orderly unwind of the Bank's portfolio of conventional and index-linked gilts purchased during the temporary and targeted financial stability operations between 28 September and 14 October 2022.[8]

68. Following this episode, the FPC recommended that regulatory action be taken by The Pensions Regulator (TPR), in co-ordination with the FCA and overseas regulators, to ensure LDI funds remained resilient to the higher level of interest rates. And following this, that regulators should set out appropriate steady-state minimum levels of resilience for LDI funds. So far, LDI funds had largely maintained these levels of resilience.

8 The FPC agreed this by written procedure in January 2023.

69. However, this requirement was explicitly temporary, and the level of resilience might erode over time in the absence of a clear long-term approach. The FPC was not the regulator of pension schemes or LDI funds. However, the FPC, as the UK body with objectives for identifying, monitoring and addressing risks to the resilience of the UK financial system as a whole, had a responsibility to ensure the financial stability risks posed by LDI funds were addressed. The FPC therefore discussed how best to achieve steady-state resilience. Overall, the regulatory approach to LDI funds would cover a broad range of factors, including but not limited to financial stability. It would be for relevant regulatory authorities to determine and implement an approach whilst taking into account other objectives.

70. The FPC's aim in considering a framework for steady-state LDI resilience was to promote financial stability by preventing forced deleveraging and gilt sales from LDI funds and pension schemes in the event of severe but plausible moves in yields. This would mitigate transmission of stress to financial markets or institutions, and so businesses and households.

71. As part of a steady-state level of resilience, the FPC judged that LDI funds should be able to withstand severe but plausible stresses in the gilt market, and meet margin and collateral calls without engaging in asset sales that could trigger feedback loops and so add to market stress. In order to achieve this, some pension schemes might need to improve their operational processes to provide collateral to their LDI funds more swiftly when needed. This approach might also be relevant when considering the appropriate resilience of other non-bank financial firms whose activities were important for UK financial stability. In the context of LDI funds, the FPC considered the nature of the shock it judged they should be able to withstand.

72. The FPC recommended that:

- The severe but plausible stresses to which LDI funds should be resilient should account for historic volatility in gilt yields, and the potential for forced sales to amplify market stress and disrupt gilt market functioning. If LDI funds were not resilient to such a shock, their defensive actions could cause financial instability, tightening credit conditions for UK households and businesses. The FPC judged that that these factors meant that the size of the yield shock to which LDI funds should be resilient should be, at a minimum, around 250basis points.

- Liquid assets held to ensure resilience in the event of such a shock should be unencumbered and immediately available. Fund managers should have scope to consider additional assets, which investors had authorised them to use to meet collateral demands. Managers should apply appropriate prudence in doing this, for example by applying suitable haircuts.

- This minimum level of resilience should be maintained in normal times but could be drawn down on in stress. Minimum resilience around this level would ensure that

funds could absorb a severe but plausible historical stress and still have a remaining level of headroom necessary to operate during a period of recapitalisation. This approach was consistent with the regulatory approaches in place for some systemically important financial institutions, where their standards were designed to allow institutions to continue operating after withstanding a severe stress.

- Funds should take into account the nature of their exposures, including duration, leverage, and concentration of holdings, and the liquidity, duration, and convexity of collateral, in modelling their resilience to yield moves.
- Pension schemes using leveraged LDI should be expected to be able to deliver collateral to their LDI vehicles within five days. Funds and schemes unable to implement these operational standards should be required to be resilient to a larger shock, calibrated to their own operational timelines.
- LDI funds should maintain additional resilience over and above the minimum to manage day to day volatility in yields and account for other risks they might face, including operational risks, in order to be able to maintain the minimum level of resilience in normal times. The amount of additional liquidity held should be calibrated by funds according to their own assessments of their exposures and operational capabilities and other regulatory requirements, as well as interest rate trends and levels of market volatility. While this additional liquidity was expected to vary between funds, when combined with the minimum resilience to yield shocks, overall resilience levels should be broadly consistent with those currently prevailing in current market conditions (i.e. 300-400 basis points). Liquid asset holdings might be safely reduced over time if fund managers were able to demonstrate increased resilience through operational improvements.

73. Further details of the resilience level discussed by the FPC were set out in the Bank staff paper: ‘LDI minimum resilience – recommendation and explainer’.

74. The FPC judged that as the supervisory and regulatory body for workplace pension schemes, TPR was best placed to implement, monitor, and enforce this resilience level in the UK. The FPC recommended that:

- TPR takes action as soon as possible to mitigate financial stability risks by specifying the minimum levels of resilience for the LDI funds and LDI mandates in which pension scheme trustees may invest. To ensure that they were able in practice to do this, it was important that trustees had a simple mechanism for monitoring, and LDI funds disclosing, levels of resilience in dynamic markets.

- TPR should have the ability to employ effective monitoring tools, and to enforce as appropriate in cases of non-compliance with this resilience level. The FPC asked TPR to report back on how it intended to implement the recommendation.

- TPR should have the remit to take into account financial stability considerations on a continuing basis. This might be achieved, for example, by including a requirement to have regard to financial stability in its objectives, which should be given equal weight alongside other factors to which TPR is required to have regard. The FPC noted that in order to achieve this, TPR would need appropriate capacity and capability.

75. In making this recommendation, the FPC noted that, while pension schemes are based in the UK, pooled LDI funds are largely based overseas, and therefore TPR should continue its effective collaboration with other domestic and overseas regulators in order that they could take account of these recommendations in their approach to regulation and supervision of relevant funds.

76. The FPC noted wider work to change the regulation of pension schemes. For example, the Government was in the process of implementing a broader strategy to ensure that DB schemes in the UK were sustainable, well-governed and that scheme members achieved better outcomes. As part of this, actions had already been taken to strengthen the regulatory framework for DB pension schemes, support consolidation and enhance scheme governance and member protection. The Government was also in the process of ensuring that DB funds in the UK were appropriately funded as they became significantly mature, which would help them to be sustainable, and of encouraging DB scheme trustee boards to more actively detect and respond to risks. The FPC considered this work essential given potential risks to financial stability.

77. Until an appropriate framework incorporating these elements was put into place, the FPC judged that TPR, in coordination with the FCA and other overseas regulators, should continue to ensure that LDI funds maintain the resilience that has been built up as set out in the FPC's November 2022 recommendation. The FPC noted that collaboration between regulatory bodies, including overseas regulators, had been effective in addressing LDI issues to date.

