Bank of England

Financial Policy Summary and Record of the Financial Policy Committee meetings on 28 November 2022 and 8 December 2022

13 December 2022

This is the record of the Financial Policy Committee meetings held on 28 November and 8 December 2022.

It is also available on the Financial Policy Summary and Record page of our website: **https://www.bankofengland.co.uk/financial-policy-summaryandrecord/2022/december-2022**

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 14 March 2023 and the record of that meeting will be published on 29 March 2023.

Financial Policy Summary, 2022 Q4

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.

Financial market developments and global debt vulnerabilities

The global economic outlook has deteriorated further since the July 2022 Financial Stability Report and financial conditions have tightened significantly. Monetary authorities have been responding to high levels of inflation, driven by higher and more volatile energy prices, domestic inflationary pressures and global supply chain issues following the pandemic. Higher central bank policy rates, alongside expectations of further rises, have led to very material and rapid increases in yields on long-term government bonds globally.

The deterioration in the global economic outlook, together with heightened uncertainty and the potential for further adverse geopolitical developments, has also led to falls in risky asset prices and a reduction in investor risk appetite. Financing conditions for households and businesses have tightened significantly. Financial market volatility has been elevated. Overall, moves in risky asset prices have been generally orderly, but the risk of sharp adjustments from further developments in the outlook remains.

Sharp increases in prices, including of energy, tighter financial conditions, and the worsening outlook for growth and unemployment will continue to weigh on debt affordability for households, businesses and governments globally. The FPC judges that the risks of global debt vulnerabilities crystallising have increased.

In the current environment, the FPC is monitoring geopolitical and other risks very closely and taking them into account when assessing the resilience of the UK financial system, including in the context of the 2022 annual cyclical scenario (ACS) stress test. It will work with other authorities at home and abroad, including the Prudential Regulation Authority (PRA), to consider whether any further action is required to enhance the resilience of UK banks to such risks.

UK household and corporate debt vulnerabilities

Household finances are being stretched by increased living costs and rising mortgage payments. Households are adjusting spending behaviour as real income is squeezed, although widespread signs of financial difficulty among UK households with debt have yet to emerge. The risk that indebted households default on loans, or sharply reduce their spending, has increased.

Pressures on household finances will increase over 2023. In total around half of owner occupier mortgages (around 4 million) will be exposed to rate rises over the next year. Falling real incomes, increases in mortgage costs and higher unemployment will place significant pressure on household finances. The share of households with high cost of living adjusted mortgage debt-servicing ratios would increase over 2023 to 2.4%, assuming current market pricing of Bank Rate, but remain lower than in the global financial crisis (GFC). Households are also experiencing increased pressure on their ability to service other types of consumer debt, such as credit cards and personal loans.

While pressures will increase, the FPC judges that households are more resilient now than in the run-up to the GFC in 2007 and the recession in the early 1990s. Households are in aggregate less indebted compared to the peak that preceded the GFC. And the proportion of disposable income spent on mortgage payments in aggregate is projected to rise but remain below the peak levels during the GFC and the 1990s recession. The core UK banking system is also more resilient, in part due to lower risk lending to households. The greater resilience of banks, and the higher standards around conduct, also means they are expected to offer a greater range of forbearance options. As such, the increased pressure on UK households is not expected to challenge directly the resilience of the UK banking system.

In aggregate, UK businesses are entering the period of stress in a broadly resilient position, but are under increased pressure from economic and financial developments. Earnings have risen and leverage has fallen in 2022 as the effects of the Covid pandemic have abated. But within the aggregate, there are a number of vulnerable companies with low liquidity, weak profitability, or high leverage. And some businesses are facing other pressures from higher costs of servicing debt, weaker earnings, and continued supply chain disruption. **These pressures are expected to continue to increase over 2023, especially for smaller companies that are less able to insulate themselves against higher rates.**

Increased pressure on the corporate sector is not expected to pose material risks to the resilience of the UK banking system, but will leave businesses more vulnerable to future shocks. There are some emerging signs of stress among corporate borrowers. Corporate insolvencies have increased, in particular among small and medium-sized enterprises. Financing conditions have tightened, particularly for risky firms, with some funding markets closed. But businesses are not yet showing signs of reducing employment or investment sharply in response to the economic downturn.

UK external balance sheet vulnerabilities

Reflecting its position as one of the most financially open economies in the world, many UK assets are held by overseas investors, meaning the UK is exposed to external financing risks. The UK's external liabilities are significantly higher than for other G7 economies. The size of these liabilities means that the behaviour of foreign investors, and

their perceptions of the UK macroeconomic policy framework, can have a material impact on UK financial conditions.

There were signs that foreign investor demand for UK assets weakened in September and early October, but this has since reversed. Over the second half of 2022 as a whole, UK asset prices have moved broadly in line with euro-area equivalents. Any future UK-specific shock to investor appetite for UK assets would likely reduce their prices. Some of the impact of such a move on the UK's external balance sheet could be offset by moves in the exchange rate. This is in part because the UK's external assets at current market value are estimated to be worth significantly more than its liabilities.

A particularly large and rapid fall in foreign investor demand for UK assets could pose a more acute risk to UK financial stability if it led to difficulties refinancing UK external liabilities, but the FPC judges that this risk at present is low. UK banks have robust foreign currency liquidity positions in aggregate and liquidity regulations require greater liquidity buffers for greater exposures to refinancing risk.

UK bank resilience

The FPC continues to judge that the UK banking system is resilient to the current economic outlook and has capacity to support lending, even if economic conditions are worse than forecast. Major UK banks' capital and liquidity positions remain strong and pre-provision profitability has increased. They are therefore well placed to absorb shocks and continue meeting the credit needs of households and businesses. In aggregate smaller lenders are also well capitalised and have strong liquidity positions.

Asset quality remains relatively strong – although some forms of lending, such as buy-to-let, higher loan to value and higher loan to income mortgage lending, and lending to lower rated and highly leveraged corporates, are more exposed to losses – as are those lenders that are more concentrated in those assets.

There is evidence that the major UK banks are tightening their lending standards by adjusting their appetite for lending to riskier borrowers as risks have increased, consistent with the worsening macroeconomic outlook. Excessive restrictions on lending would prevent creditworthy households and businesses from accessing funding. This would be counterproductive, harming both the wider economy and ultimately the banks themselves. **The FPC will continue to monitor UK credit conditions for signs of unwarranted tightening.**

The FPC has previously judged that the UK banking system is resilient to a wide range of severe economic outcomes, and is assessing major UK banks against a further severe shock in the 2022 ACS. The results will be published in Summer 2023.

The UK countercyclical capital buffer rate

The FPC is maintaining the UK countercyclical capital buffer (CCyB) rate at 2%, due to come into effect on 5 July 2023. The global and UK economic outlooks have deteriorated and financial conditions have tightened. The FPC judges that the UK banking system can absorb the impact of the expected weakening in the economic situation while continuing to meet credit demand from creditworthy households and businesses.

Vulnerabilities that could amplify future economic shocks remain. Maintaining a neutral setting of the UK CCyB rate in the region of 2% helps to ensure that banks continue to have sufficient capacity to absorb further unexpected shocks without restricting lending in a counterproductive way.

