

Holding the anchor in turbulent waters – speech by Catherine L. Mann

Given at the conference on '35 years of flexible inflation targeting:
Opportunities and challenges' at the Reserve Bank of New Zealand

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Catherine L. Mann discusses how she evaluates the anchoring of inflation expectations. She highlights the anchor as a key achievement of inflation targeting. Catherine outlines that an activist monetary policy strategy is appropriate to keep inflation expectations anchored in the future, particularly in the face of financial market spillovers and volatility from global shocks.

Speech

Introduction

It is particularly fitting to discuss the value of the inflation anchor at the Reserve Bank of New Zealand, the first official inflation targeter. Today I will focus my remarks on what it is we need to anchor, how to measure whether the anchor is holding, and what a central bank needs to do as domestic economies face more turbulent waters – that is, as economies are likely to experience larger and more frequent shocks, including from financial market spillovers.

Despite the prevalence of inflation targeting today, the origins are perhaps less well-known outside this room – so bear with me while I offer this sketch. In the 1980s, the New Zealand government hoped to promote accountability and raise productivity by measuring the outputs of the public sector. For a central bank, monetary policy inputs and outputs are rather difficult to define. However, with many economies having emerged from a period of relatively elevated and volatile inflation, some central banks had notable successes in achieving low inflation using numerical targets (for money growth for example), and in considering the relevance of inflation expectations (for example, the German Bundesbank and the Federal Reserve).[1]

The outcome being low and stable inflation, the 0-2% inflation target emerged as the New Zealand government's chosen accountability measure. Other central banks (or governments) followed suit, adopting a framework of accountability taken to achieve the outcome – the numerical target itself – with the UK adopting inflation targeting shortly after New Zealand, in 1992.

As I discussed last year in my speech on the end of the Great Moderation (Mann, 2024b), achieving low and stable inflation over most of the last two decades was attributable both to good policy (inflation targeting) and arguably good luck (fewer shocks). In the first instance, inflation targeting has provided a framework for extensive research and empirical analysis of both data and shocks so as to develop a deeper understanding of how the tools and transmission of monetary policy act to achieve the target. For the UK, the Monetary Policy

Report, along with transparency and accountability of each member's vote, plays an important role in communicating the data and analytical inputs to, and judgements around, the decision-making process.

Central to this framework is the anchoring of long-run inflation expectations to the inflation target. If a central bank has this measure of credibility, monetary policymakers can pursue the policies needed to achieve low and stable inflation in the face of shocks, trade-offs, and lags. Macroeconomic behaviors, such as how prices and wages are set, and behavioral thresholds of attention to inflation will influence the transmission of shocks and the ability of monetary policy to anchor long-term inflation expectations.

In addition, a key factor for the UK – a small open economy with a global financial center – is spillovers. We are a small ship in a big ocean. Bigger ships (say, the US and the euro area) can create large waves – real and especially financial – which the Monetary Policy Committee needs to assess, and then evaluate the policy strategy that best holds the anchor. For inflation targeting to continue to work, the monetary policymaker must act to reinforce its credibility, particularly when large shocks push actual inflation away from target. The anchor holds only if monetary policymakers act to keep it there.

I will focus my remarks today on the choppy seas of the past two years, and what we can learn to apply to the likely continued turbulent waters that lie ahead for the UK economy which may test the credibility of policy to hold firm the inflation target anchor.

Anchoring inflation expectations

The whole concept of anchored inflation expectations is elusive – but it is central to achieving the inflation target. By definition, the nominal anchor is the 2% target. In the case of the UK, the specific language in the monetary policy remit is to maintain price stability, through achieving an operational target of 2% inflation that applies at all times.^[2]

Achieving 2% is the successful outcome, but not the process. In the MPC's latest minutes, we define this process as follows: "The Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. The MPC adopts a medium-term and forward-looking approach to determine the monetary stance required to achieve the inflation target sustainably."

If anchoring expectations is key to both the process and to achieving the target, how should we measure that? How are expectations formed and how does that interact with shocks, spillovers, behaviors, and policies to ensure that the anchor holds?

To keep inflation at 2% sustainably in the medium-term means that this is where inflation expectations should be too – but at all time horizons? Short-term inflation expectations should, and are expected to, deviate from the target from time-to-time as shocks hit the

economy that move inflation and output – and thus expectations thereof – away from their equilibrium. To keep short-term expectations at the inflation target ‘at all times’ would inflict too high a trade-off and too much volatility on the real economy and financial markets.[3]

On the other hand, long-run inflation expectations should be anchored at the inflation target and insensitive to near-term macroeconomic developments. However, this is conditional on the Bank of England’s credibility, which has been built through the actions taken by the MPC historically, to return inflation sustainably to target in the face of shocks that have caused realized inflation to deviate from its target. The monetary policymaker needs to constantly assess the underpinnings of long-term inflation expectations and take actions to reinforce the anchor. This credible commitment to policy action is key to holding the anchor in the face of the turbulent waters of future shocks.

How do I assess the underpinnings and anchoring of expectations? I will walk through several concepts of anchoring, and their role in the transmission of monetary policy.[4]

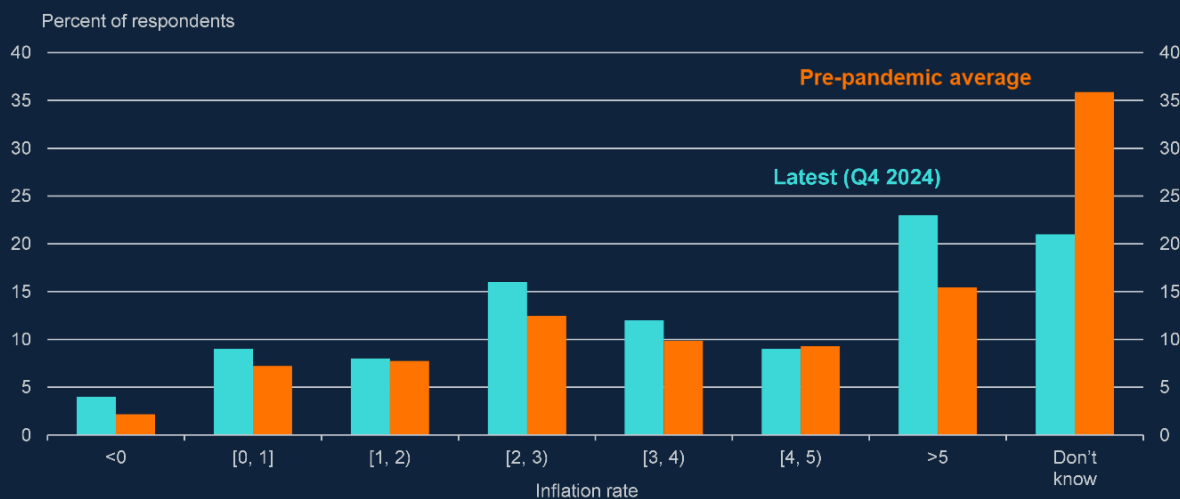
Anchoring assessment 1: the level and distribution