Money market funds

78. The FPC discussed MMFs in the context of a consultation paper on MMF regulation that the UK authorities would launch later this year, following the discussion paper issued by UK authorities in May 2022[9]. The FPC judged that increasing the resilience of MMFs was necessary to reduce systemic risk in the UK and global financial system.

[9] https://www.fca.org.uk/publication/discussion/dp22-1.pdf

79. The FPC discussed that MMFs could pose financial stability risks due to the liquidity transformation they undertook. MMFs offered daily liquidity while investing in assets that could be hard to sell, particularly in stress. If stressed outflows from MMFs exceeded their liquidity, MMFs could be forced to suspend, which would restrict access to cash for a range of investors (including corporates and financial firms) at a time when cash might be most needed. This could amplify stress in other parts of the financial system and real economy, and so pose financial stability risks. Large outflows from MMFs in the 2020 dash for cash had highlighted structural vulnerabilities in MMFs as they found their ability to generate additional liquidity constrained, and MMFs also saw large outflows in the LDI stress event.

80. The FPC judged that MMFs should be able to withstand severe but plausible levels of investor outflows without amplifying stress and increasing risks to financial stability. Given the risk that difficulties in a single fund could lead to redemption pressures on other funds and hence amplify stress, MMFs should be resilient to outflows at least as large as those seen in the dash for cash and LDI stress events, when central bank actions also helped to limit outflows. Such central bank interventions increased risks to public funds and should not be relied upon.

81. The FPC judged that, in line with its general principles for fund design, MMF redemption policies should be consistent with the liquidity of the underlying assets held by a fund, and redeeming investors should bear liquidity costs of assets sales needed to meet redemptions. The FPC noted that to raise liquidity, MMFs tended to rely on the redemption, at maturity, of short-dated assets rather than selling assets.

82. The FPC judged that, in the context of MMFs, holding more liquid assets was therefore an effective way to increase MMF resilience and so reduce risks to financial stability. Higher liquidity holdings would increase the range of stresses MMFs were resilient to. Theoretically, a fund that held only overnight liquidity (100% daily maturing assets) would face no liquidity mismatch and no run risks. While this level of liquidity would not be practicable or proportionate, given the need to ensure MMFs could withstand redemptions beyond those seen in the dash for cash and LDI stress episodes, and given the risk that difficulties in one MMF could lead to redemption pressures on other funds and so amplify stress, it was judged that significantly more liquid assets were an effective way to increase MMF resilience and so reduce risks to financial stability. Bank staff analysis suggested that holdings of assets maturing within a week would need to be significantly higher than current requirements to address financial stability risks from MMFs.

83. Charging liquidity fees, applying swing pricing, or applying redemption notice periods could be effective tools to increase resilience when asset sales were used or intended to be used by MMFs to meet redemptions. However, given the short term nature of MMFs and the reliance on maturing assets rather than asset sales to meet redemptions, the FPC noted that liquidity fees and swing pricing were less likely to be needed in practice for MMFs.

84. The FPC judged that while higher liquid assets, if calibrated appropriately, could largely mitigate financial stability risks, the Low Volatility Net Asset Value (LVNAV) structure of many sterling MMFs created additional potential risks by creating a ‘threshold effect’. Because there was the risk that conversion from stable to a floating NAV might be required in a stress, sharp moves in asset prices might cause MMF investors to redeem pre-emptively if they feared losing the benefits of a stable share price. This would add to run risk and amplify any stress. In addition, this structure could pose confidence risks if conversion was not delivered smoothly. And while the accounting treatment of LVNAV funds provided utility to certain investors, as they were more likely to be assessed as cash equivalent in the UK, that in itself might lead to additional investor outflows if the MMF was expected no longer to be able to transact at a stable price.

85. MMF borrowing was prohibited as part of the post GFC reforms, to prevent contagion of MMF distress to banks and other lenders. There were a range of views around whether there could be merit, from a financial stability perspective, if MMFs were permitted to borrow a limited amount to fund redemptions in a stress. Some members noted that access to credit facilities from the market would enable MMFs to meet redemptions that exceeded their immediately available liquid asset buffers, and so would improve their resilience. Costs of borrowing could be passed on to investors through a liquidity fee, which would reduce the risks that remaining investors had an additional incentive to redeem. Others noted that this would come with risks, including the potential for contagion of stress to lenders, or that there could be a stigma associated with making use of borrowing facilities and provision of such facilities might not be commercially viable. And some members worried about the practical ability to restrict borrowing solely for the purpose of funding redemptions in a stress.

86. The FPC noted that these issues should be further explored in the Authorities’ consultation paper later this year.

System-wide exploratory scenario

87. The Bank would run a system-wide exploratory scenario exercise to consider what drives banks’ and NBFIs’ behaviours in a severe but plausible market stress and the potential consequences. It would focus on the potential for these actions to interact and to amplify shocks in ways that might cause adverse outcomes in UK financial markets core to UK financial stability.

88. This exploratory exercise would be focused on market resilience and its importance for financial stability; it would not be a test of individual firms’ resilience.

89. The exercise’s main objectives would be twofold: (i) to enhance understanding of the risks to and from NBFIs, and the behaviour of NBFIs and banks in stress, including what drives that behaviour; and (ii) to investigate how these behaviours and market dynamics can amplify shocks in markets and potentially bring about risks to UK financial stability. It should also

provide useful information on how firms manage risks across the system – information useful to both the participating firms and their regulators, as well as the Bank.

90. The Bank would ask a range of institutions whose activity it judged to be most relevant to core UK financial markets to participate in the exercise. Firms approached to participate were strongly encouraged to prioritise this work, which would improve understanding and contribute towards the remediation of vulnerabilities that continued to pose risks to UK financial stability.

91. The Bank would publish more detailed information on the exercise in Q2.

Insurance stress test

92. The FPC noted the findings from the Insurance Stress Test conducted over 2022 and welcomed the result that the UK insurance sector was found to be resilient to the PRA specified scenarios.

93. The FPC had concerns, however, around the potential financial stability implications of certain management actions life insurers were likely to take in stress, in particular, the concurrent sale of sub-investment grade credit assets that could amplify market shocks. The FPC would give further consideration to the impact of such actions in its non-bank risk assessment work, including in the system-wide exploratory stress scenario.