Cryptoassets

Cryptoasset prices have continued to decline sharply. The sudden failure of FTX – a large conglomerate offering cryptoasset trading and other associated services – has highlighted a number of vulnerabilities. **The FPC continues to judge that direct risks to UK financial stability from cryptoassets remain limited. But these events have highlighted how systemic risks could emerge if cryptoasset activity and interconnectedness with the wider financial system increase. They underscore the need for enhanced regulatory and law enforcement frameworks to address developments in crypto markets and activities.** Financial institutions and investors should take an especially cautious and prudent approach to any adoption of these assets until the necessary regulatory regimes are in place.

The resilience of market-based finance

Tightening financing conditions and greater volatility, alongside a number of economic shocks, have caused long-standing vulnerabilities in market-based finance (MBF) to crystallise in a number of areas over the past three years.

These episodes underline the need to develop and adopt policy reforms to increase resilience across the system of MBF. The Financial Stability Board (FSB) has a comprehensive international work programme in train focused on increasing the resilience of money market funds and open-ended funds, improving margin practices and understanding drivers of illiquidity in core funding markets, including non-bank financial institution (NBFI) leverage.

The FPC welcomes the FSB's recent progress report to G20 leaders and the proposed work plan for 2023, which includes developing policy recommendations that seek to address vulnerabilities. The Bank and FPC continue to support strongly this programme of international work. **In 2023 international and domestic regulators urgently need to**

develop and implement appropriate policy responses to address the risks from MBF. Absent an increase in resilience, the sharp transition to higher interest rates and currently high volatility increases the likelihood that MBF vulnerabilities crystallise and pose risks to financial stability.

Alongside this international work, the Bank will continue to work to reduce vulnerabilities domestically where it is effective and practical. To support this, there is a need to develop stress-testing approaches to understand better the resilience of NBFIs to shocks and their interconnections with banks and core markets. **The Bank will run, for the first time, an exploratory scenario exercise focused on NBFI risks, to inform understanding of these risks and future policy approaches. Further details will be set out in the first half of 2023.**

The resilience of liability-driven investment funds

In late September, UK financial assets saw severe repricing, particularly affecting long-dated UK government debt. The rapid and unprecedented increase in yields exposed vulnerabilities associated with liability-driven investment (LDI) funds in which many defined benefit pension schemes invest. This led to a vicious spiral of collateral calls and forced gilt sales that risked leading to further market dysfunction, creating a material risk to UK financial stability. This would have led to an unwarranted tightening of financing conditions and a reduction in the flow of credit to households and businesses. In response to this threat to UK financial stability, 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.

This episode demonstrated that levels of resilience across LDI funds to the speed and scale of moves in gilt yields were insufficient, and that buffers were too low and less usable in practice than expected, particularly given the concentrated nature of the positions held in the long-dated gilt market. While it might not be reasonable to expect market participants to insure against the most extreme market outcomes, it is important that shortcomings are identified and action taken to ensure financial stability risks can be avoided in future. **There is a clear need for urgent and robust measures to fill regulatory and supervisory gaps to reduce risks to UK financial stability, and to improve governance and investor understanding.**

The FPC is of the view that LDI funds should maintain financial and operational resilience to withstand severe but plausible market moves, including those experienced during the recent period of volatility. This should include robust risk management of any liquidity relied upon outside LDI funds, including in money market funds. The FPC welcomes, as a first step, the recent guidance published by The Pensions Regulator (TPR) in this regard. The FPC also welcomes the recent

statements by the Financial Conduct Authority (FCA) and overseas regulators on the resilience of LDI funds.

Given the identified shortcomings in previous levels of resilience and the challenging macroeconomic outlook, the FPC recommends that regulatory action be taken, as an interim measure, by TPR, in co-ordination 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 are met in their LDI arrangements.

Following this, regulators should set out appropriate steady-state minimum levels of resilience for LDI funds including in relation to operational and governance processes and risks associated with different fund structures and market concentration. Further steps will also need to be taken to ensure regulatory and supervisory gaps are filled, so as to strengthen the resilience of the sector. The Bank will continue to work closely with domestic and international regulators so that LDI vulnerabilities are monitored and tackled.

Banks, as providers of funding to the LDI sector, should apply a prudent approach when providing finance to LDI funds, taking into account the resilience standards set out by regulators and likely market dynamics in relevant stressed conditions. **The FPC supports further work by the PRA and FCA to understand the roles of firms that they regulate in the recent stress, focusing particularly on their risk management, and to investigate lessons learned.**

Record of the Financial Policy Committee on 28 November 2022 and 8 December 2022

1. The Committee met on 28 November and 8 December 2022 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 outlook and financial market developments

2. The global economic outlook had deteriorated further since the July 2022 Financial Stability Report (FSR) and financial conditions had tightened significantly. The projections for global activity set out in the Monetary Policy Committee's (MPC's) November 2022 Monetary Policy Report (MPR) were materially weaker than in the May 2022 MPR. Monetary authorities had been responding to high levels of inflation, driven by higher and more volatile energy prices, domestic inflationary pressures and global supply chain issues following the pandemic. Higher central bank policy rates, alongside expectations of further rises, had led to very material and rapid increases in yields on long-term government bonds globally. 10-year advanced economy government bond yields had risen by over 200 basis points since the start of the year.

3. The deterioration in the global economic outlook, together with heightened uncertainty and the potential for further adverse geopolitical developments, had also led to sharp falls in risky asset prices, a reduction in investor risk appetite, and elevated financial market volatility since the start of the year. Financing conditions for households and businesses had tightened significantly. Advanced economy equity prices had fallen by around 10-20% since the start of the year, although they had picked up from the low points reached in September and October. Similarly, investment grade corporate bond spreads had widened significantly over the course of the year, before falling back since the Q3 Policy meeting to stand c.45-90 basis points higher than in January. Spreads for riskier credit products, such as collateralised loan obligations and leveraged loans, had widened materially during H2 from the middle of their historic distribution to the upper quartile. The FPC judged that, overall, moves in risky asset prices had been generally orderly, but the risk of sharp adjustments from further developments in the outlook remained. These could be amplified by existing vulnerabilities in the system of market-based finance (MBF) and continued challenging market liquidity conditions.

4. Energy prices increased sharply in the immediate aftermath of Russia's illegal invasion of Ukraine. Although they had broadly decreased from their peaks, some physical energy

prices had remained elevated and were expected to do so in the long term. For example, price across the UK natural gas futures curve were on average around 85% higher than they were at the start of the invasion. Power prices had also been volatile over the quarter, particularly contracts referencing the first quarter of 2023. Activity and liquidity in these markets remained muted, as the total number of outstanding exchange traded EU and UK gas derivatives contracts had fallen by around 50% compared to 2021. On 17 October, the Bank and HM Treasury launched the Energy Markets Financing Scheme (EMFS), which was designed to support, as a backstop, otherwise solvent energy companies to meet liquidity demands from margin calls arising from hedging activity in over the counter (OTC) and exchange-traded markets. A number of European countries had introduced similar liquidity support schemes.

