

## Questions for Silvana Tenreyro, from House of Commons Treasury Committee

### Personal/General

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

No.

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

Yes.

3. How has your experience to date equipped you to fulfil your responsibilities as a member of the MPC?

I hold an M.A. and Ph.D. in Economics from Harvard University (1997-2002), and I am currently a Professor of Economics at the London School of Economics. I specialise in Macroeconomics and Monetary Economics and have taught these subjects at the LSE since 2004.

I have a strong track record of policy-relevant economic research in these areas. I have written several papers on the transmission of monetary policy and its quantitative effects over the economic cycle and on housing market fluctuations, macroeconomic volatility, international trade, exchange rates and economic growth. (The papers are published in the top professional journals.)

I can bring to the job considerable analytical ability. My post-graduate training---as well as my teaching at the LSE---are all centred around the development of analytical skills to examine data in a systematic way and evaluate decisions and policy options after a careful study of multidimensional costs and benefits. This is the essence of what we learn and teach in Macroeconomics.

My economics knowledge and skills are not merely academic. From 2002 to 2004 I worked as an Economist at the U.S. Federal Reserve Bank of Boston. From 2012 to 2014, I served as External Member of the Monetary Policy Committee of the Bank of Mauritius. The Bank of Mauritius has followed closely the model of the Bank of England, both in terms of the structure of the committee (with internal and external members) and in terms of the procedures it follows for setting the interest rate, which was its main monetary policy tool. The decision-making process involved analysis and evaluation of complex and multifaceted evidence on the state of the economy, discussion of the potential benefits and costs associated with possible changes in the policy rate, and a collective effort to arrive at an informed and reasoned decision.

Similarly, my work as Economist at the Federal Reserve Bank of Boston has prepared me for the analysis of complex data and the consideration of different scenarios and the assessments of costs and benefits of potential interest-rate moves.

I have worked on many committees inside and outside the LSE, both as a regular member and as chair. I have chaired the Women in Economics' Committee of the European Economic Association from 2009 to 2012 and the Women's Committee of the Royal Economic Society in 2016-2017; I have been a Director and member of the Board of the Society for Economic Analysis (publisher of the *Review of Economic Studies*, the top economics journal in Europe); I have served as elected Member of the governing council of the European Economic Association (the main association of academic economists in Europe) and elected Member of the Council of the Royal Economic Society. I have participated in various appointment and grant-allocation committees in the UK and Europe. I have also served as Board member and Associate Editor in several academic journals, including the *Journal of Monetary Economics*, the top field journal in Monetary Economics.

My committee work has shown my natural disposition and willingness to listen to diverse views and to work constructively to find solutions to challenging problems. Similarly, my work on the board of several journals and as Co-Director of the Society of Economic Studies entailed working in different teams and embracing different views, approaches and schools of thought within academia.

I feel confident I can generate and defend independent views. I have done this routinely in my academic research and in academic conferences and seminars. Also, as illustrated by my voting record at the Bank of Mauritius' MPC, while always seeking to contribute to a collective effort to understand the conjuncture, I have on occasion felt compelled, and in these cases I have not hesitated, to express dissenting votes.

4. Which of your publications and papers are most relevant to your role?

A complete list of my publications and working papers can be found in my LSE webpage: <http://personal.lse.ac.uk/tenreyro/> . In what follows, I highlight some of the main papers related to my role.

**Monetary Policy, Economic Fluctuations and Housing Markets**

“The Timing of Monetary Policy Shocks,” with G. Olivei. The American Economic Review, Vol. 97, No. 3: 636-663.<sup>1</sup>

“Wage-Setting Patterns and Monetary Policy: The International Evidence,” with G. Olivei, Journal of Monetary Economics, Volume 57, Issue 7, Pages 785-802.

“Pushing on a String: US Monetary Policy is Less Powerful in Recessions,” with G. Thwaites, The American Economic Journal: Macroeconomics 8 (4): 43-74.<sup>2</sup>

“Closed and Open Economy Models of Marked Up and Sticky Prices,” with R. Barro, The Economic Journal, Vol. 116, No. 511: 434-456.

