Questionnaire for Clare Lombardelli on her appointment as Deputy Governor for Monetary Policy at The Bank of England

27 March 2024

Personal

1. Do you have any business or financial connections, or other commitments, that potentially give rise to a conflict or perceived conflict of interest in carrying out your duties as Deputy Governor for Monetary Policy and a member of the Monetary Policy Committee, Financial Policy Committee and Court?

No.

I have no business or financial connections or other commitments which might potentially give rise to a conflict or perceived conflict of interest in carrying out my duties as Deputy Governor for Monetary Policy. I have discussed my interests with the Bank Secretary.

I will continue my academic roles at Kings College London and Nuffield College Oxford.

I was born and grew up in the UK. I have dual British/Italian nationality on account of my paternal grandparents being born in Italy before they migrated to the UK. This is not a conflict, but I want to take this opportunity to note it.

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

Yes.

3. Please give an overview of how your career and experience to date will inform your approach to, and suitability as, Deputy Governor for Monetary Policy at The Bank of England.

I have wide ranging knowledge and experience of economics, economic policymaking, and leadership within economic institutions. I have spent my entire career working in economic policy making from different perspectives.

As Chief Economist at the Organisation for Economic Cooperation and Development (OECD), I oversee the production and lead the presentation of the quarterly global economic forecast. This has a two-year time horizon and so focusses on cyclical economic prospects and policy. I lead an economics research department, delivering a programme of research which is at the frontier of economics thinking with particular focus on structural economic issues including growth and productivity, demography, climate and economic security. And I lead a country studies programme, which provides analysis and policy advice for 50+ advanced and emerging market economies around the world. A substantial part of the OECD work involves the production and interpretation of economic data to further understanding of global economic issues and individual country economic performance. This combination of responsibilities gives me a depth of knowledge across economic issues and forecasting and a wide perspective on economic challenges – including how we can learn from the experience of other countries and draw lessons for economic policy making. I held a number of economic roles at HM Treasury, including 5 years as Chief Economic Advisor. This gave me deep knowledge of the UK economy, its economic data and cyclical and structural issues and meant I played a key role in economic policy making. In this role I managed the relationship between the Bank and HM Treasury on all monetary and markets issues and was the government's representative at MPC meetings. This gives me a good understanding of the issues and challenges faced by the part of the Bank of England which I will lead as Deputy Governor.

I have experience of financial markets through these roles. In my current and previous roles, I lead teams undertaking surveillance across a range of financial markets. As Chief Economic Advisor I was responsible for advising on the UK government's debt management strategy, managing the relationship with the UK Debt Management Office, setting strategy and monitoring operational delivery as Accounting Officer for the UK (foreign currency) Reserves, and more broadly I advised on wider financial market issues and developments.

I have experience of working on many different economic challenges and crises. During my time at the International Monetary Fund, I worked on the European Sovereign Debt crisis, supporting the Greek Authorities during this period. I held senior roles in HMT through the Global Financial Crisis, the Covid pandemic and the energy price shock. My teaching of post war UK economic history and economic policy making at Kings College London (2017–2022) has given me a wide view on economic challenges and an understanding of the lessons from history.

I have always sought to build wide networks and listen to differing and challenging voices. I seek the views of a range of experts across academia, the finance sector, thinktanks and policy makers nationally and internationally. I will continue with this approach of listening to a range of experiences and perspectives in shaping my thinking and building challenge and different views into the approach of the organisations I lead.

I am passionate about leadership and management and invest time, thought and effort to make the institutions where I hold leadership positions as successful and effective as they can be. I care about building capability and capacity and improving outreach and accessibility. I intend to continue this approach and look forward to playing a key role in the Bank's work to reform its ways of working including how we reform the forecast and related processes.

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

I oversee the economics research and publications by the OECD. I am not the author of these papers – they have been authored by the expert staff. I have provided links here for completeness given my role providing ideas and comments.

The OECD Economic Forecast. The Interim Economic Outlook from February 2024 is <u>OECD Economic</u> <u>Outlook</u>

OECD research department policy papers can be found here <u>OECD Economic Policy Papers | OECD</u> <u>iLibrary (oecd-ilibrary.org)</u>

And working papers here <u>OECD Economics Department Working Papers</u> | <u>OECD iLibrary (oecd-ilibrary.org)</u>

I coauthored a book chapter on high inflation and labour markets <u>Monetary Policy Responses to the</u> <u>Post-Pandemic Inflation | CEPR</u>

As a civil servant I did not publish papers. I gave a speech on Covid and the Economy which provided information of how within government we approached the Covid pandemic in terms of economic analysis and use of data.

https://www.gov.uk/government/speeches/covid-and-the-uk-economy-speech-by-clare-lombardellichief-economic-advisor-hm-treasury

Deputy Governor for Monetary Policy

5. What will be your priorities as Deputy Governor for Monetary Policy? What criteria do you suggest should be used to assess your record as Deputy Governor?

My primary priority will be returning inflation sustainably to the 2 percent target and then maintaining inflation around that target, and achieving this without excessive volatility in growth. This should be judged against the data on inflation and growth, with some judgement for the size and nature of any shocks across the period I am deputy governor.

To deliver this, an early priority will be taking forward reforms to the Bank's forecasting process and how the forecast is used in monetary policy making, responding to the Bernanke Review of forecasting. In judging how successful this is I would again focus on the outcomes in terms of inflation and output rather than forecast errors. The value of the forecast comes from how it informs and improves policy making and the communication of policy.