5. The FPC noted that, amid high volatility, liquidity conditions in government bond markets globally had remained challenging, with bid-offer spreads in government bond markets in the UK, US and euro-area remaining elevated relative to historical averages. The FPC had previously noted that such deterioration in liquidity conditions was largely to be expected, given the levels of interest rate volatility and uncertainty. Liquidity in UK government bond markets had been exceptionally challenging at some points since the FPC's Q3 Policy meeting. Although gilt market functionality had since partially recovered, liquidity remained poor relative to 2022 H1, and relative to global peers.

6. In late September, UK financial assets saw severe repricing, particularly affecting long-dated UK government debt. As a result, many liability driven investment (LDI) funds became forced sellers into an illiquid market. This had amplified moves in UK government bond yields, especially in long-dated bonds, and UK risky asset prices had underperformed relative to international peers. The year to date moves in UK gilt yields had largely fallen back in line with global peers since then, and risky asset prices had retracted some of their moves.

7. Liquidity conditions in sterling corporate bond markets were poor in September and early October as pension and LDI funds sold credit assets to build liquidity buffers. Sales had been temporarily absorbed by the dealer community, although bid-ask spreads had risen materially. Conditions improved as buyers re-entered the market, and bid-ask spreads settled at more normal levels.

8. Weaker risk appetite had also been reflected in primary credit markets, where issuance had been low, particularly for some riskier borrowers. There had been no issuance of sterling high yield debt since April, which was the longest period of no issuance since 2011. Issuance in US dollar and euro denominated high yield markets had also been very subdued, continuing a year-to-date trend, with issuance down c.65-75% relative to recent years' averages. And leveraged lending and collateralised loan obligation issuance slowed in H2 relative to historical averages. For larger, less risky borrowers, primary markets had generally remained open, with issuance of investment grade debt 30-40% lower than would have been normal for this point in the year.

Global debt vulnerabilities

9. The FPC judged that the risks of global debt vulnerabilities crystallising had increased in light of the further weakening in the global economic outlook, and the material tightening in global financial conditions. Geopolitical tensions were also elevated and there was potential for further adverse geopolitical developments. These developments continued to pose a material risk to UK financial stability through economic and financial spillovers.

10. Sharp increases in prices, including of energy, tighter global financial conditions and the worsening outlook for growth and unemployment would continue to weigh on debt affordability for households, businesses, and governments globally. Increased prices had reduced consumer demand and increased the cost of production for a range of businesses. This, along with the higher interest rate environment, was likely to weigh on debt affordability, particularly for highly leveraged businesses. The FPC had previously highlighted vulnerabilities from highly leveraged corporate borrowing, particularly in the US. The stock of outstanding leveraged lending in the US had increased from around $2 trillion in 2017 to $3.5 trillion as of the end of September 2022. Such lending was typically floating rate and so sensitive to increasing interest rates.

11. The material tightening in global financial conditions would also weigh on households' ability to service their debt in some countries. Mortgage rates had risen sharply in the US. However, most households were likely to be shielded from increasing rates since around 80% of mortgage debt had been originated on fixed terms of more than 15 years. In addition, nearly all outstanding mortgages were at loan-to-value (LTV) ratios of 80% or less suggesting that most households were likely to be able to absorb a significant fall in house prices before falling into negative equity. However, a slowdown in the US housing market could have knock-on effects to the wider financial system, for example through holdings of mortgage backed securities. Prices of financial assets tied to the US housing market had fallen sharply. Although mortgage rates had increased by less in the euro-area than the US, some euro-area borrowers were likely to be exposed to rising interest rates.

12. Despite these potential vulnerabilities, analysis from euro-area and US authorities showed their banking systems were expected to remain resilient to prospective increases in losses on lending. The November 2022 European Central Bank (ECB) Financial Stability Review showed that the major euro-area banks had robust capital positions, with an average Common Equity Tier 1 (CET1) capital ratio around 15% as of 2022 Q2. The November 2022 Federal Reserve Board Financial Stability Report noted that banks' risk-based capital ratios had remained within the range established over the previous decade and the Federal Reserve Board's 2022 stress test indicated that large US banks would maintain capital ratios well above minimum risk-based requirements during a substantial economic downturn.

13. Government support measures to mitigate the impact of high energy prices on households and businesses would raise public debt levels in some countries. The FPC had previously

highlighted vulnerabilities created by high public debt levels in the euro-area, including interlinkages between banks and sovereigns. Such vulnerabilities could intensify in an environment of tightening financial conditions. Following a widening in spreads to German bunds earlier in the year and the recent rise in rates on long term German bonds, yields on 10-year Italian government debt had increased to over 4% in mid-October, but had since fallen back. The ECB's Transmission Protection Instrument might help to mitigate the risk of a further widening in spreads by allowing it to make secondary market purchases of securities issued in jurisdictions that are experiencing a deterioration in financing conditions not warranted by country-specific fundamentals.

14. The Chinese economy had slowed, in part as a response to ongoing Covid restrictions as cases had increased. Debt vulnerabilities related to the Chinese property market had continued to crystallise. Property prices had continued to fall and were now on average 2.6% lower than their 2021 Q3 peak, and property investment had fallen by around 16% in the year to October. In addition to the risks to public health associated with increases in Covid cases, further lockdowns were likely to weigh on economic activity. The likely effect of the current slowdown on UK financial stability appeared limited, but a sharper or broader slowdown in China could have more significant spillovers to the UK.

15. High energy costs, tightening financial conditions and the strengthening US dollar would weigh on debt affordability in a number of emerging market economies, but currently posed limited risks to UK financial stability. In particular, energy importers and those with high levels of dollar-denominated debt or large current account deficits were likely to be most exposed. Dollar-denominated government bonds were trading at distressed levels for a number of smaller non-China emerging market economies (NCEMEs), but larger NCEMEs such as India and Brazil had been less affected so far. Stress in larger and more established NCEMEs would be more likely to impact negatively on UK financial stability.

16. In the current environment, the FPC was monitoring geopolitical and other risks very closely and taking them into account when assessing the resilience of the UK financial system, including in the context of the 2022 annual cyclical scenario (ACS) stress test. It would work with other authorities at home and abroad, including the Prudential Regulation Authority (PRA), to consider whether any further action was required to enhance resilience of UK banks to such risks.

UK economic outlook

17. The FPC judged that UK economic conditions had deteriorated and financial conditions had tightened significantly over 2022, and that the outlook for the UK economy had worsened significantly in recent months. The Committee noted that the MPC's latest central forecast as set out in the November 2022 MPR was for the UK to be in recession for a prolonged period.

18. High food and energy costs, and other supply chain issues continued to feed through into producer and consumer prices. At the time of the Policy meetings, CPI inflation was 11.1%, and the MPC had expected inflation to remain high at over 10% in 2022 Q4 and 2023 Q1, before falling back sharply to some way below the 2% target in two years' time. However, domestic inflationary pressures were expected to remain strong over the next year, and the MPC had judged that the risks to these inflation projections were skewed to the upside.