“Hot and Cold Seasons in the Housing Market,” with Rachel Ngai, American Economic Review, 104(12): 3991-4026, 2014.

“The Transmission of Monetary Policy Operations through Redistributions and Durable Purchases,” LSE manuscript, with V. Sterk.

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<sup>1</sup> This paper challenges the view held by many macroeconomists (including my PhD advisor Robert Barro, with whom this idea was largely identified) that nominal wage stickiness is not important for the transmission of monetary policy. My co-author and I added new questions on wage setting practices to the regular survey run by the Federal Reserve Bank. The results show that a large fraction of US firms adjust compensation in December, with wages remaining fixed for the rest of the calendar year. Consequently, we reasoned, if wage rigidity were important, changes in monetary policy should have different effects depending on the month in which the monetary intervention takes place. The paper tests this prediction and finds that it is indeed borne out by the data. In a follow-up paper, we exploit the different timing of wage-setting agreements in various countries, including the UK (unlike the United States or Japan, wage setting in the UK is staggered over the year and accordingly, monetary policy does not have differential effects across seasons).

<sup>2</sup> This paper estimates the responses of key US macroeconomic variables to monetary policy shocks, allowing both the shocks and responses to depend flexibly on the state of the business cycle. We find strong evidence that the effects of monetary policy on real and nominal variables are more powerful in expansions than in recessions. We also find evidence that contractionary policy shocks have more powerful effects than expansionary shocks. But contractionary shocks have not been more common in booms, so this asymmetry cannot explain our main finding.

“History Dependence in Housing Markets,” LSE manuscript, with P. Bracke.

### **Methodological contributions**<sup>3</sup>

“The Log of Gravity,” with J.M.C. Santos-Silva, 2006. The Review of Economics and Statistics, November 2006, Vol. 88, No. 4: 641-658.

For other methodological contributions, visit: <http://personal.lse.ac.uk/tenreyro/>

### **Long term Growth and Volatility**

“Volatility and Development,” with M. Koren, The Quarterly Journal of Economics, Vol. 122, No. 1: 243-287.

“Technological Diversification,” joint with M. Koren, The American Economic Review, Volume 103, Issue 1. Pages 378-414.

“Diversification through Trade,” with F. Caselli, M. Lisicky, and M. Koren, revise and resubmit, Quarterly Journal of Economics.

### **International Economics**

“On the Trade Impact of Exchange Rate Volatility,” Journal of Development Economics, Vol. 82, No. 2: 485-508.

“Economic Effects of Currency Unions,” with R. Barro, Economic Inquiry, Vol. 45, 1: 1-197.

“Optimal Currency Areas,” with A. Alesina and R. Barro, in NBER Macroeconomics Annual, 17, 301-345, edited by M. Gertler and K. Rogoff. Cambridge, MA: MIT Press.

5. How do you intend to balance your existing commitments with your membership of the MPC? Do you expect to maintain any other work commitments in addition to your new role?

My commitment with the Bank is to work three days a week on average. The other two days I will be based at the LSE, performing my academic duties at a reduced load (down to 40%).

6. Have you received the support from the Bank that you need to fulfil your role so far? Are there changes that the Bank could make to support external members of the MPC better?

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<sup>3</sup> This is a technical paper proposing a new method to estimate “gravity” equations using trade data. (The gravity equation became very popular during the Brexit debate, as it was the basis for the estimation of the potential effects of Brexit on international trade flows.) Our method is now widely used in International Economics and the paper has become the most cited paper ever published by the Review of Economics and Statistics. I have a number of follow-up papers on estimation of trade models and implementation. These can be found in my webpage.

I have received excellent support to fulfil my role so far. At the moment I do not see margins for improvement.

