TSC Pre Appointment Questionnaire

Dr. Ben Broadbent

A. PERSONAL/GENERAL

1. How has your experience to date prepared you for the role of Deputy Governor of the Bank of England, including your roles on the Monetary Policy Committee (MPC) and Financial Policy Committee (FPC)?

I have spent the last three years as an external member of the MPC. This period has been a varied one both for the economy – stagnation followed by a strong recovery – and for policy. The MPC voted for increases in the Asset Purchase Facility on three occasions, it oversaw the introduction of the Funding for Lending Scheme and, more recently, two phases of forward guidance. The Financial Policy Committee first sat, in interim form, in June 2011; in April 2013 it gained statutory power.

The time I've already spent at the Bank has evidently been helpful as preparation for the post of Deputy Governor Monetary Policy. So too, I believe, is my experience prior to joining the MPC. I gained a firm grounding in economic theory while doing a PhD at Harvard, and as an assistant professor at Columbia University. Analysing the UK economy, and communicating that analysis to non-economists, was at the heart of my job as UK economist at Goldman Sachs. That job also meant I could observe at close hand both the rapid growth in some credit markets that preceded the financial crisis and its dramatic unwinding in 2007 and 2008. Having some experience of wholesale financial markets, including those that fund the banking system is, I believe, a valuable one for serving on the Financial Policy Committee.

2. Do you intend to serve your full term?

Yes.

3. What do you regard as the main challenges you will face as Deputy Governor with Responsibility for Monetary Policy in the next five years? What criteria do you suggest should be used to assess your record as Deputy Governor?

I can think of several challenges:

- Policy normalisation: The financial crisis necessitated unprecedentedly stimulatory settings for monetary policy in every advanced country. Interest rates were cut to near-zero levels and the balance sheets of the central banks were expanded dramatically. Echoes of these policies will persist for some time. Higher risk and credit premia are likely to keep global risk-free interest rates at relatively low levels, compared with those that prevailed (on average) prior to the crisis. Higher demand for reserve deposits, partly the result of regulatory reforms,

will also keep central banks' balance sheets from reverting to their pre-crisis size, even after the advanced economies have fully recovered. Nevertheless, economic recovery will necessitate a withdrawal of monetary accommodation at some point, including some shrinkage of balance sheets, and there is associated risk of volatility in some financial markets. At home and abroad, that process will have to be managed carefully and the preconditions for it communicated clearly. As such, communications by the MPC will need to be clear about the Committee's objectives and policy actions and that clarity should extend to my own speeches and interviews.

- Developing our understanding of macro-prudential policy: The UK is not alone in concluding that a body to monitor and lean against systemic risks in the financial system would have helped temper the scale of the financial crisis, nor are we alone in creating a body such as the FPC. But macro-prudential policy is in many ways in its infancy and, unlike with monetary policy, we do not have the advantage of long runs of historical data to help identify its effects. Improving that understanding is an important challenge, one to which the Bank's enhanced research capacity will partly be directed. My personal contribution to that objective can be assessed through the content and clarity of the speeches and interviews that I give as an FPC member, most notably on the interaction between monetary and macro-prudential policies.
- Strengthening our understanding of monetary policy, ensuring the MPC is well briefed: In my view the inflation targeting framework has served us well in the past few years. During that time the UK has faced a sharp slowdown in productivity growth and steep rises in some non-labour costs. These are things that, in the absence of a credible monetary framework, would have led to much steeper rises in both unemployment and inflation than we actually experienced. I also believe the operational aspects of inflation targeting – the Inflation Report, the monthly minutes, the various meetings through which members of staff brief the Monetary Policy Committee – are also in generally good shape. I see no need for radical change in this area. But we should always challenge ourselves to make improvements to these procedures and the Oversight Committee of Court will ensure that is the case. Economics is also an evolving subject, and it is important the Bank's staff keep abreast of current thinking and best practice on policy. One measure of success in this area is ensuring that MPC members who appear before you can say that they are confident in the process of which they are part and that they receive the support they need from Bank staff.

4. Which of your publications or papers are of most relevance to your future role as Deputy Governor?

As a member of the MPC all my speeches have been directed at questions that are relevant for monetary policy. The importance of global developments has been something of a theme. In early 2012 I pointed out the high proportion of UK banks' losses made on their rapidly expanded overseas

balance sheets; later that year I suggested high risk premia and weak investment might have arisen partly as the result of fears of a disorderly outcome in the euro area; in February of this year I pointed out how sensitive was our own economy to movements in global financial conditions. I have written two speeches about the balance of growth and its impact on sterling's exchange rate.