The level of inflation expectations, in absolute or relative to some historical average can be used to measure anchoring. A simple rule of thumb says: how much do expectations measures deviate from 2%?[5] It is not my preferred measure, because some measures have not averaged 2% in the past, for reasons other than a lack of anchoring. Households’ long-term inflation expectations for instance have tended to average around 3%, not 2%.[6]

On the other hand, the distribution of inflation expectations is a rich source of information both to determine whether expectations are anchored, and how expectations are formed and may evolve in the face of incoming data.

Chart 1 compares the distribution of responses in the latest Bank of England/Ipsos Inflation Attitudes survey (in aqua) and a pre-pandemic average (in orange). The most striking aspect is the perceived *certainty* in the latest quarter of responses, relative to the average (denoted by the stark decrease in the “don’t know” option from orange to aqua). This suggests higher attentiveness of households to the current inflation environment. The second point relates to the chunk of responses in the “larger than five” bucket. In fact, a larger share of respondents expect inflation to be higher than 5% in five years’ time, rather than anchored at 2%.

Chart 1: Distribution of Bank of England/Ipsos 5-year ahead household inflation expectations



Source: Bank of England/Ipsos Inflation Attitudes Survey and Bank calculations. Notes: The pre-pandemic average spans from Q1 2009 to Q4 2019. The “<0” bucket sums responses in categories spanning “-5%” to “-1% or less”, the “>5” bucket sums responses in categories from “5%” to “15% or more”.

A look at these distributions over the whole survey sample period shows a rising gap between the mean and median, indicating that the bucket of right-tail responses of higher-than 2% inflation expectations is increasing over time. It is well-documented in the literature that the formation of households’ inflation expectations involves high weights on salient (and volatile) consumer basket items such as food and energy.[7] When these prices rise, as has been the case over the past few years, so do inflation expectations. On the other hand, when inflation is low and stable, such as post-GFC, households may be ‘rationally inattentive’ to monetary policy and inflation (Bonatti et al., 2022).

The information from the tails of the distribution matter, because, as Maćkowiak, Matějka and Wiederholt (2021) say: “Decisions depend on the subjective perception of the state of the world, not the objective state of the world”. If households form their inflation expectations on salient items of the basket only or if their perceived inflation rate is above realized inflation, households may act (in their consumption and savings decisions) as if inflation were above target (Pfäuti, 2025).

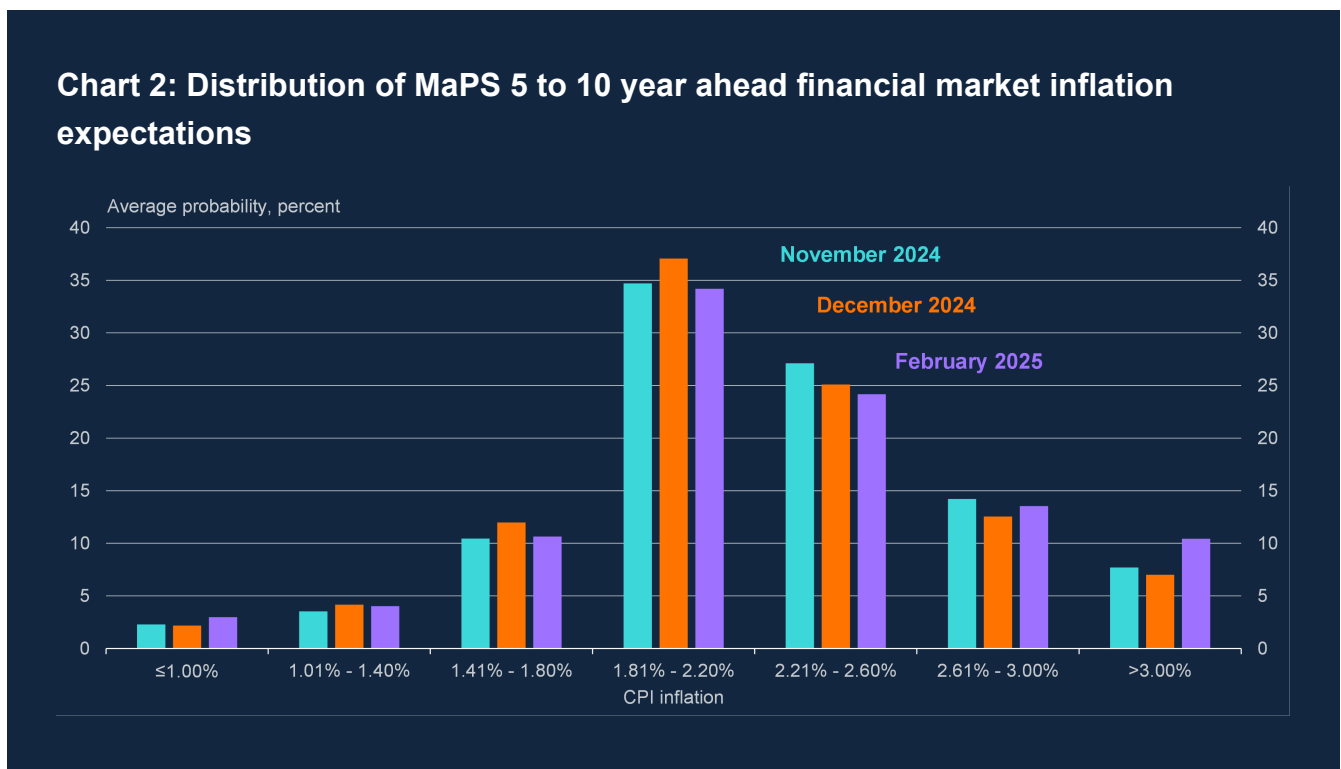
How does analyzing these tails help the policymaker to evaluate what is the appropriate monetary policy decision to keep inflation expectations anchored? On the one hand, there likely will be upside risks to the formation of expectations coming from the near-term inflation

hump, as projected in the February Monetary Policy Report. Energy and food inflation contribute 0.7 percentage points to this hump in CPI inflation, which is projected to be 3.7% by the third quarter of this year.

