

Treasury Committee Questionnaire
Response by Alex Brazier, March 2015

Personal/General

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

No. For full disclosure I note that my wife is Chief UK Economist at an economics research consultancy.

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

Yes.

3. Please explain how your experience to date has equipped you to fulfil your responsibilities as a member of the FPC. In particular, what areas of the FPC's work do you believe you will make a particular contribution to, and which will you have to undertake additional research into upon your arrival?

For the past seven years I have been at the centre of the Bank's response to the financial crisis, the programme of post-crisis reform and the formation of the new Bank of England with a much broader range of responsibilities. I am a proven macroeconomist capable of in-depth analysis of UK and global economic issues and I have considerable knowledge of the financial system and its interaction with the real economy.

Between 2011 and 2014 I was the Governor's Principal Private Secretary, responsible for supporting the Governor in delivering the full range of the Bank's policy responsibilities and co-ordinating and directing staff work. I have extensive experience of all aspects of the Bank's policy responsibilities, including macroprudential policy, monetary policy and microprudential policy. I was closely involved in the development of quantitative easing, the Funding for Lending Scheme and forward guidance, with the building of a new model of microprudential regulation and the development of macroprudential policy, and with the implementation of post-

crisis reforms domestically and internationally. I am therefore well placed to draw links between the Bank's functions and to ensure they are deployed in concert.

I have extensive knowledge of the functioning of the FPC. I have been involved in all its actions, from the first asset quality review to the most recent stress test, and I was instrumental in developing the actions taken last year regarding the housing market. I am therefore able to make a particular contribution to the development of FPC policy actions. With my experience of leading and co-ordinating staff work across the Bank I can ensure that it makes the most substantial contribution possible.

As leader of the Bank's forecasting team between 2008 and 2011, I was responsible for leading analysis for the MPC of the effects of the financial crisis on the economy and assessing the major risks to economic stability. I am well equipped to contribute to the FPC's risk assessment and development of the macroprudential framework.

As an experienced speechwriter, I have experience of distilling complex ideas into straightforward language. I can contribute to, and am committed to, the transparency of the FPC and to improving understanding of our role.

I am willing and able to advance positions with which others might disagree. I have worked to two Governors by telling them candidly what I think and arguing my position. In doing so I played an important part in the Bank's steps to mitigate the consequences of the financial crisis and the radical re-development of its framework for providing liquidity to the financial system. I am also collaborative and open to persuasion. I test arguments advanced by others and am willing to adjust my own position in response.

Reflecting the need to broaden the FPC's work to new and evolving risks, many of which could stem from outside the banking system, I intend to undertake further research into the way the financial system is evolving, the systemic risks that could be posed by market based finance, and the tools that might be necessary to address those risks. I also intend to build my own links with the FCA and relevant international organisations in this area.

4. Which of your publications and papers are of most relevance to your work on the FPC?

Given my roles, I have a limited publication record in my own name. However, I contributed to all speeches by Governor King between 2005 and 2007, including speeches on the development of macroprudential policy and the policy response to the financial crisis, and to all speeches by Governor Carney since his appointment, particularly those covering financial reform.

Financial Stability and the Financial Policy Committee

5. What do you think is currently the most significant risk to financial stability facing the UK?

I do not think it sensible to pick out a single risk when a number currently merit the FPC's attention. So this answer covers my assessment of the most significant risks.

i) Market liquidity

Some asset prices seem to reflect an assumption that sales can be conducted in an environment of continuous liquidity: that they can be sold without significant reductions in prices. The compensation demanded by investors for holding some fixed income assets is unusually low.

In fact, market liquidity has probably become more fragile. Regulatory reforms that have made banks safer have reduced their trading inventories and cut back market-making activity. The capacity of the financial system to absorb asset disposals might now be lower than in the past.

In part this mismatch stems from a search for yield among investors who are faced with persistently low returns on sovereign bonds. In part, it reflects market participants' use of low market volatility seen in the recent past as a guide to the future. And it has probably been reinforced by the growth of open-ended investment funds investing in illiquid assets and offering redemptions at short notice. Funds offering short-term redemptions have doubled in size over the past decade and account for almost half of managed assets globally.

