Questions from the Treasury Committee on the appointment of Sarah Breeden to the Financial Policy Committee (FPC)

7 July 2021

Personal

1. **Do you have any business or financial connections, or other commitments, that might give rise to a conflict of interest in carrying out your duties as Executive Director for Financial Stability Strategy and Risk (FSSR) and a member of the FPC?**

No

2. **Do you intend to serve out the full term for which you have been appointed?**

Yes.

3. **Please give an overview of how your career and experience to date will inform your approach as Executive Director for FSSR.**

I have a deep and broad knowledge of the financial system and financial stability, gained through more than 25 years of experience in a wide variety of roles in central banking. Over the last decade in particular, I have had experience of working at senior levels on both microprudential and macroprudential issues, including extensive direct interaction with the FPC on policy issues. I have led work on traditional financial stability topics (bank resilience) as well as newer ones (climate change). Finally, I have considerable experience of dealing with financial stability in stress as well as in normal times, including by playing an integral part in the Bank's policy responses.

Since 2019, I have been the Executive Director (ED) responsible for supervision of UK deposit takers. Through the Covid pandemic, I worked with colleagues including in FSSR to help the FPC and PRC judge whether firms were resilient to the stress, playing their part in supporting the wider economy through it, and to identify appropriate and where necessary speedy policy responses. I pushed forward work on the PRA's competition agenda (for example through the publication of a policy statement on growing banks) and developed our approach to the supervision of operational resilience. This deep understanding of UK banks, their role in supporting the real economy and the microprudential policy framework will form an essential foundation for my approach as ED FSSR.

Alongside this role, since 2016 I have led the cross-Bank work on climate change domestically and internationally. This has included: the novel Climate Biennial Exploratory Scenario (CBES) which is being undertaken jointly by the PRC and the FPC; the setting and further development of supervisory expectations for banks and insurers to manage climate risks; and being Chair of the macrofinancial workstream of the international central bank and supervisors Network for Greening the Financial System (NGFS), which has produced the world's first finance-relevant climate scenarios. This pioneering work has been done at pace, alongside urgent Covid-related work. Being able to progress long-term important work as well as short-term urgent issues will form an important part of my approach as ED FSSR given the need to scan the horizon for emerging risks and to pivot as necessary to keep pace with a changing financial system.

As explained in Question 6, communication skills, in particular being able to convey complex issues simply, is essential as ED FSSR. I have good experience of this through my work on climate change, including explaining why it matters to central banks and the financial system.

I have considerable experience of capital markets, both as the ED responsible for supervision of international banks active in these markets and as an operator in them whilst a senior leader in the Bank's Markets directorate through the Global Financial Crisis. I have in addition been a member of the Financial Market Infrastructure Board. This has given me good insight into financial stability risks in market-based finance, including in stress. As part of the senior leadership team in FSSR when FPC was established, I led work on two key priorities, housing and the regulatory perimeter, both of which are still relevant today and form an important part of the future FPC agenda.

Finally as an ED over the past six years, I have led UKDT and IBD in delivering a full agenda to high standards, at pace and through uncertainty.

I believe this set of experiences – in particular, my broad-based and holistic understanding of the financial system and the important role it can play in supporting (or potentially destabilising) the economy more broadly, alongside my understanding of the regulatory policy framework – will provide a solid foundation for my approach as ED FSSR.

The Financial Policy Committee

4. What are your main priorities and ambitions for your tenure as Executive Director for FSSR?

I have three priorities as ED FSSR: to continue to ensure a resilient financial system that promotes safe openness, sustainable innovation and competition; to ensure the UK macroprudential policy framework is as fit for the future risks to financial stability as it has been for the past; and to build trust and legitimacy for the FPC through effective communication and accountability. In leading FSSR, I aim to be a collaborative, committed and inclusive leader. I have been a passionate advocate of and active contributor to diversity and inclusion for many years, and look forward to supporting that further in the new role, including by supporting diversity of thought on the FPC.