### **Monetary policy and the wider economy**

#### 7. Which do you think are the most significant risks to the outlook for the UK economy?

The process of adjustment of the UK economy to new trading arrangements with the European Union is probably the most significant source of risk to the outlook. Since the referendum, the MPC's forecasts have made the assumption that there is a smooth transition to a new trading relationship with the EU over a number of years. This is consistent with the Government's intention. The assumed "end-point scenario" is an average of different potential trading arrangements. Given the underlying assumptions (end point scenario and length and smoothness of the transition), the main risks relate to i) what the eventual trading arrangement is; ii) how quickly households, companies and financial markets respond to news about the eventual trading relationship; and iii) how smooth and long the transition turns out to be.<sup>4</sup> Monetary policy cannot affect the potential output of the economy, which will be greatly influenced by the new trading relationship. It can, however, contribute to stabilise demand around its new potential. The key uncertainty is how demand will adjust vis-à-vis its potential.

On the international front, geopolitical tensions might add uncertainty to global markets, which could slow down global growth and have knock-on impacts to the UK via UK exports and investment in export-facing sectors. Global growth also faces downside risks stemming from China's financial system. China currently faces a challenge to balance its GDP growth targets and moderating its credit growth, given the financial stability risks the latter pose. There is a risk that it is unable to do so, resulting in a sharp reduction in growth and negative spillovers to the world economy.

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<sup>4</sup> So far financial markets appear to have responded quickly, though as the final trading arrangement materialises, there might be further corrections (up or down) to exchange rates. As for households, one interpretation is that households have responded more slowly (consumption only slowed as real incomes fell). An alternative interpretation is that they actually responded to the sharp depreciation by anticipating purchases before the increase in tradable prices was passed-through to domestic inflation (a substitution effect due to expected future higher prices), while at the same time adjusting to lower real incomes.

8. What would be the limits to your tolerance for above-target inflation, and what indicators would you use to assess whether monetary policy needs to be tightened?

The MPC remit is clear on the primacy of the 2 percent target for Consumer Prices Index inflation and, subject to that, the requirement to support the Government's economic policy, including its objectives for growth and employment.<sup>5</sup> While the target applies at all times, the remit recognises that shocks may temporarily move inflation away from its target, and that trying to keep inflation at target at such times may introduce undesirable volatility in output. The remit also highlights that in exceptional circumstances, when shocks are particularly large or have persistent effects, the MPC will have to balance the horizon over which it seeks to bring inflation back to target with giving consideration for output and employment volatility.

I am fully committed to complying with the remit and would not tolerate developments in the economy that threaten the ability of monetary policy to return inflation sustainably to target.

To assess whether and when monetary policy needs to be tightened, I will be monitoring a wide range of nominal indicators, including various price indices, measures of domestically generated inflation, wage growth, house price inflation, inflation expectations, etc., as well as indicators of real activity, including GDP and its composition, employment, estimates of the output gap, etc. I will not focus exclusively on any one indicator or set of indicators. I will assess the implications for the economy of the entire range of UK (and international) data, and the most important indicators will vary according to the situation.

9. Following the referendum, the economy has outperformed the Bank's initial forecasts. Why do you think this is?

The economy has performed more strongly since the referendum than the MPC's initial forecasts. In its August 2016 *Inflation Report*, the MPC thought that the most likely outcome was that the economy would grow by 0.6% over the coming year. According to the latest data, it has grown by 1.5%.<sup>6</sup> Three GDP components can more than account for this error. Consumer spending and housing investment held up better than the MPC had forecast. And

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<sup>5</sup> The government's economic policy objective is to achieve strong, sustainable and balanced growth.

<sup>6</sup> This is the estimate in the current vintage of data, while the projections in the *Inflation Report* fan charts show the MPC's best collective judgement for the mature estimates of GDP growth.

business investment, although it has not grown much, did not fall as expected.

I think there are several non-mutually exclusive reasons why the economy did not evolve as the MPC's central forecast predicted.<sup>7</sup> I discuss some possible explanations below.

Hypothesis 1: The MPC's post-referendum forecasts assumed that the eventual effects of the UK's new trading relationships on firms' productivity would occur linearly over a number of years.<sup>8</sup> The forecasts therefore incorporated a negative impact from reduced openness on GDP growth even over the year to 2017 Q2. But, effectively, Brexit still has not happened and Article 50 was only triggered in March 2017. It is now apparent that while financial markets reacted quickly, leading to a sharp pound depreciation, the rest of the economy was less immediately affected by the referendum (over and above the depreciation): trading arrangements remained in place and firms' productivity was not immediately altered by the vote.