The financial stability concern is that any market adjustment is amplified by a disorderly correction to assumptions about how liquid some assets are. This could result in sharp changes in asset allocations, sudden fire sales and market illiquidity. Furthermore, it could be reinforced as poor investment fund performance tends to result in outflows from those funds. The overshooting dynamics we normally associate with leveraged investors might also apply to unleveraged funds.

We have had glimpses of this in the past year. There have been sudden, albeit short-lived, episodes of heightened volatility and illiquidity, even in US Treasury markets. And there has been a more sustained tightening in financing conditions for emerging markets where an initial price adjustment led to sharp (mainly retail) outflows from emerging market bond funds. Issuance of high yield emerging market bonds collapsed in 2014.

A broader correction would pose risks to UK financial stability. Advanced economies, including the UK, have relied on market-based financing of net new business borrowing since the crisis. So a disorderly correction could have real effects on credit availability.

ii) **Global risks that could trigger an adjustment**

It is possible to identify three potential triggers for market adjustment. Each could prompt a correction to the mismatch between perceived and actual market liquidity, but each is likely to be associated with different impacts on UK economic and financial stability. They are listed here in increasing order of impact on the UK.

First, the beginning of the normalisation of US monetary policy or a shift in perceptions of its timing and scale. This would signal positive news about the US economy so the market adjustment is unlikely to be compounded with material credit losses. However, it would probably reduce the extent of the search for yield and prompt a reduction in global risk appetite.

Second, geopolitical risks, most notably Greece and Russia-Ukraine. Although UK banks' direct exposures to these risks are limited and the situation regarding Greece is very different to that in 2012 (sovereign yields of other peripheral European economies have in fact fallen by around 100bps as those on Greek sovereign debt have increased by over 400bps), a disorderly

outcome to either situation would probably trigger an adjustment of investor risk appetite and potentially affect growth and credit losses through its impact on economic sentiment.

Third, risks in the wider global economy. Of the potential triggers for a market adjustment, these pose the biggest threats to the UK.

The global recovery is uneven. Although economic recovery in the US and UK was surprisingly strong last year, the euro area, Japan and emerging markets disappointed and growth in China is slowing, on some unofficial activity indicators quite markedly.

Inflation in most large economies, even accounting for falling oil prices, has been subdued: weak real growth has been accompanied by weak nominal income growth. Subdued nominal growth, coupled with high indebtedness, is of particular concern.

In the European periphery, despite significant efforts to deleverage, debt-to-GDP ratios remain in excess of 300%. The ECB can address the risk of persistently low inflation in the euro area as a whole. However, with no independent exchange rate flexibility and few other mechanisms for risk sharing, the tail risk of a pernicious cycle of deleveraging in the periphery remains. Although UK banks have significantly reduced their exposures to the euro periphery, they still amount to up to 50% of banks' common equity.

With an increasingly uneven pattern of demand growth in the global economy, the US dollar has appreciated by 15% over the past six months on a trade-weighted basis. At the same time, commodity prices (most notably oil, but also others) have fallen sharply. These developments challenge some emerging markets, particularly those that have currencies fixed to the US dollar, are commodity exporters, and/or have issued substantial amounts of dollar-denominated corporate debt that are not covered by official reserves.

China – the world's second largest economy – has been affected. It has seen real economy credit conditions tighten, in part as the prospect of higher US interest rates has prompted capital outflow and also because some parts of the corporate sector have large net dollar liabilities. Growth is slowing, inflation is falling, and a correction in property markets is underway.

This follows a period in which the stock of debt has grown rapidly, mostly to finance property and construction, and facilitated in large part through the shadow banking system, creating a web of exposures that could cause contagion. The Chinese authorities face conflicting objectives of sustaining growth in the short-term and managing financial stability risks that could threaten a sharper slowdown in the future. A sharp slowdown in China and other Asian economies would have not just direct effects on the banking system (UK banks have significant direct exposures to China and Hong Kong and also have exposures via US and Japanese banks) but would also probably increase risk aversion and act as a material drag on global growth.

iii) Conduct and Cyber risks

These pose risks to banks and infrastructure at the core of the financial system.

The FPC has given impetus to efforts to manage the resilience of banks and financial market infrastructure to cyber attack. Firms have reported to authorities on their own cyber defence capabilities. Many are now being subjected to advanced testing of their cyber defences under the CBEST framework. However, the threat is dynamic and determined so the FPC should continue to pay close attention to the testing of resilience and the mechanisms in place to defend the UK financial sector as a whole.