19. There had been a significant increase in household and corporate borrowing costs. The two-year overnight interest swap rate had risen to 4.3% in late November, from 0.9% in December 2021, leading to increases in the costs of debt for households and businesses.

UK debt vulnerabilities

UK household resilience

20. Household finances had become stretched by increased living costs and rising mortgage payments. Based on the MPC's November forecast, UK unemployment was expected to rise by 1.2 percentage points by the end of 2023, from historically low recent levels, and household income growth was expected to fall in real terms over the next year.[1] This would make it harder for households to service debt, and increased the risk that indebted households default on loans, or sharply reduce their spending.

21. Pressures on household finances would increase over 2023. As of June 2022, around half of owner-occupier mortgages (or around 4 million) would be exposed to higher mortgage interest rates by the end of 2023. Based on market interest rates at the end of November 2022, mortgagors that were currently on fixed rates set to expire by the end of 2023 were facing average monthly repayment increases of around £250 upon refinancing to a new fixed rate. For an average mortgagor household, this would mean that their monthly payments would increase from £750, around 12% of average mortgagor household pre-tax income, to £1,000, around 17% of their pre-tax income.

22. Falling real incomes, increases in mortgage costs, and higher unemployment, would place further significant pressure on household finances. 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 2.4% of all households, or around 670,000, based on market expectations for Bank Rate as at late November. This share was significantly higher than what had been observed in recent years and was starting to approach levels comparable to the proportion of households with high debt servicing burdens around the start of the global financial crisis (GFC).

[1] In the run-up to the FPC's Policy meeting, the FPC had discussed with the MPC the MPC's November 2022 MPR forecast and the impact of household indebtedness on consumption in view of the current environment.

23. Compared to previous periods of stress, the relatively low debt servicing burden forecast by the end of 2023 partly reflects the fact that a much greater proportion of households with mortgages now have fixed rate mortgages. This means that households have more time to adjust before rate rises start to affect their finances. Beyond 2023, the share of households with high debt servicing burdens could rise further. Many factors could place longer-term pressure on households' cost-of-living adjusted DSRs, including continued falls in real incomes, persistently higher interest rates, and a further deterioration in the macroeconomic outlook leading to increases in unemployment.

24. Households had also experienced increased pressure on their ability to service other types of consumer debt, such as credit cards and personal loans. Relative to mortgage rates, interest rates on consumer credit products are typically higher but are not as sensitive to increases in Bank Rate, so interest rates on these products had not increased as sharply. Households' ability to service consumer credit debts would also be strongly affected by any future rises in unemployment, and by increases in the costs of essential goods.

25. Buy-to let-mortgagors were particularly vulnerable to interest rate rises. Around 85% of major UK lenders' buy-to-let mortgages were interest only, so tighter financial conditions had a greater proportionate impact. Landlords could respond by passing on costs. Were landlords to seek to offset the projected rise in buy-to-let mortgage costs, it was estimated that they would need to increase their rental incomes by around 20%. This would increase the cost of housing for renters, which might affect their resilience. This could lead renters to default on unsecured credit, or cut consumption sharply, both of which could amplify the economic downturn. However, the current share of buy-to-let mortgagors with an Interest Coverage Ratio (ICR) below 125% (the current industry standard for affordability of buy-to-let mortgages) was just 3%. This implied that many landlords ought to be able to absorb at least some of these costs.

26. Some landlords might choose to sell properties rather than bear the greater mortgage costs. If significantly large numbers chose to sell, this could place additional downward pressure on house prices. In turn, this could affect banks' LTV distributions, which are an important driver of the losses a lender would face if households defaulted on their mortgages, although LTVs on buy-to-let mortgages were low.

27. While the pressure on UK households would increase, the FPC judged that households were more resilient now than in the run-up to historic periods of stress. Households are in aggregate less indebted compared to the peak that preceded the GFC. The ratio of aggregate debt-to-income has been broadly stable over recent years at around 125%, well below the peak of around 150% preceding the GFC. Further, aggregate household mortgage DSRs were currently at around 5.5%, compared to around 9% and around 10% in the period preceding the GFC and the 1990s recession respectively. Aggregate household mortgage DSRs were projected to rise but remain below the peak levels during the GFC and the 1990s

recession. Likewise, unemployment levels, which are a strong indicator of household distress, were very low in historical terms at 3.6%, but were expected to rise.

28. Further, the FPC judged that the core UK banking system was more resilient than in previous downturns, in part due to less risky lending portfolios to households. The greater resilience of banks, and the higher standards around conduct, also meant that they were expected to offer a larger range of forbearance options. As such, the FPC did not expect the increased pressure on UK households to challenge directly the resilience of the UK banking system. In aggregate, the 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. Less than 10% of lenders' current owner-occupier mortgage exposures were at LTVs of greater than 75%, compared to around 25% preceding the GFC. As such, very few existing borrowers are expected to be pushed into negative equity. This also reflected significantly stronger lending practices than those preceding historic crises; around 40% of new lending was in excess of 90% LTV in 1991, compared to less than 20% over 2022.

29. The FPC noted that while households were adjusting spending behaviour as real income was being squeezed, to date, widespread signs of financial difficulty among UK households with debt had yet to emerge. Mortgage arrears remained subdued by historic standards and lenders had not realised large losses, or changed the levels of forbearance they have extended. The proportion of mortgages in arrears of 6 months or more had remained at around 0.5% over 2022. This was comparable to pre-Covid levels and much lower than peaks of 3.5% in 1992 and 1.4% in 2009. The share of consumer credit loans with a significant increase in credit risk had risen but remained at pre-pandemic levels.

UK corporate resilience

30. The FPC judged that the material deterioration in the economic outlook, higher interest rates, weaker earnings, and continued supply chain disruption would increase pressure on corporates. However, the FPC noted that, in aggregate, corporate balance sheets had strengthened since the pandemic and UK businesses had entered the period of stress in a broadly resilient position. Businesses had continued to repay more finance from banks and financial markets than they raised in 2022 and corporate earnings had also increased. This left the UK's corporate debt-to-earnings ratio at 315%, below both its pandemic peak and the GFC peak (both around 350%).

31. Within the aggregate, the FPC noted that there are a number of vulnerable companies with low liquidity, weak profitability, or high leverage. The FPC also noted that small and medium sized enterprises (SMEs) had more debt than prior to the Covid pandemic and that the liquidity position of some SMEs had fallen back in recent months. The share of SMEs with insufficient cash to cover at least seven days of turnover had increased close to pre-Covid levels as firms drew down on liquidity built up through pandemic era borrowing.

32. The FPC judged that the pressure on corporate earnings combined with a rising cost of credit would continue to increase over 2023 and reduce companies' ability to service their debts. Using earnings and interest rate paths consistent with the November 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 around 40% in early 2023, but well below the GFC peak of over 50%.

33. The FPC noted that pressures on corporate 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 and manufacturing, could come under significant cost pressures.

34. The Committee also noted that some businesses were more exposed to rate rises than others. While the vast majority of the increase in SME debt seen during the pandemic had been through government loan schemes at relatively low rates and fixed for six years or longer, over 70% of the stock of SME bank debt was estimated to have been issued outside government loan schemes, and a large proportion of this debt was exposed to interest rate increases. In contrast, larger companies had a relatively large share of fixed-rate debt, including market-based debt such as corporate bonds, and this would insulate them to some extent from the immediate effects of rising interest rates.