To continue to ensure a resilient financial system that promotes competition, safe openness and sustainable innovation:

We have seen though the Covid pandemic the real value of a resilient banking system that is able to support the real economy though periods of stress. As set out more fully in question 5, this experience has tangibly demonstrated the benefits of post-crisis regulatory reform, including the role of the FPC in supporting financial stability.

As we look ahead, it is essential that the FPC preserves the resilience of the banking system in the light of the evolving risk environment, given the foundation it provides in supporting households and businesses in the wider economy. But we need also to respond to the questions raised through this experience (for example whether all bank capital buffers are usable or the capital regime is too complex, and to address vulnerabilities in the non-bank financial system) and to ensure the system remains resilient to future risks (for example as use of technology evolves). And we need to do that safely whilst seeking to support openness, innovation and competition.

To ensure the UK macroprudential policy framework is as fit for the future risks to financial stability as it has been for the past:

The UK financial system is one of the largest and most sophisticated globally. It is constantly evolving. And the sources of its future risks will be different from those of the past, not least given the greater role of market-based finance, the increased use of technology and the changed relationship between the UK and the EU. It is essential for financial stability in the UK and globally that the UK macroprudential policy framework evolves too.

Our experience during the pandemic has underlined the need for further work on this. The 'dash for cash' underscored vulnerabilities in the non-bank financial system - in particular liquidity mismatches in money market and other investment funds, as well as embedded leverage and liquidity pressures from margin calls on derivatives and secured financing transactions in stress. And it provided clear evidence of how crystallisation of these risks impaired the functioning of core funding markets that underpin a stable financial system and so risked amplifying initial stress. Ensuring the FPC's macroprudential framework is able to assess and (where appropriate) respond to these risks in practice, whilst recognising that these markets are global, is an important and urgent challenge.

In addition, we need to scan the horizon for future systemic risks – whether from climate change, cyber, cloud and other operational risks, or digital currencies – and ensure that the framework for macroprudential regulation keeps pace.

To build trust and legitimacy for the FPC through effective communication and accountability

As explained in Question 6, the FPC's actions have consequences that extend well beyond financial firms and so it is essential to build trust in and support for its work, in particular as memories of the costs of financial crises fade. We must not take the FPC's legitimacy for granted. It will be an important part of my job to continue to explain what we do and why we are doing it.

5. What is your assessment of the track record of the FPC and the work of the FSSR directorate? In your opinion, what are the areas of most success and in which is there still more work to be done?

The FPC exists to ensure that the UK financial system can support the economy in bad times as well as good. Its aim is to ensure that when shocks arise (as inevitably they will) they are not amplified by vulnerabilities in the financial sector, but instead that the financial system is able to support UK households and businesses and so dampen the shock. Covid has provided the FPC's toughest test to date.

Many aspects of the FPC's framework have proven invaluable. Households and businesses have needed extensive support from the financial system to weather the associated economic disruption. Alongside direct support from the government, banks have remained resilient, and so able to support them, throughout the period. That has reflected the FPC's post-crisis work on the regulatory capital framework, the consequent build-up of resilience, and its regular stress testing of the large UK banks.

I would highlight in particular the role played by the increase in standard times and then release in stress of the countercyclical capital buffer (CCyB). The FPC's release of this buffer creates capacity for banks to extend credit as stress hits and is designed to support the economy and financial stability by avoiding the harmful effects of deleveraging. Based on our experience so far, it is not clear that other capital buffers are similarly useable in stress. More work is needed on this important topic.

So far, households and businesses have had support from the government and the financial system to weather the Covid shock, and there has been no widespread crystallisation of distress in either the household or corporate sectors. Despite the uncertain outlook, the FPC's work to build resilience and avoid the build-up of vulnerabilities (including in the household sector) should support the economy as it recovers.

The pandemic and the associated ‘dash for cash’ highlighted that the vulnerabilities the FPC had identified in non-bank financial intermediation (NBFI) had the potential to cause significant market dysfunction and so amplify stress. Indeed dysfunction in core financial markets was alleviated only by central bank intervention on an unprecedented scale.