The scale and breadth of misconduct in the financial sector now also poses systemic risks. It has damaged confidence in finance, diminishing its capability to serve the real economy. The threat of further financial and other penalties is diminishing the prudential soundness of institutions. And banks are withdrawing from some markets or activities that serve the global real economy.

The FPC, alongside the PRA, can ensure that prudential assessments and stress tests reflect likely costs of conduct redress and the risk of future penalties. The Bank, working through the ESRB and FSB, can develop co-ordination between conduct agencies to ensure enforcement continues to be an effective deterrent but does not present systemic prudential risks (see question 13). And through the Fair and Effective Markets Review the UK authorities are working to reduce the likelihood of future misconduct in fixed income, currency and commodity markets.

iv) Domestic economic risks

Three aspects of the UK economic position warrant careful attention by the FPC.

First, while the UK household sector has made progress since the crisis to reduce debt and the FPC last year insured against deterioration of underwriting standards in the housing market, UK households remain highly indebted, with debt over 130% of GDP. Mortgages are the biggest single asset on banks' balance sheets and a risk that is highly correlated across banks. And in an environment of persistently low interest rates, risks could also emerge in the buy-to-let sector, commercial real estate and leveraged lending markets.

Second, the UK's current account deficit, at 6.0% of GDP, is at a record level. With the UK growing rapidly relative to its trading partners the existence of a trade deficit is unsurprising. And confidence in the UK's policy frameworks means those deficits are easily financed at present. However, we should monitor the UK's investment income flows, the nature of the funding for the current account deficit, and the uses of that funding.

Third, there is also a concern about the persistent weakness of credit availability, particularly for SMEs. The Bank has taken a set of actions to address that, including by reshaping and extending the Funding for Lending Scheme, and the joint initiative between the Bank and ECB to consider how the European securitisation market could be revitalised, which would free up bank capital to support SME lending. This is an issue that should continue to demand some of our attention.

6. What do you regard as the main challenges facing the FPC? What areas in particular do you hope to focus your work on the FPC?

7. What have been the successes of the statutory FPC, and where is there still work to be done?

This answer addresses both questions 6 and 7.

The FPC has established macroprudential policy as an effective, operational part of the UK's framework for economic management. It has developed a set of macroprudential tools and policies for their use. Most recently, it made recommendations on a new bank leverage tool. At the same time, it has operationalised policy, particularly to manage risks associated with the persistent period of low interest rates. Its June 2014 recommendations on the housing market insured against deterioration in underwriting standards and growth in household indebtedness.

In conducting this work, **the FPC has worked closely with the MPC to ensure that monetary and macroprudential policy are coordinated.** There was an explicit 'knockout' for the FPC's judgement on risks to financial stability in the MPC's 2013 forward guidance policy. And by taking actions to guard against the build-up of indebtedness in UK households, the FPC has allowed monetary policy to remain focussed on its objectives.

The FPC has reinforced the capitalisation of the banking system. Its initial asset quality review in 2013 brought the UK banking system to a position of transparent resilience. The 2014 stress test, based on macroprudential risk assessment and macroprudential judgements about how banks could assume they would respond to the stress, was tough and credible. It reinforced confidence in the system.

That is a significant list of accomplishments on which we can build. Nevertheless, there remains a huge amount still to be done. That work can be split into five broad elements, on which I plan to focus over the coming year.

i) Work must continue to assess and take actions against systemic risks discussed in question 5.

The FPC must continue to be alert to the domestic risks I described. It will need to continue to provide impetus to efforts that reduce systemic cyber risks and work with conduct regulators to reduce the systemic risks associated with misconduct. I would strongly support the 2015 stress testing of the banking system having a focus on global risks. And the FPC will need to develop, as far as possible, an action plan to address risks arising from current market conditions.

ii) The macroprudential framework should continue to be developed into one that is comprehensive and well-articulated.

It is understandable that, at this stage, the way the FPC will react to emerging risks is not well established and predictable. But the effectiveness of macroprudential policy will be enhanced if it becomes more so. An understanding of the way the FPC is likely to react to risks as they evolve can itself be a stabilising force.