Operational resilience and the 2022 cyber stress test

Background

94. In June 2017, the FPC had set out the elements of the framework of regulation to strengthen the resilience of the UK financial system to cyber risk: (i) clear baseline expectations for firms' resilience that reflected the importance of firms and the services they provide for the financial system; (ii) regular testing by firms and supervisors to ensure that resilience kept pace with the evolving nature of the risk; (iii) identification of firms that were outside the financial regulatory perimeter, but which might be important for regulated firms; and (iv) clear and tested arrangements to respond to cyber incidents when they occurred.

95. In June 2018, the FPC had agreed that as part of establishing clear baseline expectations, it would set 'impact tolerances' for how quickly critical financial companies must be able to restore vital financial services following a severe but plausible cyber incident. In the June 2018 FSR, the Bank noted that it would use regular cyber stress tests to test firms' ability to meet these impact tolerances in severe but plausible scenarios.

96. In its March 2021 Record, the FPC set an impact tolerance for critical payments in the event of a cyber incident: the financial system should be able to make payments on the date they are due (i.e. by the end of the "value date"). The FPC acknowledged, however, that there might be particular instances where the disruption caused by a cyber incident was such

that, despite prior planning, attempting to recover by the end of the value date could have a more adverse impact on financial stability than failing to meet the tolerance. The FPC would use its cyber stress testing programme to explore these issues.

The 2022 cyber stress test

97. The FPC reviewed the findings of the 2022 cyber stress test, which looked at a hypothetical data integrity scenario in retail payments. The objectives of the test were to explore firms' and the sector's capabilities to respond and to recover their payment services following a successful cyber-attack and to gather evidence on the potential financial stability impact of this hypothetical scenario. The test was exploratory rather than a formal pass-fail assessment.

98. The findings highlighted that where data were corrupted, or where a third-party was operationally unavailable, making critical payments by the end of value date might not always be possible and might lead to adverse impacts on financial stability. However, the ability of firms to take suitable mitigating actions could limit the impact of financial and operational contagion, as well as the impact of the scenario on public confidence. Such actions could therefore limit material economic harm and impacts to financial stability, even in the case that firms were unable to make critical payments by the end of value date.

99. A separate thematic letter for the financial sector, to be published by the Bank of England and PRA on the same day as the Record, would outline the findings in more detail.

100. The Committee expected to report on plans for future cyber stress testing in due course. The Bank, PRA and FCA would also continue to engage with firms on their ability to respond to and recover from operational incidents through their supervisory work and would consider the lessons from this test to inform future work.

Impact tolerance for payments

101. The FPC reviewed its impact tolerance for critical payments, taking account of the 2022 cyber stress test.

102. The FPC still expected the financial system to have the capability to complete critical payments by the end of the value date in severe but plausible scenarios; timely recovery of service delivery was the first best way firms could prevent adverse material economic impacts.

103. However, as had been recognised by FPC previously and highlighted in the 2022 stress test, there might be instances where the disruption caused by an incident was such that, despite prior planning, attempting to recover by the end of the value date could have a more adverse impact on financial stability than failing to make value date.

104. The test also indicated that there might also be scenarios where it was not possible for firms to restore their services before recovery of a third-party (e.g., where an FMI was disrupted).

105. In such instances where restoring services would be harmful for financial stability, or impossible, alternative mitigating actions might be appropriate. Firms should therefore plan, prepare and test for such situations and invest so that their response could effectively mitigate any impact on financial stability until service delivery was restored.

106. The FPC also set its impact tolerance for payments with regard to all operational disruptions to firms' ability to make critical payments, whether arising from a cyber incident or otherwise.

107. The impacts on financial stability that firms should seek to mitigate include:

- Financial contagion to the wider financial sector and UK economy (including but not limited to liquidity stress, financial losses, significant price moves that could disrupt market functioning);
- Operational contagion to the wider financial sector and UK economy (including but not limited to disrupting the provision of vital services by other financial institutions, markets and financial market infrastructure); and
- A loss of confidence in financial institutions or payment schemes that interrupts the supply of vital services by financial institutions, markets or financial market infrastructures.

108. The FPC judged that firms that are required to consider risks to UK financial stability under Bank, PRA and FCA operational resilience policies should consider the FPC's impact tolerance for critical payments when formulating their own payment impact tolerances, alongside other applicable requirements. Mitigating actions that could limit impacts on financial stability could also help meet the requirement under those policies to consider the risks to consumers and to safety and soundness.

Cryptoassets

109. The FPC continued to judge that direct risks to UK financial stability from cryptoassets remained limited, reflecting their current limited size and interconnectedness with the financial system. However, given the speed of developments in this area, it was important to be forward-looking. Events over 2022 had highlighted how systemic risks could emerge if cryptoasset activity and its interconnectedness with the wider financial system continued to develop. The recent failure of three US banks had shown the importance of interconnections between crypto markets and the wider financial system. These events underscored the need

for enhanced regulatory and law enforcement frameworks to address developments in crypto markets and activities.

110. The FPC welcomed HMT's consultation and call for evidence for a financial services regulatory regime for cryptoassets, and its aim to achieve the same regulatory outcome for equivalent risks consistent with the FSB's proposed recommendations [10]. The FPC noted the regime would not achieve the outcome of market integrity to the same degree as in traditional securities markets, and that further development of the regime would be needed in future to capture the activities discussed in the call for evidence.[11] The FPC considered the consultation to be an important step in developing a regulatory regime, with further work anticipated as cryptoasset markets evolved and international standards were developed.

111. The FPC continued to support international work on these issues, including that of the FSB in its role co-ordinating the international approach to cryptoassets, and the work of international standard-setting bodies.

112. The FPC continued to judge that financial institutions and investors should take an especially cautious and prudent approach to any adoption of these assets and they should not expect any kind of compensation to cover any losses from investment in cryptoassets and associated markets or failure of related infrastructure.

UK retail central bank digital currency

113. The FPC had previously highlighted that innovation in payments could bring significant benefits for users, and that it viewed the ability to make payments safely and smoothly as critical to financial stability.

114. In light of the developments of new forms of digital money and their importance to UK financial stability, the FPC welcomed the joint consultation by HMT and the Bank, "The digital pound: a new form of money for households and businesses?" that had been published on 7 February 2023.[12] The consultation paper set out analysis on the potential case for a UK retail central bank digital currency ("digital pound") and consulted on the key features of a potential model. In the paper, the Bank and HMT judged it likely that a digital pound would be needed in the future and, while it was too early to decide whether to build the infrastructure for one, the next stage of preparatory work was justified.