The FPC has for some time been a thought leader in identifying potential vulnerabilities in NBFI. Further work is now needed to reduce the demands for liquidity under stress, improve the resilience of the supply of liquidity and to consider potential central bank actions to backstop market functioning. This work is vital given the increasing role played by market-based finance in our financial system and must be pursued globally, given the international nature of these markets.

In other areas, the FPC, working with other authorities, has been successful in ensuring the financial system was able safely to navigate the UK’s exit from the European Union without material disruption to financial stability, notably market or operational disruption to the provision of financial services. The FPC’s monitoring work ahead of the referendum, and during the transition period, successfully identified potential sources of disruption and led to extensive preparatory action by the FPC, alongside the private sector and EU counterparts, over a number of years.

The FPC is performing a similar role in relation to an orderly transition from Libor to alternative risk-free rates. It will need to continue to do so in relation to other transitions too – for example climate change (see Question 9) and technological developments including cyber, the use of the cloud and digital currencies (see Questions 10 and 12).

I think FSSR, alongside other areas of the Bank, has been excellent in supporting FPC in all the policy work described above. It has in addition played a leading role in financial stability work globally.

The range of issues that FSSR and the FPC are required to consider is necessarily broad. I judge that we have done a good job to date of spotting emerging risks and shifting focus as needed. But we must continue to be vigilant.

The most important lesson I take from the above is that there is huge value in having an institution with the responsibility and powers to identify and take action ahead of time to reduce vulnerabilities and build resilience to possible shocks to financial stability. I think the institutional framework put in place by the UK is a model for all financial stability authorities.

6. **How important is it that the public and the financial services industry understands the role of the FPC, the decisions it takes and the views of its members? How many on-the-record speeches do you intend to make in your new role?**

It is vital that the public has confidence in the financial system and the essential services it provides. In addition, the corollary of the FPC's wide-ranging powers is that its actions can have a direct impact on many in the financial services industry as well as those it serves. It is therefore essential that the FPC's role is well understood and we are trusted to deliver it. We must not take our mandate for granted.

Trust begins with legitimacy and support for our objectives. This matters in particular as memories of the costs of crises fade, since the benefits of the FPC's actions may appear distant and uncertain relative to their more evident, near-term costs. Explaining clearly what we do and why we are doing it will therefore be essential.

Our lived experience through Covid-19 – with the banking system as a source of support rather than instability as had been the case in the Global Financial Crisis – is helpful in this regard. It underlines that our aim in delivering financial stability is support for growth and prosperity for the economy as a whole.

To build trust, the FPC needs also to use its powers in a way that is as open and transparent as possible. The level of understanding does not need to be uniform amongst all audiences, however.

For policies such as housing tools, it is important to promote general awareness of our role. We need to make clear that by limiting highly indebted households, both borrowers and lenders are less likely to get into difficulty in the event of economic stress, and the consequence of that is that those economic problems will not be made worse.

For the financial services industry, the FPC must communicate at a more detailed level to explain the risks and the actions needed to mitigate them. That is essential given the important role the institutions themselves play in delivering financial stability. Indeed a well-run financial system that understands and takes steps to mitigate systemic risk is the FPC's first line of defence.

The FPC's accountability directly to Parliament, through regular public testimony to the Treasury Committee, is a vital part of building trust. In doing so we are able to explain why the FPC has taken the action it has done and so be held to account for delivering what Parliament has asked us to deliver.

Effective communication and transparency supports all the above. I think the FPC has made great strides in its communications. The Financial Stability Report (FSR) has become more focused. Different layers of communication have been introduced – for example social media posts with clear messages about the FPC's role, its assessments and actions, with more detailed analysis provided in the FSR and Record. Members make use of speeches and other forms of external communications to bring attention to financial stability risks, and explain their actions. And they engage with a wide variety of audiences – including the business contacts and members of the public whom the financial system serves – and in doing so they listen and learn.

But there is clearly more to do to build awareness. In a recent survey conducted for the Bank, among those who could recall news about the work of the Bank, there was a strong focus on monetary policy, with very little evidence of awareness of financial stability issues.