Another priority for me will be to take stock of the processes, procedures, modelling, data and analysis the Bank uses in its work. I want to consider if and how these should be adapted to best support monetary policy decision making in response to the changing issues and risks facing the UK economy – for example how the potential for increased structural changes and supply shocks will affect the economy and monetary policy decision making. I am also keen to consider whether there is more we should do to bring wider sources, perspectives and experience into our policymaking.

With my joint responsibilities for data across the Bank, I want to consider how our data infrastructure meets current and changing needs, and the changing opportunities from developing technology. For example how artificial intelligence, including generative artificial intelligence, could and should change how we use data, analysis and modelling.

In my role on the FPC, I will make a significant contribution to those meetings, including across macroeconomic issues and I will ensure the MPC and FPC are joined up where appropriate. Along with the other Governors, I will develop the Bank's international priorities, particularly in the area of macro-financial policy, and will represent the Bank's views effectively with international counterparts including at the G7 and OECD WP3 meetings.

And I will prioritise my role as a corporate leader in the Bank, as a member of the Court and the Deputy Governor responsible for leading the Monetary Analysis function, jointly leading the international and Data & Analytics functions, and the Centre for Central Banking Studies. Developing the capability and capacity of the Bank through attracting, developing, and retaining talent and ensuring our processes are relevant and robust is critical to the Bank's performance. I also look forward to leading the research function at the Bank, ensuring the quality and the relevance of the work undertaken and leveraging and building on economic research from across academia and beyond. These are a necessary underpinning to deliver our monetary policy objectives so ultimately the assessment criteria should be the Bank's performance in delivering its mandate on inflation and output.

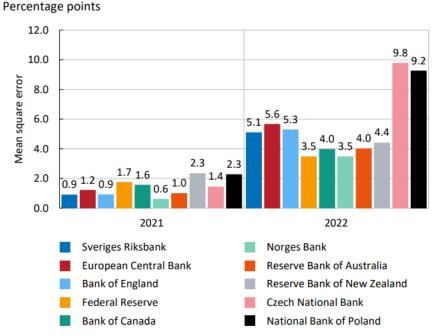
6. What is your assessment of the performance of the Bank's economic forecasts since the pandemic?

The period since the start of the pandemic has been incredibly difficult in many ways economically. Many people and businesses have suffered greatly given the size and nature of the shocks that the UK, like other economies, has faced over this period. On some measures the changes in economic activity through the pandemic were greater than those experienced at any point over the last 300 years and the inflation shock experienced greater than anything since the 1970s. The circumstances – particularly the active suppression of economic activity to control the virus, and the scale and nature of the policy response, especially the furlough scheme – were unprecedented in modern economies. The inflationary period from 2021 to now has been highly unusual in its size and in coming after a multi-decade period of generally declining price pressures. Given this, it is not surprising that traditional economic models and forecasts struggled to capture and estimate how economies would respond. At best, forecasts and models could only be one part of the toolkit economists used to understand the economy and navigate policy making through this period.

The differences between economic forecasts and how the economy evolved turned out to be large. The Swedish Riksbank produced a detailed study of the forecast accuracy of 10 central banks including the Bank of England in 2021 and 2022.¹ This shows the performance across central banks was similar though the period. A common measure of how close forecasts were to outturns is the root mean square error. On this measure all central banks and the vast majority of economic forecasters had high differences between their forecasts and economic outturns in 2021 and 2022 relative to previous periods. The chart below shows the comparative errors.

¹ <u>Cruising to victory or a dead heat? Central Bank Championships in forecasting ability 2021 and 2022</u> (riksbank.se)

Forecast errors for inflation in 2021 and 2022



Note. The forecasting errors relate to forecasts made between 2020 and 2022 for average inflation in 2021 and 2022 for each country's inflation target variable. These are the CPIF for the Riksbank, HICP for the European Central Bank, PCE for the Federal Reserve, and CPI for other central banks.

Sources: The respective central banks and the Riksbank.

On this measure, this study found that forecasting errors were larger in those countries more directly exposed to the energy shock, and so where inflation was higher and lasted longer – notably the UK, Sweden and the euro area. If the errors are normalised to take account of the general variability in the inflation data then the forecast errors across the 10 central banks are very similar. The overall conclusion from this analysis is that forecast errors have been larger through this period of higher volatility, and that central banks' forecasting errors were strikingly similar. The latter finding is not hugely surprising given these central banks use broadly similar modelling approaches.

Given the scale and the nature of the shocks hitting economies through this period, it is understandable why economic models and forecasts struggled to capture the economic impacts. The pandemic was a huge disruption to economies and there were huge uncertainties around the speed with which activity would bounce back, how firms and workers would respond to the end of the furlough scheme, the scale of the structural changes that would occur from greater use of technology and working from home. How demand and supply would respond to these effects as economies recovered from the pandemic was hard to estimate given all these uncertainties. Forecasts and models had to make assumptions about all of these things. Then added to this was the very sharp rise in energy and food prices which resulted from the invasion of Ukraine. This was unexpected and the length of the effect on commodity and food prices was uncertain.

