31 May 2019

Re-appointment of Ben Broadbent as a Deputy Governor (Monetary Policy) of the Bank of England

Personal and professional background

1. Do you have any business or financial connections or other commitments which might give rise to a conflict of interest in continuing to carry out your duties as Deputy Governor?

I have no financial or business or other commitments which might give rise to a conflict of interest in carrying out my duties as Deputy Governor for Monetary Policy.

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

Yes.

3. Have you taken on, or do you intend to take on, any other work commitments in addition to your current role. If so, what impact will they have on your work as a Deputy Governor?

No.

Openness, accountability and performance

4. Is the accountability process delivering better public understanding of decisions made by the MPC? Based on your experience, are there ways in which either the accountability process or the MPC's public communications could be improved?

Public understanding of monetary policy decisions is critical. It matters not just because the general public are our ultimate stakeholders but also because the effectiveness of policy itself relies on understanding and trust. In practice, all inflation targeting regimes are flexible: they seek to meet the target in a way that best supports the economy. That is now explicit in the MPC's remit. Policy only has the room for such flexibility, however, to the extent the target is itself credible. That in turn requires that people believe, *trust,* that we will hit the target, and understand how our actions are intended to achieve that. That requires us to communicate our thinking as extensively and as effectively as we can, making clear the justification for any particular decision and allowing the public in its turn to judge our performance.

The arrangements in this country rank very high in international comparisons of transparency. The identification of individuals' votes, the publication of minutes and our regular appearances in front of this Committee are only a few of the longstanding features of those arrangements that are important in this respect.

But we have sought to make further improvements over the past few years. Until 2015 the minutes of MPC meetings were published only a fortnight after the event. We now release them alongside the decision - and, in the relevant months, the *Inflation Report* as well. More recently, with a view to broadening our communication, we have introduced simplified summaries of the policy messages and the *Inflation Report*. The result has been more engagement (web traffic has risen significantly and people spend more time reading those publications) and, we believe, a wider audience. The MPC has also taken steps towards raising public understanding through our schools programme, EconoME

education tools, and our growing public outreach activities, including Community Forums and Citizens' Panels.

The Committee will continue to discuss ways in which it might further improve its communications.

5. What are the main communication challenges faced by the MPC at present?

Let me pick out two. One is more or less perennial, the other very much of the moment.

1. One ever-present challenge involves the nature of the MPC's forecasts and the role they play in the policy-setting process. Because monetary policy operates with a lag, any policy maker will have to form a view about how the economy might evolve over the future. This is unavoidable. Equally unavoidable is that things will turn out differently, to one degree or another, from the central projection. The future isn't wholly predictable (if it were we wouldn't bother trying to forecast it) and the MPC's projections are not point forecasts – they are distributions of possible outcomes (the "fan charts"). Nor are they unconditional: the forecasts depend on various underlying assumptions (the "key judgements") that can change over time. They are also based on prevailing prices in financial markets, including the exchange rate and forward interest rates, that are themselves changeable. And there is no guarantee that those prices, in their turn, embody precisely the same underlying assumptions as in the rest of the forecast. At times it's clear they do not. In 2012, for example, financial markets put some weight on a full-blown Eurozone crisis while the rest of the MPC's forecast did not allow for such an outcome. It's possible that something similar is happening now, with the MPC conditioning its forecasts on a smooth exit from the EU but also on financial market prices that embody some risk of a "no-deal" exit.

   I should not exaggerate the difficulty of getting these things across and certainly the onus is on us to do so in a clear and consistent manner. But the need for such communication is also apparent. There can otherwise be a tendency to view the MPC's forecasts first as single numbers, and second as unconditional and unchanging predictions – even, sometimes, as promises. I will return to this point below.

2. The MPC bases its forecasts on existing government policy. Beyond that, the Committee steers clear of purely political matters. However, some issues involve economics as well as politics and can therefore affect the Bank's objectives. This is very clearly the case with Brexit. We are duty bound, given our statutory objectives, to explain how we think this issue is affecting the economy, inflationary pressure in particular. Equally, we do not want to be drawn into political discussions. Again, I should not exaggerate the difficulties here. The *Inflation Report* has frequently explained how the MPC views the near-term impact of Brexit risk on the economy. Over the past couple of years I've given three speeches purely on that topic and have never encountered any difficulty, whether from inside or outside the Bank, in doing so. Nevertheless, it's ground on which one treads somewhat gingerly, and about which a great deal of care is required.