Although there will never be a single numerical target as there is for monetary policy, the macroprudential framework would benefit from a clearer description of what it is aiming to achieve, the consequences of its actions and the set of indicators that will guide it. Further detail of this is given in question 12.

iii) The FPC faces the challenge of explaining its work to both the financial sector and the wider public.

Following the example of the MPC, the FPC should seek to establish a firm bedrock of understanding among the wider public of what it is seeking to achieve and why. And it should continue to enhance its communications and explanation to financial market participants on how it will operate, to allow its actions to be anticipated. Further detail on this challenge is given in questions 9-11.

iv) The FPC will need to enhance its assessment of risks stemming from outside the banking system.

As I note in my answer to question 5, market-based finance has grown in importance since the onset of the financial crisis. Greater diversity of financing for the real economy is a positive development and a natural economic response to the reduction in the implicit subsidy enjoyed by banks that were too big to fail. But market-based finance must be resilient: its benefits may be quickly unwound if it gives rise to systemic risks.

The FPC has committed to review risks stemming from outside the banking system on an annual basis. This work should encompass asset management and other non-bank investors, such as the insurance sector, as well as financial market infrastructure. It will require close

collaboration with the FCA and at the FSB (see question 12). The FPC should consider new macroprudential tools to address risks in this area. This is discussed further in question 8.

v) The bank stress testing framework should continue to develop and reforms to the banking system must be finalised and implemented.

Reforms to the banking system will need to be finalised and implemented. The FPC has a particular role in establishing new leverage requirements and in calibrating any additional capital buffer for ring-fenced banks in the UK. It should also oversee at a system-wide level the implementation of measures to address the too big to fail problem, including new buffers of loss absorbing capacity that will enable smooth resolution of institutions when they fail. The implementation of measures to ensure resolvability is critical to sever the link between risks to individual institutions and to the system as a whole.

As these reforms draw to a close, the FPC should consider setting in train an assessment of the total impact of reforms on the banking system and wider financial system. This, along with the development of the stress testing regime, is discussed in question 12.

8. What is your assessment of the macroprudential tools that are available to the FPC? Are there additional tools or powers which you think it would be useful for the FPC to have?

The FPC has direction powers over supplementary capital buffers for banks (sectoral capital requirements and the countercyclical buffer), and, subject to Parliamentary approval, will soon have direction powers on leverage requirements and housing tools (residential mortgage lending loan-to-value and debt-to-income restrictions). Historically, systemic financial crises have often been associated with excessive growth of bank credit and with property markets. The FPC's direction powers are consistent with this.

In addition, the FPC has wide-ranging powers of recommendation, including on a 'comply or explain' basis to the PRA and FCA. Recommendations have been used effectively to, for example, provide impetus to efforts to manage cyber security risks, enhance bank disclosures, assess risks of a sharp upward adjustment in long-term interest rates and manage the transition

to tighter liquidity standards for banks. The stress-testing regime is also a powerful macroprudential tool.

This is a solid base on which to build and the toolkit should continue to develop as more is learnt about the risks we face and about the effects of existing tools. Given the growing importance of market-based finance the FPC could usefully review the case for any extension of its toolkit. I do not have a firm view on the outcome of any review, but three areas seem to me to merit consideration.

The growing importance of collateral in non-bank financing markets has developed forms of leverage and liquidity risks outside the banking system. Repo and securities lending (broadly termed securities financing transactions) have the potential to create bank-like risks. AIG, which had an aggressive securities lending programme before the crisis, was an extreme example of this. The FSB has developed a framework to constrain some of the risks generated by securities financing transactions. The FPC could review the implementation of this framework in the UK and consider whether supplementary macroprudential tools would be of value in the UK.

As discussed in question 5, **some investment fund structures can create liquidity risks** by offering short-notice redemptions to investors while investing in longer-dated assets for which market liquidity is fragile. The FPC could consider the merits of measures to address risks arising in this area, but international co-operation is likely to be required to address these risks fully and the risks associated with asset managers are very different to those created by banks.

In due course, the FPC could consider whether and how stress testing might be extended to non-bank financial institutions, including financial market infrastructures. In the EU, a stress test of the insurance sector took place in 2014. In the US, the SEC is considering how best to implement the legal requirement to subject large funds to annual stress testing. The FPC can consider lessons from these for possible extensions of stress testing in the UK. This is not to suggest that the baseline for any such extension should be the detailed annual stress tests being conducted on the UK banking system. And because financial market infrastructures are so few in number and operate across jurisdictions, consideration would need to be given to international co-ordination.