Hypothesis 2: A sharp depreciation of a currency leads to increases in the prices of imported goods and services that are only passed-through gradually to domestic prices. These episodes generate two effects on households' consumption and residential investment, which we normally call "income" and "intertemporal substitution" effects.

The income effect (due to the fall in future real income) tends to lower consumption, both in the short and medium term.

The substitution effect, on the other hand, tends to increase consumption in the short term: as prices are still "temporarily low," (that is, before they are passed-through to domestic prices), consumers bring forward their purchases, particularly of durable goods (which can be stocked) or goods and services with high components of imported inputs. In the short term, these two opposing effects tend to counterbalance each other.

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<sup>7</sup> The *Inflation Report* features the MPC's forecasts for the distribution of GDP growth and inflation, so one should not expect outturns to always equal the modal (or central) projection. The actual outturns for annual GDP growth and CPI inflation have been within the central 60% probability bands of the fan charts in the August 2016 *Inflation Report*.

<sup>8</sup> See Saunders (2017). In line with the committee's usual forecasting assumptions, the forecast also assumed that the fall in potential supply would be matched by similarly lower aggregate demand.

Why did the forecast underestimate consumption growth? The forecast probably assumed a larger (negative) income effect than actually occurred: in aggregate, households appear to have initially looked through any anticipated falls in their real income.<sup>9</sup> Moreover, the effect was to some extent mitigated by a labour supply response---people are more willing to work (or work more, if already employed), even if wages are low. On the substitution effect, it is possible that the forecast underestimated a pick-up in households' consumption, particularly of durable goods, due to the short-term price effect. (A tentative, complementary hypothesis is that substitution effects are higher in the face of very large identifiable shocks than in normal times, a possibility that makes forecasting even more difficult, as it requires the elasticity of substitution to vary with the size of the shock.)

Similar arguments can be made for why the forecast underestimated investment growth. On the one hand, higher future trade costs and lower productivity may have deterred investment, but in the very short run, low pass-through stimulated investment.<sup>10</sup>

Hypothesis 3: Policy actions by the Bank of England provided significant stimulus. In August 2016, the MPC cut Bank Rate from 0.5% to 0.25%, launched a funding scheme intended to ensure that the cut was passed through to real economy lending rates; and announced purchases of both government and corporate bonds. Moreover, the MPC gave guidance that if conditions evolved broadly as forecast, a majority of the MPC expected to cut Bank Rate further.

The immediate effects of these policies appeared to be stronger than in the MPC's initial forecasts. On the day of the policy announcement, market interest rates fell, corporate bond spreads narrowed and equity prices increased. It is also plausible that the policy stimulus

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<sup>9</sup> Confidence and income expectations may have been initially high among those who voted leave in the referendum. One reason for the large mark-down in growth forecasts following the referendum was that survey indicators of overall consumer confidence fell sharply. But at the time, there was a wide range of views on what the eventual effects of Brexit would be. The initial effects on confidence could have boosted consumption among those who voted leave, while the reaction of those voting remain was more moderate. There is tentative support for this hypothesis in some of the survey data. The majority of respondents to the September 2016 NMG Consulting survey of household finances did not think that the Brexit vote was likely to affect the general economic situation in the UK. And those respondents who were more positive about the result had more positive expectations about the economy and their own finances.

<sup>10</sup> Adding to this, global growth has offered slightly more support to the UK outlook than the MPC had expected.

contributed more widely to recoveries in business and consumer confidence, as well as to reductions in measures of uncertainty.

Hypothesis 4: Uncertainty had a smaller effect than expected. Measures of uncertainty rose sharply following the referendum, and the MPC expected them to remain elevated. In their post-referendum forecasts, this weighed on business investment and reduced activity and prices in the housing market, with a knock-on effect on consumption. It is possible that the monetary policy response in August 2016 contributed to a faster reduction in uncertainty. As well as uncertainty falling back, the macroeconomic impact of heightened uncertainty may have been smaller than the MPC had anticipated.