6. What are the costs and benefits of the MPC collectively, and members individually, providing greater clarity on their expectations for the path of interest rates, including through conditional forecasts?

The MPC publishes forecasts based on two assumed paths for the official interest rate – one constant at the existing level, one taken from the forward interest rates prevailing in financial markets at the

time. In conjunction with the other conditioning assumptions, the implications of these paths for growth and inflation are published in the MPC's fan charts. If only indirectly these can give some information about the MPC's view of the appropriate path of interest rates over the future.

An alternative approach is to construct, within the forecast, the path of interest rates that would "best" meet the MPC's objectives, given the other conditioning assumptions. This would arguably be a more coherent approach, and might deliver something closer to an unconditional forecast for growth and inflation. It might also convey more directly the MPC's collective view of the risks around the future path of interest rates.

A minority of central banks take this approach. The Reserve Bank of New Zealand (RBNZ) started publishing interest projections in 1997. Later adopters include Norges Bank (2005), Sweden's Riksbank (2007), the Bank of Israel (2007) and the Czech National Bank (2008). These banks usually publish an expected path of interest rates over the next 2-3 years. Most (apart from the RBNZ) also publish a swathe around the central projection, while the Federal Reserve publishes individual FOMC member expectations of the Fed funds rate at various points in time (colloquially described as the FOMC's "dots").

However, most central banks have not gone down this route and nor has the MPC. Although it could offer some advantages I do not think it's a panacea for some of the communication challenges I mentioned earlier; the MPC already gives quite a bit of information about the risks around future interest rates – including, importantly, how policy might be expected to react to economic events; I also see some potential drawbacks of such an approach. Let me explain further:

- The MPC decides the current interest rate by simple majority voting. It's not obvious on what basis any published future path would be determined, though it's clear it could not be done the same way. One option might be to calculate an "optimal" path, designed to meet some simplified representation of the MPC's remit (and taking as given the rest of the forecast, including the other asset prices on which it is based). But, as I say, it would not be possible to determine this path by majority vote and it would therefore not have quite the same status as the actual interest-rate decision.
- Though such a forecast would arguably be more coherent than one which takes the market path as given, it could not, in general, be wholly so. That's because the forecast also depends on prices of other assets – share prices and the exchange rate, for example – whose values are affected by many things other than just monetary policy. As I mentioned earlier it's likely that, during the Euro area crisis in 2012, financial markets, including those for foreign exchange and equities, did not have exactly the same assumptions as those on which the MPC's forecast was based. (Specifically, markets put some weight on the possibility of an extreme outcome that had been explicitly excluded from the MPC's fan charts.) To one extent or another the same might be true at any point in time.
- This is one reason why, for my part, I am not greatly concerned that the market should match exactly, and at all times, what might be the "optimal" forward path of interest rates within the central bank's forecast (as defined above). As I say, the market may have different underlying assumptions about the chances of particular economic events. But even if that were an over-riding concern, it's far from clear that publishing such a forecast achieves it. There have for many years been significant gaps between the forward rate path published by the Swedish central bank and that priced into financial markets. The same is true of the market's expectations of the future Fed funds rate in the United States and the FOMC's "dots".
- What is important is that people understand how the forecast explains the current stance of monetary policy and how changes in one might affect the other. To that end the Committee already provides significant information in the form of its existing forecasts, qualitative statements about their implications for future policy and, on occasion, simulations in the

Inflation Report depicting how interest rates might be expected to respond to various shocks. Individual members' speeches provide further colour.

- Finally, I think there are risks that a fan chart for future interest rates would attract the same misperceptions, only to a greater extent, that sometimes affect existing parts of the forecast. It might be interpreted as a fixed, single path that is independent of other things in the forecast – as an unconditional intention, even a promise, about future policy. The predictions made by individual members of the FOMC in the US are often described as "intentions" concerning future interest rates. But they could only ever be forecasts, as susceptible to future economic news as any other part of the MPC's projections.