In addition to broadening the scope of macroprudential tools, there are also two areas in which existing tools could usefully be kept under review.

The existing toolkit allows the FPC significant influence over the resilience of the banking system. It will develop this year as the FPC sets out the framework for the application of the Systemic Risk Buffer that will be applied to ring-fenced banks and large building societies. Once this is done, the FPC should keep under review the case for any extension of its powers over the systemic risk buffer beyond ring-fenced banks.

The FPC recommended in September 2014 that its direction powers over mortgage loan to value and borrower debt to income should extend to buy-to-let lending. The Government has announced its intention to consult on this later in 2015 to allow time for an evidence base for these tools to be constructed. I support that intention given that owner-occupied and buy-to-let mortgages should be considered as parts of the same common housing market.

9. How well do you think the public understands the work of the FPC, and how important do you think it is that they do? What do you intend to do to increase the public profile of the FPC?

General public knowledge of the FPC and its role is not high. And yet the FPC's actions can have direct and indirect consequences for the public. I believe it to be vital for the long-term legitimacy of the Committee that public understanding be increased.

Indeed, the continuation of our mandate, past the point at which memories of the last crisis have become faded, will rest on sustained explanation of our purpose and work. The FPC is, in part, the institutional memory of the crisis and its costs. We have a responsibility to ensure the lessons are not forgotten.

I believe our efforts are best spent not on explaining the minutiae of macroprudential policy but on explaining what the FPC is seeking to achieve and why, and what tools it uses, how it uses them and what effects they have. In its monetary policy responsibilities the Bank has achieved a high degree of awareness that interest rates are adjusted in pursuit of the inflation target because high and low inflation can be costly. We should be seeking to reach the same position for macroprudential policy.

FPC members have been active in giving speeches and attending events across the country to explain the work of the Committee and the Bank has produced a Quarterly Bulletin article and a YouTube video explaining its role in maintaining financial stability. This is the beginning of a long-term investment.

As the Executive Director for FSSR, I will have a responsibility to co-ordinate this project and intend to play a leading role in delivering it personally. I intend to devote time to explaining the role of the FPC and macroprudential policy to non-specialist audiences and I am currently establishing a programme of visits to all parts of the UK, each of which will include sessions with local business audiences and regional media.

I intend to consult with FPC colleagues and the Bank's Public Communications experts to construct a programme to raise public awareness. I do not yet have firm views about what exactly it should include, but it should probably include: development of a simple story about the FPC and its role; frequent talks by FPC members, and discussions between them and local audiences of businesses and other groups; and exploration of the use of social media and educational programmes. On the last of these, we can learn from the Target 2.0 competition in the monetary policy sphere, which has involved more than 900 schools, sixth form colleges and higher education institutions over 15 years.

10. What do you consider are the strengths and weaknesses of the FPC's current transparency arrangements? Do you agree with the conclusions and recommendations of the Warsh review as they concern the FPC?

Transparency serves two main purposes. First, it enhances the **effectiveness** of the FPC by allowing its actions to be understood and anticipated. Clear and consistent messages are needed to achieve this. Significant progress has been made here, using the FPC's Statements, Record, Financial Stability Report and accompanying press conference.

However, the FPC's 'reaction function' inevitably remains underdeveloped at this stage. In addition to research work to establish what it should be (see question 12), the FPC will need to consider ways to communicate it as effectively as possible, including through reforms to the FSR (see question 11).

Second, our transparency arrangements allow the Committee and its members to be held **accountable** by the public and Parliament for the delivery of our statutory objectives. To date, the Committee's publications and speeches have allowed significant scrutiny of its work. However, there has been little disagreement amongst FPC members on their policy choices, so the arrangements cannot be considered fully 'battle-tested'. We should keep under review their suitability for more challenging circumstances that could arise in future.

The FPC has not been able to adopt a tried-and-tested set of transparency arrangements from the MPC because of a deliberate choice by Parliament that its decision making process should differ from the MPC. I think this difference is appropriate because the FPC's decisions span a broader range of instruments and are not set in pursuit of a single numerical objective. The Bank of England Act requires the FPC to reach decisions by consensus wherever possible. Our transparency arrangements must reflect this.