Communicating uncertainty is always a challenge when presenting forecasts. There is a natural tendency for interpretations to focus on central estimates rather than ranges or probabilities, and to focus more on the outcomes of forecasts than the assumptions which underpin them. Perhaps more could be done to lean against these forces, and to do more to illustrate the different forecasts that

would be generated with different assumptions. When the energy price assumption became particularly important the MPC showed the effects of different potential energy price paths on the forecasts. Perhaps showing these and other outcomes more prominently, or using this type of approach to illustrate the impact of different assumptions more broadly, might help communicate these uncertainties more clearly.

There are important lessons for the Bank of England, central banks and the economics profession as a whole that can be learned from the period since the pandemic. Looking forward there are reasons to expect supply shocks may be more frequent than they used to be. The Bernanke Review of economic forecasting is one important opportunity for the Bank to consider these issues and reform its forecasting process in a way that learns these lessons.

7. When do you expect to receive Dr Ben Bernanke's report on the Bank's forecasting processes?

I will receive Dr Ben Bernanke's report when it is published in April. I will take up my role at the Bank on 1 July. I look forward to digesting and considering the report, talking to Bank staff, and a wide range of stakeholders about the findings in the report and our choices on how best to implement changes to our processes to support the MPC in deciding and communicating monetary policy.

The economic outlook and the Monetary Policy Committee (MPC)

8. What is your assessment of the overall prospects for UK inflation, growth and unemployment over the short and medium term? What do you see as the main upside and downside risks, particularly those around getting inflation back to target sustainably?

After a very difficult period for people and businesses in the UK in 2022 and 2023 due to sharp rises in inflation, the prospects for the economy in the short and medium term are improving. Inflation has fallen significantly from the extremely painful levels which peaked at just over 11% in 2022, and it is expected to continue to fall. The decline in the figures is likely to be bumpy as pricing behaviour isn't smooth and base effects will impact on the numbers, but the overall experience for people should be of lower and more predictable inflation. Headline inflation is expected to fall more quickly than services inflation.

On average, real incomes have now been rising since the second quarter of 2023, and should continue to rise as inflation falls, including because of the 12% cut in the energy price cap in April. This, coupled with high levels of employment, mean that we can expect consumption to be stronger in 2024 and 2025 than in the last couple of years. Though consumer confidence remains low.

Overall unemployment is expected to rise as the impacts of tighter monetary and financial conditions keep feeding through the economy, but these increases should not be large, and the labour market is expected to remain relatively strong by international and historical standards. However, there are particularly high levels of uncertainty around what is happening in the UK labour market. There appear to have been sizeable structural shifts in labour supply since the pandemic and there are particular challenges around the availability and reliability of UK labour market data due to the substantial problems with the Labour Force Survey.

The risks for the UK are similar to those of other advanced economies. On the one hand inflation, especially services inflation, may prove to be more persistent than expected. This could be the case if firms are confident of their ability to raise prices and labour markets remain relatively tight. In this case the monetary tightening to date may have less effect on bringing down inflation than expected. On the other hand, it is uncertain how much of the impact of the monetary tightening has fed through to the economy, for example as mortgage holders roll off previously low fixed rate mortgages. As inflation falls the policy rate will be more restrictive in real terms and so the impact of monetary tightening on demand may prove to be greater. Navigating policy through this uncertainty is the key challenge for bringing inflation back to target sustainably and for growth in the near term.

Developments in the Middle East and disruption to shipping through the Red Sea could exert upward pressure on inflation in the near term. The quantities of goods being shipped through the Red Sea are down and shipping costs have more than doubled since the end of 2023. On energy, we saw in 2021 and 2022 how fast energy markets can be disrupted, with a direct impact on inflation. Energy markets are now much calmer, UK gas prices are near pre-pandemic levels, but with a quarter of global oil and gas trade passing through the Strait of Hormuz, this is a potential choke point in the event of escalation. So far there has been a limited impact on energy prices or inflation, but there are risks to activity and inflation in an adverse scenario.

9. What are the key differences between the current OECD and Bank and England outlooks for the UK economy?

The most recent OECD global interim economic outlook was published on 5 February. This includes a high-level forecast of economic output and inflation for the global economy and individual G20 economies including the UK. UK growth is projected to increase from the low rate observed in 2023 to 1.2% annual growth in 2025. Annual UK inflation is projected to decrease to 2.8% in 2024 and to 2.4% in 2025. The OECD's Interim Economic Outlook is less comprehensive than the Economic Outlook forecast it publishes twice a year in May/June and Nov/Dec.

The Bank of England's latest economic forecast was published on 1 Feb, this is significantly more detailed about the UK. It projects a similar annual growth rate for 2023 but is more pessimistic on growth for 2024 and 2025. The Bank projects inflation to be slightly lower in 2024 and slightly higher in 2025 than in the OECD Interim Economic Outlook. Both the OECD and the Bank forecasts were published before the 2023 Q4 UK GDP estimate released on 15 February.

	Annual Real GDP Growth (%)	
	OECD (5 Feb)	BoE (1 Feb)
2023	0.3	0.25
2024	0.7	0.25
2025	1.2	0.75

Figures for the latest OECD and Bank outlooks for the economy are given in the tables below.

	Annual CPI inflation (%)	
	OECD (5 Feb)	BoE (1 Feb)
2023	7.3	7.3
2024	2.8	2.6
2025	2.4	2.7

The two forecasts differ in their objectives, approach, conditioning assumptions and judgements. The objective of the OECD forecast is to inform members and partners about the outlook for the global economy. It contains more cross-country information – for example on the global outlook for trade – and seeks to provide a globally consistent forecast. The OECD central forecast takes a link model approach which iterates between individual country forecasts and a global forecast. OECD alternative scenarios are produced using modelling based on the National Institute Global Econometric Model (NIGEM). The Bank forecast is undertaken to inform the policy making process and its communication. It will contain far more country specific detail for the UK and is produced using a range of modelling techniques and approaches as well as MPC judgement.