35. The Committee therefore judged that UK corporate debt vulnerabilities were likely to increase in the near term, which would make the corporate sector more vulnerable to future shocks. Consistent with that, the FPC judged that the risks that firms default on debt, or cut employment or investment sharply, had increased. Financing conditions had tightened, particularly for risky firms, with some funding markets closed. But businesses were not yet showing signs of reducing employment or investment sharply in response to the economic downturn. The Committee noted that 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 over coming quarters, reflecting the deteriorating economic outlook. The large majority of the increase in insolvencies was among very small, younger entities that held little debt, and a high proportion of this debt was government guaranteed.

36. The FPC judged that UK financial stability risks from corporates could be amplified by the vulnerabilities in the system of MBF it had previously identified. Businesses had become more reliant on debt sourced through markets than on bank funding in aggregate; the share of borrowing sourced through markets was now 55%, up from 40% before the GFC. Large negative shocks to asset values, or episodes of rapid repricing, could force lenders to sell assets to generate liquidity. This could push down the price of corporate bonds and equities, further amplifying shocks and affecting corporate valuations and access to finance. And

businesses that lose their investment grade status ('fallen angels') might pose risks if investors with rating sensitive mandates are forced to sell downgraded securities into illiquid bond markets. This could push bond prices down below levels consistent with the downgrade news, which could impact the ability of firms to roll over debt.

37. In common with the outlook on household debt, increased corporate distress was not expected to challenge the resilience of the banking system directly, but would leave businesses more vulnerable to future shocks.

UK external balance sheet vulnerabilities

38. The FPC noted that the UK had a large external balance sheet that was associated with large gross capital flows that exposed it to external financing risks. This reflected the UK's position as one of the most financially open economies in the world, with many UK assets held by overseas investors. The FPC judged that the size of the UK's external liabilities meant that the behaviour of foreign investors, and their perceptions of the UK's macroeconomic policy framework and its long-term growth prospects, could have a material impact on UK financial conditions.

39. There were signs that foreign investor demand for UK assets had weakened in September and early October. This was likely related to increased uncertainty around UK economic prospects, including around the UK's fiscal position. Between the start of September and mid-October, UK government bond term premia and corporate bond spreads had risen by more than their counterparts in the US and euro-area. Since then, indicators of the perceived riskiness of UK assets had generally fallen back in line with those of euro-area economies.

40. The FPC noted that any future UK-specific shock to investor appetite for UK assets would likely reduce their prices, although some of the negative impact on the UK's external balance sheet could be offset by moves in the exchange rate. This is in part because the UK's external assets were estimated to be worth significantly more than its liabilities, when measured at current market values.

41. The FPC also noted that a large and rapid fall in foreign investor demand for UK assets could pose a more acute risk to UK financial stability if it led to difficulties refinancing the UK's external liabilities, but the FPC judged that this risk was, at present, low. They noted that these risks tended to be particularly acute for shorter duration external liabilities that constituted a significant share of other investment liabilities. The Committee had noted previously that these refinancing risks were mitigated by the reduction in the scale of 'other investment' liabilities and the improved resilience of the UK banking sector over the past 15 years. This was partly due to the development of a regulatory framework that, for example, required financial institutions with a greater exposure to these risks to hold larger buffers of liquid assets.

42. The FPC would continue to monitor the size and composition of the UK's external balance sheet, the nature of capital flows in and out of the UK, and risk premia on a range of UK assets.

UK bank resilience

43. The FPC judged that the major UK banks' and building societies' (major UK banks') capital and liquidity positions remained strong and therefore they were well placed to absorb shocks and continue meeting the credit needs of households and businesses. The aggregate CET1 capital ratio for the major UK banks remained flat on the quarter at 14.2%, and the aggregate three-month rolling average Liquidity Coverage Ratio (LCR) stood at 144% in 2022 Q3 – around its average level since 2015. Major UK banks' pre-provision profitability was higher than a year ago, supported by higher net interest income. In aggregate, smaller lenders were also well capitalised and had strong liquidity positions, with a weighted average CET1 capital ratio of 18.3% and a weighted average LCR of 230%.

44. Major UK banks' provisions had increased somewhat in 2022, as banks had recognised impairments in anticipation of credit losses, though their provision coverage remained below recent averages. Asset quality remained relatively strong. Some forms of lending, such as buy-to-let, higher loan-to-value, higher loan-to-income mortgage lending, and lending to lower rated and highly leveraged corporates, were more exposed to losses, as were lenders with higher exposure to those assets.

45. The outlook for the major UK banks' profitability implied by consensus forecasts suggested they could absorb further increases in expected credit losses without adversely impacting their capital positions. Impairments would need to increase materially above current expectations before they began to erode major UK banks' capital buffers.

46. The FPC judged that there was evidence that the major UK banks were tightening their lending standards by adjusting their appetite for lending to riskier borrowers as risks had increased. To date, that tightening appeared in line with expected changes in credit quality related to the worsening macroeconomic outlook. But excessive restrictions on lending, solely to defend capital ratios or capital buffers, would prevent creditworthy businesses and households from accessing funding. That would be counterproductive, harming both the wider economy and ultimately the banks themselves. The FPC would continue to monitor UK credit conditions for signs of such unwarranted tightening.

47. Alongside their role of providing credit to the real economy directly, the UK banking system also supported the real economy through the provision of MBF and through activities in leveraged loan markets. While banks' role in facilitating MBF could provide them with significant additional sources of revenue, it could also expose them to additional risks. For example, banks operating in the UK had total credit exposures of approximately £1.5 trillion to non-bank financial intermediaries (NBFIs) through lending (including securities financing)

and derivatives activities. The risks arising from such activities, which could increase in response to an abrupt tightening in financing conditions and higher volatility, could lead to potential losses if not managed well.

48. The FPC judged that the UK banking system was resilient to the current economic outlook and had capacity to support lending, even if conditions were worse than forecast. The FPC had previously judged that the banking system was resilient to a wide range of severe economic outcomes, and was assessing banks against a further severe shock in the 2022 ACS.

The UK countercyclical capital buffer rate

49. 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 restrict 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.

50. In considering the appropriate setting of the UK CCyB rate, the FPC judged that vulnerabilities that could amplify future economic shocks remained consistent with a neutral UK CCyB rate at 2%[2].

51. The global and UK economic outlooks had deteriorated and financial conditions had tightened in 2022. In the MPC's November 2022 MPR, the UK economy was expected to remain in recession for a prolonged period.

52. The FPC discussed the UK banking system's ability to absorb the expected impact of the recession while continuing to supply credit to the real economy. The Committee noted that there was some evidence of the major UK banks tightening their lending standards by adjusting their appetite for lending to riskier borrowers, as risks had increased given the macroeconomic outlook.

53. 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 during the recession. 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

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

of 2% would help to ensure that banks continued to have capacity to absorb unexpected future shocks without restricting lending in a counterproductive way.