But on the other hand, the potential for a non-linear increase in unemployment and an associated erosion of consumer demand will likely reduce firms’ pricing power; which would moderate both inflation and inflation expectations. Keeping track of the tails matters as they reflect the balance of how these risks are internalized into the medium-term inflation expectations of households.

Financial market expectations, which are typically derived from inflation-linked bonds, or inflation swaps, contain unobservable risk and liquidity premia that make them only an indirect read on inflation expectations.[8] These premia may reflect inflation volatility associated not just with shocks, but also perhaps with a central bank struggling to hold the anchor.

Surveys of financial market participants do not suffer from the issue of contaminating risk premia. The Market Participants Survey (MaPS) for instance asks for CPI expectations, and therefore offers a window on how the distribution of long-term inflation expectations has changed more recently. **Chart 2** shows that there is a small shift to the right in the long-term expectations for inflation, with a notable positive skew in the distribution – 48% of the probability mass lies above 2.2%.



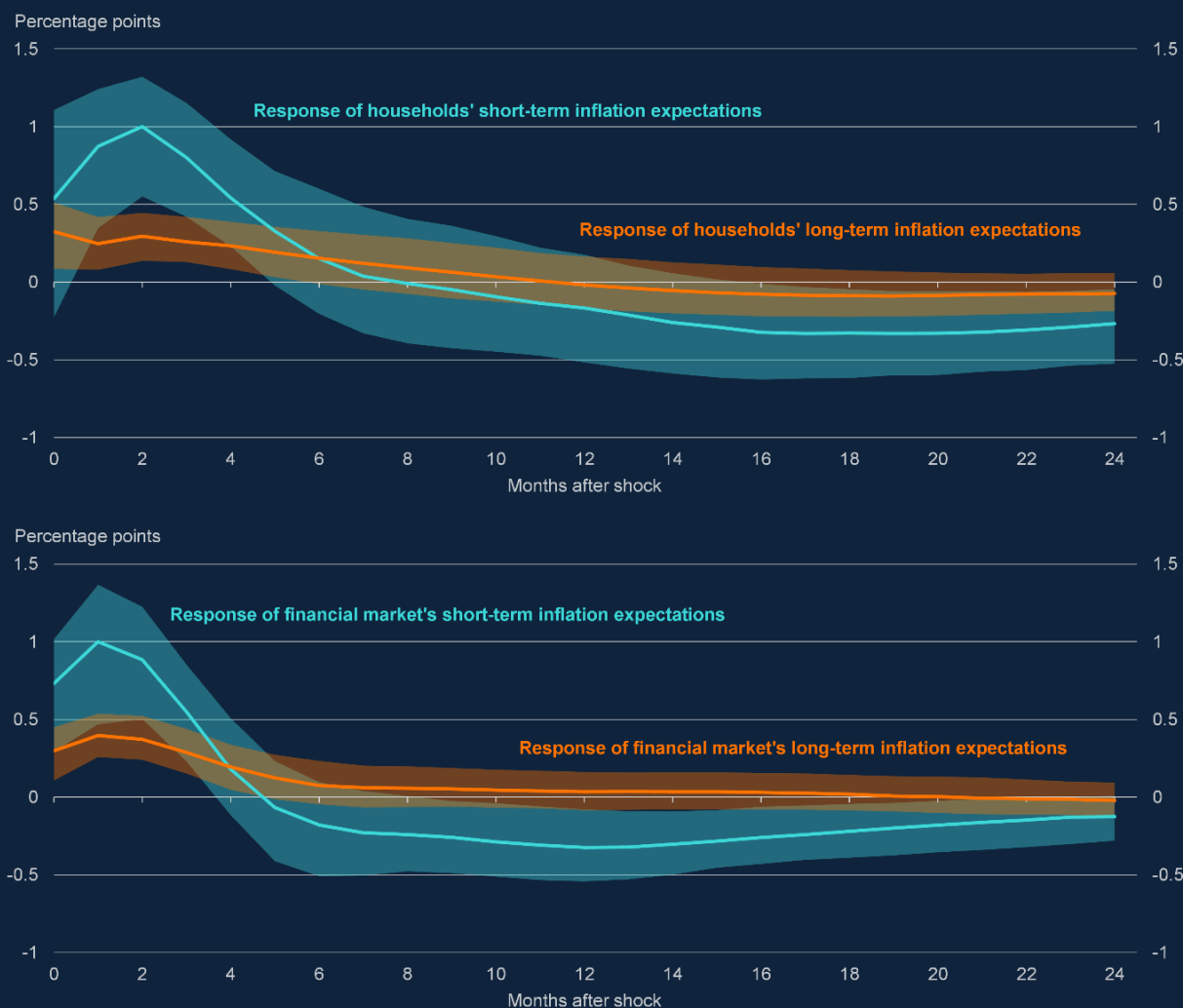
Source: Market Participants Survey and Bank calculations.

Anchoring assessment 2: insensitivity to near-term shocks

When long-term inflation expectations are anchored, we would typically expect them to be insensitive to near-term macroeconomic shocks. This is because the monetary policymaker reacts such that, in the long-term, the effects of shocks wash out and inflation returns to target. As this is a measure of credibility, we want to test whether this holds in our data.

Let's look at a macroeconomic shock that we would expect to affect short-term expectations but hope to leave long-term inflation expectations anchored at target. **Chart 3** shows impulse response functions of short-term inflation expectations (in aqua) and long-term inflation expectations (in orange) to a global oil supply shock. The top panel shows the response of households' expectations and the bottom panel the response of financial market expectations.

Chart 3: Impulse response functions of short- and long-term inflation expectations to a global oil shock



Source: Bloomberg Finance L.P., Känzig (2021) and Bank calculations. Notes: The impulse response functions are derived from a structural VAR model as in Burr (2025) estimated from 2005 to 2019. The solid line shows the median response, and shaded areas denote the 68% credibility intervals. The impulse response functions are scaled to increase short-term inflation expectations by 1 percentage point at peak. Household expectations are proxied using the monthly Citi/YouGov survey. Short-term expectations show the response of the one-year ahead expectation, long-term expectations show the response of five-to-ten year ahead expectations. Financial expectations are proxied using UK inflation swaps (monthly averages). Short-term expectations show the response of the 1-year, 1-year ahead inflation swap, long-term expectations show the response of the RPI-reform-adjusted 5-year, 5-years ahead inflation swap. The global oil shock is proxied using a high frequency identified instrument by Känzig (2021).