The OECD and Bank approaches share some conditioning assumptions but take a different view of others. For the Interim Economic Outlook, the OECD does not make explicit conditioning assumptions, but in general OECD forecasts are conditioned on unchanged exchange rates and market prices for energy unless futures curves indicate something very unusual is expected. Fiscal policy is assumed to be as announced by the respective government and on monetary policy the OECD twice yearly forecast gives a view on the likely path of interest rates in countries given the forecast projections of activity and inflation for those countries. The Bank assume energy prices follow their respective futures curves, and that fiscal policy will evolve in line with announced government policy. The Bank assumes that UK exchange rates will follow an average of a random walk and the exchange rate implied by uncovered interest parity and that policy rates will follow paths implied by financial markets. With all these moving parts multiple effects are driving the differences between the two latest forecasts – the largest difference is likely due to OECD taking a more positive view of potential supply growth.

The OECD will next release its global Economic Outlook on 2 May. To avoid any conflicts or perceptions of conflicts, judgements on all aspects of the UK projection in the Economic Outlook will be overseen by my successor and the leadership of the Economics Department of the OECD. I will be recused from all judgements and decisions regarding the UK projections.

10. What is your assessment of the causes of the ongoing outbreak of inflation and the response of UK monetary policy, both with the benefit of hindsight and given what was knowable at the time?

Inflationary pressures started to mount, globally and in the UK, in the second half of 2021 because of supply and labour shortages and rising energy prices. This reflected changes in the balance of demand and supply resulting from the pandemic and the measures taken to contain its spread.

CPI inflation rose continuously from 2% in summer 2021 to its peak at just over 11% in October 2022. The surge reflected elevated energy prices, largely determined by global markets, and global supply shortages compounded by strong demand for goods, particularly in the US. The Russian invasion of Ukraine was a further large shock to energy prices. Core inflation also rose significantly. This sharp increase in inflation then had second round effects as firms increased prices given the high levels of demand in product and services markets, and nominal wages rose in tight labour markets.

Headline inflation has eased substantially since the late 2022 peaks and now stands at 3.4%. In particular energy and food price inflation have fallen. Services inflation has remained more persistent at 6.1%. Though there is some sign that pressures in the labour market are easing. Vacancies have fallen substantially from their peak, and the balance between the total number of people looking for a job and the number of vacancies is nearly back to its pre-Covid level. Wage growth is slowing; however it remains high, with annual nominal regular pay growth in the private sector of above 6% year-on-year in January. With inflation falling real wages have been growing since Q2 last year.

As inflation emerged in the second half of 2021 the challenge was in understanding how large and long lasting the inflationary period was likely to be. The main sources of the inflationary shock – a shock to global prices due to supply disruptions, sharp adjustments to global demand and rising energy prices were expected to be temporary. Demand and supply were expected to rebalance as economies normalised after Covid and as consumers and businesses responded to changing prices, global demand rebalanced from goods to services, and energy prices stopped rising.

There was, at the time, a large degree of uncertainty about what was happening and would likely happen in the labour market. Despite high levels of unemployment and inactivity, firms continued to report recruiting difficulties and a high level of vacancies. This higher tightness was also associated with some increase in private sector pay growth. But at the time it was difficult to disentangle aggregate labour market pressures from changes across sectors that were happening in response to changing patterns of demand resulting from the pandemic. The impact of the furlough scheme, both in terms of what would happen to the people on it when it came to an end, and what the medium-term impacts on labour supply would be, were uncertain. This is because of the unprecedented nature and scale of the scheme (it supported nearly 9 million jobs at its peak, and over 1.1 jobs were still furloughed at the end of the scheme on 30 September 2021).

The MPC started to increase Bank Rate in December 2021. And the Bank of England has responded to rising inflation with continuous rate increases. The Bank Rate increased from 0.1% in December 2021 to 5.25% in August 2023. Monetary policy remains tight to respond to inflationary pressures.

With the benefit of hindsight, we now know much more about how the economy has evolved since the outbreak of the inflationary period. The impact of the shock to energy prices has been greater and more long lasting than expected, driving up costs across the economy. The tightness in the labour market proved to be much greater than expected, because of structural changes and a reallocation of demand across sectors. Prices have risen more than was expected as demand across the economy has proved more robust as, on average, consumers and firms have been in relatively strong financial positions since the pandemic. This masks large distributional differences as those on lower incomes had weaker starting positions and inflation has hit them much harder.

11. What assessment have you made of the impact of Brexit on the UK economy to date? What nature and magnitude of ongoing effects do you expect?

It is not possible to quantify the specific impact of Brexit on the UK economy given it has taken place alongside other significant economic shocks and trends – the pandemic, the energy price shock, and a general slowing in the rate of globalisation. The evolution of the UK economy since 2016 suggests

that the economic impacts of Brexit may have come through more quickly than were anticipated by the weight of analytical studies which were conducted in the period following the referendum. The evidence suggests that Brexit has had a negative economic impact through investment and trade. What is less certain is the precise size of this negative impact.