[10] https://www.fsb.org/2022/10/regulation-supervision-and-oversight-of-crypto-asset-activities-and-markets-consultative-report/

[11] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1133404/TR_Privacy_edits_Future_financial_services_regulatory_regime_for_cryptoassets_vP.pdf

[12] https://www.bankofengland.co.uk/-/media/boe/files/paper/2023/the-digital-pound-consultation-working-paper.pdf?la=en&hash=5CC053D3820DCE2F40656E772D9105FA10C654EC

115. In its June 2021 Discussion Paper, the Bank had noted that demand for new forms of digital money and the impact on banks and credit conditions could create risks to financial stability. In this context, the FPC welcomed the latest consultation paper's consideration of potential financial stability risks, and the proposal to place limits on holdings of digital pounds, at least during an introductory period, in order to manage those risks.

Libor transition

116. The FPC received an update on the transition away from Libor. It continued to support the view that synthetic versions of Libor were a temporary solution, and that active transition of legacy contracts provided the best route to certainty for parties to contracts referencing Libor.

117. The Committee therefore welcomed the further reduction in the stock of legacy GBP Libor exposures, and consequently judged that the financial stability risk associated with GBP Libor had effectively been mitigated.

118. Significant progress had also been made in the adoption of the Secured Overnight Financing Rate (SOFR) across USD markets, ahead of USD Libor panel cessation at end-June 2023.

119. The FPC noted progress with active transition of legacy USD Libor exposures. The Committee encouraged participants to maintain momentum on transition efforts to minimise remaining exposures by end-June 2023, including taking effective actions to manage any operational challenges from the upcoming central counterparty (CCP) conversion events for cleared derivatives.

120. The FPC re-iterated its views that SOFR-based rates provided more robust alternatives than USD credit sensitive rates, and that these latter rates had the potential to reintroduce many of the financial stability risks associated with Libor.

121. The Committee also cautioned on the use of term SOFR, outside of the specific use cases recommended by industry working groups, to ensure markets transition to the most robust benchmarks.

Strong and simple initiative

122. The Committee was briefed on the PRA's Strong and Simple project. The PRA's Strong and Simple initiative seeks to maintain strength and resilience in the UK banking system while simplifying the prudential framework for small, domestic banks and building societies and reducing barriers to growth. The PRA had recently launched consultations on the first phase of the Strong and Simple regime, which covered liquidity and disclosure aspects for 'Simpler-regime' Firms – the smallest and least systemic banks and building societies. The

PRA planned to develop proposals for the capital framework for these firms over the coming year.

123. The FPC noted the importance of delivering the strong aspect of the regime as well as the simple aspect. The Committee also noted that recent experience in the US had highlighted the importance of maintaining robust capital and liquidity standards including for smaller firms. Staff planned to bring further analysis related to the Strong and Simple project to the Committee over the year as the project progressed.

The following members of the Committee were present at the 23 March 2023 Policy meeting:

Andrew Bailey, Governor
Colette Bowe
Sarah Breeden
Jon Cunliffe
Jon Hall
Randall Kroszner
Dave Ramsden
Nikhil Rathi
Elisabeth Stheeman
Carolyn Wilkins
Sam Woods

Gwyneth Nurse attended as the Treasury member in a non-voting capacity.

Ben Broadbent was unavoidably unable to attend owing to other official business. He communicated his views to the Governor beforehand.

In accordance with the relevant provisions of the Bank of England Act 1998:

- Sam Woods had previously notified the Committee of his wife's employment at the consulting firm, Flint Global. It had been announced on 13 February 2023 that his wife would lead a review of The Pensions Regulator. It was therefore agreed that Sam Woods would be recused from discussion of issues (and not receive papers) relating to The Pensions Regulator and – as a precaution given the connection – liability driven investment issues more broadly. The expectation was that this recusal would fall away when his wife's work with The Pensions Regulator was complete, but the position would be reviewed again at that point.

- Jon Hall had notified the Committee of his shareholding at Guardtime (a blockchain based information security provider). It was agreed that he would recuse himself from discussions on digital assets and central bank digital currency, and that he would not receive the related papers.

- In accordance with the relevant provisions of the Bank of England Act 1998, Carolyn Wilkins had notified the Committee of her Non-Executive Directorship of Intact Financial Corporation (including holding company of Royal Sun Alliance Group). It was agreed that she would recuse herself from discussions on insurance firms, which for this round included the discussion on the insurance stress test and climate change, and that she would not receive the related papers.

- Elisabeth Stheeman had notified the Committee of a close personal relationship linked to the UK Debt Management Office. It was noted that it had been previously agreed that Elisabeth would be recused from papers and decisions relating to gilt sales undertaken by the Bank of England and – as a precaution given the connection – Elisabeth was recused from discussion on sterling rates markets, given it included discussion of the gilt market.

Annex 1: Financial Policy Committee policy decisions

Outstanding FPC Recommendations and Directions (as at the date of the FPC's meeting on 23 March 2023).

On 23 March 2023, the FPC made the recommendation that:

- The severe but plausible stresses to which LDI funds should be resilient should account for historic volatility in gilt yields, and the potential for forced sales to amplify market stress and disrupt gilt market functioning. If LDI funds were not resilient to such a shock, their defensive actions could cause financial instability, tightening credit conditions for UK households and businesses. The FPC judged that that these factors meant that the size of the yield shock to which LDI funds should be resilient should be, at a minimum, around 250 basis points.
- Liquid assets held to ensure resilience in the event of such a shock should be unencumbered and immediately available. Fund managers should have scope to consider additional assets, which investors had authorised them to use to meet collateral demands. Managers should apply appropriate prudence in doing this, for example by applying suitable haircuts.
- This minimum level of resilience should be maintained in normal times but could be drawn down on in stress. Minimum resilience around this level would ensure that funds could absorb a severe but plausible historical stress and still have a remaining level of headroom necessary to operate during a period of recapitalisation. This approach was consistent with the regulatory approaches in place for some systemically important financial institutions, where their standards were designed to allow institutions to continue operating after withstanding a severe stress.
- Funds should take into account the nature of their exposures, including duration, leverage, and concentration of holdings, and the liquidity, duration, and convexity of collateral, in modelling their resilience to yield moves.
- Pension schemes using leveraged LDI should be expected to be able to deliver collateral to their LDI vehicles within five days. Funds and schemes unable to implement these operational standards should be required to be resilient to a larger shock, calibrated to their own operational timelines.
- LDI funds should maintain additional resilience over and above the minimum to manage day to day volatility in yields and account for other risks they might face,

including operational risks, in order to be able to maintain the minimum level of resilience in normal times. The amount of additional liquidity held should be calibrated by funds according to their own assessments of their exposures and operational capabilities and other regulatory requirements, as well as interest rate trends and levels of market volatility. While this additional liquidity was expected to vary between funds, when combined with the minimum resilience to yield shocks, overall resilience levels should be broadly consistent with those currently prevailing in current market conditions (i.e. 300-400 basis points). Liquid asset holdings might be safely reduced over time if fund managers were able to demonstrate increased resilience through operational improvements.