Consistent with the salience literature noted earlier, short-term expectations are considerably more reactive than long-term expectations. However, long-term inflation expectations also rise for around 5-6 months following the shock. Overall, the evidence suggests that the UK policymaker in the model, as estimated from the historical data, has underreacted to global oil supply shocks, perhaps as they sought to look through a temporary shock. This has allowed long-term inflation expectations to temporarily deviate from their anchor. In the end however, over this historical sample, the monetary policymaker's commitment to 2% (along with fortuitous globalization 'luck' and sluggish domestic demand most notably after the GFC) prevented this drift from becoming embedded.

Monetary policy affects long-term inflation expectations through the systematic and predictable way in which it responds to offset pressures that would take inflation away from target (Pill, 2024). This predictable expectation forms the credibility of monetary policymakers – so long as it is reinforced in times when shocks hit. In the past, monetary policy has responded to shocks that hit the economy that caused inflation to deviate from target, which built credibility, and established a notion of the MPC's reaction function (i.e. how the MPC might respond in the future to a similar shock).

Having established this credibility, the monetary policymaker may respond to future shocks according to this reaction function – importantly depending on the extent to which the shocks, behaviors, and spillovers are like the past. However, if the nature of the shocks or the state of the economy are sufficiently different, the reaction function needed to hold the anchor may change. Therefore, clear communication around inputs to the reaction function is essential. The value of the anchor lies not just in the target, but in the process that when the monetary policymaker responds to a shock, their policy will work as intended.[9]

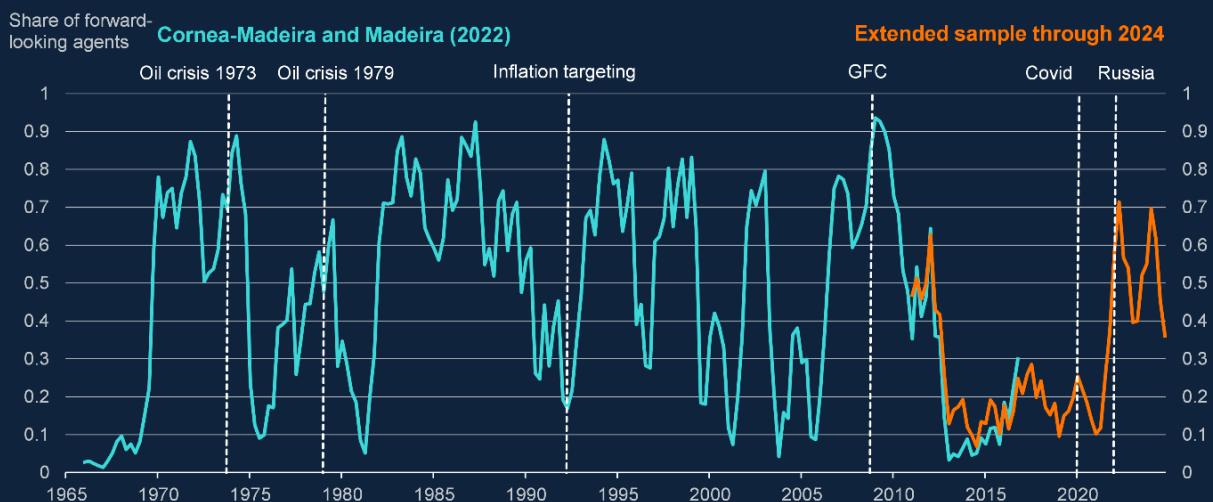
Anchoring assessment 3: endogenous expectation formation

The previous assessments give some window into how expectations are formed. However, there is an empirical method which highlights that expectation formation is endogenous to the macroeconomic environment, including monetary policy. This last anchoring assessment method therefore evaluates the prospects for the anchor holding using the calculation of the backward- versus forward-lookingness of agents in their expectations formation.

After a period of elevated inflation and in the context of a bumpy disinflation process, the anchor can drift away from the target-consistent 2% if agents become more backward-looking in their expectations (Mann, 2022; 2023a). In a theoretical model,^[10] I showed that the more agents look backward in their formation of expectations, the more persistent is inflation, and the greater the need for monetary policy restrictiveness, with a worse inflation-output trade-off. Therefore, understanding what might affect the degree of backward-looking and forward-looking formation of expectations matters.

Chart 4 shows an updated calculation from Cornea-Madeira and Madeira's methodology (2022) on the time-varying share of 'fundamentalists' or forward-looking agents in the UK economy.^[11] In their framework,^[12] firms can choose between two different forecasting rules. One which considers information about the wider macroeconomy (which we might call macroeconomic fundamentals), and a naïve rule which just takes last period's inflation rate as the prediction for next periods' (backward-looking). The methodology relies on learning in the face of information costs – given the cognitive costs associated with having to be attentive to inflation developments, sometimes economic agents are better off just looking back at recent outturns instead of 'forecasting'.

Chart 4: Share of 'fundamentalists' (forward-looking agents) in the UK Phillips curve



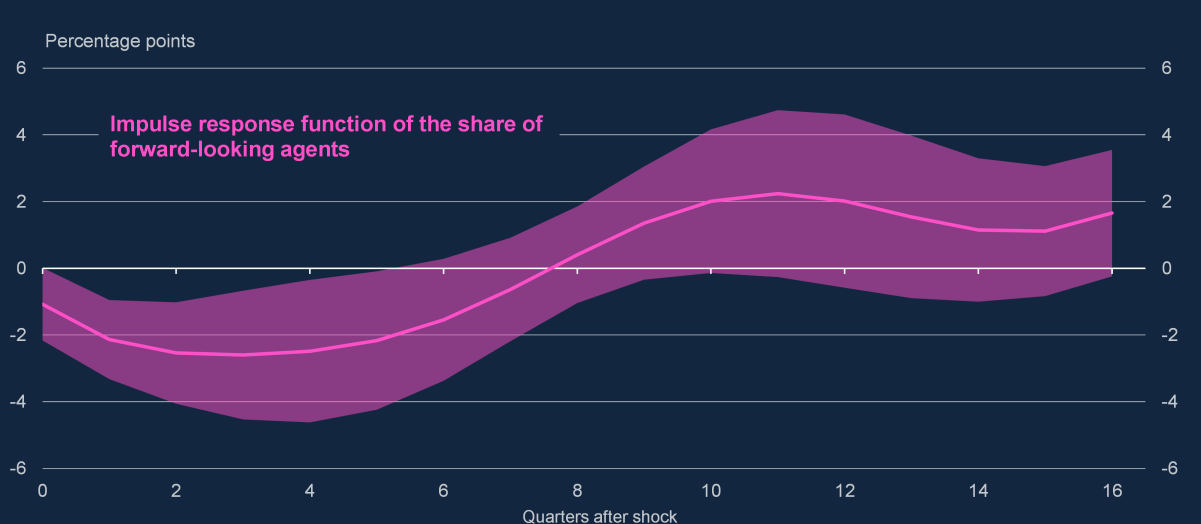
Source: Cornea-Madeira and Madeira (2022) and Bank calculations. Notes: The orange line extends the analysis of Cornea-Madeira and Madeira until December 2024 using CPI instead of the GDP deflator as the measure of inflation as well as the MPC's estimate of the output gap as the measure of economic slack in the Phillips curve.

