Jon Hall reappointment questionnaire

1. Do you have any business or financial connections, or other commitments, that might potentially give rise to a conflict or perceived conflict of interest in carrying out your duties as an external member of the FPC?

   As the Committee is aware, I have notified the FPC of my shareholding at Guardtime (a blockchain based information security provider) and it has been agreed that I would recuse myself from discussions on digital assets and CBDC, and that I would not receive the related papers (as noted in question 2 below). Otherwise, in consultation with the Bank's Secretary, I do not consider that I have any business or financial connections, or other commitments, that might potentially give rise to a conflict or perceived conflict of interest in carrying out my duties as an external member of the FPC.

   In line with the FPC's Conflict of Interest Code I have declared my assets and liabilities to the Bank and I have discussed them with the Secretary of the Bank (the Bank's conflicts officer). The Bank also maintains a public register of interests (available here) which sets out the other roles I hold at present outside of the Bank (School Governor, West Buckland School, Devon; Co-chair, Development Committee, Exeter College, Oxford; and Member, Founders Circle, Institute for the Future of Work) together with relevant financial interests (my shareholding in Guardtime noted above; deposits over FSCS limit (Coutts and Goldman Sachs); and holdings of individual gilts).

   I will of course continue to ensure my interests are managed to avoid any actual or potential conflicts of interest, taking advice from the Secretary wherever necessary. This reflects the fact that this a dynamic process in two senses: First, the Bank is aware of all of my assets and interests and any proposed additions or divestments are discussed and approved in advance, in accordance with the Bank's policies and the FPC Conflict of Interest Code. Second, if there is any change in the activity of an organisation in which I have invested, or in the focus of the Bank, which leads to an increased risk of the perception of conflict, then that will be reviewed (as happened with Guardtime). For example, since my initial appointment in 2020 I have declared to the Bank a shareholding in Amazon. The Bank has advised that while it currently does not present an actual or perceived conflict of interest (Amazon are not regulated by the Bank and the regime for regulating CTPs is unlikely to be in place until some time in 2024), this will be kept under review as the topic comes back to the FPC and the process for designating CTPs is determined.

2. You disclosed a conflict of interest due to a shareholding at Guardtime (a blockchain based information security provider) which resulted in you being recused from aspects of FPC work. What have been the practical consequences of this recusal? How has this affected your ability to carry out your duties as an external member of the FPC?

   As with many decisions there are costs and benefits associated with recusals that must be weighed. These include the costs associated with potentially reducing the pool of experienced individuals who are able and willing to apply for an external role. However, the Bank in particular must maintain public trust in order to successfully carry out its mandate, so a visible commitment to high standards of integrity is essential. As such I believe the Bank is right to take a transparent and cautious approach to potential conflicts and perceptions of conflict.

As noted in the FPC Record, it has been agreed that I would recuse myself from discussions on digital assets and CBDC, and that I would not receive the related papers. Although I completely understand the reasoning behind the recusal, it is possible that there has been a cost associated with the decision. These are new and fast-moving areas for the Bank to navigate. Having been interested in the field, and possessing some relevant knowledge, my input may have been beneficial. However, from what I have seen publicly the Bank has navigated these areas well, so there are no specific costs of my recusal that I can point to.

While an important area of the FPC's work, digital assets and CBDC are just one discussion area among a significant number. This conflict hasn't affected my ability as an external FPC member to carry out my duties on any other source of financial stability risks.

3. Do you intend to serve out the full term for which you have been re-appointed?

Yes.

4. Do you have, or do you intend to take on, any other work commitments in addition to your continuing membership of the FPC?

Not at present. I am due to finish my PhD later this year, which will free up some time. Although it is likely that I will find something to replace that, I will not take on any role that conflicts with or reduces my availability for, the FPC.

5. Why have you decided to stay on for a further term? What do you regard to be your main achievements to date? Is there anything you would like to do in the next term, which you have not been able to do in your previous term?

In my opinion, being an external member of the FPC is an engaging and rewarding role. I believe strongly in the value of the mandate and the FPC's impact, and the breadth of topics we cover is remarkable. I believe that I bring a distinct and valuable perspective to the committee which, when taken together with the diverse viewpoints of other members, helps us to reach an informed decision. I appreciate the rigour and quality of analysis from the staff and other external members.

Although there has been much progress over the last few years, there is an enormous amount for the FPC to do, and I look forward to helping with that in my second term.

I would like to highlight three separate areas in which I believe I have had a significant impact since I joined the FPC in September 2020.

The first is through rigorous analysis of our main policy tools. During my time on the FPC we celebrated our ten-year anniversary. This provided a good opportunity to have a fresh look at some our major policies, such as the Counter-cyclical capital buffer (CCyB) and housing tools, to ensure that they benefited from ten years of understanding and practical experience. Whilst naturally providing a fresh perspective to the debate, I have worked hard to combine that with a detailed understanding of the original thinking. I believe we have made good progress in updating the policies, and support the further work being done in terms of explaining this to external stakeholders. For example, it is still not widely understood that the counter-cyclicality of the CCyB is meant to refer to the financial cycle rather than the economic cycle.