Brexit led to a large and long-lasting increase in uncertainty, which analysis shows reduced investment which will have reduced output and productivity. The data also shows that Brexit has had a negative effect on trade, which will also weigh on productivity as trade drives competition and innovation and so enables resources to be used in more efficient ways. Exporters will have temporarily benefited from the exchange rate depreciation, and this may have helped to offset the impact of lower trade volumes on their profits, with importers experiencing the opposite effect.

Brexit has also affected the economy through migration. Migration increases growth and productivity through increased economic activity and better matching skills to needs in the labour market. Migration patterns have altered across this period. The composition of net migration in terms of EU and non-EU migrants has changed. And since the pandemic, the total level of migration has increased. The increase in net migration has increased economic growth, while the impact of the changes in the composition of migration is harder to judge and adds to the challenges of understanding and interpreting what is happening in the UK labour market.

As joint head of the Government Economic Service I jointly oversaw the final stages of production and publication of the Government's Long Term Economic Analysis of EU Exit. This was published in November 2018 <u>EU Exit: Long-term economic analysis (publishing.service.gov.uk)</u> alongside an accompanying technical reference paper <u>EU Exit: Long-term Economic Analysis Technical Reference</u> <u>Paper (publishing.service.gov.uk)</u>. This analysis modelled a number of different simplified scenarios for trading relationships between the UK and the EU relevant to the policy discussions at the time. This modelling showed how the GDP impacts would differ across different levels of trading relationships and different assumptions about the level of migration.

Also in November 2018 The Bank set out a range of scenarios to the TSC (<u>here</u>). In 2022 the OECD published a cross country analysis of the impact of the Trade and Cooperation Agreement on trade and GDP across European countries including the UK <u>Trade impacts of the Trade and Cooperation</u> <u>Agreement between the European Union and the United Kingdom | OECD Economics Department</u> <u>Working Papers | OECD iLibrary (oecd-ilibrary.org)</u>. And an assessment of the economic consequences of Brexit published before the referendum in 2016.

<u>https://www.oecd.org/economy/The-Economic-consequences-of-Brexit-27-april-2016.pdf.</u> These studies are in line with others, including the analysis by the Office of Budget Responsibility, which estimate negative GDP impacts broadly in the 3-4% range in the long-run, though most note the large uncertainty around any estimates.

12. What role do money supply growth and asset prices play in inflation, and what role should they play in setting monetary policy?

Empirical evidence shows there is a relationship between money supply growth and inflation over long time horizons, but that the relationship between money supply growth and inflation over the monetary policy making horizon is weak and volatile. That said, data on monetary aggregates tells us something about bank, firm and individual behaviour and so it is important to monitor and observe these variables as they may be able to provide useful information about economic behaviour, for example if the demand for money changes. Monetary aggregates have helped us understand the large increases in household savings and corporate balances that occurred during the pandemic and their unwind after the pandemic. These sorts of insights may be useful – especially if and when we are dealing with high levels of uncertainty or unusual circumstances.

Asset prices have direct and indirect impacts on inflation. The exchange rate has a direct impact through the prices of imported goods. Other assets such as financial assets or housing will affect the level of demand in the economy through wealth effects and collateral channels – if the value of assets people hold rises, they may choose to spend more as their net financial position is improved, or they may be able to secure a larger loan if the asset they're using as collateral has increased in value.

Asset prices also provide a rich source of data to help us understand the outlook of the economy. Financial market data contains information on what market participants expect to happen in the macro economy, with financial derivatives providing information on what the distribution of these views is.

Interest rate markets play a key role in the monetary transmission mechanism and they provide a route by which movements in the policy rate set by the Bank are transmitted to the real economy through changing longer term market interest rates. This influences the interest rates people and businesses pay on their mortgages and other loans.

13. What impact do you think quantitative tightening has on the economy?

There is limited evidence to date on the impact of quantitative tightening (QT) on the economy. Limited quantitative tightening has been undertaken so far around the world, and what has, has been specifically designed to have minimal economic impact. The evidence there is, points to little economic impact so far, and less impact than quantitate easing. But we are quite early in process of QT tightening, for example the reduction in the stock of assets held by the Bank of England to date has been around 15 percent of the total stock.

The Bank, like other central banks, has sought to conduct QT but not to use it as an active monetary policy tool. And the asset sales and non-reinvestments have gone smoothly to date. The Bank's strategy of setting out the detail of what will be sold and when so that there is clarity in financial markets has likely been important in ensuring the smooth execution of QT. The scale of the sales has also helped minimize any risk of financial market disruption. The Bank's relatively tentative approach coupled with learning as they go is a sensible one given the uncertainties around this tool.

Academic work by Du, Forbes and Luzzetti published at the start of this year² shows that there are small announcement and implementation effects from QT. And that both have a minimal impact on liquidity or other measures of market functioning. In August 2023 the Bank published its own analysis on the impacts of QT. This showed QT's effects on gilt yields were positive but materially smaller than the effects of QE. Bank staff estimated that a one-off additional £80 billion of QT relative to expectations was likely to increase 10-year gilt yields by less than 10 bps (in market conditions at the time), results that are in line with the more recent academic work.

² USMPF 2024 Paper - Clark Center | Chicago Booth

We should not assume that the economic effects of QT in future be the same as we have observed to date. Circumstances, such as the economic and market conditions will change. Given how early we are in the QT journey it will be important to continue to monitor the impacts of the policy in the UK as well as the experience of other countries.