54. 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.

55. 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 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 economic 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.

Cryptoassets

56. Cryptoasset valuations had declined more sharply than other risky assets since the start of 2022. The market capitalisation of cryptoassets had fallen to around $800 billion, from a peak of almost $3 trillion in late 2021. More recently, the sudden failure of FTX – a large conglomerate offering cryptoasset trading and other associated services – had highlighted vulnerabilities within the cryptoasset ecosystem.

57. The FPC judged that direct risks to UK financial stability from cryptoassets remained limited, reflecting their limited size and interconnectedness with the financial system. Consistent with this, the sharp decline in cryptoasset prices and the collapse of FTX had not posed material risks to broader financial stability.

58. However, given the speed of developments in these areas, it was important to be forward-looking. Recent events highlighted how systemic risks could emerge if cryptoasset activity and its interconnectedness with the wider financial system continued to develop. And they underscored the need for enhanced regulatory and law enforcement frameworks to address developments in crypto markets and activities. The FPC continued to judge that financial institutions and investors should take an especially cautious and prudent approach to any adoption of these assets until such a regime was in place. In March, the Financial Conduct Authority had issued a statement to all regulated firms to highlight certain risks related to crypto activities, including financial crime and custody risks[3].

[3] **Notice to all FCA regulated firms with exposure to cryptoassets | FCA**

Market-based finance resilience

Recent developments

59. The Committee judged that sharp adjustments in asset prices could be amplified by existing vulnerabilities in the system of MBF and continued challenging market liquidity conditions. Over recent months the financial system had experienced large changes in bond yields and elevated asset price volatility. This had exposed vulnerabilities, most notably in the UK LDI sector. Other parts of MBF had so far been more resilient. But the FPC judged that it was important that resilience in MBF was strengthened, particularly given the volatile economic environment.

60. Rising interest rates and higher volatility had resulted in increased initial margin (IM) and large variation margin (VM) flows. High levels of IM, and payments of VM, help protect financial institutions from counterparty default risks. However, they could also trigger market participants to sell assets in order to meet margin calls. Total daily VM calls across a range of products at UK central counterparties (CCPs) reached a 2022 H2 high of around £28bn on 3 October, comparable to the peak daily flows seen in March 2020 and March 2022 (£30bn and £35bn respectively). Total IM held at the major UK CCPs had been rising steadily, reflecting the elevated volatility, and stood at just over £350bn (up 28% YTD).

61. Reflecting higher volatility, and since the FPC's Q3 Policy meeting, CCPs had reviewed and increased their haircuts on gilts used as collateral, and banks were imposing or increasing haircuts on gilts in repo trading, particularly to LDI funds. These actions would boost the resilience of CCPs and banks to stress in the NBFI sector.

62. Sterling money market funds (MMFs) faced large redemptions from institutional investors, including LDI funds in late September. Those outflows were comparable to outflows during the 'dash for cash' in March 2020. MMFs managed redemptions well because they were holding large liquidity buffers and had reduced the duration of their assets earlier in the year. MMFs affiliated with LDI fund managers had subsequently seen historically large inflows and those MMFs were currently holding high levels of liquid assets.

63. There had been no evidence of material stress in the hedge fund sector and, on the whole, funds had appeared to reduce their leverage and risk taking in an orderly manner. Use of gilt repo leverage by hedge funds in aggregate had decreased throughout 2022, in response to greater volatility and higher funding costs. But the risk of a rapid unwind of leveraged positions, in response to sharp moves in asset prices, remained.

64. Looking ahead, the FPC judged that higher credit risk and higher volatility could lead to de-risking behaviour in credit markets by a range of investors. Such rebalancing away from riskier and less liquid assets could potentially amplify adjustments in asset prices.

65. So far, however, de-risking flows in credit markets had been orderly and relatively gradual. US and European high-yield corporate bond funds had already seen persistent but gradual redemptions in the year-to-date (12-17% of assets under management) in response to losses, with no evidence of acceleration so far. And leveraged loans funds had seen net outflows of around 15-20% since May, following inflows of the same size earlier in the year.

66. In late September and early October, UK pension funds had sold a large amount of investment-grade corporate bonds to rebuild their liquidity buffers. In addition, there had been evidence of pension funds seeking to liquidate less liquid investments, such as private assets and investment in commercial real estate funds. In response, some funds had deferred redemptions.

67. Based on market intelligence, appetite for private assets, including private credit, had slowed in recent months, due to economic uncertainty, falling public valuations and investors looking to improve their liquidity positions. Given the opacity of private markets, it was difficult to assess the scale of potential risks in this area.

Building resilience in market-based finance

68. The FPC noted that the system of MBF had grown substantially in recent years and had become increasingly important to the UK and global economies. Between the start of the GFC and the end of 2020, the non-bank financial system had more than doubled in size, compared to banking sector growth of around 60%. As a result, non-banks now accounted for around half of the total assets making up the global financial system.

69. Given its importance to the UK economy and UK financial stability, it was important that MBF was resilient, so it could absorb, and not amplify, economic shocks. The FPC judged it important that vulnerabilities which could pose risks to financial stability were monitored closely and actions were taken to enhance resilience.

70. At its Q3 2022 Policy meeting, the FPC had noted that the issues in LDI funds were an important example of how abrupt market moves could be amplified by vulnerabilities in the system of MBF. Tighter financing conditions and greater volatility, alongside a number of economic shocks had similarly caused long-standing vulnerabilities in MBF to crystallise during several other stress episodes over the past three years too. For example:

- The ‘dash for cash’ in March 2020 had shown how sudden spikes in liquidity needs during a stress could be amplified by vulnerabilities in MBF, leading to core market dysfunction and the need for significant central bank intervention.
- High levels of hidden leverage through equity derivatives had been a key factor in the default of Archegos in March 2021, leading to sizeable losses for banks.
- Significant volatility in commodity markets earlier in 2022 had highlighted vulnerabilities in these markets and created risks to the broader economy. Hidden

concentration risks in commodity derivatives markets had led to extreme price spikes in Nickel markets in particular.

71. These episodes underlined the need to develop and adopt appropriate policy reforms to increase resilience across the system of MBF.

72. Tackling these risks was made difficult by the depth, complexity and international nature of MBF. Building on the lessons learned from Archegos and more recently LDI funds, further policy action was required internationally to address the risks arising from leveraged non-bank investors. This would complement the Financial Stability Board's (FSB) existing comprehensive international work programme focused on:

- Increasing the resilience of MMFs – with jurisdictions expected to put in place reforms to increase resilience in 2023.
- Liquidity risk and its management in open-ended funds – with the FSB Policy Recommendations to address structural vulnerabilities from asset management activities due to be strengthened in 2023[4].
- Improving margin practices – with policy work to take forward proposals from the final joint report 'Review of margining practices'[5].

73. In 2023 international and domestic regulators urgently needed to develop and implement appropriate policy responses to address the risks from MBF. Absent an increase in resilience, the sharp transition to higher rates and currently high volatility increases the likelihood that MBF vulnerabilities crystallise and pose risks to financial stability.