The second area is to bring a unique level of in-depth understanding of market dynamics to the committee. Although helpful in general, this has been particularly important over the last few years as a number of shocks have been amplified by vulnerabilities in sometimes anomalous sectors of the market. This includes stress in commodity markets after the Russian invasion of Ukraine, losses in prime brokerage businesses after the failure of Archegos, and stress in pooled Liability Driven Investments after the mini-budget. One thing I have been very impressed with in the Bank of England has been the speed with which the staff are able to understand and respond to stresses even in non-core areas.

The third, and perhaps most important area, relates to our understanding of, and ability to respond to the market moves of autumn 2022. Since joining the committee in the aftermath of the dash-for-cash of March 2020, we have been particularly focused on the vulnerabilities within the Non-Bank Financial Intermediation (NBFI) sector and the risk of what I have called jump-to-illiquidity, due to liquidity mismatches and dynamic management of leveraged positions. Market participants that increase efficiency and liquidity in good times can behave in ways that amplify volatility and reduce liquidity in bad times. Whilst the main focus should of course be on reducing vulnerabilities, this process is slowed and challenged by the heterogeneity of the sector as well as the fact that participants are predominantly domiciled overseas. And even if global regulation could be optimised, self-insurance is always finite, so a back-stop may be necessary, as was shown in 2020. Complicating matters was an awareness that in future we would not always be able to rely on so called divine coincidence - that financial instability issues would naturally be resolved by actions taken for monetary policy reasons. As such it was important that the Bank would have the tools to be able to provide a temporary and targeted intervention for financial stability reasons if necessary. A huge amount of work by the Bank staff and executive, involving both the FPC and MPC, meant that on the 28th September 2022 the tools were in place for the FPC to be able to recommend that the Bank take action to restore financial stability. The successful operation, including the fast and orderly unwind of purchases, took a huge amount of planning and is something for which Bank staff deserve much credit.

Looking forward, the big ongoing project for the FPC is the increasing focus on NBFIs. As the latter have grown in market share they have become an increasingly large source of risk to financial stability, particularly in structures that involve leverage and/or liquidity mismatch. By its nature, and as mentioned above, this work is taking time. The entities involved are often small individually, but highly correlated and systemic in aggregate, lightly regulated and domiciled offshore. Therefore, the FPC needs to work closely with overseas regulators. Variable levels of progress are being made globally and domestically with respect to money market funds, open ended funds, and Liability Driven Investments (LDI), but vulnerabilities remain. I look forward to supporting the first ever system-wide exploratory scenario, the results of which will inform future priorities.

6. In your questionnaire on your first appointment, you stated you would make a particular contribution to the FPC on: Extracting signals from financial markets, Libor reform, Margin and collateral analysis and implications, Contingent liquidity, Central Counter Parties (CCPs) and the non-bank financial sector. Has this been borne out in practice?

   Libor reform has been a huge success, both in the UK and globally, and the focus and diligence of Bank staff has been a significant reason for this. Over $300tn Libor contracts will have switched over to robust alternative rates smoothly, and 29 Libor settings have permanently ceased whilst the remaining six settings have firm end-dates. This was a process that I first became involved in in 2014, when I was a member of the Market Participants Group supporting the Financial Stability Board's (FSB's) report on reforming major interest rate benchmarks. In the FPC's most recent publication we judged that the financial stability risk associated with GBP Libor had effectively been mitigated. This is a great result. Seeing this project almost through to completion whilst a member of the FPC is a source of satisfaction.

   With respect to understanding and analysis of the other issues, I was able to have an immediate impact. The general non-bank financial ecosystem has been highly relevant to financial stability throughout my term, and my experience in this area has been relevant and, I believe, helpful. This was no doubt one of the main reasons that I was appointed to the role and I take the responsibility very seriously. I have had deep interactions with the Bank's market intelligence team, whose ability to extract signals from markets is strong and constantly improving.

   Weaknesses in liquidity management remain a major source of potential vulnerability. Whether due to large and unpredicted margin calls, run dynamics associated with liquidity mismatch, or a lack of operational competence, unplanned for liquidity drains can amplify shocks and create financial instability. Although we are making some progress towards reducing this source of risk, this is a significant ongoing area of focus for the FPC.

The Financial Policy Committee

7. What is your assessment of the track record of the FPC In your opinion, what are the areas of most success and where is there still the most work to be done?

   I think the FPC has a strong track record and significant international credibility. The fact that we were set up as a separate committee, accountable to the TSC for a very specific financial stability mandate, is a significant factor in that success. I think it is fair to say that the FPC is considered a global thought leader with respect to financial stability issues. For example, the IMF in the 2022 Financial Sector Assessment Program (FSAP) noted "On the institutional side, the Financial Policy Committee (FPC) is a world-class macroprudential authority."