This work indicates that the balance between forward- and backward-looking agents in the UK economy varies significantly over time – agents select a particular forecasting rule depending on how well it has performed recently. First, note that the introduction of inflation targeting

was associated with a rise in the share of forward-looking agents – the institutional decision and associated communications appear to have given agents the belief that the central bank would pursue policies to maintain low inflation. This makes central bank credibility part of the macroeconomic fundamentals. It also appears that significant macroeconomic events mark turning points in the series: expectations became more backward-looking following the oil shocks of the 1970s, the GFC (which coincided with an oil price shock), and Russia’s invasion of Ukraine (again, an energy price shock).

To make this assessment concrete, **Chart 5** shows the estimated local projections of the share of forward-looking agents onto global oil supply surprises over the past 60 years, up until the Covid period. As suggested by the Cornea-Madeira and Madeira methodology, expectations formation becomes more backward-looking after such surprises: An oil shock that increases oil prices by 10% is followed by a 2-3 percentage point decrease in the share of fundamentalists in the year after the shock. This is consistent with the experience of the UK over 2022 and 2023 when the share of forward-looking agents roughly halved (from 70% to just under 40%, as shown in **Chart 4**) in response to the increase in energy prices caused by Russia’s invasion of Ukraine. In the face of such large shocks, even agents using a fully forward-looking model to predict inflation incur forecast errors, which leads them to revise their formation of expectations to be more backward-looking, given the recent inflation outturns.[13]

Chart 5: Impulse response function of the share of forward-looking agents to an oil shock



Source: Cornea-Madeira and Madeira (2022), Känzig (2021) and Bank calculations. Notes: The solid line shows the point estimate of the response of the share of fundamentalists to a surprise change in oil prices estimated using the smooth local projection method of Barnichon and Brownlees (2019), estimated on quarterly data from 1966 to 2019. The swathe shows the associated 90% confidence interval.

Given that expectations formation co-moves systematically with shocks, this means that both expectations formation and the effectiveness of monetary policy are endogenous to the state of the economy. Taking together the evidence presented in **Chart 3** – that in response to global oil shocks long-term expectations rise – and the evidence from **Charts 4 and 5**, that agents become more backward-looking after that same shock, monetary policy needs to act more strongly (than the past reaction function might suggest) to these types of shocks to maintain the anchor and prevent higher inflation expectations from becoming embedded.

To summarize this section on the anchoring of inflation expectations and various measures, when expectations are anchored, any given shock to inflation will have a smaller effect on inflation expectations and hence inflation (Mishkin, 2007). But, what it might take to maintain the anchor may depend on how big the waves are. In the next section, I will discuss why 2% is the magic number, aside from it being, in the Bank of England's case, a government-mandated objective.

Why 2%, not 3%?

Inflation is the increase in the general consumer price level over a fixed window of time. In keeping with that definition, the MPC's target is to maintain a 2% rate of growth in consumer prices (as measured by the Consumer Price Index) over one year. For us, this number is set by the government, so it is not our decision. In fact, the target has changed in the past.[14]

This does sound odd at first, wouldn't we prefer prices to stay the same over time rather than rise? After all, 2% inflation on average implies that prices double every 35 years. For several reasons, a mildly positive rate of inflation is best. For example, deflation, that is, outright falls in the aggregate price level, is a much more difficult phenomenon to keep in check than inflation, as it sets in motion a spiral of deferred consumption and therefore output. A buffer above 0% still reaps the benefits of price stability while mitigating the risks of deflation.

There are other reasons why 0% is not the best number to target for CPI inflation. With downward rigidity in wages and prices, a positive overall inflation rate provides room for relative prices to adjust. Finally, the standard approach to weighting the components in the CPI basket does not consider consumer substitution away from more expensive items, or changes in their quality. In these latter two cases, experienced inflation with a target at zero would be deflationary.[15]

But, why 2%? Why not 3% or even 4%, both of which were popular numbers explored in the literature in the post-GFC period, before the recent high-inflation period.[16] High inflation has costs – in a broad sense, not just in monetary terms. First, high inflation is very unpopular with households, and we have been recently reminded of this fact. Second, higher inflation

requires more frequent or intense bargaining between workers and employers (Guerreiro et al., 2025), which is a costly cognitive effort for everyone involved even if, in the end, real wages are held steady.

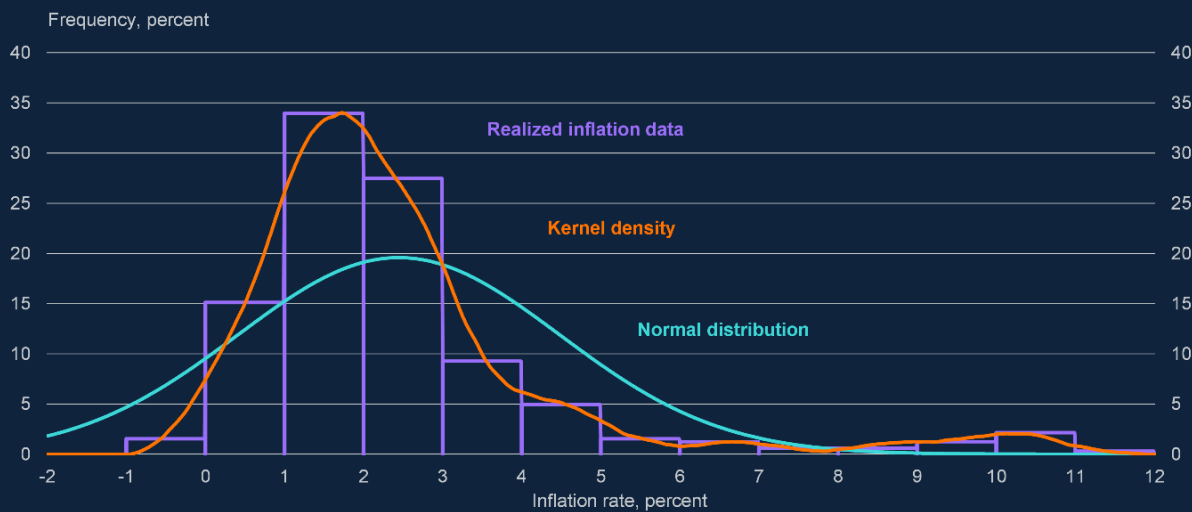
High inflation takes resources away from fundamental decisions. The evidence on expectations formation, discussed above, suggests that inflation attentiveness increases when inflation is high, which means that more resources are devoted to evaluating current inflation and forecasting it, rather than spending resources on real side decisions such as investment, saving and consumption. Similarly, high inflation and high inflation volatility go hand in hand, blurring relative price signals, which distort sectoral allocation, and blur product-price signals which provide an umbrella under which firms can raise their own prices when competitors raise theirs.