I have also written about the productivity puzzle, focussing on the role played by impaired resource allocation. In the context of forward guidance, I have explained why, when the MPC and other inflation-targeting policymakers are uncertain about future productivity, it makes sense to focus more directly on measures of economic slack, including unemployment. Finally, I wrote a more conjunctural speech in late 2012, arguing that construction activity was likely to turn up the following spring.

I have included a list of all the speeches I have given since I joined the Bank in an Annex, along with a list of the relevant work I did prior to this.

5. Following the launch of the Bank of England's strategic plan, how do you think your role will differ from your predecessor's?

Its essential aspects will not change. My main responsibility, as was my predecessor's, is to oversee the Monetary Analysis Directorate of the Bank and to ensure that the MPC continues to receive the best possible economic analysis in order to meet its remit. I am Vice-Chair of the Committee. I am also a member of the Financial Policy Committee. I will represent the Bank of England in international fora such as the ECB General Council and OECD Working Party 3 and also attend the annual Jackson Hole Symposium; my predecessor's G20 role will be passed across to the Deputy Governor for Financial Stability.

A few things are different, however:

- The Deputy Governor for Monetary Policy will no longer have responsibility for Markets, which will fall under the new position of Deputy Governor for Markets and Banking, but I will instead be directly responsible for the Notes Directorate, whose main role is to continue to maintain confidence in the currency by meeting demand for notes. A key part of this task is to oversee the introduction of polymer notes, as well as the award of the new printing contract later this year.
- I will have a role assisting the Governor in executing the Bank's new Strategic Plan. In particular I must ensure, together with the Bank's Chief Economist, that the Monetary Analysis and Notes Directorates play their part in supporting the Bank's strategic research priorities; these include the interaction between monetary and macro-prudential policy.

6. To what extent does the work of the MPC and the FPC overlap? Do you think that current arrangements sufficiently reflect this overlap? Is there a case for merging the two committees?

This is a complex issue but let me summarise my current views as succinctly as I can: there is a clear case for joint work but only a weaker one for merging the two Committees. There may also be outright costs to a merger.

Regarding the first point, it's clear that, because they are both concerned with macro-economic stability of one sort or another – their primary objectives are the stability of inflation and the financial system respectively (both have support for the Government's economic objectives, including those for growth and employment, as a secondary objective) – the MPC and FPC will be interested in any work on the macro-economy. More than that, each policy can affect the objectives of the other. Though best assigned to meeting the inflation target, changes in interest rates affect the resilience of the financial system; they also influence both the supply of, and the demand for credit. At least for a while, increases in capital requirements can depress demand and inflationary pressure. The same applies to more direct controls on credit supply. So joint analysis makes sense. It's also important that each Committee understand how the other would respond to particular economic developments.

These inter-dependencies are why it's right to house the two policies in the same institution. They explain why the MPC and FPC are often interested in the same issues, and have had joint meetings to discuss them (the housing market, for example). And they are fundamentally recognised in the cross-membership of the two Committees.

So why not go the whole way and merge them?

Let me make two points in this regard. First, although some people sit on both, each Committee benefits greatly from members who specialise in one area or the other. My fellow external members on the MPC have an expertise in monetary policy in particular; those on the FPC have been selected for their experience in banking and financial markets. There would be a real cost in losing this degree of specialisation.

Second, while there may be other reasons for a merger, one line of argument that does not make sense to me (but which one hears quite often) is that, on their own, the two Committees might end up setting policies that "pull in opposite directions" on demand. The point here is that, given the differing objectives, this will at times be the right thing to do. In particular, a single grand Committee, setting both policies, might well choose settings that have this property. Suppose, for example, we were confronting an economy with sub-optimally low inflation but elevated risk to the financial system. The correct policy setting, one a merged Committee would also choose to follow, would involve tight macro-prudential policy and loose monetary policy.