14. What is your view on whether the MPC collectively and/or individually should provide clarity on their expectations for the path of interest rates, and on what form this could take?

A key objective of monetary policy communications is to reduce uncertainty for households and firms so they can plan and make informed economic decisions based on realistic interest rate assumptions. The MPC should provide clarity on the economic outlook and risks and where possible, reliable information on the likely future path for interest rates.

However, there are challenges that come with any communication of interest rate expectations by policy makers:

- The expected path of interest rates is uncertain. It is conditional on how the economy evolves. These future economic conditions cannot be known in advance. In some circumstances policy may be able to indicate a credible direction of travel, or perhaps a sense of scale or timing, depending on how conditions evolve, but these would be limited.
- Setting out expectations may be interpreted as a prediction and/or may be taken to imply a greater level of certainty than exists.
- Setting out a path may raise the cost of deviating from that path even when to do so would be better policy. This could occur, for example, if there is a desire to avoid surprising economic actors or financial markets or if policymakers feel their credibility would be questioned if they deviate from a previously communicated expected path.

Given the importance of any communication given being clear, further challenges may be introduced if 9 individual expected paths were to be expressed.

The challenge for the MPC's communications is to ensure any communication is as clear as possible. And that it provides information that increases certainty to aid people and businesses in their economic decision making but doesn't over promise when policy is necessarily uncertain. Much has been written about monetary policy communications, and there is no consensus view across the economics community about what is the best approach for central banks to take. Different central banks around the world choose to do this differently, and there is no clear evidence that any one approach is superior.

The Bernanke review is considering how the forecast and related processes support the communication of the MPC's view of the outlook and risks. Its findings will provide an important opportunity for us to improve the way we communicate policy and policy expectations.

15. The MPC remit sets an inflation target of 2 per cent at all times, but it also allows the MPC to tolerate temporary deviations of unspecified length in order to avoid "undesirable volatility in output". How do you interpret this mandate and the degree of flexibility it offers?

The primary objective for the MPC is to achieve inflation that is stable around the 2 percent target. When inflation deviates from target because of a shock, the MPC should not necessarily bring it back to 2 percent as fast as possible where to do so would cause greater welfare loss through excessive volatility in output which would damage employment, incomes and business activity.

I interpret this mandate as providing the needed flexibility to bring inflation back to target over a sensible time horizon, particularly where there is a trade-off between inflation and output. This would be the case where shocks move inflation and output in opposite directions, as is usually the case with shocks to economic supply.

Our understanding of the transmission mechanism – how changes to interest rates affect inflation through their impact on the economy, is that it takes 18-24 months for the full effect to feed through. Where there have been shocks to the economy which involve an output / inflation trade off, the best response depends on the nature of that shock. Where a shock is expected to unwind before most of the monetary policy effect can feed through, for example if there is a one-off change to the price level such as a one-off change in the VAT rate – then monetary policymakers should not respond, to avoid creating additional output and inflation volatility. If the shock is expected to affect inflation over a longer timeframe, and there is a strong reason not to expect second round effects, then the best response may be to take more time to return inflation to target to minimise additional output volatility.

The space that monetary policy makers have in bringing inflation back to target is also affected by how well anchored inflation expectations are. Where inflation expectations are well anchored, this can create space for monetary policy makers to return inflation to target over a longer period. Where there are risks that inflation expectations may decouple from the target then monetary policy makers would need to act more forcefully to bring inflation to target and ensure long-term expectations remain anchored.

How to use this flexibility over the time horizon when it is needed will involve judgement. Temporary deviations and undesirable volatility are undefined. This is sensible given the uncertainties and the wide range of shocks means the best approach will vary depending on the nature of the shocks and the way in which monetary transmission is working at the time. The remit builds in transparency and accountability, rightly requiring the MPC to explain the approach being taken, including being explicit about the horizon it is using when bringing inflation back to target.

Financial Policy and the Financial Policy Committee (FPC)

16. What do you view as the main risks to UK financial stability at present?

The main risks to UK financial stability stem from the current economic circumstances of higher interest rates and low economic growth and from ongoing structural changes to financial markets.

The relatively recent rapid tightening of monetary and financial conditions globally and in the UK mean financial markets have experienced rapid change which has increased risks. To date households, business and financial institutions have been broadly resilient to the higher interest rate environment, though we know the full effects of the monetary tightening are yet to feed through.

Economic shocks which reduce activity are a potential source of stress to financial stability. The most recent stress tests for the UK undertaken by the Bank of England indicate that banks remain well

capitalised and so can continue to support lending in the UK economy, including in the case of large shocks to output in the UK or other Advanced Economies. More broadly geopolitical risks have increased, with a corresponding increase in uncertainty. If this were to lead to future prices shocks – for example to energy prices – this would affect the financial resilience of households and businesses. If it leads firms operating internationally to change their pattern of activity this could also change their financial position.

We are seeing structural changes to financial markets such as the increase in non-bank financial intermediaries (NBFIs). Much has been done since the global financial crisis to strengthen the banking system and reduce exposure to systemic risks, the non-bank financial system has not seen a similar level of regulatory change. Yet NBFIs have grown more than the banking system and are more diverse – their significance in financing the real economy has increased. The need to actively assess and strengthen tools to reduce NBFI vulnerabilities, including risks around funding and liquidity, in a changing financial system are priorities for the FPC. Many of these non-bank financial intermediaries are global and the risks are international, so this is also an important part of the Financial Stability Board (FSB)'s work programme.