In sum, there are disbenefits as well as benefits to such an approach and the issue is not clear-cut. The MPC will, of course, keep its forecasting methodology under review and will always seek to make improvements to its communication.

Monetary and economic policy

7. What are your current research priorities for monetary policy?

Research on monetary policy is important for our understanding of both economic developments and the impact of policy, and for ensuring we have the right skills for policy analysis. Over 200 research projects are in progress across the Bank and, in the year ending in February 2019, Bank authors published more than 40 papers in academic journals. Researchers at the Bank collaborate with external academics and other central banks.

In recent speeches, I have considered the reasons behind the slowdown in business investment, the risks from high levels or rapid change in debt in the economy, and the impact of QE.

Looking ahead, I think important topics for monetary policy include work on the level of "neutral" real interest rates, the effects of significant changes in international trade patterns (including those that might arise from the UK's withdrawal from the EU), and the implications of an ageing population for labour supply and the potential rate of growth. These topics and many others form part of our One Bank Research Agenda.

8. What are the most significant risks to growth and inflation? Do you see any trends that give cause for either particular optimism or alarm?

In the MPC's latest projections – which were conditioned on a smooth transition to the new trading relationship between the UK and EU – GDP grows a little below potential this year, given subdued global growth and the impact of uncertainties around Brexit. As these uncertainties wane, demand growth recovers and domestic inflationary pressures strengthen so that CPI inflation – which is projected to be somewhat lower than the 2% target over the majority of the first half of the forecast – picks up to above 2% in two years' time. Inflation is still rising at the end of the three-year forecast.

The outlook for both growth and inflation will depend significantly on the nature and timing of EU withdrawal, in particular: the new trading arrangements between the EU and the UK; whether the transition to them is abrupt or smooth; how households, businesses and financial markets respond; and the balance of these effects on demand, supply and the exchange rate.

In May, the Committee judged that the risks around the GDP growth and inflation projections were balanced. On the one hand, the apparent strength of GDP growth in Q1 could be less temporary than expected, and recent increases in unit labour costs could feed through to CPI more rapidly. On the

other hand, uncertainties related to Brexit could weigh on spending more than expected, and increases in prices could be restrained by competitive pressures. I agree with that assessment and do not see specific trends that give cause to optimism or alarm relative to the MPC's forecast.

9. Based on the current MPC forecast, how do you expect interest rates to change over (a) the next year, and (b) the next three years? How do these expectations compare with those of other MPC members?

The May *Inflation Report* was conditioned on a market path that saw Bank Rate increase less than ¼ point over the first year and only one full ¼ point over the three-year forecast horizon. Conditional on that – and on a smooth transition to the average of a range of possible outcomes for the UK's eventual trading relationship with the EU – excess demand builds and domestic inflationary pressures strengthen over the MPC's forecast. Excess demand is 1% by the end of the forecast horizon, and CPI inflation 2.2% and rising. To me this means that, were the economy to develop in line with our projection, and taking as given other asset prices in the forecast, interest rates would probably have to rise by a little more than what was in the curve at the time of the forecast. That is also the case for the MPC as a whole.

However, if the UK were to achieve a smooth Brexit, as the MPC assumes, the exchange rate might appreciate (that would be true to the extent it currently discounts the possibility of a worse outcome for the economy). And, as always, there are other risks besides and the actual path for interest rates will depend on the path of the economy as it actually unfolds.

10. To what extent is there still a UK productivity puzzle?

Productivity growth has slowed in all developed economies since the financial crisis but it's clear that the slowdown has been particularly marked in this country. To some extent that reflects a relatively strong performance in the period before 2007 – UK productivity outgrew that in other advanced economies for much of the preceding quarter century – which may itself have overstated the sustainable trend. But it also reflects the particularly weak growth since that date. The level of output per hour has taken longer in the UK than in other countries to return to its pre-crisis peak.

I doubt we will ever arrive at very clear explanation for this slowdown, certainly one that involves a single or simple cause. I'll make only a few observations.