In addition, the FPC made the recommendation that:

- TPR takes action as soon as possible to mitigate financial stability risks by specifying the minimum levels of resilience for the LDI funds and LDI mandates in which pension scheme trustees may invest. To ensure that they were able in practice to do this, it was important that trustees had a simple mechanism for monitoring, and LDI funds disclosing, levels of resilience in dynamic markets.
- TPR should have the ability to employ effective monitoring tools, and to enforce as appropriate in cases of non-compliance with this resilience level. The FPC asked TPR to report back on how it intended to implement the recommendation.
- TPR should have the remit to take into account financial stability considerations on a continuing basis. This might be achieved, for example, by including a requirement to have regard to financial stability in its objectives, which should be given equal weight alongside other factors to which TPR is required to have regard. The FPC noted that in order to achieve this, TPR would need appropriate capacity and capability.

Other FPC policy decisions which remain in place

The following text sets out previous FPC decisions, which remain in force, on the setting of its policy tools. The calibration of these tools is kept under review.

Countercyclical capital buffer rate

The FPC agreed to maintain the UK CCyB rate at 2% on 23 March 2023, unchanged from its 28 November 2022 Policy meeting. At its June 2022 Policy meeting, the FPC agreed to increase the UK CCyB to 2%, with binding effect from 5 July 2023. This rate is reviewed on a quarterly basis. The UK has also reciprocated a number of foreign CCyB rate decisions – for more details see the Bank of England website.[13] Under PRA rules, foreign CCyB rates applying from 2016 onwards will be automatically reciprocated up to 2.5%.

[13] See the **Financial Stability section** of the Bank's website: **www.bankofengland.co.uk/financial-stability**.

Liability driven investment funds

On 28 November 2022, the FPC recommended that regulatory action be taken by TPR, in coordination with the FCA and overseas regulators, to ensure LDI funds remain resilient to the higher level of interest rates that they can now withstand and defined benefit pension scheme trustees and advisers ensure these levels were met in their LDI arrangements.

Mortgage loan to income ratios

In June 2014, the FPC made the following Recommendation (14/Q2/2): The Prudential Regulation Authority (PRA) and the Financial Conduct Authority (FCA) should ensure that mortgage lenders do not extend more than 15% of their total number of new residential mortgages at loan to income ratios at or greater than 4.5. This Recommendation applies to all lenders which extend residential mortgage lending in excess of £100 million per annum. The Recommendation should be implemented as soon as is practicable.

The PRA and the FCA have published their approaches to implementing this Recommendation: the PRA has issued a policy statement, including rules,[14] and the FCA has issued general guidance.[15]

Leverage Ratio

In September 2021, the FPC finalised its review of the UK leverage ratio framework, and issued a Direction and Recommendation to implement the outcome of the review as set out in its **October 2021 Record**.

In line with its statutory obligations, the FPC completed its annual review of its Direction to PRA. The FPC revoked its existing Direction to the PRA in relation to the leverage ratio regime, and issued a new Direction on the same terms as in September 2021 with the addition of discretion for the PRA to set additional conditions to the central bank claims exclusion.

The full text of the FPC's new Direction to the PRA on the leverage ratio is set out in the Annex of the **October 2022 Record** (see Annex), together with the original Recommendation (now implemented).

The PRA has published its approach to implementing this direction and recommendation[16].

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[14] See PRA Policy Statement PS9/14, '**Implementing the Financial Policy Committee's recommendation on loan to income ratios in mortgage lending**', October 2014: **www.bankofengland.co.uk/pra/Documents/publications/ps/2014/ps914.pdf.**
[15] See **www.fca.org.uk/publications/finalised-guidance/fg17-2-fpc-recommendation-loan-income-ratios-mortgage-lending.**
[16] **PS21/21 | CP14/21- The UK leverage ratio framework | Bank of England**

Annex 2: The FPC's assessment of the resilience of the UK banking system in light of developments in the global banking system

The following material on the stability of the UK banking system was provided to the Treasury Committee by the Governor of the Bank of England on 22 March 2023 as part of a written response to questions from that Committee on the resolution of SVB UK.

Assessment of the UK banking system

The UK banking system maintains robust capital and strong liquidity positions. It is well regulated – in line with standards implemented by UK authorities that are at least as great as those required by international baseline standards – and subject to robust supervision. The sector's profitability is strong, having improved as interest rates have increased, and it is well placed to continue supporting the economy in a wide range of economic scenarios, including in a period of higher interest rates. The FPC judges that the UK banking system remains resilient.

Recent events in the global banking system

Recent weeks have seen a number of banks fail or come under severe stress. Silicon Valley Bank (SVB), the 16th biggest US bank, failed. Higher interest rates had led to large falls in the value of a large portfolio of long-dated bonds that it was holding, which it had not hedged against falls in value if interest rates were to rise. Given that these bonds had high quality issuers, if SVB had held them to maturity they would have been unlikely to experience any cash losses on either the coupons or the repayment of the principal at maturity. But a rapid and very large increase in depositor withdrawals led to a need to sell assets quickly to pay depositors, which led to losses greater than the bank's capital could absorb, as a result of the low market value of its bonds. Following challenges in raising additional capital, depositor withdrawals accelerated and this led to the failure of the bank and the intervention by the US authorities.

The smaller US-based Signature Bank was also forced to close following SVB's failure. And some other regional US banks continue to be under stress. These US banks were not subject to the full application of some international regulatory standards on liquidity or capital. Problems with the US parent led to a loss of confidence in Silicon Valley Bank UK (SVB UK), and the Bank of England used its resolution powers for stabilising failing banks to write-down its Additional Tier 1 (AT1) and Tier 2 capital instruments, and transfer the shares in SVB UK to a private sector purchaser, HSBC UK Bank plc. We have provided further detail on this in response to your questions below.