   There are three particular areas of success to highlight:

The FPC was the first to introduce a strategy for a positive neutral rate for the countercyclical capital buffer (CCyB). Seeing the benefits of the FPC's approach, this was adopted by several countries and supported by the Basel committee. In particular, the benefits were apparent during the Covid related stress, where the release of the CCyB buffer helped banks to continue to lend. Most recently in June 2022, the FPC set the CCyB to its neutral rate of 2% (with binding effect from 5 July 2023). If risks materialise, the FPC could release this 'rainy day' buffer to ensure that banks are able to keep lending to households and businesses.

The FPC's housing tools built resilience by requiring lenders to stress test mortgage affordability and to limit the flow of high loan-to-income mortgages. This has proven very important given the sharp rise in interest rates over the last year. Although households are under pressure from increased living costs and higher interest rates, this level of pressure is less than the counterfactual of greater indebtedness. This reduced indebtedness increases both household and lender resilience to higher rates. (To note, the FPC as part of its regular review of its housing tools, concluded that the LTI flow limit alongside the wider assessment of affordability by the FCA's Mortgage Conduct of Business rules ought to deliver the appropriate level of resilience in a simpler, more predictable and more proportionate way. Therefore, the FPC withdrew its affordability test last year.)

Finally, as discussed in question 5, the ability of the FPC to very quickly and effectively respond to the stress of autumn 2022, was the result of significant advance work and planning by Bank staff. I mention this again here because I have the impression that this was the first time that the FPC's role with respect to financial stability really 'broke through' to public consciousness. I was pleased that the financial press and the public were fully able to differentiate the actions and motivations of the FPC from those of the MPC.

Of course, none of that is to say that the work of the FPC is done. There are many current and future areas of vulnerability that need to be addressed. The FPC should take comfort from the empirical fact that we can have a positive impact and the benefits are real, whilst redoubling our effort to increase resilience elsewhere. The most obvious example of that is in NBFI. Although the FPC has done a good job of highlighting the kinds of activities that increase the chance that shocks will be amplified, it is a frustratingly slow and difficult task to translate high level principles into concrete actions, made harder by the fact that we often aren't the regulator of the entities in which the risks reside.

For example, the FPC has clearly set out its perspective with respect to Money Market Funds (MMFs). Because these funds promise daily liquidity and are treated by many investors as cash-like, they are relied upon as a source of liquidity in times of stress. As such they could pose financial stability risks if they are forced to suspend or otherwise restrict access to cash at a time when it is most needed. Later this year UK authorities will issue a consultation paper on MMF regulation, which we hope will be an important step towards ensuring that UK money market funds are able to withstand severe but plausible levels of outflow. Beyond that, as most sterling MMFs are domiciled abroad, we are reliant on other regimes to implement the policy proposals of the FSB in their jurisdictions.

I would also like to flag that the FPC has just published its medium-term priorities. The first priority is on the market-based finance which I've covered above. In addition, the FPC's priorities are to:

- Continue to identify, assess and respond to structural changes and new risks in the financial system and the economy. This includes work on corporate debt, mortgage markets, digital assets, climate risks, commodity markets, etc.
- Respond to lessons learned for macroprudential policy from the FPC's experience in periods of stress. This includes work on the approach to stress testing, the banking sector, the crisis toolkit, etc.
- Continue to improve macroprudential oversight of operational resilience, in light of its growing importance to financial stability. This includes work on cyber risks, critical third parties, AI, etc.

8. What is your assessment of the state of the global financial stability regime? Where would you particularly like to see international agreement?

   There are a number of vulnerabilities in the global financial system that cause heightened levels of risk to financial stability. The two most obvious risks relate to geopolitics and the interaction between higher interest rates and high levels of global debt. The former would likely result in increased volatility which could lead to liquidity stresses. The latter could crystallise risks in a number of areas such as US risky corporate borrowing, European peripheral debt sustainability and the Chinese property sector. In addition, we are continuing to monitor developments in the overseas banking sector including in the US following the failure of SVB.

   Global institutions are generally aligned at a high level with respect to financial stability, and have been working constructively on issues such as open ended funds and money market funds at the FSB. However, it is important that momentum is maintained and we need to see progress on national implementation of the globally agreed recommendations.

   A second and longer term project on which there should be international focus, is on data collection and sharing for financial stability purposes. This is a complicated area due to commercial and privacy concerns but the Archegos incident in particular revealed the dangers of a situation where regulators do not have sight of a growing risk to financial institutions. In order to be able to act to control risks, institutions like the FPC must first be able to monitor those risks as they build.

9. During your time on the FPC, when have you been most uncomfortable with a consensus view reached by the Committee?

   The short answer, is that I have not felt 'uncomfortable with a consensus view'. The longer answer is:

   There are two human frailties in particular that undermine optimal decision-making. The first is that any individual or homogeneous group, no matter how brilliant, will have biases and blind spots which will cause them to make mistakes. The second is that all individuals are subject to two drives which can be in conflict. The first is towards the truth (or the optimal answer) but the second is towards within-group (or tribal) acceptance or recognition. Although groupthink is often discussed, I think that tribethink, more generally, is a dangerous enemy to truth-seeking.