Increasing digitization and technological change including the further adoption of machine learning and generative artificial intelligence across financial services will have significant impacts, including through the development of new financial services and products and through lower costs. Regulation will need to take a forward-looking approach to keep pace with these developments and minimize any potential risks.

17. What is your assessment of the macroprudential tools that are available to the FPC?

The FPC is charged with ensuring the UK financial system is resilient. So it can support people and businesses and give them confidence that the financial system is sound and is not a source of risk. The FPC does this by identifying, monitoring and acting to remove or reduce risks which are systemic.

The FPC has a range of tools which are proportionate to its responsibilities, and which can be applied as required across different circumstances. The FPC has both powers of direction to the PRA and FCA and of recommendation more broadly, giving it the ability to flex its responses as best suits the specific risks and their institutional context. For example, it has directly mandated leverage ratios and it has used its powers of recommendation to restrict the proportion of high loan to income ratios to limit total household debt and the number of highly indebted households. And it has recommended action outside the Bank family, for example to The Pensions Regulator in relation to Liability Driven Investments in specifying the appropriate minimum levels of resilience. And the FPC's broader toolkit has meant it can react to vulnerabilities in the risk environment by increasing or cutting the countercyclical capital buffer as appropriate.

The stress testing framework is also an important part of the FPC's toolkit. Annual stress tests ensure that in the case of severe economic or market shocks, banks' positions would be adequate, not just to withstand these shocks but also so that they could continue to lend to people and firms through these circumstances.

The financial sector continues to evolve, including in response to international changes and technological advances. This may lead to changes in the nature of financial stability risks and may require changes to the FPC's range of tools or that those tools are applied differently. In response to the changing size and scope of non-bank financial intermediaries the Bank has been active at international level in developing a set of policy reforms to enhance resilience – for example in

addressing liquidity mismatch in Money Market Funds and Open Ended Funds. NBFIs are wide ranging – they are in different sectors, with different business models, seeking to deliver different financial products and services. Ensuring they are a source of stability not instability for the real economy requires a range of different tools and policies.

The FPC is right to be considering the issues and potential risks that will come with increasing digitisation across the financial system and the impacts of wider adoption of generative artificial intelligence. In the medium term the financial products and services that will develop enabled by these technologies may mean different tools need to be considered. The FPC will need to continue to monitor the emergence of risks across the evolving system and make recommendations to maintain stability, including recommendations in new areas of regulation if needed.

18. What is your assessment of the state of the global financial stability regime? Where would you particularly like to see international agreement?

The global financial stability regime is significantly stronger today than before the global financial crisis. Substantive reforms, agreed across countries, have made the banking system more resilient. The requirements for bank capital and liquidity are consistently higher across countries and there are greater requirements for loss absorbency where resolution is needed. This reduces the systemic risk that any one bank, including any one international bank, poses for the global financial system.

In part, this is due to strengthened global governance on financial stability issues. In particular through collaboration across the G20. The establishment of the Financial Stability Board in 2009 created a powerful mechanism for driving up standards across sectors and reducing cross border risks. Strong commitment by Finance Ministers and Central Bank governors at the G20 has led to the implementation of this agenda.

International collaboration and agreement is key. Without consistency, differences in regulatory approaches could exacerbate cross-border spillovers, including through fragmenting markets or institutions choosing to locate in areas of lower regulation. There are at least two areas where there is a case for further international collaboration and agreement: non-bank financial institutions and rapidly changing technology.

International regulation of banks is far ahead of that on non-bank financial institutions. This is understandable given the diversity of these institutions. But they now represent over half of all UK and global financial assets. Work is underway at the Bank of England, with international counterparts and international bodies such as the FSB, but there is some way to go to be assured that all non-bank financial intermediaries are secure, resilient and do not pose systemic risks. Some reforms are still to be agreed, and others have been agreed but are yet to be implemented. Until we have robust and consistent implementation, there will be vulnerabilities.

Those vulnerabilities, especially in the current context of elevated and volatile interest rates, could amplify any tightening in financial conditions. We have seen this happen already, such as the dash for cash in 2020 and the LDI episode in the UK government bond market in 2022. And the scale of leveraged lending, high-yield bond and private credit markets mean they play an important role in providing credit to the real economy accounting for around a quarter of all market-based debt globally.

Rapidly changing technology and its increased use in financial services is another area where which should be the focus of international collaboration and agreements. Increasing digitisation of financial services and the increased use of artificial intelligence and generative artificial intelligence will likely change the way in which we use financial services and the services provided. This is a huge opportunity for financial services to better meet the needs of people and businesses across the economy and to do this at lower cost. But the dynamics of these markets, such as the value of data generated by large consumer bases creating barriers to entry and reducing competition and the use of a small number of models, could exacerbate herding effects in financial markets. International work has started to consider the vulnerabilities associated with AI and this will need to include considering the policy implications.

19. What is your assessment of the risks to financial stability from non-bank financial intermediaries, and how those risks should be tackled by the Financial Policy Committee?

The growing size of non-bank financial intermediaries means they are increasingly significant to the economy and so there would be growing consequences of financial instability in these sectors. The diversity of these sectors also means the risk picture is complex and their impacts far reaching. Recent examples of stress include the dash for cash in March 2020, stress in commodities markets following Russia's invasion of Ukraine, and the 2022 LDI-related issues in long-term UK government bond markets. These have illustrated that the actions of non-bank financial intermediaries can cause significant impacts on core financial markets and financial stability.