As noted above, I consider this work a priority. And I have sought to prioritise it in my current role, including as it applies to the Bank's work on climate change. Over the past year alone, I have undertaken regular on-the-record speeches, keynote addresses, appeared in front of Parliamentary Committees, participated in panels at conferences and roundtables events, and actively engaged through our broader outreach programme (including citizens panels and directly with business) – totalling over 50 events. I plan at least to maintain this approach as ED FSSR.

7. The current remit letter from the Chancellor recommends that the FPC act with a view to supporting four aspects of the Government's strategy for financial services: competition and innovation; openness and competitiveness; environmental sustainability and climate change; and housing. As a FPC member, what will be your approach to balancing these against the statutory financial stability objective?

As the question notes, the FPC's primary objective in law is financial stability. Subject to meeting that primary objective, the FPC is required to exercise its functions with a view to supporting the economic policy of the Government, including its objectives for growth and employment as set out in the annual Remit letter.

By achieving its primary objective, the FPC ensures the financial system can serve UK households and businesses in bad times as well as good, and so a strong and stable financial system will in itself support the government economic agenda and sustainable long run growth. Ultimately, the objectives are complementary.

For example, by highlighting the future risks associated with climate change, the FPC's work on the CBES should encourage the financial system to begin to manage those risks now through the provision of finance to the real economy to help steward it to net zero. In addition, work to support the resilience of non-bank finance through reducing liquidity mismatches in fund structures might support long-term investment in less liquid assets, which could itself spur innovation and growth.

There are other areas – notably the intermediation of finance towards productive investment – where the FPC is doing work, alongside other UK authorities, directly to support the secondary objective, which should lead to a more resilient financial system in the long term. I am keen to explore if there are more of these types of project we could progress, subject to practical resource constraints and meeting the primary objective.

My approach to considering potential short-run trade-offs is to communicate transparently, and have regard to proportionality and the costs and benefits of our actions across both objectives.

The FPC has processes in place to ensure this happens and the results of it form an important part of its communications. For example, recent proposals on the leverage ratio framework explicitly set out how the FPC has considered its primary and secondary objectives in calibrating and deciding on the scope of its application. In addition, the FPC's approach to the Systemic Risk Buffer is designed to support competition by delivering greater resilience only for the largest UK ring-fenced banks. A similar approach supports the decision not to include international wholesale banks in the regular solvency stress-testing regime, thereby supporting openness and competitiveness. It seems to me that those processes are delivering the right approach to pursuing these factors alongside financial stability but without compromising that primary objective.

Speaking personally, I have had some experience in recent roles of considering trade-offs of this kind. In particular, in my role supervising UK banks, we sought to ensure we delivered our primary objective to deliver safe and sound firms at the same time as pursuing our secondary objective to promote competition through our approach to lowering barriers to entry, exit and growth (see for example the policy statement on growing banks I mentioned in Question 3). In a similar vein, I co-led the recent PRA discussion paper on a Strong and Simple prudential regime for non-systemic firms. In addition, in my role supervising international banks, I sought to ensure (for example through our policy on supervision of branches) that in permitting systemically important wholesale branches we delivered safe and sound firms through responsible openness.

Regulatory and policy issues

8. What is your assessment of the risks to financial stability arising from the Coronavirus pandemic? How well have the FPC and global policymakers dealt with the situation to date, and what future challenges could emerge?

Covid-19 has had a tragic impact on people worldwide and UK households and businesses have needed considerable support from government and the financial system to weather the consequent economic disruption.

As I noted in response to Question 5, the UK financial system has so far been able to play its part in providing that support, reflecting the resilience that the FPC ensured was built up following the global financial crisis, and the extraordinary policy responses of the UK authorities.

Households and businesses will need the continued support of the financial system, particularly the banking system, as the economy recovers and government schemes unwind. As the FPC noted in March 2021, the banking system has the capacity to continue to provide that support, even if economic outcomes are considerably worse than currently expected.