Regardless of whether consensus is reached or a vote is taken, I think the Record of the meeting should continue to reflect the full set of views explored by the Committee, the issues that were weighed, and what I expect to be robust discussions that take place in reaching the final outcome. The Record is an important communication tool, describing how the FPC got to its decision. FPC members, with the support of the Bank's Court, should therefore keep the Record under review. I would expect to discuss with FPC colleagues and the Court of the Bank if I ever believed important elements of the debate were being omitted from the Record.

To date, all decisions of the FPC have been made by consensus. Where consensus is possible, I do not think views should be attributed in the Record to individuals. To do that would risk hindering the process of building consensus and diminish the exploratory nature of debate. Indeed, the Act explicitly carves out "information identifying particular members of the Committee" from the information required to be included in the Record.

And where consensus is formed, I do not believe that it would be helpful for each of us, after the event, to start to provide different interpretations of, or perspectives on, the final decision. Each of us should be accountable for having signed up to the consensus. To do otherwise would cloud the accountability of FPC members and risk diminishing the effectiveness of the Committee.

It is quite possible that, for some future decision point, a consensus will not be found. The transparency arrangements of the FPC are able to accommodate this. A vote would be taken and individual votes published in the Record of the Committee's policy meeting. The Record would set out the majority and minority views.

Finally, as a general rule, I do not think it sensible for the speeches of individual members to contain significant news about policy decisions above and beyond the information in the FPC's official communications. Repeated newsworthy announcements by individual members risk creating a cacophony, which diminishes transparency. Again, this emphasises the importance of continuing to produce a full Record: a practice I will support as Executive Director for FSSR.

Warsh Review

I agree with the conclusions of the Warsh review as they relate to FPC. The FPC is at a different stage of development to the MPC and will benefit from a more unconstrained space for discussion. Furthermore, the different nature of FPC decision making and the focus on risks rather than central projections, mean that, as the Warsh Review concluded, there cannot be a direct read across to FPC from his recommendations for the MPC. However, the question of publishing transcripts of FPC discussions should be reviewed in 3-5 years, once the FPC is more firmly established.

There are some conclusions of the Warsh Review that can be taken forward now. First, our archiving policy and practice should ensure that records are available in due course that document the early stage development of macroprudential policy in the United Kingdom. Second, we can ensure that policy decisions and their rationale are communicated as soon as possible after decisions are made. In that regard, I would like to review the processes and procedures of the FPC to assess the scope for following the MPC in aligning publication of decisions, Record and Financial Stability Report. The clarity of the FPC's communications could be improved by bringing them together, but there may be obstacles to going as far as the MPC proposes to go because, in contrast to monetary policy, the FPC takes decisions over a much broader range of instruments.

11. What is your assessment of the effectiveness of the Financial Stability Report as a communication tool? How would you improve it?

The function of the Financial Stability Report is to explain the FPC's assessment of the threats to financial stability, its choice of action to address those risks, and its assessment of the impact of those actions. It should complement the Record by documenting the in-depth analysis behind the Committee's agreed risk assessment and policy actions.

Work is currently underway to review the format and content of the Report, beginning with a readership survey. Before committing to specific reforms, I intend to review the findings of that and consult with my FPC colleagues. However, I start from the position that there is scope for improvement. The Report is currently a long document (the December 2014 Report covered 70 pages). It is structured in a way that can encourage repetition. And it separates policy choices from risk assessment.

I believe the effectiveness and accountability of the FPC would be bolstered by a document of greater clarity and force. I am minded to consider changes that focus the Report on each of the major threats to financial stability and explain what action the FPC has taken or could take as the risk evolves. The explanation of each risk would contain a summary of the indicators the FPC considered of most importance in assessing the evolution of that risk. Such a reformed Report could assist in building understanding of the FPC's reaction function and promote the effectiveness of macroprudential policy.

12. What do you think the FPC should be focusing its research on?

The FPC's research priorities are central to the new Bank of England research agenda, which will draw together and exploit synergies between the Bank's policy responsibilities. Within that agenda, I believe there to be three areas of focus for the FPC. These are linked closely to my assessment of the challenges the FPC will face (see questions 6 and 7).