The significance of market-based finance has grown in the economy. This has advantages – enabling firms to tap into wider sources of investment, which would increase the stability of funding in a stress scenario. But also brings risks as market-based finance can be less transparent and data less available so that we can understand and monitor these markets.

We have observed a rapid rise in private equity and private debt during the period of low interest rates, as investors search for greater returns. Against this backdrop, higher interest rates may prove challenging for these business models and so current and future risks here should be closely monitored.

The FPC has a critical role to play in ensuring the resilience of NBFIs to meet its mandate. There are several ways it should act to tackle these issues:

First, it should seek to increase resilience of individual NBFIs against stress events. The responsibility to manage risks sits with the intermediary themselves – they should self-insure against liquidity risks. This is critical so they do not overly rely on intervention by the public sector in times of stress, ie to reduce the risk of moral hazard. Given the international nature of the NBFI sector, policy reforms and standards developed at international level will likely to be more effective. Where agreed, reforms then need robust domestic implementation. The Bank should continue to play its key role in this international work.

Second, the FPC can develop a deeper understanding of the behaviours of NBFIs and banks in stressed market conditions. This will give more detail on the specific systemic risks including where potential interactions could lead to stresses being amplified. The Bank's planned 2024 system-wide exploratory scenario (SWES) should be a significant step forward in developing this understanding.

And finally, the FPC can develop tools that could be used in the case of episodes of extreme financial stress where dysfunction could pose a threat to financial stability. The Bank is developing a new

collateralised lending tool for NBFIs, for potential use in cases where the risks are systemic and there is a temporary need for liquidity. Such a tool would be preferable to using asset purchases, as it presents less risk to the public purse and avoids any actual or perceived inconsistency with monetary policy.

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

Climate change could bring financial stability risks through a number of possible channels. Through physical risks from more frequent and severe climate events such as floods and storms resulting in the destruction of property. Such destruction, or the change to behaviours in anticipation of future damage to property, could have implications for specific financial sectors and disrupt economic activity. For example, it could impact on credit risks for assets on banks' balance sheets or the costs and availability of insurance. Affected sectors will need to adapt to ensure they are resilient to these increasing pressures. This may have systemic implications if the effects are widespread or acute.

The transition to a net zero economy will change the pattern of economic activity as we see shifts from brown activity to green activity. Forward looking asset values will change and in some cases we may see stranded assets. This could lead to abrupt adjustments in balance sheets or rapid changes to business models which could raise financial stability risks. The rapidly changing pattern of demand for those commodities necessary for the green transition, particularly the critical minerals necessary for batteries, wind turbines and solar panels will likely lead to volatile and increasing prices and changes in related derivates markets. These commodities and their processing have a particular and challenging geographical distribution which potentially introduces geopolitical risks to their supply.

The primary role of the FPC with respect to climate change is to ensure the resilience of the financial system to any impacts of climate change and the green transition. The Bank's climate scenario exercise (the Climate Biennial Exploratory Scenario, or CBES) points to climate related-financial risks building over time, with losses greater where there is no transition, or the transition is disorderly. However, there is uncertainty over the size of the risks and how rapidly they could materialise. It is important that the FPC continues to assess the risks and is prepared to take action to mitigate risks from climate change where necessary.

Subject to this, the FPC has a secondary objective to support the government's economic policy to achieve strong, sustainable and balanced growth. The Bank, and the FPC, have a role to play on the green transition, but it is for Government, through policy, and firms and people, through their choices, to drive the transition.

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

Increasing digitisation of assets and currencies provides a huge opportunity for innovation and growth through extending the reach and the efficiency of payments, financial services and financial markets to the benefit of people and firms across the economy, including increasing access to financial services. They should also provide ways to enhance financial stability as well as posing potential risks to it.

In thinking about the risks, these differ across different kinds of digital assets:

Cryptoassets. While cryptoassets such as Bitcoin are not large enough to pose financial stability risks in themselves, an increasing number of people hold them, and they are increasingly interacting with the rest of the financial system. This can create risks, especially given the volatility observed in their prices. For instance, trading platforms increasingly allow investors to take positions on cryptocurrencies alongside more traditional assets, and so losses, especially if large or sudden may lead investors to make other sudden adjustments in their portfolios. And these services are expanding as technology develops. The changing availability of cryptoassets needs to be monitored. Regulatory standards are increasing in the UK and internationally – the FSB has set out a global framework for minimum standards, which the UK is taking steps to adopt.

Stablecoins. The use of stablecoins is currently very small within the UK, but this has potential to change. Payment companies with large established networks could scale such services quickly. There is a case for anticipatory regulation so that stablecoins are developed consistent with regulatory requirements which ensure stability at times of stress and maintain confidence in money and payments. The Bank and FCA published discussion papers in November 2023 on their approach to regulating stablecoins and supporting innovation in retail payments.

Central Bank Digital Currencies. The development of central bank digital currencies is at an early stage in the UK. If and how a central bank digital currency could be implemented in the UK will depend on operational and technology considerations, and the wider evolution of money and payments. Any decision on whether to implement a central bank digital currency would be taken by Parliament.

Please provide a full CV when returning this questionnaire. The Treasury Committee will publish your answers to this questionnaire alongside your CV. All documents should be provided in Word and PDF. Please provide these documents by midday 28 March 2024