There is a parallel here with recent settings of monetary and fiscal policy. The crisis did significant damage to government revenue and, although there might have been different views on the pace at which it should happen, there was general agreement that the UK government should make efforts to reduce its deficit. At the same time, with an eye to its objectives, the MPC set very loose monetary

policy. Faced with very high public borrowing and weak demand this is, I believe, an orthodox prescription, one a single policymaker would also pursue. Similarly, circumstances may dictate that, at the margin, the optimal settings of monetary and macroprudential policies "pull in different directions" on demand. It is a natural consequence of having differing objectives.

We must keep an open mind on the matter. But, allowing for the close connections that already exist, I do not currently see a strong case for a full merger between the FPC and MPC.

7. What do you consider to be the most important conclusions and recommendations of the Parliamentary Commission on Banking Standards with respect to your new responsibilities?

The recommendations and conclusions of the Parliamentary Commission on Banking Standards (PCBS) are most relevant for the work of the Financial Policy Committee and the PRA Board. The two recommendations directly addressed to the FPC involve the leverage ratio and the regulation of non-bank financial companies.

The PCBS, concerned about the difficulty of setting appropriate risk weights for banks' assets, suggested the FPC publish an assessment of the appropriate level of capital relative to the un-weighted balance sheet (the leverage ratio, or rather its inverse). The FPC set out the terms of this review in March and expects to finalise the review by November of this year.

The leverage ratio is likely to be a vital component of the overall capital framework. But one thing worth saying though is that, although risk-weights have their problems, that doesn't mean all assets carry equal systemic risk or, therefore, that a minimum leverage ratio is a sufficient regulatory tool: on its own it could encourage banks towards systemically riskier activities. It should therefore be seen as one of a number of measures designed to ensure sufficient levels of loss-absorbing liabilities on banks' balance sheets.

The PCBS also recommended that the Bank, the FPC and the PRA take seriously the task of monitoring shadow banking. As the regulation of banks adjusts for the failures of the past, one would naturally expect some financial activity to migrate to the non-bank sector. This doesn't render those regulations impotent: to the extent the systemic interactions and moral hazard problems are smaller outside the banks such a shift would be beneficial, at the margin. Equally, however, regulators need to guard against the risk that non-banks themselves become over-leveraged and highly inter-connected. The FPC recently undertook an initial review of the adequacy of the existing regulatory perimeter for selected non-bank and market sectors (finance companies, asset managers, hedge funds, money market funds and securities financing transactions). It will shortly publish an assessment of risks in these sectors.

B. MONETARY POLICY

8. What do you regard as the major risks to the outlook for the UK economy?

Many important risks emanate from outside this country. They include:

- A re-emergence of credit risk in the peripheral Euro area countries. The funding costs of sovereigns and banks in the Euro area periphery have fallen sharply since President Draghi's pledge to "do whatever it takes" to maintain the single currency and the backing that statement received from core-country governments, in mid-2012. That in turn has helped stabilise economic activity in those countries, justifying (to a degree) the initial compression in risk premia. But the institutional reforms necessary to sustain a healthy monetary union over the longer term still have a long way to go and, in the meantime, there is always a risk of adverse movements in sentiment and funding costs – a risk that the virtuous circle of the past eighteen months switches back to the vicious circle that characterised the 2010-12 period. The progress of these reforms therefore remains of critical importance for the UK economy.
- A hard landing in China. Rapid growth in credit in China has left some parts of the economy in a financially fragile position. The country as a whole has enjoyed a much healthier external position than those involved in the East Asian financial crisis in the late 1990s. But it is also a much larger economy and a severe correction in China would have consequences for the rest of the world, including the UK.
- A bumpy exit from super-easy monetary policy settings in the developed world: the financial crisis resulted in near-zero interest rates and significant expansions in central banks' balance sheets. At least some of this will have to be unwound. The pace of withdrawal will depend on the strength of economic activity and is likely to occur at a time when risk appetite is improving and the supply of government debt declining. However, it may still result in heightened volatility in financial markets and associated risks to economic activity.
- As far as domestic risks are concerned, one potential area of concern is the housing market. I say "potential" because, as yet, growth in mortgage debt remains low: relative to household incomes the stock is little changed in recent quarters. If left unchecked there is a risk that the recovery in the housing market results in renewed growth in gearing, including in the number of high-LTV and high-LTI mortgages. There are already signs of a shift in the flow of new lending towards higher LTI ratios. This, in turn, would increase the risk of future instability in credit supply and economic activity.
- Sustained weakness in UK productivity. Many of the risks above would primarily affect demand for UK output. But, in the long run, it is supply – underlying productivity – that determines per-capita national income and the rate at which it can grow. We do not fully understand why productivity growth has been so weak in recent years. But if that trend were to continue, this would necessarily limit the rate at which real incomes can grow.