SVB UK did not provide critical functions supporting the UK financial system. It did not hold significant deposits from financial institutions, and the UK banking and insurance sectors had limited direct and indirect exposures to SVB UK. As such, the direct risk of spillovers to UK banks or other financial institutions from the failure of SVB UK was limited. SVB was the only US regional bank with a UK footprint. Direct exposures of UK banks and insurers to other US regional banks are negligible.

Over the months leading up to SVB's failure, Credit Suisse had been experiencing liquidity stress, the causes of which were unrelated. It had faced significant outflows of client funds as a result of concerns over the firm's risk management practices and profitability. In the week following the failure of SVB, the US Securities and Exchange Commission (SEC) questioned Credit Suisse's financial statements, which led to a delay of the publication of its full financial figures. There was also a widely-publicised statement by a large shareholder of Credit Suisse that led commentators to call into question whether key investors would provide further support to the bank if needed. These events triggered a worsening of the liquidity stress that Credit Suisse had been facing, and an intensification of client outflows, ultimately leading to Credit Suisse being taken over by UBS, following an intervention by the Swiss authorities.

Interest rate risk in the UK banking system

Maturity transformation involves banks raising money through sources of funding that can be recalled over a relatively short time period – such as instant access or term deposits – and using the money to either lend over a longer period – for example through mortgages, unsecured consumer lending or corporate lending – or invest in securities that are longer dated. Frequently, the shorter term liabilities are floating rate or have short fixed rates, and the longer-term assets have rates fixed for longer periods. This exposes banks to interest rate risk.

Banks usually hold a portfolio of high quality bonds and other securities that they use for liquidity management purposes, such as when they face depositor outflows. Investment banks also hold a range of tradeable loans and securities for trading purposes. Assets like these are typically held at fair value by major UK banks, meaning they are reported at their market value in accounts and in the UK changes are immediately reflected in banks' capital ratios as market values move around, which has occurred in recent months as higher interest rates have reduced the value of bonds and other securities that they hold. Major UK banks and building societies typically account for around two-thirds of the bonds they hold in their banking books and almost all of the bonds they hold in their trading books on a fair value basis. But bonds held for liquidity management purposes can also be 'hold-to-collect' (on the assumption that they will be held to maturity); these are held at amortised cost, and changes in their market value are not taken through profits and capital ratios – unless a firm needs to sell them unexpectedly.

Accounting rules allow banks to value assets such as mortgages, corporate loans and bonds that they intend to hold to maturity at their amortised cost when they report them in their accounts.[17] The mortgages that many UK retail banks hold in large quantities tend to be issued with fixed interest rates over two to five years; banks routinely hedge some of their interest rate risks in mortgage lending using interest rate swaps.[18] Corporate lending is more mixed and comes with either fixed or floating rates. UK banks typically have proportionally smaller amortised cost bond portfolios compared with US banks. On average major UK banks' and building societies' bond portfolios held at amortised cost make up around 3% of their total assets.

Moves in market interest rates would not be recognised unless the asset is sold or otherwise disposed of for example, should they need to liquidate the assets quickly, as in the case of SVB mentioned above. These assets are generally illiquid, though they can be used as collateral for borrowing in a liquidity stress, for example for lending against pre-positioned collateral from the Bank of England as mentioned below.

The PRA assess all UK banks on their need to hold capital against the interest rate risk on these banking book assets, including any net open bond positions which are held at cost rather than fair value. This is done via an explicit capital charge in the Pillar 2A part of the capital framework, against 'interest rate risk in the banking book' (IRRBB). It is calibrated on forward-looking estimates of the impact of large shocks to the interest rate yield curve on the net position of their banking book.

Many banks actively manage their interest rate risk – taking into account the maturity and variability of interest rates on their funding and assets as a whole – using derivatives such as interest rate swaps. The derivatives that UK banks use for hedging are subject to strict regulation: interest rate swaps are subject to a clearing mandate, meaning that banks face and pay margin to a central clearing counterparty (CCP).

Interest rates and UK borrowers

Interest rates also affect the resilience of household and corporate borrowers, which influences the losses banks may incur on their credit portfolios in a stressed environment. The FPC has been closely monitoring the impact of higher interest rates on corporate sector interest cover ratios and household debt service ratios as part of its risk assessment.

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[17] The accounting framework which all listed UK banks are required to follow – the International Financial Reporting Standards (IFRS) – is more restrictive on the use of amortised cost accounting for securities than the US Generally Accepted Accounting Principles (GAAP), reflecting differences in banks business models.
[18] 5 year fixed interest rates are the most common product in the market for new UK mortgages. Around 20% of outstanding mortgages in the UK are on variable rates. Around another 15 to 20% of outstanding mortgages tend to reach maturity in any given year.

The FPC judged in the December Financial Stability Report that debt vulnerabilities are likely to increase in the near term. But the major UK banks are resilient, and have been stress tested to more severe scenarios.

The UK banking system is well regulated and subject to robust supervision

Since the global financial crisis of 2008, international authorities have established significantly more robust regulatory standards, including for bank capital and liquidity. The UK authorities have put in place a range of robust prudential standards, designed to ensure levels of resilience which are at least as great as those required by international baseline standards.

These include a liquidity framework and capital requirements that are calibrated to the risks faced by individual firms. These apply to all UK banks, including smaller UK banks and building societies than the major UK banks. Smaller banks and building societies (including UK subsidiaries of foreign banks) make a significant contribution to the real economy as they comprise approximately 25% of total bank and building society lending to the UK real economy.[19] Furthermore, smaller lenders play a proportionately larger role in some sectors such as commercial real estate (CRE), corporate lending and personal loan and overdraft lending. The PRA is currently considering measures to simplify regulatory requirements for the smallest UK banks (the ‘Strong and Simple’ Framework). However, there is no intention that any such simplifications will weaken the regime for small banks. SVB UK would not have come under the scope of the Strong and Simple Framework.

The UK’s liquidity framework has been designed in line with international standards and applies to all UK banks and building societies. This includes the Liquidity Coverage Ratio (LCR) and Net Stable Funding Ratio (NSFR). The LCR promotes the short-term resilience of the liquidity risk profile of banks, by requiring them to hold a large enough stock of high quality liquid assets to meet their payment obligations in the case of a severe short-term stress. The NSFR is intended to ensure that banks maintain a stable funding profile in relation to the composition of their assets and off-balance sheet activities. The NSFR focuses on protecting against liquidity risks over a longer horizon than the LCR metric.