Further, there is evidence that the costs of inflation rise non-linearly with the inflation rate; there are important thresholds for when households and firms react to higher inflation. Below these thresholds, inflation remains in the background. People are ‘rationally inattentive’: when the inflation rate is low, firms and households can rationally ignore inflation and macroeconomic developments, and monetary policy also can stay in the background.

However, in highly attentive environments, any given shock has larger effects on inflation. Pfäuti (2025) finds that supply shocks are two to three times more inflationary in a high attention environment as the shock volatility increases once the inflation threshold is surpassed. Similarly, Weber et al. (2023) find that changes in inflation volatility can be a driver in attentiveness to inflation. Research finds that an inflation rate of about 4% is an important threshold for attentiveness.^[17] Given that the latest UK inflation forecast rises to some 3.7% in the near term, we need to be especially alert to self-fulfilling dynamics.

What does this background have to do with the specifics of a 2%, or 3% target? **Chart 6** shows a histogram of realized inflation rates in the UK since 1998 alongside two density estimators – a flexible kernel density estimator^[18] and a standard normal distribution. We can see that the normal distribution (in aqua) does not fit the realized data very well – inflation rates very obviously are not normally distributed. We know from the CPI microdata that individual prices rarely fall (Brandt, Burr and Gado, 2024), and it is also the case that aggregate inflation is rarely negative (there is little purple mass below zero in this chart).

Chart 6: Unconditional distribution of UK inflation from 1998-2024



Source: Office for National Statistics and Bank calculations. Notes: Monthly headline CPI inflation data from January 1998 to December 2024. Purple lines show a histogram of the distribution of outcomes in headline inflation numbers over the period. The aqua line shows a normal distribution with a mean of 2.4% and standard deviation of 2.0. The orange line shows a density generated using an Epanechnikov kernel smoothing function.

The kernel density, which fits the underlying data more closely, in orange, shows that the distribution of inflation outcomes also has a fat right tail. Now imagine the inflation target were 3%, not 2%. Because densities are non-linear, when we shift these to the right, we are more likely to find ourselves above the important behavioral threshold of 4%. The distribution of historical outcomes for inflation associated with the UK's 2% target yields a probability of being above the 4% threshold around 13% of time. Shifting to a 3% target implies that the probability of being above 4% rises to 23%! This is likely to be an underestimate of the true probability, for the reasons mentioned above around being closer to the behavioral threshold. My back of the envelope calculation has assumed that the realized distribution that occurred under a 2% target would just shift to the right. It is reasonable to assume that the shape of the distribution would change, with a fatter tail as more outcomes occur above the 4% behavioral threshold.

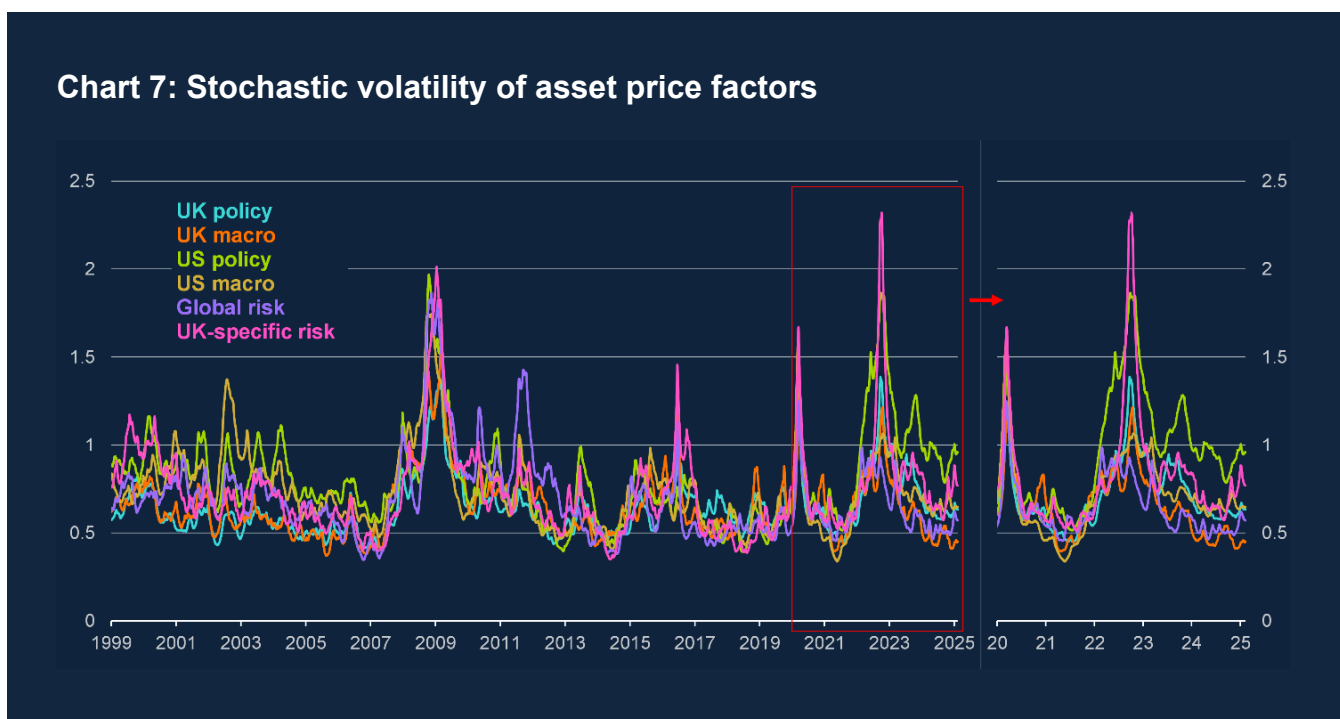
Turbulent waters ahead

As a small open economy, the UK is of course not the only ship in the water. Small ships can be easily rocked by the waves generated by larger ships (e.g. the US and euro area).