First, a substantial and long-term research programme is needed to establish a well-articulated macroprudential policy framework, improve its predictability, and co-ordinate its use effectively with monetary policy and microprudential policy.

This will include research to clarify what the FPC is seeking to achieve. The FPC's mandate describes its role as removing or reducing systemic risks, but there are few firm foundations for identifying the full range of those risks or how they arise. As our understanding develops, we should continue to refine the reference indicators that the FPC uses to guide the calibration of its powers.

The transmission of macroprudential tools to financial stability and to economic activity will need to be quantified. Given the global lack of experience of the use of such tools, this research will need to draw on as wide a range of data and case studies as possible. It should also improve our understanding of how macroprudential tools can best be deployed in co-ordination with each other and with other policies.

The stress-testing framework should also continue to develop. We should improve the Bank's quantitative modelling capabilities, including by examining the behaviour of the banking system during past stress events. We should gradually build a richer set of interconnections into the tests so it is truly a test of the system. Over time, we will need to consider: (a) how the design of stress test scenario should link to the position of the economy within the credit and business cycles and (b) how the outcomes of the test should feed into the use of the FPC's time-varying capital and other tools.

Second, a research programme is needed to identify ways in which the financial sector is changing and to formulate our response to those changes.

This work should have a particular focus on the growth of market-based finance, and should include analysis of the growing importance of collateral. As I suggest in question 8, our range of tools will need to expand to deal with risks in this area.

There is also merit in reviewing the overall effects of post-crisis reforms to the financial sector. The reforms agreed and in train will fix the fault lines that underlay the crisis but have they had unintended or unexpected effects? Have we reached a position that best allows the financial system to serve the real economy without generating systemic risk?

Third, to aid the identification of risks we should exploit new data sources to map the financial system, the interconnections within it and the connections between it and the real

economy. This includes development of 'flow of funds' data, on which the Bank is working with the ONS. And to increase our understanding of the risks stemming from market-based finance, it should also encompass the mapping of flows of collateral and networks of credit and liquidity risk exposures.

13. What are your key concerns regarding international regulation? What still needs to be done, and how much influence does the UK have over these decisions?

There are four areas in which international regulation can affect the FPC's objectives and are therefore of concern to me.

i) It is essential that the global financial system is safe and resilient: all jurisdictions should implement agreed baseline standards fully, consistently and promptly.

As a global financial centre, instability in other jurisdictions is more costly for the UK than for some others. But fragmentation of the global financial system would be costly for the world economy and particularly so for the UK. The maintenance of an integrated global system requires each jurisdiction to have confidence that it won't be side-swiped by instability elsewhere. To build the necessary confidence the FSB conducts regular peer reviews and will this year initiate an annual reporting process on implementation, and the IMF conducts annual assessment programmes of financial sectors.

ii) Some global standards remain to be finalised and agreed. Reform fatigue must not be allowed to set in.

In the banking system, standards must be finalised for leverage and the total loss absorbing capacity (TLAC) that globally systemic banks must hold so that they can be resolved when they fail without generating wider instability or recourse to public funds. The TLAC standard will ensure that loss absorbing capacity cascades through group structures, giving both home and host regulators confidence that capacity will be available when and where needed. Having observed the work to establish this standard very closely, I am confident that the UK has significant influence over its development.

Further progress is also needed in reforms to address the too big to fail problem outside the banking system - in insurance and financial market infrastructures, for example. Increasing use of central counterparties (CCPs), as mandated by the G20 for OTC derivatives, is reducing systemic risks, but the concentration of risk in CCPs means they are becoming increasingly systemic themselves. More work is needed at an international level to establish credible resolution strategies for CCPs.

iii) **We should be alert to any global or EU standards that would constrain the UK's ability to adopt standards appropriate to its circumstances**

The forthcoming EU banking structural reform proposals must retain sufficient flexibility for the UK to continue to implement its own structural reform measures. And international and EU definitions of the leverage standard for banks, to be agreed by end 2016, should preserve the flexibility for the UK to adopt additional buffers for systemically important banks and a countercyclical leverage ratio buffer.