9. How successful was the first phase of forward guidance? What are the risks to the success of the second phase of forward guidance?

The principal aim of the first phase of guidance was to reassure UK households and businesses that the Bank wouldn't raise interest rates until the economic recovery was on a firm footing. Specifically, the MPC said it would not consider raising interest rates at least until unemployment had fallen below 7%. With the economy clearly operating well below normal capacity it was reasonable to condition policy on one simple measure of spare capacity. And although, thanks to rapid employment growth, that first phase of guidance came to an end sooner than the MPC had anticipated, it helped prevent forward rate expectations from rising too strongly as the economy recovered. According to survey evidence, it appeared to have a greater effect on companies: almost half of responding companies reported that they expected Bank Rate to remain at low levels for longer than they would have done were guidance not in place; the majority said that the Bank's policy guidance had made them more confident about UK economic prospects.

The second phase of guidance has focused not on the conditions necessary for interest rates to begin to rise but, more importantly in my view, the shape of the path once they do so. The MPC has indicated that, for a variety of reasons, and in order to meet the inflation target, interest rates are likely to rise (i) more gently and (ii) to a materially lower level, when compared with economic expansions in the past. The actual path of interest rates will depend, as ever, on actual events, as they unfold over the future. But this guidance has again helped to prevent financial conditions from tightening too rapidly as the economy recovers.

10. What is your view of the UK's 'productivity puzzle'?

The first thing to say is that there is a puzzle: productivity is far weaker than might have been expected even allowing for the weakness of output growth. So either the usual, demand-related factors that help to explain why productivity is usually cyclical – labour hoarding for example, or other sources of variable factor intensity – are extraordinarily strong at the moment, or something else is at work.

It's hard to see how labour hoarding alone can explain the data. It's been strong rates of hiring, not low levels of redundancies, that lie behind the growth of employment in recent years. Firms hoard labour in the belief that they will need it at some point in the future, yet in 2012, when the puzzle was at its most marked, they were becoming less optimistic about the future.

Therefore (and as my second point), while these cyclical factors have clearly been important, there are probably other, more structural things going on as well. Some of these are fairly straightforward. The past few years have seen much weaker growth in areas of the economy that are highly capital intensive and have relatively high levels of per-capita output (oil and finance, for example). That has necessarily had some effect on aggregate productivity. But there may be deeper mechanisms at work as well. Because productivity growth has also been weak after other financial crises, my guess is that these are connected with the financial system and the cost of capital. I have noted, for

example, that aggregate productivity would suffer if, in response to demand shocks that differ across firms and sectors, the economy is unable to reallocate resources in the usual manner. That would be consistent with anecdotes about the difficulty in obtaining credit for new (and profitable) projects and, at the same time, forbearance of some poorly-performing credits. It would also be consistent with the sharp rise in the dispersion of output prices since the recession.

11. What consideration should be given to asset prices, including house prices, within the framework for inflation targeting? In particular, how should monetary policy react to asset price bubbles?

Asset prices are a more important consideration for macroprudential policy than monetary policy and, even then, it is their interaction with credit growth that matters most for financial stability.

This is not to say monetary policy should ignore the behaviour of asset prices: they are an important indicator of underlying confidence and funding costs and must always be watched closely by policymakers. For example, the significant jump in the price of various risky assets in the latter part of 2012, including the traded liabilities of the banks, was an important precursor of the ensuing acceleration in economy activity.

Some argue there is a case for monetary policy to go further and, in the interests of financial stability, that it be used actively to "lean against" excessive swings in asset prices, even if (in expectation) this compromises the pursuit of the inflation target.

I am less convinced that monetary policy has a major role to play in this respect. For one thing, it isn't always easy to identify "in real time" what is excessive and what is not. Second, as an open economy, the UK is at least as sensitive to asset prices set in global markets as it is to domestic developments. On its own, UK monetary policy has little impact on many of the markets that matter for our economy. The experience of the financial crisis is instructive in this respect. The majority of losses experienced by UK-owned banks were on their overseas balance sheets; write-downs on domestic mortgages, the asset most susceptible to short-term sterling interest rates, were negligibly small. I believe it would therefore have made little difference to the scale or impact of the financial crisis had UK monetary policy alone been tightened more aggressively prior to the crisis. Third, what matters for financial stability isn't so much rises in asset prices per se but the degree of any accompanying increase in leverage. It's when households or firms finance the acquisition of assets with significant quantities of debt that the most severe problems can occur. And finally, we now have a new set of policy instruments – macro-prudential policy – designed explicitly to address this risk.