Decision-making bodies must be able to discover and eliminate biases and blind spots, whilst ensuring that truth-seeking dominates over tribalism. This is why a process of constructive debate, conducted between individuals with a diverse experience set in an atmosphere of mutual respect, will outperform over the long term. There is a body of research (see for example Mercier and Sperber's book 'The Enigma of Reason') which shows that constructive, interactional argumentation, between individuals with a common interest in finding the truth, generally outperforms processes that rely on averages of individual reasoners, even when those averages are iterated using sophisticated multi-round techniques.

For that reason the word that I find the most striking in the question is 'uncomfortable'. I have never felt uncomfortable in an FPC meeting, either in expressing a view or disagreeing with a colleague, or about the process through which we have iterated towards a decision. There are times when I have been persuaded and others when I have been a persuader. This I believe is the sign of a healthy dynamic. A decision-making body that emphasised loyalty over truth would be uncomfortable. As would one that was made up of individuals or tribes who staked out a position but then didn't listen or engage constructively with each other.

I think that on the FPC we are helped by the fact that in each "round" of FPC meetings each quarter, we have a number of decisions to make on very different issues. As such we may be fully aligned with a colleague on one topic but have a different perspective to them on the next. This removes much of the risk of constant disagreement leading to a mutual lack of respect and failure to engage constructively, or of constant agreement leading to groupthink.

Having said all of that, it is important for the TSC and other external bodies to check the health of the FPC's decision-making process. This can be achieved by asking questions such as this, but we on the FPC can also help by being transparent about areas in which there are different views. I have been an advocate for this approach and expect that you will see more of this going forward in our communications. Below I include an example from our most recent Record, released in March:

"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."

10. How have you promoted greater understanding of the work of the FPC while in office, and how do you intend to further that understanding in your next term?

    There are four ways that the FPC communicates with its external audience:

    FPC communications: Although I am aware that our detailed publications have a specialist readership, my view is that the specific wording of our communications is very important. I personally, and the committee in general, spend a huge amount of time making sure that our message is being delivered as accurately and precisely as possible. This is then summarised for a broader readership in what we call level one and level two communications.

    TSC hearings: On top of my appointment hearing, I have been asked to appear before the TSC twice during my term. The first time was virtually due to covid restrictions and the second time was in person, earlier this year.

    Speeches: I have given one formal speech in Cardiff 'Building financial market resilience: from diagnosis to prescription' and have another entitled 'Leverage and Responsibility' written, for which a date has yet to be set. On top of this I have given two less formal speeches to audiences as part of agency visits, in the South West and Brighton. Finally, I enjoyed giving a talk to GCSE and A level students at New Rickstones Academy in Witham, Essex. In my second term I intend to increase the frequency of formal speeches to one per year.

    Agency visits: A particularly rewarding and informative part of the FPC role is the ability to engage in regional visits with the Bank's agents. These give the opportunity not only to promote greater understanding of the FPC's perspective, but also to hear from businesses around the UK. For example, my agency visit to Essex took place immediately after the market volatility and Bank intervention of autumn last year, so was a valuable opportunity to provide clarity and receive feedback. In the early part of my term these visits were, unfortunately hampered by Covid, but are now a regular part of my schedule.

11. In your original questionnaire, you stated that you intended "to join the Bank in engaging in outreach through both market participants and agents, to try and pick up early warning signals and paradigm shifts that may not be captured by historically based models." How has that worked out in practice?

    As discussed in question 10, the Bank's Agent network is hugely valuable as a way of getting to talk to businesses and institutions of all sizes across the country. In bilateral visits this gives members of the FPC the chance to get up to date and first-hand information about the issues facing businesses and households. In addition, it is an opportunity for us to get our key message out to those who understandably do not have time to read our full publications. The information from all of these bilateral meetings is then aggregated by the Agents to give a full picture of the state of the economy which supplements the Bank's more theoretical models. As mentioned, Covid had a negative impact on my ability to conduct Agency visits in the early part of my term, but they now a regular part of my schedule. I look forward to continuing this form of outreach in my second term.

With respect to market participants, the Bank has a significant and sophisticated outreach and intelligence gathering effort. I was not aware of the full extent of this operation prior to joining, so have perhaps spent more time talking to this team and using this to aid in my own intelligence gathering than I expected in my original pre-appointment questionnaire.

Although I have my own contacts and ways of looking at information I have been careful to ensure that any external discussions are conducted, first, in line with the Bank's internal code for communications for the policy committees and outside of any 'quiet period' and, second, in a way that is additive rather than detrimental to the overall effort. I am speaking to Bank executives about whether there are ways of optimising this process further in my second term, for the benefit of all parties.

In terms of how it has worked out in practice, I would say that the sum of all of the above, including my input and understanding, has enabled the Bank to be attuned and responsive to stresses very quickly as they have been building. Having said that, the market moves related to the three major shocks of my term so far – the Russian invasion of Ukraine, the mini-budget in autumn 2022, and the collapse of the US bank SVB in March – have all happened at exceptional speed. If we have had a head start it has been measured in days rather than weeks. Although one can always do better, I do not believe that there were missed opportunities to pick up specific market information that would have given us more of an advanced warning. As I mentioned in question 2, I have been very impressed with the ability of Bank staff to respond quickly and flexibly to stress in new areas.

