Questionnaire from the Treasury Committee

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 an external member of the FPC?

I have declared my various interests as part of the application process to be an external member of the FPC. I have also discussed them with the Secretary of the Bank (the Bank's conflicts officer), taking into account the FPC's Conflict of Interest Code.

In summary, I do not believe that I have any financial or other interests that may give rise to a conflict of interest in carrying out my duties as an external member of the FPC.

I am Professor of Economics at the Booth School of Business at the University of Chicago, and intend to continue in that role.

I chair the advisory committee to the US Treasury, Office of Financial Research, and am a member of the Federal Reserve Bank of Chicago's Academic Advisory Council. I am on the Board of Advisors for the Paulson Institute, a non-partisan think-tank founded by former Treasury Secretary, Hank Paulson, focused on the US-China relationship. I am a member of the board of directors the Renaissance Society (a contemporary arts organisation at the University of Chicago) and a member of the board of Trustees of the Chicago Symphony Orchestra. Having discussed with the Bank's Secretary, I do not consider that any of these roles would pose a conflict with my role on the FPC.

I do not hold any financial interests that might give rise to a conflict with my role on the FPC.

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

I am honoured to be appointed to this position and intend to serve out the full term.

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

As noted above, I will continue my duties as Professor of Economics at the Booth School of Business of the University of Chicago. I will of course consider whether any work commitments I may want to take in the future may pose an actual or potential conflict of interest with my role on the FPC, and will discuss them in advance with the Secretary of the Bank to ensure they are managed in line with the FPC's Conflict of Interest Code.

4. Please explain how your experience will inform your role as an external member of the FPC. To which areas of the FPC's work do you expect to make particular contributions?

My careers in policymaking and academia provide me with background and experience that will inform my role as an external member of the FPC.

I was a Member of the Board of Governors of the U.S. Federal Reserve System from 2006 to 2009. From 2007 to 2009, I chaired the Board committee on Supervision and Regulation as well as the committee on Consumer and Community Affairs. Thus, I was in the eye of storm of the Global Financial Crisis (GFC) so have experienced and responded to a major financial crisis first hand.

At the Fed, I took a leading role in developing responses to the crisis and new rules to improve consumer protection and disclosure for credit cards and mortgages. In addition, I represented the Fed on the Basel Committee on Banking Supervision and the Financial Stability Forum (now Financial

Stability Board). I also chaired the Organisation for Economic Cooperation and Development (OECD) "working party three" comprised of deputy finance ministers and deputy central bank governors on international macroeconomic policy.

My research and teaching at University of Chicago Booth School of Business provided me with historical, empirical, and analytical frameworks that were crucial to diagnosing the fragilities that contributed to the crisis and formulating both immediate and longer term responses in terms of central bank and regulatory policy. I have been teaching Money & Banking to MBA students since 1990 and have also taught Money, Banking, and Crises and International Financial Institutions and Markets course to MBA as well as a class on the Political Economy of Regulation of Financial Institutions at the University of Chicago Law School.

I have published research on global banking and financial regulation, financial crises and risk management, monetary policy, debt restructuring, and corporate governance in refereed academic journals, policy journals, books and the popular media. I have also co-authored or edited a number of books and reports, including *Reforming U.S. Financial Markets: Reflections before and beyond Dodd-Frank* (MIT Press, 2011), co-authored with Nobel laureate Robert J. Shiller.

In my research, I have analysed both micro and macro-prudential issues. For example, I have studied the consequences of activity restrictions on bank expansion, incentives for bank risk taking, corporate governance at financial institutions, the costs and benefits of clearing houses and central counterparties (CCPs), the moral hazard of the safety net, and the potential unintended consequences of regulation. I have also been teaching about digital currencies since 2009.

I have also continued my engagement with the practical policy world in my role as chair of the Financial Research Advisory Council (FRAC) to the U.S. Treasury Department's Office of Financial Research (OFR) since 2018 and was vice-chair for three years before that. The OFR was created by the Dodd-Frank Act to promote financial stability "by delivering high-quality financial data, standards, and analysis" that cuts across the micro-prudential responsibilities of each of the financial regulatory agencies comprising the Financial Stability Oversight Council (FSOC) to identify systemwide risks. In addition, I participate regularly in policy conference sponsored by central banks, regulators, and international financial institutions around the globe.