10. How does your own forecast for the UK economy differ from that published by the Bank in its most recent Inflation Report? Conditional on that forecast, when do you expect to vote for a rise (or fall) in Bank rate?

The forecast in the August 2017 Inflation Report represented the MPC's best collective judgment about the economic outlook. That assessment, which I signed up to, was for relatively weak near-term growth in GDP, given the drag on consumption from weak household real incomes. Further out, we expected the contributions of net trade and business investment to growth to increase, offsetting the weakness in consumption. We expected the effect of the fall in sterling on CPI inflation to dissipate over the forecast, but also for earnings growth to pick-up as output grew faster than its potential. Since August, I have been paying close attention to the evolution of demand and its expenditure components, as well as to wage growth, for signs as to whether the economy is evolving as we forecast.

In August and September, I voted for no change in the policy stance. Along with the other MPC members, in both months I judged that if the economy follows a path broadly consistent with the August central projection, then policy could need to be tightened by a somewhat greater extent over the forecast period than had been priced into market expectations. I look forward to my appointment hearing, particularly as it represents my first opportunity to publicly discuss the rationale behind my votes and my views on the outlook. As MPC members' individual policy views are market sensitive ahead of their publication, I hope to discuss my expectations for future policy votes in more detail in

person at my hearing.

11. Do you think the equilibrium interest rate has become permanently lower? If so, what are the consequences of this for monetary policy-making and the wider economy?

On the first question, measures of expected real rates, constructed using longer-term financial market interest rates, suggest that the equilibrium interest rate has fallen over the past 25 years (see, e.g., Summers 2014, King and Low, 2014). The jury is still out on whether this is a permanent fall and on the exact magnitude of the fall.

There are some reasons pointing to permanently or persistently lower rates. In particular, productivity growth may be structurally lower than in the past. There is, however, an interesting debate on magnitudes, with some scholars arguing that mismeasurement of new goods of higher quality has led to a downward bias in measures of productivity growth (Aghion et al., 2017)<sup>11</sup>; they would also argue that measured inflation rates are overstated, and therefore measures of real interest rates, are accordingly biased downwards.

An important consideration is that it is not only productivity growth in developed economies that drives global real interest rates, but also productivity growth in the rest of the world. Moreover, (risk-free) real rates depend not only on the expected (or mean) productivity growth but also on higher-order moments of the productivity growth distribution. An increase in the incidence of tail events would push down real rates (Barro, 2006, Guimarães & Vlieghe, 2017).

A second possible driver of lower interest rates is the increase in the demand for safe assets (a ‘global saving glut’) coming from fast-growing emerging economies, together with a nearly fixed global supply of safe assets (e.g., US Treasuries, UK gilts). This has led to an increase in the value of safe assets (or equivalently, a fall in the risk-free real rate). The private sector attempted to increase the supply of safe assets by creating mortgage-backed securities, but soon enough it became clear that these were not really safe (Caballero et al., 2016, 2017). The open question is whether other governments might be able to supply a safe asset or whether the private sector could design truly safe assets. If this happened, the trend in real interest

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<sup>11</sup> Bean (2016) discusses the challenges related to measuring quality change in the construction of UK statistics.

rates could eventually reverse.

A third factor contributing to lower rates is demographics – ageing populations saving for retirement – which could keep pushing down on real rates for some time (Carvalho and Ferrero, 2014). Fourth, secular increases in inequality may have increased savings by the rich, who have a higher propensity to save (Auclert and Rognlie, 2016). Fifth, a secular decline in the relative price of capital goods may have increased the capital-output ratio and pushed down real returns (Sajedi and Thwaites, 2016).

There are also factors pointing against a permanently lower equilibrium real interest rate. First, a material part of the fall in the risk-free rate coincided with the start of the crisis, which is suggestive of more cyclical explanations than a secular decline. Consistent with that, new work by economists at the New York Fed (see Del Negro et al. 2017) have pointed to a possible beginning of a pick-up in real rates. Moreover, some researchers have argued that estimates of real rates were unusually high in the 1980s, and that the fall since then was partly just a return to historically normal levels (Eichengreen, 2015; Kindberg-Hanlon, 2017).