12. Do you believe that the equilibrium size of the Bank of England's balance sheet should be larger in the future than it was pre-crisis? What changes to the Sterling Monetary Framework would be needed to accommodate this?

Largely reflecting the MPC's Asset Purchase programme, which has injected a significant amount of liquidity into the system, the level of commercial banks' reserves at the central bank has increased materially during the crisis. In the near term, at least, the evolution of the Bank's balance sheet will continue to depend on the MPC's QE decisions.

But it is likely that over the longer term, and quite independently of QE, commercial banks' demand for reserves is likely to be materially higher than before the crisis. This reflects changes in risk aversion and also bank regulation. International liquidity regulation requires banks to hold a significant buffer of liquid assets on their balance sheets. Central bank reserves – as the ultimate means of payment in the economy – are the most liquid of all, and it is likely that banks will want to hold some portion of their buffers in this form.

The SMF is a flexible tool and is well placed to deal with shifts in the demand for reserves. The Bank is able to both inject reserves (through short and longer-term repo operations) and drain them (through issuance of Bank of England bills). It can, of course, amend its operations as required to ensure that it is able to implement the MPC's desired level of Bank Rate.

13. What is your assessment of the effectiveness of the policy of quantitative easing in the UK, and of what needs to be considered when preparing for the eventual unwinding of quantitative easing? What is your view of the distributional effects of QE?

Qualitatively, QE is little different from textbook monetary policy: it's a classical open market operation. As such, it would be odd if it had had no effect and the evidence says quite clearly that it did. The low point for risky asset prices, in March 2009, was reached immediately prior to the launch of QE in the UK and the US. It also had an impact on the prices of government debt, and so long-term interest rates. Taking both into account, the MPC's central assessment is that the asset purchase programme had a peak impact on GDP of around 2½% and raised inflation by a little more than 1 percentage point.

I don't think it's possible to be very precise about the scale of any impact. In part, this simply reflects the usual imprecision of empirical estimates (in recent work, for example, my colleague Martin Weale has suggested the effects may have been slightly larger than the MPC's earlier estimates). But it may well be that the effects of QE aren't fixed anyway. If the policy works partly by compressing liquidity premia, for example, its impact is likely to be greater the more dysfunctional the state of private asset markets. What is clear is that the interventions in 2009, in particular, had significant and helpful effects on economic activity.

Turning to the unwinding of quantitative easing, we – as a Committee – set out a number of considerations in our most recent *Inflation Report*. First, we intend for Bank Rate to be the active marginal instrument for monetary policy and, in order to do that, we are likely to defer sales of assets

at least until Bank Rate has reached a level from which it could be cut materially were more stimulus required. Second, in principle, we could reduce the stock of assets just by letting the gilts mature, although I'd note that the relatively long average maturity of the gilts in the portfolio may mean more active sales are required. Third, we intend to conduct any asset sales within an orderly programme on which we will liaise closely with the Debt Management Office, as the Bank has done in the past.

As I say, it's clear the asset purchase programme gave significant support to the economy during a difficult period: had the MPC not taken that action, economic activity would have been significantly lower, unemployment significantly higher and risky asset prices – and therefore the value of pension funds – would have suffered that much more. But, as with all change in monetary policy, that support will not have been shared evenly across everyone: if only at the margin, it will have had a distributional impact. It is important that we, as policymakers, understand the implications of such changes for long-term economic growth, even if the tools to address such issues lie outside our own sphere of influence.

C. FINANCIAL STABILITY

14. What do you view as the main threats to UK financial stability at present? What other risks would you wish to monitor closely in future?

Domestically, the main potential threat lies in the housing market. In the past, periods of strong house price growth have often been associated with high rates of turnover, declining underwriting standards and, as a result, rapid growth of vulnerable mortgage debt. We are not yet at that stage: transactions rates are still below average and, at around 1%, annual growth in mortgage debt is still very low. Equally, it would be wrong to allow a potential threat to become a real one and it is clearly an area the FPC will scrutinise.