First, history shows that deep financial crises are often followed by relatively weak growth. Second, and even though the crisis recedes ever further into the past, I think there are clear and ongoing signs of a significant risk premium required for risky ventures in the UK. Yields in equity markets are relatively high (i.e. UK companies are valued relatively cheaply compared with their earnings), their spread to gilts more unusual still. Despite high profitability firms are reluctant to commit to new investment projects. Third, we know from a "growth accounting" process that much of the slowdown since 2007 has been associated with relatively weak investment spending. This suggests that, while its precise extent is hard to pin down, a significant contributor to weak productivity growth has been the perception of higher downside risks to the economy, and to profits in particular, and the impact of this nervousness on business investment.

In the February 2019 *Inflation Report* the MPC said it expected productivity growth to remain subdued over the forecast period: "many of the factors that have weighed on productivity growth over the past decade are expected to persist". This in part reflects the impact of Brexit uncertainty on investment.

11. How would you measure regional imbalances?

The MPC's remit, which is set by the government, requires the MPC to meet an inflation target across the UK as a whole and that is also how the Bank sets monetary policy - for the UK as a whole. But to the extent that a better measurement and understanding of regional activity and prices can increase the Bank's understanding of the economy as a whole, it can improve the information on which monetary policy decisions are based.

The Bank's network of Agents across the country provides the MPC with a report on business conditions before every MPC decision is taken, and this information is a valuable input into the decision-making process. Agency intelligence feeds into assumptions about the labour market, inflation and consumption alongside other sources of information, such as business surveys and official data. The Bank's Agents provide detailed information on different sectors of the economy to the MPC and publish this information quarterly in the Agents' Summary of Business Conditions. We can also use other sources of regional data to understand differences (for example) in house prices and employment.

However, I will make a few qualifying points:

- Identifying regional differences from Agency intelligence is not straightforward. Most of the companies the Bank's Agents speak with are active throughout the UK and in many cases internationally too, so the information those companies provide reflects their activity in all of those markets, not just in one particular region.
- It's likely that there isn't much regional variation for some of the things to which the MPC pays most attention. Take the CPI. Precisely because we do operate in a single economy, in which the same goods and services are sold throughout the country, one wouldn't expect to find very significant regional variation in prices of goods and services, still less any persistent variation in their rates of inflation. If anything this is likely to have become more the case as online shopping has grown.
- There are parts of the economy – labour and housing markets, for example – that are more local. It's quite possible for there to be significant variations in these across regions. But there are longer-standing and fuller surveys (including by the ONS) about such variation than anything the Bank's Agents could provide. And the relevant question for the MPC would be whether regional variations of this sort alter the important relationships (for example between wage growth and unemployment) at the aggregate, UK-wide level. I've not seen any evidence that it does.

12. What are the principal risks associated with monetary policy normalisation, and what can be done to mitigate them?

Although the latest MPC forecast embodies a judgement that monetary policy will require somewhat higher interest rates, it's unlikely the extent of any rises will be that great. The MPC continues to expect any necessary rises in Bank Rate to be "gradual and limited". More generally, I've always been slightly wary of the word "normalisation", at least if it suggests that there is some pre-determined level – the average before the financial crisis, say – to which the interest rate will inevitably return. Even before the crisis it was clear that what's considered "normal" can change, and in particular that the "neutral" real rate of interest – the level consistent with sustainable growth and inflation – had been declining over a number of years. It was the belief that the structural factors underlying that decline were unlikely to be reversed any time soon that first led the MPC, in early 2014, to use the phrase "gradual and limited". Bank Rate is only 25bp higher than it was then. Yet inflation has averaged 1.5% in the intervening five years. This tells you precisely that the neutral rate too has

remained low. Anyhow, I don't think there should be any pre-supposition that interest rates will inevitably return to pre-crisis values.

13. What is the outlook for the global economy?

The MPC's latest forecasts were published in the May 2019 *Inflation Report*. Though less supportive than a year ago the global backdrop is reasonable. Growth slowed sharply through the course of last year. Measured on a UK-weighted basis, it declined from 3% in 2017 to 2½% in the first half of 2018 (measured at an annualised rate) and only 1¾% in the second.

But there have been signs of stabilisation since the New Year. The MPC expects growth at a pace of close to 2% in the first half of this year. Over that period there has also been a significant easing in financial conditions that should support economic growth over the next year or so. There remain significant risks – from ongoing trade disputes, for example, and high corporate indebtedness in some countries – but, as in February, the MPC expects UK-weighted global growth to settle at a little over 2% a year in 2020 and 2021.