In the above I am referring to the very specific stresses mentioned. I will discuss the more general and slower building vulnerabilities to high and volatile rates in the following question.

Regulatory and Policy issues

12. What is your assessment of the risks to financial stability arising from both higher inflation and higher interest rates?

If any financial paradigm persists for a significant period of time, behaviour becomes adapted to the associated conditions, and households, corporates and financial institutions become optimised to take advantage of those conditions. The risk is that, in the absence of an entity like the FPC, the system might not build in resilience to a potential paradigm shift. This is the reason that stress testing is so important. It allows the regulators and institutions involved to check that the system is able to withstand sudden shifts and to build resilience where it is lacking. The Bank's annual cyclical scenario stress tests for banks in 2017, 2018 and 2019 included an increase in interest rates and found that the UK banking system was resilient to such scenarios. The 2022 ACS also included an increase in the Bank Rate up to 6% and results will be published later in the year.

In addition, the Bank's housing tools were specifically designed to ensure that low rates did not cause an unsustainable build-up of mortgage debt. They achieved this by limiting the flow of high loan-to-income mortgages and requiring an affordability test that included a stress to higher interest rates. Affordability testing is now solely managed by the FCA under their Mortgage Conduct of Business rules on responsible lending.

This shows two things. First that the FPC has long been cognisant of the risks to financial stability from a sharp transition to higher rates and, second, that it has taken actions to mitigate those risks where possible.

There are areas where the Bank has not been able to take action and has been highlighting the risks for many years, in order to increase awareness. This includes global debt vulnerabilities and corporate debt, particularly with respect to riskier corporate borrowing in the US.

The final area on which the FPC is focused on is market based finance. Here, the risk is often not to higher interest rates per se, but to the volatility associated with a sharp and disorderly transition to higher rates. An example of this is in the LDI stress of late last year. As has often been said, pension funds actually benefit from higher rates and the LDI positions were a hedge, so should not have been an issue. The problem arose because the speed of the market moves overwhelmed the ability of pension funds to meet the capital calls necessary to maintain the hedge. Forced unwinds of positions in an illiquid market, amplified market moves and led to financial instability. The FPC made recommendations to address risks in the LDI sector in November 2022 and March 2023. I've noted other risks in the NBFI sector in my response to the next question.
A combination of higher inflation and higher rates has put increasing pressure on households and businesses and we are closely monitoring both debt servicing ratios and indicators of stress such as mortgage arrears and insolvencies. Current projections are for the stress to increase, but to remain below that seen in the Global Financial Crisis (GFC). The forecast peak pressure has actually eased slightly as energy prices have declined. On the other hand, if inflation were to prove more persistent than currently expected, rates were to rise further than currently priced, or the unemployment rate was to rise more than forecast, this would increase pressure further. Despite this, we judge that the UK core banking sector is well capitalised and maintains strong liquidity positions, so is well placed to support the economy through a period of higher rates.

13. To what extent does non-bank financial intermediation pose risks to financial stability, and how should those risks be mitigated?

Since the Global Financial Crisis, NBFI market share has increased significantly. Analysis by the FSB shows non-bank financial institutions account for 50% of the global financial sector's assets, approximately the same share as in the UK. Businesses and households are increasingly directly or indirectly reliant on NBFI for critical financial services including lending, and markets are increasingly reliant on NBFI for liquidity. As such, they have become an increasingly large source of risk to financial stability.

There are two fundamental channels through which NBFI (and banks) pose risks to financial stability: Liquidity mismatch and leverage management.

Liquidity mismatch occurs when the liquidity terms offered to investors are too generous relative to the liquidity of the portfolio. For example, MMFs offer daily liquidity and are treated as cash equivalents, but hold assets that cannot always be immediately sold at par, especially in stress. This model can be profitable as long as investors don't exercise their rights, but if all investors were to try and exit at once then the fund will not be able to meet its obligations. This can cause financial instability through two routes. First, it is an unstable equilibrium that has run dynamics due to so-called 'first mover advantage'. Second, if investors are relying on the cash-equivalent nature of the product then a failure to achieve this can cause significant knock on effects, transmitting and amplifying stress.

In general liquidity mismatch can be mitigated by either increasing the liquidity of assets, to ensure that liquidity needs can be met in severe but plausible scenarios, or by reducing the risks associated with withdrawals. The latter can be achieved through lengthening redemptions terms, pricing redemptions appropriately through so-called swing-pricing mechanisms, or by putting up gates to restrict redemption amounts. Which approach is preferable and achievable is dependent on the product. For example, the FPC judged that as MMFs generally hold assets to maturity, significantly more liquid assets were an effective way to increase MMF resilience.