However, we need to remain vigilant. As the economy recovers and extraordinary support measures are withdrawn, businesses' cash flow needs may rise. The recovery is likely to be uneven across sectors and across geographies. And many businesses will be faced with higher levels of debt after the pandemic (albeit with low servicing costs). It will be important to monitor the availability of credit to support viable, productive businesses during the recovery.

In contrast, there is also now evidence of elevated risk-taking in the wider financial system. Risky asset prices have continued to increase, leaving some asset valuation metrics at stretched levels relative to historical norms. In addition, there has been evidence in some areas (most obviously leveraged lending) of further loosening in underwriting standards. Sharp readjustments in valuations (for example as prospects for growth or inflation are reassessed) could be amplified by the vulnerabilities in market-based finance I set out in Question 4. This is a crucial part of the FPC's agenda.

House price growth and housing market activity have also been buoyant in the UK and globally. The FPC's mortgage market Recommendations are in place to limit any rapid build-up in aggregate indebtedness and in the share of highly indebted households. This is further covered in Question 11.

a) What role has macroprudential policy played in supporting the economic recovery from the pandemic, and what role should it play going forward?

As explained in Question 5, I consider macroprudential policy to have played an important role in supporting the recovery from Covid so far and believe that it will continue to do so as the recovery continues.

In particular, the FPC released in full the UK CCyB to support banks in their supply of credit to bridge the Covid stress. The FPC reiterated its expectation that all elements of banks' substantial capital and liquidity buffers could be drawn down as necessary. And the FPC, with the PRC, agreed to cancel its usual annual stress test to help lenders focus on meeting the needs of UK households and businesses. The measures complemented substantial action by other authorities – most notably the introduction of Government guaranteed loans and furlough schemes.

The FPC conducted a desk-based stress test in May 2020, and a reverse stress test in August 2020 to confirm that banks had the resilience to keep lending even in more severe paths for the economy. Importantly these stress tests incorporated estimates for the demand for credit, based on granular Bank staff estimates of the corporate sector's cash flow needs.

The FPC's actions and the loan schemes launched by the government helped UK businesses raise £82 billion from the banking system and financial markets between March and December 2020. This combined with the use of corporate cash buffers and other actions have helped companies meet their cashflow needs, kept insolvencies low and limited the economic damage from Covid-19 to households and the wider economy.

Nevertheless, there is more to do both to support the recovery and to learn the lessons for the macroprudential policy framework in the light of the Covid stress. In particular, the FPC should:

- continue to judge the resilience of the banking system (including its support of the real economy) as the risk environment evolves;
- incorporate lessons in relation to buffer usability and complexity of the capital framework;
- further develop the role of NBFI in the macroprudential framework, including by playing an active part in developing and taking forward proposals coming from the Financial Stability Board's (FSB) ongoing work to address the serious vulnerabilities exposed during the dash for cash; and
- support the Government's broader economic policy to build back better, for example through work on Productive Finance (designed to identify practical solutions to the barriers to investment in longer-term and less liquid assets through the creation of a Long Term Asset Fund) and climate change (see Question 9).

9. What is your assessment of the risks to financial stability arising from climate change? What role can and should macroprudential policy play in promoting the transition to net zero carbon emissions?

The physical effects of climate change (e.g. sea-level rises and more frequent severe weather events) and the transition to a net-zero economy (e.g. changes in government policy, consumer preferences, and technology) create financial risks and economic consequences.

These risks have distinct characteristics.

First, they are far-reaching in breadth and scope. They will affect every household, every corporate, in all sectors and across all geographies. Their impact will likely be correlated, non-linear, irreversible, and subject to tipping points. They are therefore likely to occur on a much greater scale than other risks.

Second, the risks are simultaneously uncertain and yet totally foreseeable. While we do not know now what exact combination of physical and transition risks we will face, we do know that either we continue on our current emissions pathway and face physical risks or we change our emissions pathway and face transition risks. So it is not a question of whether risks will arise, it's rather a question of which.