UK banks are subject to robust supervision. The PRA's supervisory work on UK banks, which includes small banks and building societies, is intended to ensure that firms hold sufficient capital and liquidity to withstand severe but plausible stresses. This includes regular reviews of firms' capital and liquidity positions as well as sensitivities to interest changes on firms' assets and liabilities. As part of PRA rules, firms are expected to manage risks within clearly articulated risk appetites and capital allocated against aggregate risk exposures as part of the

[19] As reported in ‘Stress testing the UK banking system: key elements of the 2022 annual cyclical scenario’ the major UK banks (ie the eight banks taking part in the 2022 ACS) account for 75% of lending to the UK real economy.

UK capital setting framework. This approach mitigates the accumulation of large unhedged risk positions on firms' balance sheets.

Furthermore, the Senior Managers and Certification Regime (SM&CR), provides further safeguards by allocating responsibilities on a bank's business model, financial information and risk management (amongst other things) to the senior executive management and directors of banks which are subject to regulatory approval.

The UK banking system maintains robust capital and strong liquidity positions

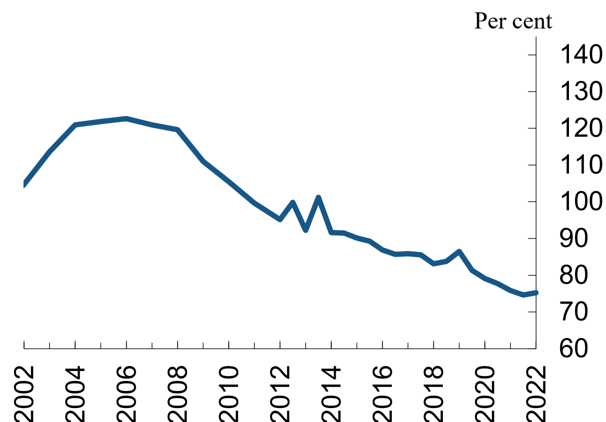
The UK banking system is well capitalised. The aggregate CET1 ratio for major UK banks stands at 14.6%, and smaller lenders have an aggregate CET1 ratio of around 18%. Asset quality is stronger now than in the run up to the global financial crisis.

Major UK banks have large liquid asset buffers (of £1,399bn), more than six times larger than the total size of major UK banks securities held at amortised cost in the banking book. Around two-thirds of these liquidity buffers are currently either in the form of cash or central bank reserves (£908bn). The loan to deposit ratio of major UK banks has reduced from 120% in 2008 to 75% in the latest reported data (Q4 2022) (Chart 1). In aggregate, major UK banks had a liquidity coverage ratio of 149%, a three-month rolling average LCR of 145% (Chart 2) and an aggregate NSFR of 136% as at February 2023, providing resilience to deposit outflows.

Smaller UK firms typically run larger liquidity surpluses over regulatory standards than major UK banks and around three-quarters of smaller firms' liquid asset buffers are held in Bank of England reserves. In aggregate, Category 2 and 3 UK firms[20] had a weighted average LCR of 246% and an NSFR of 147% as at February 2023, providing resilience to large deposit outflows.

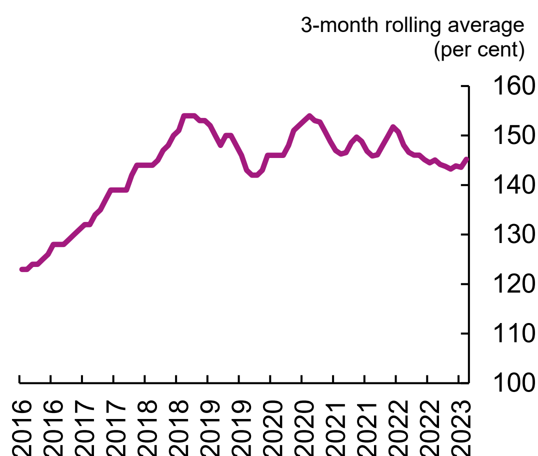
[20] As part of the PRAs risk assessment of firms, the significance of a firm and their potential impact on the stability of the UK financial system is assessed. This 'potential impact' reflects a firm's potential to affect adversely the stability of the system by failing, coming under operational or financial stress, or because of the way in which it carries out its business. All deposit-takers and designated investment firms the PRA supervises fall into the categories based on their impact. For further information on the PRA's categorisation of firms please see: **The Prudential Regulation Authority's approach to banking supervision - October 2018 (bankofengland.co.uk)**.

Chart 1: Major UK banks' loan-to-deposit ratio[21]



Source: Published accounts and Bank calculations.

Chart 2: Major UK banks' aggregate LCRs[22]



Source: Published accounts and Bank calculations.

UK banks also have access to a range of liquidity facilities which allow banks who meet the Bank of England's supervisory standards, and who have the right collateral, to access reliable supplies of liquidity by borrowing against their assets at a predictable cost. The Bank operates on an "open for business" basis which means that banks can use the liquidity facilities on a day-to-day basis. But pricing means they are likely to be of particular benefit

[21] The loan to deposit ratio is calculated as loans and advances to customers over customer deposits. The series starts in 2000 with annual data until the end 2012. From 2013 the data changes to half-yearly. The peer group includes Barclays, HSBC, Lloyds, Nationwide, NatWest, Santander UK, Standard Chartered, Virgin Money UK (from end-2020) and HBOS (until 2009). Previously, this indicator also included Alliance and Leicester, Bank of Ireland, Bradford & Bingley, Britannia, Cooperative Bank, National Australia Bank, Northern Rock and Santander.

[22] The liquidity coverage ratio is calculated as high-quality liquid assets over stressed net-cash outflows over 30 calendar days. The peer group includes Barclays, HSBC, Lloyds, Nationwide, NatWest, Standard Chartered and Santander UK. The series starts from Dec-2015 from which a 3 month rolling average is derived.

when an interruption to private markets occurs. The facilities that the Bank offers also include regular multilateral auctions (e.g. the Indexed Long-Term Repo which provides 6 month liquidity on weekly basis, weekly 7 day US dollar repo, and the Contingent Term Repo Facility) as well as bilateral facilities available on demand (such as the Discount Window Facility). The Bank accepts a wide range of collateral which can include assets that are less liquid and harder to sell quickly, such as mortgages or other loans. Banks can “pre-position” these less liquid assets with the Bank of England enabling due diligence and valuation in advance. The additional amount the Bank could lend through its market operations based on excess pre-positioned collateral is around £300bn.