I hope to contribute to the FPC by combining my practical hands-on policy experience with my academic work to provide a solid analytical foundation for policy-making and analysis. Some particular issues to which I hope to contribute would include CCP risk concentrations, technological innovation, and the interaction between monetary policy and fragilities that can arise from interconnectedness across financial markets and institutions, and risk management frameworks.

5. How do you assess your current state of knowledge about the UK economy and financial sector and macroprudential policy in the UK, and are there any areas in which you need to develop your understanding?

My academic and research work as well as my attendance at international financial conferences organised by institutions such as the Bank for International Settlements, World Bank, IMF, and central banks around the globe have ensured I remain informed of UK developments in these areas. As Chair of the Financial Research Advisory Council to the Office of Financial Research at the U.S. Treasury, I have made it the FRAC's mission to identify emerging financial stability issues that the Financial Stability Oversight Council should be focusing on. Topics on recent agendas include digital assets, counterparty risk, cybersecurity, alternative reference rates, rising interest rates, inflation,

and the potential effects of climate change on financial stability – topics which are also of relevance to the UK and the work of the FPC.

I also gained further understanding of UK-specific issues while living in the UK between 2019 and 2021 and by regularly reading outputs from the FPC such as the Financial Stability Report and the Committee's quarterly Records. I am keen, however, to learn more and deepen my understanding of specifics about the UK macroprudential policy and the financial sector. Some examples would include:

- The administration or bankruptcy regimes and the ability of firms experiencing distress to obtain financing, and
- The specifics of the rules related to maintaining the resilience of Financial Market Infrastructures such as CCPs under stress and the links with financial stability.

The Financial Policy Committee

6. What is your assessment of the track record of the FPC and the state of the global financial stability regime? In your opinion, what are the areas of most success and in which is there still the most work to be done? Where would you particularly like to see international agreement?

The International Monetary Fund's recent Financial Stability Assessment on the UK noted that the FPC is "a world-class macroprudential authority" and I would agree. The FPC has generally had an excellent track record in identifying risks and vulnerabilities in the financial system. Key areas of success are the increases in capital and liquidity cushions following the financial crisis, including the use of the countercyclical capital buffer (CCyB). The development of a stress-testing regime for the UK banking system and the regular solvency stress tests are valuable macroprudential tools. The resilience of the UK financial sector to the COVID - 19 crisis is a testament to its success.

Of course, one should never become complacent and there is always more work to be done as the global financial system evolves. I believe it would be valuable to do more work on follow-through and implementation. While it is important to monitor the full landscape of risks and vulnerabilities, more clearly setting out priorities and making progress on particulars is crucial. The recent Liability Driven Investment (LDI) episode, which underscored a broader set of financial stability risks from non-bank financial institutions, is a good example of this. While the FPC deserves credit for identifying this as a risk, there was arguably not sufficient follow through to avoid the stress occurring.

On international agreements, in addition to the capital and liquidity standards under Basel III, I look forward to seeing further progress in the international workstream on CCPs, given their interconnectedness and how actions taken by them have the potential to have significant impacts on other parts of the financial system.

I am delighted that the Bank of England undertook its first public Central Counterparty Supervisory Stress Test (SST) last year and I would hope to contribute to working through stress scenarios, including international and system-wide stress, to underscore the importance of international agreements on these critical parts of the financial market infrastructure.

7. How important is it that the public and the financial services industry understand the role of the FPC, the decisions it takes and the views of its members?

It is important for the public and the financial services industry to understand the role of the FPC, the decisions it takes and the views of its members for credibility, confidence, and transparency.

As a member of the FPC, I would be keen to help communicate its important work through activities such as speeches, visits across the country as organised by the Bank of England's Agency network, and engagement with the media. When I was at the Federal Reserve, I travelled throughout the country, visiting the regional Federal Reserve Banks. I found that getting outside of Washington was very valuable for understanding the impacts of policy actions on households and businesses. It also provided me with an opportunity to try to explain the motivation behind the policies. These meetings were valuable to provide transparency about the actions we were taking, allowing people around the country to ask questions directly. Such meetings also had the consequence of building credibility and confidence.