It would be equally wrong to imagine that the only risks lie in our own housing market. As I said in answer to question 11, the financial crisis taught us that, in the presence of a globally integrated financial system, threats to domestic financial stability can emanate just as easily from abroad as at home. One important risk is that of a hard landing in the Chinese property market. I would also highlight the risk that investors, taking part in a "search for yield", underestimate and misprice risk. Implied volatility is already at relatively compressed levels. Further compression would make some financial markets increasingly vulnerable to a disorderly correction.

15. What do you regard as the strengths and weaknesses of the work undertaken by the Financial Policy Committee?

The most important action taken to date by the Financial Policy Committee has been its recommendations to improve the capital position of the UK banking system. As a result, our banks' balance sheets are in a much healthier position than was the case just a few years ago. That has helped reduce their funding costs and contributed to the economic recovery. There is further to go to

build the resilience of the system – in particular, resolving the issue of 'Too Big to Fail' – but the actions of the Committee to build capital adequacy have represented an important first step.

The Committee has also acted swiftly to establish a macroprudential framework in support of its activities. Unlike when the Bank of England was originally granted monetary policy independence, there is relatively little history on which macroprudential policymakers can draw. Yet the Committee has worked to develop a sustainable framework for policy, identifying both the tools over which it might have powers of direction and the core indicators it will consider when setting policy.

Where the FPC could, perhaps, do more is in the area of public communication. It is important the public understand what the FPC does, why macro-prudential policy is valuable and the circumstances under which the FPC might act.

To help us do that, we will need to explore further the transmission channels through which our policies operate and the consequent costs and benefits. This is a relatively recent strand of the economic literature and the challenge is made harder by the greater breadth of policies available to the Committee. It is therefore an area rich for much fruitful research both within and outside the Bank and something I will strongly encourage.

16. To what extent is the banking system holding back the UK recovery, and how much further do banks have to go before they will have satisfactorily repaired their balance sheets?

The continuing pressure on banks to shrink balance sheets, even years after the recession formally ended, was a key reason for the weakness of the recovery in 2011 and 2012. That pressure was alleviated during the latter part of 2012 after authorities took action earlier that year. The Bank of England and the Treasury launched the Funding for Lending Scheme in mid-2012. In the euro area, the ECB increased both the scale and scope of its lending to the banking system; it also pledged to do "whatever it takes" to prevent the break-up of the single currency. Together, these moves helped to reduce sharply the funding costs of the banks and the pressure they'd been under to shrink lending.

That may not be immediately obvious in the broad credit data in the UK. But the stock of mortgages moves relatively slowly: though it's still below average, the flow of new mortgage debt has recovered in the past year or so. As for corporate lending, this is being depressed in part by sustained falls in lending to the commercial real estate sector, driven at least in part by write-downs of poorly-performing loans. By contrast, there is evidence (for example in the Bank's Credit Conditions Survey) that the availability of new credit to companies is improving. There is further to go: small and medium-sized companies still report that new lending terms are somewhat restrictive. But the tightness of credit supply is clearly much less of a constraint on activity than it was a couple of years ago.

It's unlikely that the authorities' actions in mid-2012 would have had the same impact had banks' balance sheets been in as fragile a position as they were immediately after the financial crisis. So although the deleveraging process has been painful, it also contributed to a gradual improvement in

capital ratios – the UK's major banks are ahead of their Basel III minima – that eventually helped pave the way for economic recovery. The FPC stress tests will help to determine how much further there is to go. But there has already been significant progress.

17. What is your assessment of the macroprudential tools that are available to the FPC? Would you prefer the FPC also to have the ability to limit loan to value and/or loan to income ratios?

The FPC has two main powers. First, it can make recommendations to anyone and on a 'comply or explain' basis to the PRA and the FCA. Second, it has powers of direction over specific macroprudential tools, presently the countercyclical capital buffer and sectoral capital requirements.

As I said earlier, in answering question 15, macroprudential policy is relatively new and our experience of its effects is limited. So although the impact of increasing the countercyclical buffer (say) on banks' resilience is clear enough, it is hard to be precise about the broader impact on credit supply.