While all the hypotheses have merit, my own take is that long term equilibrium real rates are lower, although probably not as low as existing measures of equilibrium real rates suggest, both because part of the fall in rates during the crisis will eventually reverse, and also because long term productivity growth may not be as slow as existing measures indicate, given the arguments in Aghion et al. (2017). And while the incidence of tail events may increase over time (together with the participation in global demand of countries more exposed to tail events), it is equally possible that the supply of safe assets also increases, counterbalancing the pressure on real rates.

The implications for the wider economy depend on what exactly drives down real interest rates. If it is indeed lower productivity growth and higher negative tail risks, we are heading to a scenario with lower growth and relatively stagnant living standards.

If the cause stems from falling investment prices (which in turn stem from faster productivity growth in the capital-good sector), the implication is higher growth and higher levels of living standards.

If the cause is higher savings from emerging markets, the old, or the wealthy, then long-term growth might be affected positively if savings are channelled toward productive investment, or affected negatively, if savings are channelled to unproductive assets.

Low interest rates can also have effects on the distribution of income, though, again, the direction of these effects would depend on the specific mechanisms that have led to low interest rates in the first place.

Reality is probably a combination of all the factors mentioned above (and others to be yet uncovered). This is why more quantitative research on this area is incredibly important. The research community is actively working on these issues. I am optimistic that we will have more informed answers from that collective effort.

Let me now turn to the implications for monetary policy. Monetary policy cannot affect these long-term trends. It can only affect economic activity in the short run, by stabilising aggregate demand around its potential level. Concretely, changes in Bank Rate can, in the short run, affect asset prices and aggregate activity (investment, consumption, net exports and employment).<sup>12</sup> Given that long-term equilibrium real rates are lower, then monetary policy will need to set nominal interest rates at a lower level in order to meet the inflation target. Nominal interest rates will also be much closer to their lower bound, so when facing large recessionary shocks, monetary policy will more often need to turn to unconventional tools.

12. What role should monetary policy play as the UK economy adjusts to a new trading relationship with the EU? To what extent can and should monetary policy provide additional stimulus in the event that the economy underperforms against expectations?

The role of monetary policy depends on the nature of the adjustment. If it largely involves a gradual change in productivity growth, there is little that monetary policy can do to affect that

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<sup>12</sup> They can also affect the distribution of income (see Doepke and Schneider 2006, Gorneman et al. 2012, Broadbent 2016, Sterk and Tenreyro 2016, Auclert, 2017). To be clear, real forces are the principal drivers of inequality trends. All else equal, however, cuts in the Bank Rate would tend to stimulate job creation and wages. They will also lead to higher inflation rates, whose incidence will vary across households. Cuts would also tend to benefit debtors (typically young and lower income people) more than creditors, although the effect on creditors or savers is ambiguous. This is because, in practice, savers tend to have other assets along with deposits (e.g., housing), and hence would benefit from the general increase in asset prices caused by monetary policy. Overall, the effect on aggregate demand stemming from distributional effects tends to be positive, as debtors' consumption is more sensitive to changes in interest rates than creditors'.

adjustment. Monetary policy should be set to ensure that demand evolves in line with supply to avoid inflationary or deflationary pressures. In normal times, the supply or output potential tends to evolve slowly and smoothly. One element that is different at present is that the evolution of supply is more uncertain than usual.

If the adjustment involves further large moves in the exchange-rate, then that will present a trade-off between achieving the inflation target and avoiding undesirable volatility in growth and employment. Monetary policy will have to balance that trade-off according to the remit.

It is possible that at some point, when the terms of the new trading arrangements become clear, households and companies adjust quickly to the anticipated long-run impact. Demand could then adjust sharply, requiring a strong monetary response.

Whether monetary policy should provide additional stimulus depends on the balance of the effects of the adjustment to new trading arrangements on demand, supply and the exchange rate in order to meet the demands of the remit.