14. What is the outlook for consumer spending, and the housing market, in the UK?

Consumption has been steady at around ½% per quarter since the EU referendum. This was initially underpinned by a fall in the household saving rate. It has since been sustained by growth in real household incomes, reflecting strong growth in employment and strengthening growth of average earnings. While household sentiment around general economic conditions has weakened, that of personal finances continues to hold firm. The range of consumption indicators we track signal broadly similar growth in Q2.

In the May IR projections, consumption growth continues to support GDP growth throughout the forecast growing at close to the rate it has averaged since the referendum.

The housing market has been subdued since the referendum, with some evidence that Brexit-related uncertainties, alongside other factors, have weighed on activity and price inflation. Mortgage approvals fell to 62,000 in March, below the 2018 average of 65,000, and are expected to remain around this level over the remainder of the year.

We expect the housing market to remain subdued in the near term and then to pick up somewhat as Brexit uncertainties dissipate.

15. What is your current estimate of the size of the output gap, the potential rate of productivity growth, the natural unemployment rate, and the equilibrium rate of interest?

In the MPC's most recent forecast, excess supply was judged to be around ¼% in 2019 Q2, slightly larger than in Q1 as the temporary boost to output from stockbuilding unwinds.

Annual potential productivity growth is 0.9% on average over the forecast, of which 0.5% is accounted for by capital deepening and 0.4% by TFP growth.

The natural rate of unemployment is a slow-moving variable, reflecting long-run structural trends, and so the Committee revises its view of it only infrequently, typically once a year. The MPC currently estimates the equilibrium unemployment rate to be around 4¼%. This is lower than the estimate of 5% or so that prevailed just before the 2008 recession. The MPC's view is therefore that the labour

market is capable of sustaining a somewhat lower unemployment rate than before without generating excessive wage and inflationary pressures.

The trend component of the equilibrium real interest rate (R*) is also slow moving. Bank staff's central estimates – based on a combination of a statistical filter and overlapping generations model and published in the August 2018 *Inflation Report* – imply that R* in the UK has fallen by more than two percentage points since 1990. That fall has been driven by structural factors such as the rising average age of the global population, a slowing in global productivity growth and the rising cost of financial intermediation. Over the shorter term, the equilibrium real interest rate (r*) can fluctuate around R* as a result of shorter-term influences on the economy. It is likely that r* fell below the trend rate during the financial crisis. In recent years, r* is estimated to have risen gradually as financial conditions have eased, the fiscal drag has declined and global growth has strengthened. Nevertheless, the fact that the economy is operating around its potential rate and that inflation is close to target, even though the actual real rate of interest is negative, suggests to me that the shorter-term neutral real rate has also been below zero for some time.

16. What are the material differences between your personal forecast for the UK economy, and the MPC's collective view?

I have as much influence on the MPC's collective view as any other member of the Committee and do not have a separate personal forecast. It is quite likely that, were I to see the risks differently from the majority of the MPC, in any material way, I would also be voting differently on policy.

Financial Stability

17. What are currently the most significant risks to financial stability?

A disorderly Brexit remains the most significant risk in the near term. The March FPC Record noted that the core of the UK financial system, including banks, dealers and insurance companies, is resilient to, and prepared for, the wide range of risks it could face, including a worst case disorderly Brexit. Most risks to UK financial stability that could arise from disruption to cross-border financial services in a no-deal Brexit have been mitigated. However, some disruption to cross-border services is still possible and, in the absence of other actions by EU authorities, some potential risks to financial stability remain. It's also important to note that, even though financial stability risks have been mitigated, one could still envisage significant market volatility in the event of a disorderly Brexit. However, markets have proved able to function effectively through volatile periods.

The FPC continues to monitor financial risk across a wide range of potential sources, abroad as well as at home. In the November 2018 *Financial Stability Report*, the FPC identified four main risks in addition to Brexit: UK household indebtedness, leveraged lending, the UK's external financing position and global debt vulnerabilities. I've been particularly focussed on the first two of these this year in my speeches.