Leverage famously carries the risk that losses can be greater than the size of the original investment. This means that, in contrast to unleveraged investments, the position needs to be dynamically managed. In the case of losses the investor must either reduce the position, which amplifies market moves, risking market and financial instability, or provide further capital. If they do neither then the product manager or loan provider will aggressively unwind the position to protect themselves. This is what happened in the LDI and Archegos stress incidents.

Managing leverage requires sophisticated and dynamic risk and liquidity management processes. For those that don't have the financial or operational capabilities, leveraged investments are not appropriate. For those that do, the amount of leverage should be calibrated to their own capabilities as well as their correlation to similar strategies. A small non-bank financial institution may have minimal impact when considered in isolation, but a large number of highly correlated institutions all trying to unwind in illiquid conditions can have financial stability implications. To manage risks from leverage, the FPC and others, including international bodies, are progressing work in a number of areas:

- The FPC judged that 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.
- The FPC is supporting the Bank's work with international bodies to improve NBFI disclosures to enable monitoring of leverage. The Bank/FPC are supporting the FSB's

work on assessing and proposing policy action to address leverage as a key amplifier of liquidity imbalance, with a focus on "hidden" leverage.

This year, the FPC will conduct its first system wide exploratory scenario to try and better understand the complex and dynamic interactions relating to liquidity mismatch and leverage management.

14. From a financial stability perspective, what is your assessment of the Government's "Edinburgh Reforms"?

The Edinburgh Reforms constitute a significant number of potential changes, most of which will only be finalised after a period of consultation.

Given the UK's withdrawal from the EU, it makes sense to consider potential enhancements or simplifications to the regulatory framework. However, as the government has stated, the UK's success as a financial services hub is built on the basis of consistently high regulatory standards. This is something that should be maintained, not just for the benefit of the financial services industry, but also for the wider economy. A robust, liquid and well capitalised financial system provides the best environment for households and businesses to make plans and invest, and supports long term growth.

At present I have not seen anything specific that constitutes a financial stability risk, but this is something that will be reviewed through the course of the various consultation processes, and as legislation and rule changes are proposed.

I agree that relevant provisions should be transferred to the PRA rulebook as soon as practicable, and, as I said in front of the TSC in January 2023, I am confident that the PRA can incorporate competitiveness as a secondary objective, as currently drafted, without this causing financial stability concerns.

15. How well does the counter-cyclical capital buffer work in practice?

This is an important question. The CCyB has been a centrepiece of the FPC's banking sector toolkit. The FPC has released the CCyB on two separate occasions: in July 2016, following the sharp increase in economic uncertainty associated with the result of the referendum to exit the European Union; and in March 2020 at the onset of the Covid-19 pandemic. And the FPC has increased the CCyB rate to build resilience when vulnerabilities were judged to have increased - most recently in June 2022 to its neutral rate of 2% (with binding effect from 5 July 2023.

One of the main reasons for the CCyB is that, unlike traditional regulatory capital, it is releasable in stress. Once released, capital previously held against the CCyB, becomes surplus, and can therefore be used to support credit supply. The question, however, is whether there is any evidence that this theoretical benefit shows up in bank behaviour?

Recently Bank staff have conducted a detailed review of credit supply behaviour in the 2020 Covid shock, when the FPC last cut the CCyB. They have published a paper which I would recommend reading in full. I provide a link below.

Due to the government guaranteed lending schemes which supported corporate credit, the paper focuses on mortgage lending.

The authors found evidence that releasing the CCyB during the period of stress had a positive material effect. Banks that received greater capital relief from the CCyB cut were able to maintain more stable lending outcomes. These banks maintained lower interest rates on new mortgage lending and higher loan values than their peers, and tightened terms on riskier lending by less.

The data showed this effect even though all banks maintained strong capital positions. It is likely that the relative impact would have been larger if government support had been less and banks had been capital constrained.

Although we will continue to monitor the effect of the CCyB in good times and bad, these initial results are very supportive for the framework.

It is important for all buffers, and not just CCyB, to be useable and that international work on this progresses. In it's medium term priorities, the FPC has included a future priority to consider how the usability of UK banks' capital buffers beyond the CCyB could be improved.

Staff working paper: Useful, usable, and used? Buffer usability during the Covid-19 crisis (Jan, 2023)

16. Where do you think there is scope for further research work into financial stability and macroprudential policy?

I would like to highlight three areas for potential further research:

The first area is the boundary between what is expected as a result of the standard economic cycle and what comprises financial stability concerns. In a simplistic model, when the MPC shifts interest rates, this has an impact on financial conditions and future path of the macroeconomy via the monetary transmission mechanism. The FPC's role in this model is to help ensure that financial stability issues do not disrupt the transmission mechanism. In that model one could clearly distinguish between a warranted change in financial conditions and an unwarranted change, perhaps driven by irrational bank and NBFI behaviour. In reality, this model is oversimplified and there is a grey area between the two extremes. Whether it relates to borrowers adjusting their behaviour magnitudes greater than we would expect due to changes in the cost of debt, or lender behaviour, due to changes in their own risk appetite, there is a rich seam of analysis to study this grey area and to understand better the appropriate policy response.