And third, the size and balance of those future risks will be determined by action taken in the next few years. Carbon released today remains in the atmosphere for decades. Similarly with a fixed carbon budget the longer that meaningful adjustment is delayed, the sharper and more disruptive a transition we will see. So to manage future risks we need to look beyond typical planning horizons and take different decisions now, many years before the consequences of inaction become clear.

The Bank, the NGFS, and most recently the BCBS have set out the transmission channels between climate and financial risks. But sizing the financial risks and identifying mitigating actions requires further work.

The 2021 CBES is designed to do this. In the absence of certainty on what will happen, the CBES uses three scenarios that bring together climate, financial and macroeconomic variables to explore the resilience of the largest UK banks and insurers to the physical and transition risks associated with climate change.

The Bank has played a leading role in the development of these scenarios internationally. In particular, the Macrofinancial workstream of the NGFS that I chair has brought together 60 central banks with leading climate scientists to produce freely available scenarios for policymakers and firms to use.

The Bank intends the CBES to be a learning exercise. Expertise in modelling climate-related risks is in its infancy, so this exercise will develop the capabilities of both the Bank and CBES participants. The CBES will explore the vulnerability of current business models to different climate pathways. And in doing so, it will aim to shine a light on risks that are currently rather opaque.

Where gaps and vulnerabilities are identified within the financial system as a result of the CBES exercise and other work, we will consider the breadth of our micro and macroprudential toolkits in addressing them.

Already, our microprudential supervisory expectations are pushing firms to enhance their approaches to managing the financial risks from climate change. It is too early to judge whether specific macroprudential tools need to be deployed to build resiliency. But the results from our CBES exercise will give us a key insight into this within the UK. And our work with other central banks internationally through the NGFS will enable us to learn from each other.

It is important however to remember that the primary levers and the responsibility for driving the transition to a low carbon economy are appropriately in the hands of governments. Central banks can amplify, catalyse and complement but should not substitute for government climate policy.

Nonetheless, if firms are able effectively to identify and measure the financial risks from climate change, this should yield benefits for the transition. Having identified the risks, the financial system can help manage them by stewarding businesses and households through the transition to net zero with financing and risk management solutions. In addition, in demanding more information from clients on their exposure to different climate scenarios, financial firms can catalyse climate action in the real economy too.

10. What is your assessment of the balance of risks to financial stability and opportunities for innovation and growth arising from digital assets and currencies, and from the possible development of central bank digital currencies in the UK and globally?

New forms of digital money including central bank digital currencies (CBDC) present different implications for financial stability and opportunities. Such innovation has the potential to bring considerable benefits but also raises significant public policy issues, including for financial stability.

New forms of digital money should be distinguished from digital assets that have no backing and so no anchor to their value. Those digital assets include Bitcoin, Ethereum, Ripple. They provide a means of exchange but, without an anchor, have no intrinsic value and should be considered as highly risky investments and not a useful store of value akin to money. They are not widely used as a means of payment at present and do not currently present material financial stability risks, though this may change in the future. We need to monitor them as their usage grows (as we do other risks outside the banking system), including their use as means of payments, and as a speculative asset.

I also distinguish new forms of digital money from existing forms of private money, primarily commercial bank money. This already provides a means of digital payment in the form of payments cards that give access to deposits in commercial banks. The FPC's existing work to deliver a resilient banking system and resilient payment systems delivers stability in the use of this form of money.

New types of digital money in the form of privately-issued stablecoins (eg Tether and prospectively Diem) would also provide a means of digital payment. But rather than using commercial bank money as the basis for transactions, these providers of digital currency would create and use their own money or 'coin'. They could be issued by companies, including large technology platforms, rather than banks, and could have the capacity to scale up and grow rapidly.

Such innovation and competition in payments could bring significant benefits for end users, and for the economy as a whole. They could contribute to faster, cheaper, and more efficient payments, especially cross-border. And they could potentially enhance financial inclusion.

Stablecoins will have backing assets that provide an anchor, and therefore have intrinsic value. As a result, they have the potential to become widely used as both a trusted form of payments and as a store of value, and hence become systemic.