It is important to remain vigilant to developments in household credit, though my view is that risks from this source are currently relatively low given low structural interest rates and relatively weak demand for credit. While the level of debt is obviously not irrelevant to financial stability, in a speech in January this year[1] I noted that most academic studies suggest the growth of credit is a more reliable indicator of building financial stability risks. Mortgage lending has grown only modestly over

[1] Debt dynamics https://www.bankofengland.co.uk/-/media/boe/files/speech/2019/debt-dynamics-speech-by-ben-broadbent.pdf

the past year, reflecting weak demand. And the share of households with high mortgage debt-servicing ratios is close to historical lows. Consumer credit lending growth has also slowed recently, consistent with some tightening in credit conditions. There's no guarantee this will remain the case in perpetuity. However, the 2018 stress test showed that UK banks can successfully absorb potential losses on mortgage lending and consumer credit in a very severe stress scenario. And the FPC's two mortgage market policies (the loan to income flow limit and the interest rate affordability test) continue to guard against a significant increase in the number of highly indebted borrowers.

One pocket of risk to which the FPC has paid particular attention involves "leveraged lending". These are loans issued to already-indebted companies, which are often then packaged up and sold as "Collateralised Loan Obligations" (CLOs). This grew rapidly in the US and Europe (including the UK) in 2016 and 2017. Issuance of this lending has since slowed, however. Intermediaries in the UK are less involved with this activity (reducing the risk of amplification if some of these loans were to sour). And it's worth noting that corporate leverage in aggregate has, like its counterpart in the household sector, declined since the crisis.

18. How effective is the co-ordination of monetary and macroprudential policymaking between the MPC and the FPC?

As I noted in a speech in April 2018,[2] I think the interactions between the two policies are often overstated, particularly in small open economies like the UK. Domestic interest rates have a smaller effect on financial stability, and financial policy a less significant impact on demand and inflation, than often supposed.

That said, it is important that each Committee is aware of how the other is thinking and how it might respond to particular economic events. It's also important that the two bodies share the best possible analysis of the economy. To that end the MPC and FPC receive joint briefings and then discuss matters of mutual interest. In between joint meetings I have also briefed the FPC on MPC discussions. There is also a standing invitation for FPC members to attend the pre-MPC briefing meeting (and vice versa).

19. What have been the FPC's greatest successes so far, in your opinion? Where is there still work to be done?

When I joined the FPC as Deputy Governor, the committee had only been formally established for a little over a year (although it had begun its work on an interim basis in June 2011).

My first few years on the committee were therefore spent designing and operationalising policies to ensure the stability of the financial system: the leverage ratio capital requirement; the systemic buffer regime for domestically significant banks; the implementation of bank system wide stress testing in the UK; the objectives and operation of the Counter-Cyclical Capital Buffer (CCyB); and the main pillars of the new bank resolution regime.

I'll pick out a couple of particular successes.

The first is the work the FPC has done to establish and operate the CCyB in concert with the annual stress tests. The CCYB reinforces the resilience of the banking system, by raising capital

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[2] Monetary and macro-prudential policies: The case for a separation of powers
https://www.bankofengland.co.uk/-/media/boe/files/speech/2018/monetary-and-macro-prudential-policies-the-case-for-a-separation-of-powers-speech-by-ben-broadbent

requirements as risks build up. The aim of the Committee – the central objective of financial policy – is to ensure that the financial system can support the economy at times of stress. The FPC is able to use the annual stress test to inform its judgments on the necessary level of resilience in the banking system, by adjusting the severity of the test to current financial conditions. I think the UK stress testing framework is transparent and is now well understood by banks and their investors.

There is more to be done on our approach to the CCyB and stress tests. The recent Independent Evaluation Office (IEO) review of the Bank's approach to stress testing made several recommendations for improvements.[3] One is that we explain more clearly, over time, how the scale of the simulated stress will vary through the cycle. It's certainly important that it should do so. In a financial upswing, credit standards loosen, assets prices move ahead of economic fundamentals and financial stability risks build. It is then appropriate to increase the scale of the stress to match that increase in risk and to set the appropriate level of the CCyB accordingly. And effects of that policy would clearly be transmitted more efficiently if the financial system were itself able to anticipate the likely magnitude of such changes. However, I think the basic framework is well thought out and equips us well to respond to some of the systemic risks than can build up in the banking system.