The EU bonus cap has restricted the scope for the remuneration code in the UK to discourage excessive risk taking. From a prudential perspective, it is clearly preferable for employee remuneration in banks to be as flexible as possible and for flexible remuneration to be held back until it is clear that it was not awarded on the basis of excessive risk taking or while employees were engaged in misconduct.

iv) **The UK should continue to engage at both European and global levels to co-ordinate responses to risks and to improve the functioning of the global financial system.**

To be addressed fully, the current risks in market-based finance (described in questions 5 and 8) will require internationally co-ordinated actions. In this area, the FSB is acting as the forum through which regulators can share analysis and data and examine the tools that might need to be applied consistently across jurisdictions.

The European Systemic Risk Board offers an opportunity to co-ordinate the tackling of risks at the European level. Under European regulation, it ensures that macroprudential actions taken by individual Member States can be reciprocated elsewhere in the EU. And in the past year, the

UK has used its influence in the ESRB to initiate work assessing and managing systemic risks posed by misconduct.

The UK is also influencing EU moves towards the building of a Capital Markets Union. The Bank issued a paper on February 27 discussing how national barriers to savings and investments could be diminished and is committed to delivering a constructive response to the Commission's Green Paper by the deadline of 13 May.

Executive Director for Financial Stability Strategy and Risk

14. What do you regard as the main challenges you will face as Executive Director for Financial Stability Strategy and Risk?

My primary challenge will be to continue to mould a newly-formed area, motivate its teams and maintain clear direction and purpose. I will be accountable to the Court of the Bank, which will keep the performance of me and the directorate under review.

The FSSR directorate is still less than a year old, having been formed from teams in the PRA and the Bank's Financial Stability area during the Bank's strategic planning exercise in June 2014. It is well organised and has a strong management team. My task will be to set clear and compelling direction for the immediate need to assess and manage risks, a longer-term research agenda, and a programme to raise public and financial sector understanding.

The direction for the research programme is set out in question 12. On the immediate policy challenges, FSSR should always be strongly biased towards worrying intelligently. We must avoid any tendency to be persuaded easily that any situation that looks risky is in fact safe or that 'this time is different'. The culture must remain one of rigorous analysis and I must maintain an internal environment that is open to challenge and encourages people at all levels to speak up and question any prevailing wisdom.

FSSR should also have a bias towards giving the FPC options for action to mitigate and manage risks. The FPC can always choose not to adopt them. But without such options, the FPC will be constrained to inaction. FSSR will need the confidence to propose policy actions

that could be novel and unpopular, again making rigorous analysis and understanding of their impacts of critical importance.

I will also face the challenge of ensuring that the FPC is able to draw on the work of the entire Bank of England, including supervisory intelligence, market intelligence, monetary analysis and international policy positions. At the same time, I must ensure that macroprudential policy is co-ordinated, where appropriate, with firm-level supervision and resolution planning, negotiations on international standard-setting, central bank market operations and monetary policy formulation. This is the foundation of the One Bank strategy being pursued by the Bank and which, as a member of the Bank's executive team, I will be responsible for delivering.

15. What do you intend to achieve as Executive Director for Financial Stability Strategy and Risk? How should we measure your success?

My aims are consistent with the challenges I described in questions 5, 6, 9 and 14. They can be summarised into three groups.

First, to deal effectively with systemic risks arising from the real economy and all parts of the financial sector. Success should be measured by rigorous assessments of whether risks were identified as promptly as possible and addressed as effectively as possible using the tools available. The MPC conducts an annual review of its forecasting performance. There may be merit in an annual review of FSSR's risk assessment and mitigation work, including of the impacts of the FPC's policy actions. With the policy regime still young, we will undoubtedly learn much as we progress and such an exercise could provide a valuable learning discipline.

Second, to establish a well-articulated, comprehensive and understood macroprudential framework that has broad public support. Success here might be measured over multiple years and include the existence of a clear and in-depth statements, based on firm research foundations, of the aims and methods of macroprudential policy. Our stress tests should continue to have credibility and the outcomes and reactions to them understood. And in surveys of public understanding, we should move closer towards the levels achieved by the MPC.

Third, to build the FSSR directorate of the Bank into the most effective possible risk assessment and mitigation unit, integrated with the rest of Bank. The effectiveness of

FSSR should be assessed by FPC members and the Bank's Court. The integration aims should be assessed as part of a broader assessment of how the Bank delivers its objectives as a whole – an exercise in which I would expect the Court of the Bank to play the leading role.