Second, I think there is more formal work to be done on quantifying correlation risk. High exposure to levels of, or shifts in, correlation shows up in most stress. For example:

- Mortgage related products in the GFC had a high exposure to the correlation of house prices across the US. When they all fell at once, what was supposed to be a diversified asset, became much more risky.
- SVB, as previously discussed, was more highly exposed than its peers due to a high correlation between its depositors, in part because of the low proportion of deposits that were insured. A significant percentage of depositors all withdrew their money at once.
- In the post mini-budget LDI stress, most of the entities that sold long date UK government bonds were small in isolation, but their behaviour was highly correlated, and large in aggregate.

The system wide exploratory scenario announced in March should help us to explore some of these issues.

Finally, there is some interesting work to be done on the efficient frontier between efficiency and resilience. Just as in the natural world, the financial market ecosystem is most resilient when there is a diversified set of participants. A market that relies too much on a single type of investor base or liquidity provider, may be efficient in good times, but is exposed to jumps to illiquidity. This resonates with our mantra that the financial system must be able to support households and businesses in bad times as well as good.

17. How have you used the FPC's core indicators in your work? Which is the most important, in your view?

I would like to start my answer with two remarks:

- First, the FPC's core indicators are only a subset of the wide range of indicators, and supervisory and market intelligence that support the FPC's assessment of the risk environment and its judgements on financial stability.
- Second, the Committee's decisions are not tied to any specific set of indicators and judgement ultimately plays a material role in our assessment of potential threats to financial stability.

With this in mind, the CCyB core indicators support the FPC's assessment of vulnerabilities that could amplify future adverse shocks to the UK economy, and of the ability of the UK banking system to withstand stress without restricting essential services, such as the supply of credit, to the real economy.

The indicators are grouped into three categories: i) 'non-bank balance sheet stretch', which captures leverage in the broader economy and in the private non-financial (i.e. households and corporates) sector; ii) 'conditions and terms in markets', which captures borrowing terms on new lending and investor risk appetite more broadly; and

iii) 'bank balance sheet stretch', which captures loss absorbing capacities, leverage and maturity/liquidity transformation in the banking system.

Regarding which indicator is most important, I would suggest "private non-financial sector credit growth" within the 'non-bank balance sheet stretch' and "the Common Equity Tier 1 ratio for major UK banks" within the 'bank balance sheet stretch' category.

The rationale for my choice is the following:

- An extensive literature on the causes and consequences of financial crises has identified excessive credit growth in the private non-financial sector as a key predictor of financial instability and crises. In addition, financial recessions – by which I mean economic downturns associated with a financial crisis – are deeper and last longer than normal recessions. Therefore, this indicator is a useful starting point to gauge a potential build-up of vulnerabilities that could amplify future adverse shocks to the UK economy.
- Concerning Common Equity Tier 1 capital, it is the highest quality of regulatory capital as it absorbs losses immediately when they occur. This is thus our best proxy to assess the resilience of the UK banking system to shocks and its ability to continue to meet credit demand from creditworthy households and businesses even during stress episodes.

I would like to conclude with two caveats to my answer:

First, the choice of the most important indicator – or set of indicators – at a given point in time will also be determined by the broader economic and financial context. For instance, the intensification of inflationary pressures, and the associated tightening in financial conditions have led to challenging conditions for many households and businesses in the UK over the past year – weighing on their ability to service debt. Assessing potential threats to financial stability in this context has required the use of different indicators capturing the debt servicing capacity of households and corporates, together with more bespoke analysis incorporating different macroeconomic scenarios (ranging from a central case to more adverse conditions) and their implications for the non-financial sector and banks' resilience.

Second, the list of core indicators is by no means exhaustive and the FPC is committed to update it over time. Bank staff are currently revising the FPC's core indicators to reflect conceptual and methodological improvements to the assessment of vulnerabilities and resilience since 2016, as well as the lessons learned from operating the FPC's macroprudential framework. The revised list will also reflect the evolution of the financial system and the growing role of market-based finance and NBFI.

18. To what extent is there growing pressure for a lighter-touch regulatory regime in the UK? How do you respond to such pressure? Are there any areas of the financial sector you consider to be over- or under-regulated?

In general, I have not personally felt pressure to ease regulations.

The structure of the regulatory regime is always a source of lively debate, and whilst there may be calls from some quarters (both in the UK and in other financial centres) for lighter regulation, there are a number of recent examples which should give pause for thought.

The most obvious example is the push for smaller banks to be excluded from the post financial crisis regimes. Within the UK we are able to judge that our banking system is resilient because banks don't have uncapitalised losses. Although a small bank may argue it is not systemic, there is always a risk of a snowball effect, where the failure of a small bank harms confidence to the extent that the cost of funding rises for other institutions. As well as putting pressure on these other, potentially systemic, institutions, higher costs of funding reduce credit availability and/or increase borrowing costs for households and businesses.

Another example where perhaps unpopular regulations have been helpful is in the housing sector. By reducing household leverage, the FPC's housing tools reduced the exposure of individuals to higher interest rates, and reduced the likelihood of stress on the banking sector.