The second is the evolving published list of financial stability risks related to Brexit. Starting in November 2017 the FPC has published in successive *Financial Stability Reports* and FPC Records a "checklist" system of potential problems raised by Brexit but that could be mitigated by authorities in the UK and elsewhere. For example we highlighted a risk to cleared derivatives. Authorities in the UK and the rest of the EU have now provided temporary regimes to recognise each other's central counterparties (CCPs) after Brexit. Without this, users of the CCPs may have been unable to meet contractual obligations and may have been needed to migrate significant numbers of contracts to new providers (with a high risk of operational disruption to markets during the process). I think this was important, not to say critical, in ensuring that all possible actions have been taken to limit (where possible) the consequences for financial stability of a sudden departure from the EU. That is not to say there would be no economic costs to such an outcome. But it is important to ensure that any such costs are not amplified by addressable failures within the financial system. The FPC's Checklist was a very important innovation to help achieve this.

20. What is your assessment of the public profile of the FPC, both within the industry and among the wider public? How important is it that the public understands the role of the FPC and the decisions it takes?

Despite the FPC's best efforts, I'm often struck by the lower level of awareness of the FPC's work relative to the MPC. The Committee has put a lot of effort into improving awareness of its work. Alongside changes to how the MPC communicates, the FPC has also made its communications clearer. It is using simpler language, and infographics as part of a 'layered' approach to communications. We've also included material on issues such as stress testing in the 'Knowledge Bank' on our website to improve general understanding and awareness of what the FPC does. This has led to greater coverage of the FPCs work in the media, but awareness is still relatively low.

It's not immediately obvious why this is. I suspect it may be partly a matter of time. The media are familiar with the MPC and used to writing about interest rates. The concerns and tools of the FPC may seem more arcane, or at least novel.

But it can't be a matter of importance – the FPC takes and will take decisions that have at least as much consequence for people as a 25bp change in Bank rate – and it does matter, I think, that the

[3] https://www.bankofengland.co.uk/independent-evaluation-office/ieo-publication-on-the-boe-approach-to-concurrent-stress-testing-and-boe-management-response

public is as aware of important policy decisions by the FPC, and the reasons for them, as it is about changes in official interest rates.

We are therefore working to continue to improve understanding of the FPC, through use of plain English in our communications, use of social media and through our EconoMe programme for schools.

Prudential Regulation

21. At present, what are the main risks in prudential supervision and regulation?

As my colleague Sam Woods recently noted, in the PRA's business plan, we're moving out of the post-crisis reform phase into more of a steady state. Examples of these shifts can be seen in ring-fencing and implementation of Solvency II. The PRA is also pushing forward on operational resilience, competition and scanning for new risks.

For banks I think an important issue is continued competition in the mortgage and consumer credit markets. We need to ensure banks are appropriately capitalised for the risks they are taking. That becomes slightly more challenging if the sector's net interest margins are squeezed. The sustainability of these margins, and of traditional banking, could in time face a more structural threat from new technologies that enable the separation of deposit-taking and lending, disintermediating banks and commoditising some of their services.

On the insurance side, an important issue is the growth of illiquid assets on life insurers' balance sheets. Given these firms also have long-term illiquid liabilities this is an economically reasonable strategy. However, it's important that insurers are properly measuring the risks they remain exposed to and set capital appropriately. The PRA's guidance on the valuation of equity release mortgages is one example of the PRA's work on this issue.

Operational resilience remains a priority. We've seen issues at a variety of firms over the past year. It is important that firms have appropriate systems in place not only to avoid disruption from operational outages or cyber-attacks, but also to have plans to recover from the quickly when they will inevitably happen. This involves working with financial firms, but also the wider network of technology firms and outsourcing service providers they work with.

Brexit is also an issue that will be important for supervision and regulation. Alongside the FPC, the PRA has been working hard to ensure the financial sector is as prepared as it can be for Brexit, including a disorderly Brexit. That work will need to continue until we have clarity on the next steps in the Brexit process.

22. How transparent should the PRC be in its work?

It is important that the PRC is transparent about its policies and the rationale behind them. That's why we put out discussion papers and consultation papers on changes to our rules and expectations of firms. We also publish a monthly regulatory digest of regulatory news and publications by the PRA.

However, while it is important for us to be transparent about the framework we expect firms to operate in, many of the decisions taken by the PRC are market sensitive and/or relate to individuals. The PRC must necessarily be less transparent about this aspect of its work.