Over the post-Covid inflation period, financial market variables have been especially volatile. And we find that US monetary policy in particular has created larger waves in the financial system than previously. In this section I will take a closer look at financial market volatility given the spillovers from the US have been particularly large in the last few months.

Of course there have been other sources of macroeconomic volatility that I covered more extensively in my speech on climate (Mann, 2023b) and on the Great Moderation (Mann, 2024b), covering the physical effects of climate change; the economic effects of the transition to net zero; trends towards global fragmentation through politically aligned ‘friend-shoring’ and an increasing incidence of protectionist trade policies and sanctions; as well as more active use of fiscal and industrial policies. Finally, there are the more ‘traditional’ sources of volatility, such as geopolitical tensions and energy markets.

Turning back to financial markets, I have previously shown model-based decompositions of movements in different asset prices into sources of the shock (see for instance Chart 10 in Mann, 2024a). Taking a slightly different approach this time, I estimate a sequence of stochastic volatility models both on raw asset returns and on the underlying factors driving these asset returns.^[19] **Chart 7** shows the time series of the estimated shock volatilities from these stochastic volatility models. We see that even though the shocks themselves are by construction uncorrelated, their volatilities co-move. Financial market volatility increased through 2021 and 2022 as inflation accelerated globally and central banks began to unwind the Covid stimulus. It then started to wane again through 2023 and 2024 and on most measures is now back to where it was in the pre-Covid decade.



Source: Bloomberg Finance L.P. and Bank calculations. Notes: The calculations are based on a structural VAR identified

using sign and magnitude restrictions following Brandt et al. (2021). The model is extended to analyze monetary policy spillovers between the UK and its two most important trading partners and dominant currency blocks, the US and the euro area (as described in Mann (2024a)).

There is, however, one notable outlier. The volatility of the US monetary policy factor (in green), through the lens of this specific model, has been much slower to come down. It still stands at about double its pre-Covid norm. This implies that US monetary policy has had an outsized effect say, on UK interest rates.

Notwithstanding the importance of the US waves, I also note heightened volatility of the UK-specific risk factor, and its rise over the last few months, which may point towards some hesitancy of investors relative to UK assets (above and beyond news from the macroeconomic outlook, which is captured in the UK macro and policy shocks).

This volatility in financial markets, in part due to spillovers from US policy was a key motivator for my monetary policy decision at the last meeting, which I will discuss in the next section. I will note however, that this is not the first time where financial spillovers have been important to my decision. In February 2024, when financial markets were pricing in around 200 basis points of cuts in the US and the UK over three years, I voted for a 25 basis point increase in Bank Rate as, in my view, financial markets were not properly pricing in the UK macroeconomic environment and prospects at that time.

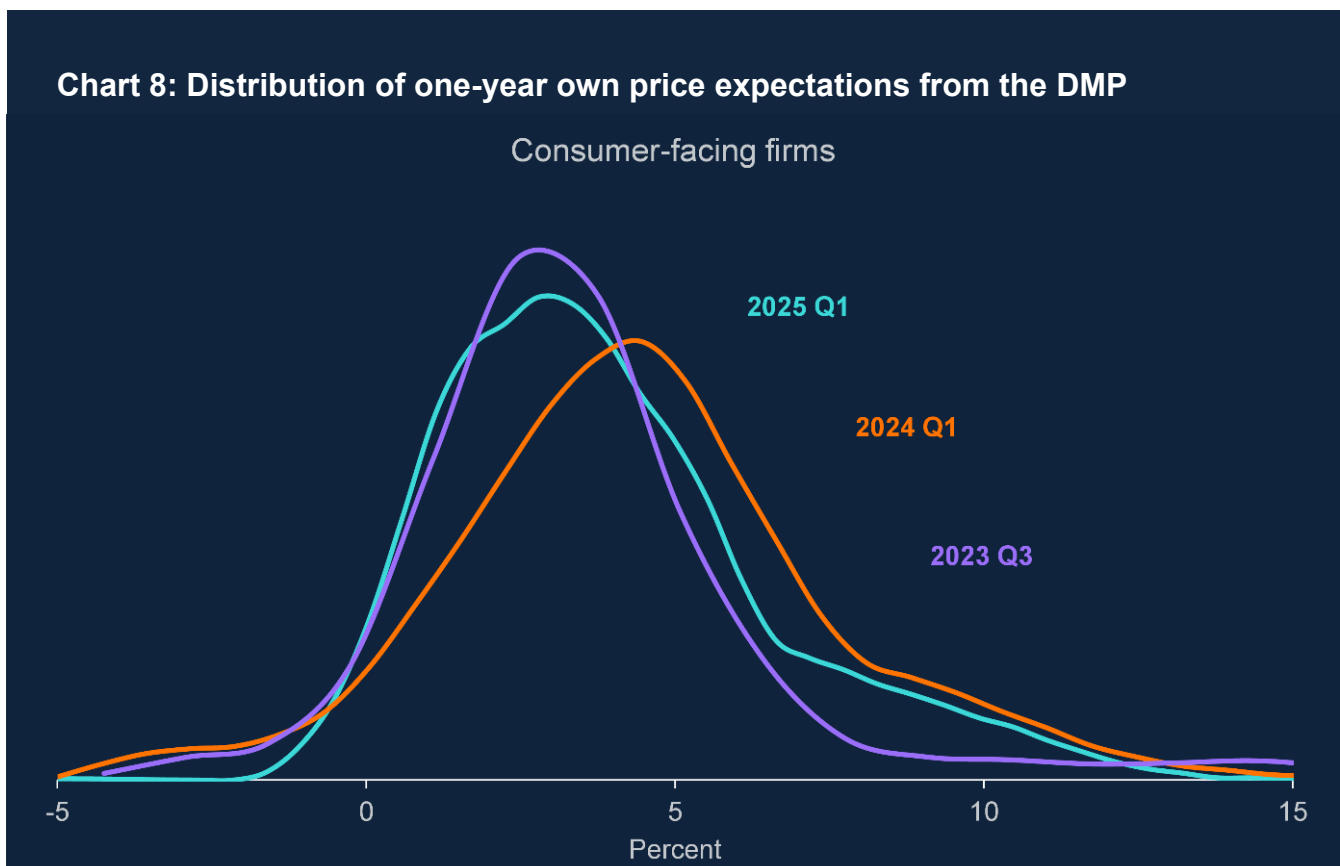
Monetary policy strategy

In these choppy seas of past and current shocks, my inflation targeting framework emphasizes evaluating how disaggregated data, microeconomic behaviors, and cross-border spillovers affect inflation and expectations. The key shock already in train is the projected near-term hump in headline inflation, driven by one-off factors, but also importantly by energy and food. Other shocks increasing uncertainty and volatility come from potential trade disruptions and geopolitical tensions generally. These are covered in the February Monetary Policy Report. In general, research shows that more volatile inflation, along with downward rigidities in wage and price setting imparts an upward bias to inflationary pressures. And, incoming data on wage and price developments and one-year ahead expected trajectories are not yet target-consistent.