There may be a case for complementing tools that build resilience with those that more directly address the build-up of vulnerabilities. The FPC's powers of recommendation are very broad. It could, for example, take actions to limit loan-to-income or loan-to-value ratios by making the corresponding recommendations to the PRA and FCA. That might be appropriate if it's clear that financial risk is rising to unacceptable levels purely because of growth in one particular form of lending.

The scope of the FPC's powers of direction is a matter for Her Majesty's Government to decide. Powers of direction are implemented more expediently and may therefore be useful for actions where the FPC is likely to revisit its policy setting more frequently.

18. What is your assessment of the FPC's ability to use macroprudential tools on a regional level? Is there a scenario under which you believe that would be necessary?

If the FPC were to make recommendations about specific areas of banks' loan books – mortgages, for example – there is no reason why, in principle, these can't also be about specific regions. Whether, in practice, such instruments should be used as a matter of course is quite another question. Because UK banks lend (for the most part) on a national basis the risks in a single region would have to be that much starker to matter, on their own, for UK financial stability. Because the data are less good it would be harder for the FPC to be confident about the necessity of an intervention at a regional (as opposed to a national) level. And it's not clear it would be necessary anyway, as a national intervention is likely to bind most acutely in precisely the regions that pose the highest risk. Others would be less affected.

Take the current situation. The housing market is recovering. That poses a risk to financial stability if it is accompanied by sharp rises in the number of risky mortgages. That judgement, in turn, involves

several other questions: (i) are prices getting to levels from which declines are more likely than rises? (ii) are there lots of people actually buying houses at these prices? and (iii) are many of them doing so with high-LTV mortgages? As I said in answer to question 14, I'm not sure one would yet answer positively to any of these questions (let alone all of them) at a national level, though the FPC may nonetheless want to do something to guard against the risk that we get to that point.

What about the regional position? Well, it's clear that prices have recovered more strongly in London than elsewhere: according to official data, prices rose by 17% in the year to March in the capital, compared with around 5% elsewhere. But it's less clear whether the growth of risky mortgages is similarly skewed. (Transactions volumes seem to have risen by broadly similar proportions across the country, but it may be that the cash component of these purchases has risen by more in London than in other parts of the country.) And even if it is, any intervention designed to limit the growth of over-risky lending would presumably have its strongest effect in London itself. A policy needn't be deliberately regional to have regionally distinct effects. More generally, in my view, it is the job of regulators to ensure the system as a whole is secure, while it is the job of the lenders, who are in possession of much more detailed information (right down to the individual firm or household), to allocate that lending.

19. Do you think there is any reason why the FPC would intervene in the housing market other than for financial stability reasons?

The FPC has two objectives: to contribute to the stability of the UK financial system and, subject to that, to support the government's goal of strong, sustainable and balanced growth. As part of the primary objective, the FPC is charged with monitoring and, if necessary, acting to reduce risks that arise from "unsustainable levels of leverage, debt or credit growth". So if the strength of the housing market threatens to increase credit growth to "unsustainable levels" it's clear the FPC would have reason to intervene on the grounds of its main objective.

But leverage might be "sustainable" – in the sense that mortgage defaults are likely to remain low – and still be high enough to make the economy over-sensitive to shocks. This in turn would make the economy more volatile and, in principle, justify intervention on the grounds of the secondary objectives (in particular the sustainability of economic growth).

Annex 1: Relevant publications

Speeches while on the MPC:

'Rebalancing and the real exchange rate', *Speech given at Thomson Reuters,* September 2011.

'Deleveraging', *Speech given at Market News International, London,* March 2012.

'Costly capital and the risk of rare disasters', *Speech given at Bloomberg, London,* May 2012.

'Productivity and the allocation of resources', *Speech given at Durham Business School,* September 2012.

'Deconstruction', *Speech given at Lancaster University Management School,* October 2012.

'Forecast errors', *Speech given at the Mile End Group of Queen Mary, University of London,* May 2013.

'Conditional guidance as a response to supply uncertainty', *Speech given at the London Business School, Regent's Park,* September 2013.

'The balance of growth', *Speech given at the London School of Economics,* January 2014.

'The UK economy and the world economy', *Speech given at the Institute of Economic Affairs State of the Economy Conference, London,* February 2014.

Publications prior to Bank of England

Publications prior to Goldman Sachs

"Does Favorable Tax-Treatment of Housing Reduce Equipment Investment?" (with Michael Kremer), *Journal of Public Economics*, 1999

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