23. How effectively have the PRA and FPC worked together, and where can improvements be made?

There is often a lot of focus on the potential for tensions between monetary policy and macro-prudential policy. In my view there is if anything a greater need for coordination, and at the least very clear mutual understanding, between micro- and macro-prudential policies.

This happens quite a bit already, most regularly in the joint meetings to calibrate and assess the annual stress tests. There may be more to do to ensure each committee understands the reaction function of the other. In its recent evaluation of stress testing the IEO suggested that a prudent regulator tasked with ensuring the continued safety and soundness of an individual financial institution might naturally want to ensure that its capital was preserved, or even enhanced. The objective of the FPC, meanwhile, is to ensure that in such circumstances, capital ratios are allowed to fall, ensuring that losses are absorbed without the need for active deleveraging.

Banknotes and data

24. What are your priorities for data collection and analysis?

Our ultimate aim is to minimise the cost of data collection and analysis while maximising the benefits to the public. It is always important that we consider the costs to firms of complying with our requests for statistical or regulatory data. We need to ensure we are only asking for the data we need for our work. We also need to ensure that the systems we use to collect that data impose the minimum burden on firms. I think developments in technology offer the potential for new ways of working with the financial sector to share data with us at lower cost, and I think it is important we work with industry to achieve this.

An important priority for me is making sure we maximise the benefits of the data we collect, by ensuring it is shared appropriately within the Bank and we are using the right tools for our analysis. That involves better technology (hardware and software), but also on-going cultural change. Two of the Bank's values are openness and collaboration. So we encourage and enable people in the Bank to do more to share data with colleagues to help answer policy questions. We are also investing in our systems to make it easier to find and share data. The Bank takes its obligations under GDPR very seriously, so we are also constantly improving our policies on how we share such data internally to ensure we are sharing the right data with the right people. We are also investing in skills, ensuring people in the Bank are able to use the new analytical tools being developed. I include myself in that – I've spent time learning the basics of the 'R' programming language so I can understand and engage with the work being done around the Bank.

25. What do you see as the responsibility of the Bank in maintaining access to cash, and how do you intend to achieve it?

The Bank has three important responsibilities with respect to cash. We are the sole issuer of banknotes in England and Wales, we deliver effective protection for holders of Scottish and Northern Ireland banknotes and we oversee how banknotes are then distributed to the wholesale market, in other words to entities such as banks. We are not responsible for how these banknotes are then distributed to the general public, as this is an area in which other authorities have more direct responsibilities.

I think it is important that people continue to have choice in how they make payments. The vast majority of people in the UK continue to use cash at some of the time. It is estimated that 95% use it

more than once a month, and a subset use cash almost all of the time. About 2.2 million people rely predominantly on cash for everyday spending and approximately 1.3m people in the UK do not have a bank account. Those most reliant on cash tend to be from lower income households, with over half having total household incomes of less than £10,000 per year.

The recent Access to Cash review has recommended that consumers should have a guarantee they can access cash wherever they live or work. Whether there should be such a guarantee is for other regulators and the industry, and perhaps ultimately the government. However, while the Bank is not responsible for the retail distribution of banknotes, I certainly appreciate the importance of ensuring the availability of banknotes in ATMs, Post Offices and bank branches. The Bank is working with the FCA and PSR as part of Joint Authorities Cash Strategy Group, chaired by HM Treasury, to ensure that any actions that are taken are joined up and supportive across the entire cash chain.

In March 2019, we announced that we will convene relevant stakeholders to develop a new system for wholesale cash distribution that is efficient, resilient and sustainable, including in a world with lower cash volumes. It is not our role to make commercial decisions, but we will act as a guiding hand throughout this design process, providing advice and support. The objective is to ensure that any new model of distribution is consistent with our objective of ensuring confidence in the currency.

The Bank is fully committed to supporting cash as a viable means of payment for as long as the public still wants to use it. We are continuing to invest in the design of our banknotes, including moving to polymer notes, which are cleaner, safer and stronger than their paper counterparts with a new generation of security features. This will ensure that genuine, good quality notes are available to the public.

The completed questionnaire and full CV should be returned as both a Word document and as a PDF.