74. In this context, the FPC strongly supported the Bank and FCA's continued engagement with this important programme of international work. The Committee welcomed the FSB's NBFI progress report to G20 leaders published on 10 November 2022, and the proposed work plan for 2023 to develop policy recommendations that addressed vulnerabilities.

75. Alongside international work, the FPC noted that the Bank would continue to work to reduce vulnerabilities domestically where effective and practical, for example in the context of LDI funds. To support this, the FPC judged there to be a need to develop enhanced stress testing and horizon scanning approaches to better understand the resilience of NBFIs to shocks and their interconnections with banks and core markets.

76. The FPC judged that insufficient granularity and availability of data was a key issue limiting the ability to assess risks, stress test and horizon scan effectively, and was further hampered by the complexity of regulation both within and across jurisdictions. The FPC judged that further effort was needed internationally and domestically to enhance data

---

[4] **Policy Recommendations to Address Structural Vulnerabilities from Asset Management Activities**
[5] **The joint report by the** Basel Committee on Banking Supervision (BCBS), Bank for International Settlements' Committee on Payments and Market Infrastructures (CPMI) and International Organization of Securities Commissions (IOSCO) can be found **here**

gathering for monitoring and transparency, and to explore potential enhancements to cross-border supervisory cooperation.[6]

77. In order to support the FPC's ongoing horizon scanning, the Bank will run, for the first time, an exploratory scenario exercise focused on NBFI risks, to inform the understanding of these risks and future policy approaches. Further details would be set out in the first half of 2023.

The resilience of liability-driven investment funds

78. In late September 2022, UK financial assets saw severe repricing. This particularly affected long-dated UK government debt where the speed and scale of the increases in gilt yields were unprecedented, and exposed vulnerabilities associated with LDI funds in which many defined benefit pension schemes invest. This led to a vicious spiral of collateral calls and forced gilt sales that risked leading to further market dysfunction which would have led to an unwarranted tightening of financing conditions and a reduction in the flow of credit to households and businesses. The FPC assessed there was a material risk to UK financial stability, recommended that action be taken to address it 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.

79. The FPC observed that the introduction of the facility had improved market conditions and allowed LDI funds to deleverage, and had left the sector significantly better prepared to manage gilt market volatility in the future. Over the intervention period, LDI funds sold £23bn in gilts (in market value terms), and raised over £40bn in capital, leaving the sector significantly better prepared to manage gilt market volatility in the future. The resilience of sterling LDI funds across Europe subsequently improved, with an average yield buffer[7] in the region of 300-400 basis points. The FPC had welcomed the Bank's plans to unwind its temporary holdings of UK government debt in a timely but orderly fashion.[8]

80. This episode demonstrated that levels of resilience across LDI funds to the speed and scale of moves in gilt yields were insufficient and that buffers were too low and less usable in practice than expected, particularly given the concentrated nature of the positions held in the long-dated gilt market.

81. The episode also highlighted deficiencies in the internal stress testing of pension schemes and LDI funds, which did not seem sufficiently to take into account possible ahistorical

---

[6] A full discussion of vulnerabilities identified by the FPC can be found in the **2021 report**

[7] The yield buffer is defined as the level of yield adjustment on long term gilts that the GBP LDI Fund is insulated from or may absorb before its capital reserves are exhausted

[8] The decision was taken by written procedure, 9 November 2022, from which Elisabeth Stheeman was recused, see page 23.

shocks to the gilt market, operational factors in responding to market moves, or concentration risks across the sector.

82. Limitations around firms' operational resilience meant that LDI funds (particularly those with pooled structures) and pension schemes took longer to raise additional capital, exacerbating their liquidity issues and need to sell assets. Many pension funds had governance processes involving a range of stakeholders (often including the use of investment consultants' advisory services), making decision-making too slow to deal adequately with the stress.

83. The episode also exposed deficiencies in how banks monitor and manage risks with respect to LDI funds and their understanding of those funds' ability to meet margin calls in periods of market stress. This was exacerbated by the operational complexities of making and receiving large volumes of collateral calls during periods of significant market volatility. Some custodian banks which provide services to these funds (and especially those which were more reliant on manual processing) struggled to keep pace with the volume and complexity of requests.

84. Assessing and monitoring risks in the LDI fund sector was hampered by a lack of regular and granular data on the sector, including on the use of LDI strategies by pension schemes. Prior to the LDI episode, the FPC had taken steps alongside other regulators to better understand risks to financial stability from pension scheme investors, including through their use of LDI strategies. For example, the Committee had identified LDI as a vulnerability in its 2018 assessment of the risks from leverage in the non-bank financial system, and highlighted the need to monitor risks associated with the use of leverage by pension schemes using LDI strategies. The Bank also subsequently worked with The Pensions Regulator (TPR), that had completed a survey of defined benefit (DB) pension schemes in 2019 that sought to improve DB pension liquidity risk management. In addition, the Bank and FCA had undertaken market intelligence with LDI managers over the course of the year as yields gradually rose. In its Q3 2022 Policy meeting, the FPC had also assessed the risks posed by a further tightening in financial conditions, and identified LDI funds as one possible channel by which risks could be transmitted to other parts of the financial system. However, regulatory fragmentation and data gaps had hampered more thorough assessment and monitoring.

85. While it might not be reasonable to expect market participants to insure against the most extreme market outcomes, it was important that shortcomings were identified and action taken to ensure financial stability risks can be avoided in future. There was a clear need for urgent and robust measures to fill regulatory and supervisory gaps to reduce risks to UK financial stability, and to improve governance and investor understanding.

86. The FPC was of the view that LDI funds should maintain financial and operational resilience to withstand severe but plausible market moves, including those experienced during the recent period of volatility. This should include robust risk management of any

liquidity relied upon outside LDI funds, including in MMFs. The FPC welcomed, as a first step, the recent guidance published by TPR in this regard. The FPC also welcomed the recent statements by the FCA and overseas regulators on the resilience of LDI funds[9].

87. Given the identified shortcomings in previous levels of resilience and the challenging macroeconomic outlook, and market liquidity conditions, the FPC made the recommendation[10] that regulatory action be taken, as an interim measure, by TPR, in coordination with the FCA and overseas regulators, to ensure LDI funds remained 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.

88. Maintaining resilience was seen as an important first step in light of current risks. The FPC judged that as a next step, regulators should set out appropriate steady-state minimum levels of resilience for LDI funds more broadly including in relation to operational and governance processes, and risks associated with different fund structures and market concentration. Further steps would also need to be taken to ensure regulatory and supervisory gaps were filled, so as to ensure the resilience of the sector. And appropriate reporting and data collection was likely to be needed to monitor the resilience of LDI funds. The Bank would continue to work closely with domestic and international regulators so that LDI vulnerabilities were monitored and tackled, and so to ensure that they did not pose a risk to financial market functioning which would threaten financial stability. The FCA had recommended that HM Treasury considers bringing investment consultants into the FCA's regulation, which would improve the effectiveness of intermediaries.[11] In this regard, the FPC supported this recommendation by the FCA.