I see a close parallel for the FPC. Meetings around organised by the Bank of England's Agency network, speeches at conferences, and media interviews can help to build a greater understanding of the role and objectives of the FPC. That transparency can then translate into greater credibility of the FPC and enhanced confidence in UK financial system. Clear and effective communication about the FPC actions is crucial to the success of its decisions.

For the financial services industry, the FPC must communicate its objectives directly to provide a framework for interpreting its decisions. The FPC can then build upon that framework to explain the motivations for its actions as well as how the particulars of its actions contribute to financial stability. That transparency helps in turn to build credibility with the industry and confidence in the robustness of the UK financial system, both within the UK and globally.

I am comfortable with media and public speaking and delighted to contribute to the communication of the thinking and work at the FPC.

Regulatory and Policy issues

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

Higher inflation and higher interest rates pose a number of financial stability issues. The FPC has previously highlighted vulnerabilities created by high public debt levels globally as well as high debt levels for certain firms in the aftermath of the pandemic. This is true for both developed country and emerging markets. In addition, corporates with high levels of debt may face stress as interest rates rise and may face difficulties in passing on increased costs as the economy slows.

The mortgage market is a key area of potential risk, particularly in the UK, where a substantial fraction of mortgage interest rates reset each year. Given the increases in interest rates over the past year, some households may find it more difficult to repay their mortgage once they refinance.

Other risks include the erosion of real wages and increased likelihood of higher unemployment, leading to lower demand, arrears on mortgage payments, and increase in bankruptcies. More generally, the economic slowdown and resulting personal and corporate bankruptcies, could lead to higher unemployment and lower demand.

This is why it is crucial for the FPC to consider the continuation of adequate and appropriate provision of credit when assessing regulation and systemic risk so avoid the unintended consequence of a "credit crunch." The FPC's use of the UK CCyB will important in this respect. The FPC report last month argued that the UK banking system is resilient to the current economic outlook and has capacity to support lending, even if economic conditions are worse than forecast. Nonetheless, it will be important to monitor lending capacity very closely if overall economic conditions deteriorate.

There are also risks relating to non-bank financial institutions, as set out in question 11.

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?

Climate change is one of the major global challenges, and it is crucial that regulators assess its consequences for financial stability. The Bank of England has previously noted that financial risks from the physical effects of climate change and the transition to a net-zero economy have the potential to affect the vulnerability of banks and insurers to shocks and the stability of the wider financial system. One of the complexities in assessing these risks is that we must acknowledge humility in that there are large uncertainties about the implications of climate change for banking and financial stability.

For this reason, it is important to do further research and stress testing in this area. The recent climate stress test undertaken by the Bank of England - the Climate Biennial Exploratory Scenario 2022 - outlined how the Bank is working closely with government and other regulators to improve its understanding of: the future path of climate policy; how the transition will unfold across the real economy; and the ability of the financial system to support a sustainable transition.

One potential risk that may not have received sufficient attention is that climate change may be altering underlying correlations in weather patterns, potentially increasing correlations across regions and countries. It would appear worthwhile to study whether changing correlations reduce the historical benefits of geographic or industry diversification to assess futures risks and vulnerabilities. This has potentially important impacts on agricultural and commodity markets.

Also, since the objective is net zero, it is valuable to consider what is necessary to ensure a robust financing options entrepreneurs and innovators who are exploring novel ways to sequester, capture, and absorb greenhouse gases.

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

As the developments over the last year have illustrated with great force, there are many risks associated with crypto assets. Some so-called stablecoins, for example, have turned out to be anything but stable. Exchanges have gone bankrupt leaving account holders with large losses. As least so far, the volatility and failures in the crypto sphere have not caused broader financial stability issues, likely reflecting the current limited size and interconnectedness of crypto assets to the rest of the financial system.

Despite the risks, I do not believe it would be feasible or appropriate to try to regulate crypto assets out of existence. It is important to allow experimentation and innovation to thrive but crucial to prevent failures of those experiments from causing system-wide problems. Perhaps a "sandbox" approach that permits experimentation but ensures that interconnections are limited in the case of failure would be a productive direction to pursue. It is also important to have a robust and transparent legal and regulatory regime in place so that turmoil in crypto assets do not undermine confidence more generally in the financial system and mitigate the likelihood of fraud.