Having said that, those in favour of a robust regulatory regime need to bear three things in mind. First, measures need to be proportionate to the risks. The so-called stability of the graveyard does not help anyone. Second, if a regime is too complicated then it increases the burden in a way that disproportionately impacts smaller firms. Finally, in order to have counter-cyclical benefits, buffers that are built up must be usable.

Our goal should be regulatory regimes that are strong and simple, where both words are taken seriously. This is driving the PRA's proposed regime for smaller banks, but was also the reason we simplified the housing tools in 2022. In addition, counter cyclical measures like the CCyB must be releasable and usable in practice.

As noted in my response to the other questions, I think there is more work to be done globally and domestically to ensure that the NBFI sector is appropriately regulated.

19. What are your views on the proposed reforms to Solvency II?

Overall, the Government's proposed changes to life insurance sector regulations, if implemented, will likely lead to a reduction in regulatory capital and increase the risk to the sector. This might be partially mitigated by the ability of the PRA to take additional supervisory measures. Although it is too early to tell the full impact, as it will depend on insurer's behavioural response to the changes in incentives, it will make the likelihood of failure greater.

Despite this, I would currently judge that the change in financial stability risk as a result of the proposed changes is relatively small.

There are two specific areas that are worth monitoring on an ongoing basis. The first is whether the changes increase the amount of productive investment, which will depend on how firms utilise the released capital. That was an argument made to justify the overall increase in risk, but whether it turns out to be the case remains to be seen. Second, the timing of these changes so soon after the stresses in pension fund liability investments may incentivise further the transfer of defined benefit pension fund liabilities to insurance firms, especially given the high interest rate environment. This may result in new risk concentrations.

As better data becomes available over time on the increasing risk taking behaviour within insurance companies, the changes in productive investment, and the shift of pension fund liabilities, the full costs and benefit of the changes will become clearer.

20. To what extent has the recent failure of US banks (including Silicon Valley Bank and its UK subsidiary) altered your view of the current state of financial stability and the efficacy of prudential regulation and resolution regimes?

In general, the SVB experience has shown the benefit of post financial crisis reforms. However, there are lessons to be learned:

The first is that regulators should not allow legitimate concerns about the complexity of regimes to lead to a weakening of standards. If SVB had been subject to the same rules as a large bank then it would not have crystallised uncapitalised losses at the point it sold certain securities portfolio in an effort to strengthen its financial position.

Here it is worth clarifying the difference between SVB, the US regulated parent, and SVB UK. As a UK regulated subsidiary, SVB UK was subject to PRA supervision; UK bank regulations which apply to all banks, including capital and liquidity requirements calibrated to the risk of the firm; and the UK resolution regime. As described in detail in the Governor’s letter to the TSC Chair, the Bank used its resolution powers to write-down Additional Tier 1 and Tier 2 capital instruments and transfer the shares of SVB UK to a private sector purchaser, HSBC UK Bank plc. The capital requirements placed on the subsidiary ensured that the Bank was able to write-down the loss absorbing capacity during the resolution, and ultimately supported the sale of the firm.

The second lesson is a refocus on correlation risk and liquidity mismatch. SVB was particularly exposed to a run because most of its deposits were neither insured nor diversified. As such, the firm’s management should have been more cautious than their competitors with respect to liquidity ratios and investments.

In the FPC we often talk of the need for the financial system to be able to withstand a severe but plausible stress. The issue is that the liquidity stress that is plausible for an institution like SVB may be much more severe than an institution with a more diversified and insured deposit base. It is important that both regulators and firms have the granularity of approach and the necessary data to be able to calibrate the liquidity and capital necessary to ensure resilience. The answer is absolutely not a one-size-fits-all approach. Achieving this whilst maintaining simplicity is non-trivial.

One final lesson, that applies more broadly, is perhaps an increased risk and pace of deposit flight given developments in social media, spreading information and/or misinformation at speed, and digital banking, allowing for easier transfer of funds.

Given these factors, I would suggest that one of the areas to review in the UK is the deposit protection framework. This would allow a full analysis of the costs and benefits of any change, in the context of recent experience.

The FPC has discussed that it intends to draw lessons from the recent events in the global banking sector, 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.

21. Apart from the issues highlighted above, would you highlight any other risks to financial stability in the UK and globally?

One obvious risk that has not been discussed is the risk of a cyber-attack. The Bank and PRA have been working closely with industry and experts to stress test the ability of the firms' and sector's capabilities to respond quickly to an attack. The FPC discussed and reviewed the thematic findings of the 2022 cyber stress test and these were published in March this year.

We have seen with the collapse of SVB that technological advancements can significantly accelerate the timeline of any stress, and that has some cross-over with a potential cyber-attack, particularly if there were to be a malicious state actor.

In addition, recent advances in AI potentially increase the opportunity for bad actors to release huge volumes of misinformation, which could further amplify stress. This is a fast-moving space and it is important to ensure that the Bank and the financial sector are focused and dynamically evolving to keep pace.