89. Banks, as the providers of funding to the LDI sector, should apply a prudent approach when providing finance to LDI funds, taking into account the resilience standards set out by regulators and likely market dynamics in relevant stressed conditions. The FPC supported further work by the PRA and FCA to assess the role of firms that they regulate in the recent stress, particularly their standards off risk management, and set out lessons learned.

90. The episode demonstrated the need for the Bank to further refine its understanding of how failures in parts of the NBFI ecosystem could result in systemic financial stability episodes, and for it to continue its work to improve its preparedness for risks stemming from NBFIs. The Bank's exploratory scenario exercise on NBFI risks would also support this.

---

[9] Please see:, **Maintaining liability-driven investment resilience | The Pensions Regulator**; **Statement on LDI | FCA**; **Industry Letter, LDI Funds - NCA**

[10] By written procedure on 30 November 2022

[11] **MS15/2.3: Asset Management Market Study: Final Report (fca.org.uk)**

Cyber stress testing

91. The FPC reviewed the findings from the first phase of its exploratory cyber stress test conducted over 2022. This phase looked at a hypothetical data integrity scenario in retail payments and explored firms' capabilities and the potential financial stability impact of this hypothetical scenario.

92. The FPC advised on the areas for staff to focus on for the second phase of the test and on the approach. These areas would help the FPC deepen its understanding of firms' response and recovery capabilities, and of impacts and spill over effects. The FPC would also give further consideration to the point beyond which disruption could begin to cause material economic impact, termed its impact tolerance, following the completion of the test.

93. The Committee expected to report on thematic insights from this test in due course.

Update on the Productive Finance Working Group

94. The FPC welcomed the progress by the Productive Finance Working Group (PFWG)[12] in developing practical solutions to the barriers to investment in long term, less liquid assets. Appropriately managed, investment in such assets could benefit investors and the broader economy by supporting the supply of long-term capital, financial stability and transition to net zero, in line with the FPC's primary and secondary objectives, and remit.

95. In November 2022 the PFWG published a suite of materials[13] for trustees, employers, consultants and other key Defined Contribution (DC) scheme decision makers. These materials included the first comprehensive set of guides, aimed at raising awareness of the key considerations around investing in less liquid assets and to give investors the tools to make better informed decisions. To support implementation in practice, investment and employee-benefit consultant members of the PFWG published a joint commitment to shift the focus from cost to value when advising DC scheme decision makers, an accompanying list of key considerations for consultants, and a call to action for DC investment platforms to evolve their processes and systems to support investment in less liquid assets. The PFWG had also published model constitutional documents for the Long-Term Asset Fund (LTAF), to help streamline the legal process and raise awareness of key aspects of this new fund structure.

96. The FPC welcomed the publication of these materials, which could support both the FPC's primary and secondary objectives. These materials could support financial stability by emphasising the importance of robust liquidity management and due diligence. They could also support the supply of long-term capital and the successful delivery of the LTAF structure

---

[12] An industry working group established by the Bank of England, HM Treasury and the FCA
[13] **Productive Finance Working Group publishes guides to help pension schemes understand risks and opportunities of investing in illiquid assets | PLSA**

by making a significant contribution to raising awareness of the key considerations around investment in less liquid assets.

Financial regulation and Solvency II

97. The FPC noted HM Treasury's consultation response setting out the final reforms for Solvency II. It noted that the design and calibration of the fundamental spread did not incorporate proposals by the PRA. HM Treasury had committed to support the PRA in taking forward additional supervisory measures to hold insurers to account in maintaining safety and soundness and policyholder protection, including by ensuring the PRA had the necessary powers. The FPC would assess the implications of the reforms for its objectives as they were implemented.

98. Consistent with its statutory responsibilities, the FPC remained committed to the implementation of robust prudential standards in the UK. As the FPC had previously judged, UK financial stability will require levels of resilience at least as great as those put in place since the GFC and required by international baseline standards, and – recognising the importance of the UK as a global financial centre – in some cases greater.

The FPC's remit response

99. On 17 November 2022, the FPC had received from the Chancellor of the Exchequer[14] a letter specifying the economic policy of HM Government and setting out HM Treasury's recommendations to the Committee under Sections 9D-9E of the Bank of England Act 1998. These recommendations relate to matters that the Committee should regard as relevant to its understanding of the Bank's Financial Stability Objective and the Committee's responsibility in relation to the achievement of that Objective, the Committee's responsibilities in relation to support for the Government's economic policy, as well as matters to which the Committee should have regard in exercising its functions. The FPC agreed its response to this letter[15], which would be published alongside this Record[16].

100. In addition, the previous Chancellor set out a recommendation in relation to the Government's energy security strategy on 7 April 2022[17]. As that recommendation was replaced by the recommendations in the Chancellor's November letter, this document and the cover letter also constitute the Committee's response in accordance with section 9E(3) of the Act.

[14] **Remit and recommendations for the Financial Policy Committee – November 2022 (bankofengland.co.uk)**
[15] The FPC's response was approved by written procedure
[16] See **here** for more details
[17] **Recommendations_for_the_Financial_Policy_Committee_April_2022_final.pdf (publishing.service.gov.uk)**

The following members of the Committee were present at the 28 November 2022 Policy meeting:

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

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

As permitted under the Bank of England Act 1998, David Roberts was present as observer in his role as Chair of Court.

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 Solvency II, and that she would not receive the related papers.

- 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 cryptoassets, and that he 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 agreed she would be recused from papers and decisions relating to gilt sales undertaken by the Bank of England.

The following members of the Committee were present at the 8 December 2022 Policy meeting:

Andrew Bailey, Governor
Colette Bowe
Sarah Breeden
Ben Broadbent

Jon Cunliffe
Jon Hall
Dave Ramsden
Nikhil Rathi
Elisabeth Stheeman
Carolyn Wilkins
Sam Woods

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

Annex: Financial Policy Committee policy decisions

Outstanding FPC Recommendations and Directions (as at the date of the FPC's meetings on 28 November 2022 and 8 December 2022).

On 30 November 2022, the FPC made the recommendation (22/Q4/1)[18] that regulatory action be taken, as an interim measure, by The Pensions Regulator (TPR), in coordination with the Financial Conduct Authority (FCA) and overseas regulators, to ensure liability-driven investment (LDI) funds remained 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.

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 28 November 2022, unchanged from its 30 September 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.[19] Under PRA rules, foreign CCyB rates applying from 2016 onwards will be automatically reciprocated up to 2.5%.

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.

---

18 By written procedure
19 See the Financial Stability section of the Bank's website: **www.bankofengland.co.uk/financial-stability**.

The PRA and the FCA have published their approaches to implementing this Recommendation: the PRA has issued a policy statement, including rules,[20] and the FCA has issued general guidance.[21]

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 first annual review of its Direction to the PRA in October 2022. 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 explanation of the FPC's decisions and the original Recommendation (now implemented).

The PRA has published its approach to implementing this Direction and Recommendation[22].

[20] 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**.

[21] See **www.fca.org.uk/publications/finalised-guidance/fg17-2-fpc-recommendation-loan-income-ratios-mortgage-lending**.

[22] **PS21/21 | CP14/21- The UK leverage ratio framework | Bank of England**