The development of central bank digital currency (CBDC) in the UK and globally involves the prospect of bringing new technology to the very traditional realm of fiat currency. The financial stability implications will depend upon the specific forms that the CBDC will take, e.g., Would accounts simply

be held directly with the central bank and disintermediate traditional banks? Would CBDC provide faster, cheaper, and more reliable means of payment, domestically and internationally, than private alternatives, potentially competing them out of existence? What will be the exchange risks between traditional non-crypto parts of the financial system and CBDC? I understand that the Bank of England will soon publish a consultation paper on CBDC that will provide a basis for studying the financial stability consequences of CBDC in more depth.

11. To what extent does non-bank financial intermediation pose risks to financial stability?

Non-bank financial intermediation has grown relative to traditional banking and often is subject to less regulation and oversight than traditional banking and finance. Non-bank intermediaries may be closely interconnected with traditional banking and finance so could cause risks to overall financial stability.

While progress has been made on some aspects of reducing risks posed by non-bank financial intermediation to financial stability, substantial risks remain, as demonstrated during the "dash for cash," Archegos, and LDI episodes and disruptions in commodity markets. It is crucial to ensure that the system of markets, non-bank financial market participants and infrastructure is resilient so, as much as possible, the system can absorb and not amplify economic shocks.

It is important to get the regulatory balance right and be sensitive to the potential for unintended consequences. High capital requirements on traditional financial institutions can improve their resilience. If those requirements become too high, however, they can push activities outside of the traditional banking sector into less regulated or unregulated non-bank "shadows." That may simply shift risk rather than reduce it. Potentially, this can increase risky interconnections and vulnerabilities. I often use an analogy with the risks of icebergs: the risks of an iceberg are not simply what you can see above the water line but what you cannot see below the water line.

Thus, it is crucial to try to gather data on non-bank activity to understand where there may be high leverage, the potential for liquidity to dry up, and fragile interconnections with the rest of the financial system. Since shadow activities can easily take place offshore, it is important to work internationally to try to reduce vulnerabilities in this area, including effort internationally and domestically to enhance data gathering for monitoring and transparency.

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

The "Edinburgh Reforms" are a wide-ranging set of roughly 30 reforms to promote competition, technology and innovation, and ensure effective flow of credit throughout the economy. My understanding is that part of the reform package is to undertake a review of the impact and effectiveness of existing regulations, e.g., how effective is ring-fencing and how should it be applied to different institutions and the effectiveness of the senior managers and certification regime in aligning risk-taking incentives. It is important to the global success of the UK financial system that there be a high degree of confidence in stability and resilience of the system.

I believe it is valuable to undertake a periodic review of regulations to ensure that they address the issues they were intended to address and to ensure that they continue to be effective and "fit for purpose" as the global financial system evolves over time. The goal of such an exercise should be to assess the costs and benefits of the regulations individually and as a whole to ensure a robust and effective regime that promotes financial stability and the flow of credit necessary to support growth, employment, and innovation. It is also important to assess the potential for unintended

consequences. The financial system evolves over time, sometimes in direct response to regulations. As noted above, regulatory requirements in one area could result in a migration of activities to less regulated non-bank or "shadow" banks or offshore. Simply shifting risk may not promote financial stability.

To assess the reform package, I think we will need to understand more detail about the proposed changes as well as the potential interaction of these changes.

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

In addition to the issues highlighted in previous questions, I would note three other risks.

First would be cybersecurity threats, as a key example of the risks to operational resilience. A cyber attack on a major UK financial institution or part of the financial market infrastructure in the UK could disrupt the UK financial system and undermine financial stability in the UK and globally. It is also important to be aware of cyber risks outside of the UK since cyber attacks elsewhere in the world can have significant financial stability implications for the UK.

Second would be low liquidity in many markets that may in part be due to risk aversion after the GFC and in part as a result of regulation to improve the safety and soundness of financial institutions that has had the unintended consequence of discouraging their activities as market makers. Low liquidity conditions mean that markets are less able to absorb shocks and can instead amplify them.

Third would be geopolitical shocks that could lead to a "dash for cash," cause major movements in commodity prices, and disrupt supply chains. Scenario planning and stress testing for resilience to such shocks outside of the control of the UK would be very important in the current environment.

Please return this questionnaire to the Treasury Committee on 12 January 2023, alongside a full CV, in both Word and PDF.