For stablecoins to be widely used without threatening financial stability they would need to be safe. This means that the public would need to have the same confidence in systemic stablecoins as they do in existing forms of money (cash and commercial bank money). The FPC's expectations for systemic stablecoins, that I fully endorse, are designed to deliver this outcome. They are:

1. Payment chains that use stablecoins and firms that are critical to their functioning should be regulated to standards equivalent to those applied to traditional payment chains.

2. Where stablecoins are used in systemic payment chains as money-like instruments, they should meet standards equivalent to those expected of commercial bank money in relation to stability of value, robustness of legal claim and the ability to redeem at par in fiat.

Establishing such a secure regulatory environment for stablecoins to operate within in the UK lays a clear foundation for sustainable innovation.

An alternative to a private stablecoin, but not a mutually exclusive one, would be central bank issued digital money, or CBDC. Central bank money has a unique role in anchoring value and promoting confidence in monetary systems. A CBDC could therefore play an important role in sustaining, and potentially expanding, retail access to central bank money, also supporting sustainable innovation.

In addition to the potential impact of digital currency on financial stability through its impact on the safety of money noted above, there are potential implications for financial stability through the impact of digital currency on credit too.

In particular, by offering an alternative to commercial bank money, new forms of digital currency – privately issued stablecoin or any potential CBDC – could affect the cost and availability of borrowing from banks, in normal times and in stress. Specifically:

1. Any large-scale use of stablecoin would require a higher fraction of money in the economy to be backed by high-quality liquid assets rather than loans to the real economy. In that event, real economy loans would need to be financed instead by more expensive wholesale sources of funding. While there is of course considerable uncertainty about how this might work out, it might lead to greater reliance on non-banks for credit provision. The FPC would need to monitor the implications of any such shift to market-based finance for UK financial stability, in normal times and in stress.

2. While banks could be funded by more stable sources of funding, during a system wide stress, the availability of new forms of digital money could increase the proportion of banks' deposits that are withdrawn.

3. Given the high level of uncertainty as to the impact of digital currencies, the FPC may wish to limit the speed and scale of any transition to digital money. That would provide space for the authorities and the financial system as a whole to adapt and so deliver greater assurance that possible threats to financial stability would be well managed.

All these issues need careful thought and it is clear to me that monitoring and managing the potential financial stability risks that arise through innovation in digital currency must form a significant part of the FPC's future agenda. I am pleased that the Bank is seeking to lead the debate internationally given the cross-border nature of the issue. The recent Bank of England Discussion Paper on new forms of digital money, which was endorsed by the FPC, is an important milestone in that debate.

11. What is your assessment of the risks to financial stability arising from the UK mortgage market? What has been the impact of the FPC's limits on loan to income ratios, and will these remain appropriate going forward?

Mortgage debt is systemically important. Housing is the household sector's most valuable asset and mortgage debt is the banking sector's largest loan exposure. It demands particular focus from the FPC.

Historically, high levels of mortgage debt have been associated with deeper and/or longer recessions. In the event of stress, more highly indebted households cut back more sharply on spending to make their mortgage payments. This poses risks to the wider economy that go beyond the risk to the individual lender of that individual loan.

To mitigate this risk, the FPC's housing tools seek to prevent a loosening of underwriting standards that would otherwise lead to an increase in aggregate indebtedness and the number of more highly indebted households. It introduced two Recommendations in 2014:

- An affordability test which specifies that lenders should assess whether borrowers could still afford their mortgages if, at any point over the first five years of the loan, their mortgage rate were to be 3 percentage points higher than the reversion rate specified in the mortgage contract at origination.

- A Loan-to-Income (LTI) flow limit which limits the number of new mortgages extended at LTI ratios of 4.5x earnings or higher to 15% of the new mortgages issued by a lender.

These two Recommendations work in tandem and are "structural" tools intended to remain in place through housing market cycles. They constrain lending more in housing market upswings or booms when prices and so mortgage debt are rising more quickly than earnings and so risks to financial stability are building. They constrain lending by less in more benign markets.