### **Accountability**

13. How important is it for MPC members to be subject to parliamentary accountability? What do you think are the strongest and weakest parts of accountability structures for these committees?

The main rationale for having an operationally independent Central Bank is to separate monetary policy making from the political cycle in order to avoid the inflationary bias that the electoral process might create. The delegation of monetary policy to independent central banks and monetary policy committees that are not politically motivated has been a successful solution to the inflationary-bias problem. Moreover, a clear remit to target inflation, such as the Bank of England's MPC's, solves the so-called time-inconsistency problem; that is, the temptation to overstimulate the economy, which, again can lead to inflationary biases.<sup>13</sup>

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<sup>13</sup> Time inconsistency can be present even in the absence of a political cycle.

But because monetary policy committees and central bank authorities are unelected, independence creates an even stronger need for accountability. That is why it is essential that MPC members are properly accountable to parliament.

The UK has a number of accountability mechanisms, including i) appearances at Treasury Select Committee hearings, which are also a *de facto* way of testing and challenging MPC decision-making; ii) the numerical inflation target and the requirement to publicly write a letter to the Chancellor if the MPC miss the target by more than one percentage point; iii) the *Inflation Report*, policy statement and minutes, where the MPC make clear the views and evidence underlying their decision; iv) the publication of MPC transcripts with an appropriate lag.

Importantly, MPC members are individually accountable for their decisions, which are also immediately available via published voting records.

As regards to weaknesses, I would prefer to reserve judgment until I have more experience of the role.

14. How far do you think the public understand the role and decisions of the MPC? How important do you think it is that the public understand the role and decisions of these committees and what activities or actions do you intend to take forward to improve public knowledge and understanding?

I think that there is some general understanding of the role and decisions of the MPC. According to the Bank of England/TNS Inflation Attitudes Survey, around two-thirds of respondents correctly select the Bank of England from a list when asked who sets interest rates. Unprompted, over one-third name either the Bank of England or the MPC. I believe the public also understands that inflation is influenced by the Bank of England, even if the transmission mechanism is not entirely transparent.

But there is clearly more to do to improve public knowledge. I believe it is important that the public understand the role of the MPC because it matters for the effectiveness of monetary policy: the public need to understand how monetary policy is set to form accurate expectations of future policy, which matter for their spending and saving decisions today. Public understanding and trust in monetary policymakers is also important for

accountability. Although MPC members are directly accountable to parliament via the Treasury Committee, ultimately we are accountable to the public. It is therefore crucial that we explain our decisions and reasons for them in ways that are relevant and accessible.

The second part of this question connects with question 15, so I address them jointly below.

15. How do you intend to add to the public's understanding of the role and decisions of the MPC?

In addition to appearing at Treasury Committee hearings and submitting an annual report to explain my forecasts and the reasoning behind my policy votes, I plan to:

- i) Regularly go on visits with the Bank's agents to different parts of the UK, to speak directly to businesses, and the public via charities and other organisations (I have already visited the East Midlands).
- ii) Give several speeches each year that will also discuss my views on the outlook and on monetary policy.
- iii) I will also take up opportunities to give broadcast or newspaper interviews.
- iv) I will continue to produce research on monetary policy and disseminate it at conferences and by publishing working papers.
- v) I will be giving talks to secondary school students.

16. Based on your experience of the MPC to date, are you completely satisfied that alternative views, explanations and forecasts are given due hearing and consideration? What measures would you propose to guard against the risk of 'groupthink' on the MPC?

I have not seen evidence of groupthink. I am impressed that there are staff presentations to the committee specifically designed to offer new perspectives on different topics. MPC members seem willing to listen to different views. Part of my role as an external MPC member is to bring a different perspective and challenge the thinking of other committee members. As an academic, I am trained to do precisely that. I have not encountered any obstacles to offering a different view or interpretation of the data when I have held it.

The current system seems well designed. One of the reasons for external members having short terms is that it helps ensure that they are less susceptible to groupthink. I also intend to keep working part-time at LSE, where I will continue to be exposed to diverse views on economics and monetary policy.

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