Stress tests show that the UK banking system is well placed to continue supporting the economy throughout a wide range of economic conditions

Banks’ pre-provision profitability influences their ability to absorb losses as they arise, by supporting their capital positions over time. Major UK banks posted pre-provision profits of around £56bn in 2022, a year-on-year increase of 37%, supporting UK banks’ capital ratios and ability to support the economy.

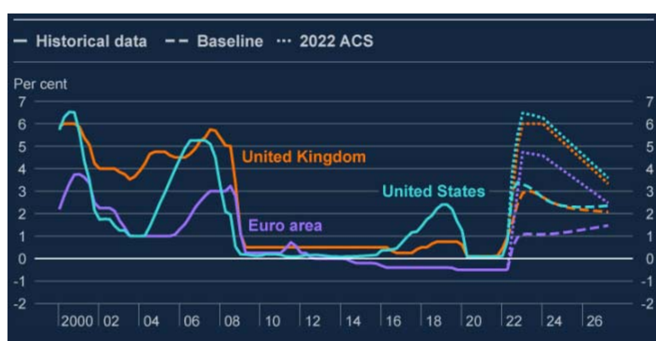
Stress tests have shown that the banking system is resilient to a wide range of severe economic outcomes. Since 2014, the major UK banks have been tested in a usually annual coordinated exercise to scenarios more severe than the global financial crisis (GFC) as part of the Bank of England’s Annual Cyclical Scenario (ACS) stress test programme, as well as during the desk based exercises during the Covid pandemic and the 2021 Solvency Stress Test.

Table 1: Changes to key variables in the 2019 and 2022 ACS stress test scenarios[23]

Per cent

Variable	2022 ACS	2019 ACS	Global financial crisis
UK real GDP	-5.0	-4.7	-5.9
World real GDP	-2.5	-2.6	-1.9
UK unemployment (change)	4.7	5.2	3.2
UK unemployment (peak level)	8.5	9.2	8.4
UK residential property prices	-31	-33	-17
UK CRE prices	-45	-41	-42
UK Bank Rate	5.1	3.3	-5.2
UK equity prices	-45	-41	-40

Chart 3: Policy rates in the UK, US and EA in the 2022 ACS scenario[24]



[23] Source: For further details please see *Stress testing the UK banking system: 2019 results*.

[24] Source: For further details please see *Stress testing the UK banking system: key elements of the 2022 annual cyclical scenario*

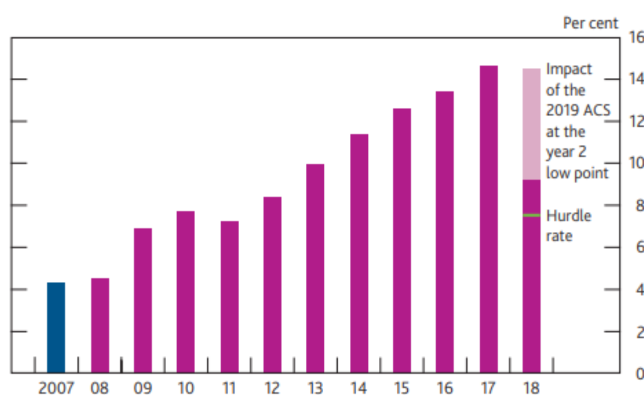
The last ACS stress test conducted in 2019, included a rapid rise in Bank Rate, reaching 4% after a year, as well as a sharp rise in longer-term bond yields (to almost 7% in the UK), and a large drop in economic activity in the UK (4.7%) and around the world (2.6%) (Table 1). Since then, to assess resilience during the Covid pandemic, the Bank conducted a desk based stress test exercise and a reverse stress test for the largest major UK banks in 2020, followed by a solvency stress test in 2021. The 2022 ACS is currently ongoing, and includes a rise in Bank Rate, which peaks at around 6%, and interest rates around the world increasing materially alongside (Chart 3). The results are due to be published in the July 2023 Financial Stability Report.

Table 2: Contributions to the change in the aggregate CET1 capital ratio in the 2019 ACS[25]

Percentage points (unless otherwise stated)

	CET1 ratio(b)
End-2018	**14.5%**
Baseline (at CET1 capital/leverage low point)(d)(e)	**14.3%**
Impairments	-5.7
of which mortgages	-1.2
of which consumer credit	-1.4
of which lending to businesses	-2.9
of which other impairments	-0.2
Traded risk losses(f)	-2.0
Risk-weighted assets / leverage exposure(g)(h)	-1.7
IFRS 9 transitional relief	1.0
Misconduct costs	-0.7
Net interest income	1.3
of which sterling	0.4
of which non-sterling	0.8
Reductions in discretionary distributions in stress	2.2
of which dividends	1.4
of which variable remuneration	0.4
of which AT1 coupons and other distributions	0.4
Expenses and taxes(i)	0.9
Other(j)	-0.3
Stress end low point (before AT1 conversion)	**9.3%**
Impact of AT1 conversion	0.6
Stress end low point (after AT1 conversion)	**9.9%**

Chart 4: Aggregate CET1 capital ratio of major UK banks since the financial crisis[26]



Smaller banks that are not part of this annual stress test must carry out their own stress testing. The PRA publishes a pair of scenarios annually to serve as a guide for banks and building societies. These scenarios have typically been derived from the ACS, but might feature some variants. For example in 2022, the PRA published a “rates up” scenario identical to the ACS, and a “rates down” scenario of similar severity. The scenarios serve as a template and severity benchmark for firms to support their own internal capital adequacy assessment process, details of which can be found in a PRA supervisory statement (see **SS31/15**). Smaller firms are also subject to desk-based stress testing by supervision using the firms’ standard regulatory data submissions.

25 Source: For further details please see ***Stress testing the UK banking system: 2019 results***.

26 Source: For further details please see ***Stress testing the UK banking system: 2019 results***.

Overall implications for financial stability

In conclusion, the UK banking system is resilient, maintaining robust capital and strong liquidity positions. It is resilient to the current economic outlook and has the capacity to support the economy in a period of higher interest rates even if economic conditions are worse than forecast.

The FPC will continue to monitor developments closely, in particular for the risk that indirect spillovers impact the wider UK financial system. There remain channels through which UK economic conditions could be affected and possible future strains from banks outside the UK. These include any lasting impact on bank funding costs, and the potential for that to increase the cost of borrowing for UK households and businesses.

And – should there be further volatility and/or sharp moves in asset prices – there are risks it could trigger the crystallisation of previously identified vulnerabilities in market-based finance, amplifying any tightening in credit conditions.