Between 2014 and 2020, UK house price inflation was steady and fairly low. While the FPC's 15% loan-to-income flow limit has not been reached in aggregate, a degree of "bunching" of new mortgages just below the 4.5 loan-to-income threshold might suggest that the Recommendations have constrained higher risk lending to some extent over this period. This would have contributed to stronger household balance sheets ahead of the Covid recession than they were in advance of previous recessions.

The Recommendations have had more of an effect on some parts of the market than others. For example, their effect is more pronounced in London, where house prices are higher relative to incomes, than elsewhere. It is also likely that the Recommendations have had some limited effect on first-time buyers. For most potential buyers, it is raising a deposit to meet loan-to-value requirements that acts to constrain what they can afford. The Government's Mortgage Guarantee Scheme is, therefore, likely to help some first-time buyers to get on to the property ladder.

Over the past year, the housing market has been stronger than at any time since the Recommendations were introduced. House price inflation was almost 10% in the year to March 2021, the highest annual growth since 2007. As intended, it is therefore likely that the LTI flow limit has constrained lending somewhat more over the past year than it has previously in some parts of the country where house prices are high relative to incomes. Partly for that reason and partly because lenders have continued to be somewhat cautious in, for example, lending at higher LTV ratios, there has not yet been the same sort of increase in riskier lending as in previous housing market upswings. This is something the FPC is watching closely.

The FPC is currently reviewing its Recommendations. As set out in the December 2020 FSR, there have been some structural changes to the mortgage market and the wider economic environment since 2014 that may be relevant to the calibration of the Recommendations.

In particular, since 2014, long-term interest rates have fallen and it is possible that interest rates will remain structurally lower than envisaged when the Recommendations were calibrated in 2014. In addition, the housing market is strong at the moment (as indeed are housing markets around the globe) and some of that strength is likely to persist. I think both factors are relevant to the review.

I look forward to participating in the review. I take into it a supportive stance on targeted interventions such as these which seek to manage possible financial stability risks that arise in a low interest rate environment that makes sense at the level of the economy as a whole. But I also think it appropriate regularly to review their specification and calibration, in particular as circumstances change.

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

Many of my greatest concerns have been covered in the questions. I would add only three more.

Operational resilience. The FPC needs to monitor non-financial risks, including operational risks arising from the use of critical third party service providers. As I have seen in my current role, the adoption of cloud services by financial firms has been increasing, and that trend has further accelerated during the pandemic.

Third-party provision of these services could improve the operational resilience of firms, if managed well. But the providers are outside our regulated perimeter and are generally not regulated by others either, and so financial stability risks need to be managed indirectly via regulated firms at present. Some risks (such as the highly concentrated nature of the cloud services market, or the need for resilience testing) may be difficult for firms to manage in practice. Solutions are unlikely to be straightforward. But we are considering what ways there may be to deal with these risks.

Libor: Use of most major currency Libor rates is due to stop at the end of this year. This is important because of the longstanding weaknesses in the benchmark interest rate, which is heavily reliant on 'expert judgement' and vulnerable to thinly traded markets.

In sterling, most use of Libor in new contracts has now ceased, replaced by SONIA, the risk-free rate with robust underlying markets administrated by the Bank. But risks to a sustainable transition away from weak interest rate benchmarks remain.

In particular, further progress is needed to reduce the stock of legacy contracts in cash markets, with use of synthetic Libor 'term rates' derived from risk-free rates needing to be limited to specific use cases where their use is to be compatible with financial stability.

In US markets, proposed ‘credit sensitive’ alternatives pose the risk of transitioning to an alternative that has all the same vulnerabilities as Libor itself.

The global environment: Vulnerabilities in the global financial system can spill over to the UK. While the global economy is expected to recover as Covid-related measures ease, the speed and extent of the recovery is likely to vary across regions and some countries may be vulnerable to a tightening in global financial conditions. The Covid pandemic has also amplified some existing international vulnerabilities, for example through sharp increases in global corporate debt. Given uncertainty about how such vulnerabilities will evolve, it will be important to continue to monitor these risks.