In previous speeches I have emphasized the need to hold a restrictive Bank Rate for longer to discipline this upward bias – and I still believe this. Given the projected inflation hump, the salience of the rise in energy and food inflation, and the right-tail risks in the distribution of households' medium-term inflation expectations, the need to remain restrictive is particularly important. While policy currently is restrictive – and would still have been had my last vote been realized – these risks to the anchor could have warranted a hold at the February meeting, rather than my decision to vote for a Bank Rate cut of 50 basis points.

However, I need to look six to nine months ahead for sources of inflationary pressures. Incoming data evidences more extensive weakness in market sector output and consumer demand. Survey evidence from the Decision Maker Panel (DMP) on labor demand points to a non-linear downward adjustment as firms address the multi-year accumulation of increased labor costs. Already high savings rates, associated with buffers against volatile purchasing power and mortgage refinancing costs may be further bolstered by an unemployment-risk buffer.

In the face of these assessments of prospects for labor demand and consumption, I judged that wage and price setters are more likely to have to absorb the inflation hump rather than pass it through. What is the evidence? Agents' assessments of one-year ahead wage developments are near to target-consistent. Evidence from the DMP on the distribution of one-year ahead price expectations disaggregated by business services, goods producing, and especially consumer-facing services are still too high at their means, but the latter's wide distribution points to the likely discipline of sluggish consumer demand on pricing prospects (**Chart 8**). These judgements are the rationale for a Bank Rate cut and time will tell whether they are borne out.



Source: Decision Maker Panel Survey and Bank calculations. Notes: 2023 Q3 and 2024 Q1 include data from the respective months in their calendar quarters. Data in 2025 Q1 reflects data from the January 2025 survey only.

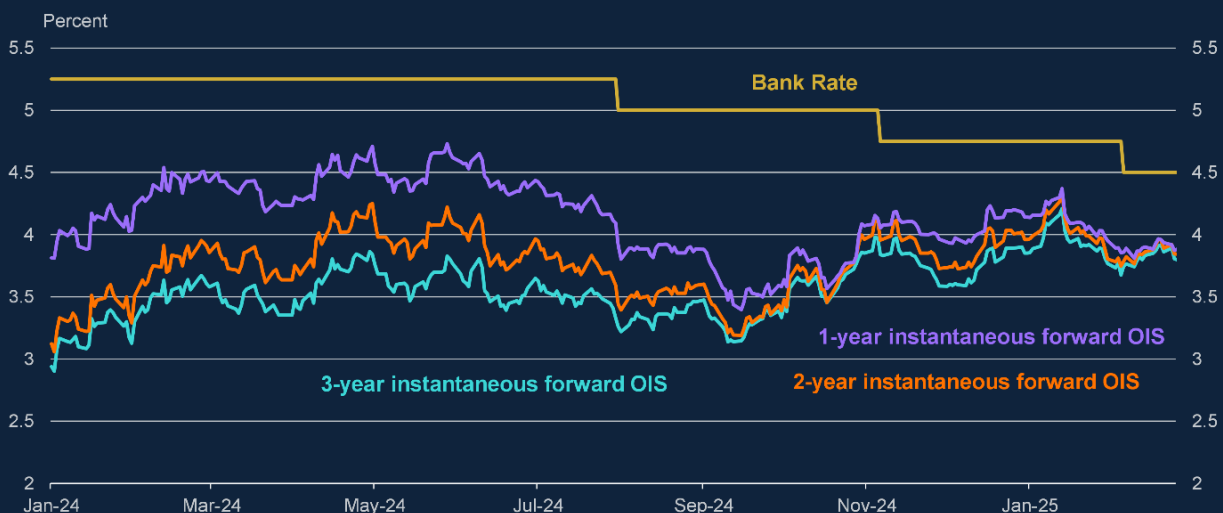
But why 50 basis points? And, indeed, the MPC collectively judged that a “gradual and careful approach to the further withdrawal of monetary policy restraint was appropriate”, which resulted in the third 25 basis point cut in Bank Rate.

Gradualism as the preferred monetary policy strategy was promulgated at a time when financial flows were small and the markets more stable. Gradual moves in the policy rate were seen to prevent monetary policy from creating excess volatility in financial markets, which would hamper monetary policy transmission. As I showed in the previous section, these days, the volatility is coming from financial markets, including (especially) cross-border spillovers.

Here is some additional evidence. Despite the MPC having twice cut Bank Rate by 25 basis points in August and November last year, the short end of the yield curve has been quite volatile. **Chart 9** plots the evolution of the 1-year, 2-year and 3-year points on the OIS curve over time. When Bank Rate was held over the first half of 2024, rates moved within a range larger than 100 basis points! Even following the cuts in Bank Rate, the overall trajectory of short-term interest rates has been up – with the short end of the yield curve flattening as the 1-year, 2-year and 3-year ahead rates have coalesced at just under 4%. This volatility is reflected in mortgage rates (which are priced off the maturity-matched yield), having also seen a range of some 50 basis points.[20]

In short, international spillovers have dominated the signals from UK domestic data and monetary policy actions. With substantial volatility coming from financial markets, especially from cross-border spillovers, the founding premise for a gradualist approach to monetary policy is no longer valid.[21]

Chart 9: UK 1-year, 2-year and 3-year ahead instantaneous forward OIS rates, and Bank Rate



Source: Bloomberg Finance L.P. and Bank calculations. Notes: All data as of 28 February 2025.

To conclude, unlike the [Taihoro](#), New Zealand's entry, which skimmed above the seas off Barcelona to win the Louis Vuitton 37th America's Cup last year, monetary policy must navigate through choppy financial markets, shock-ridden economies, and sticky expectations. Larger cuts, such as the one I voted for in the latest meeting, cuts through this turbulence, with the objective to more effectively communicate the stance of policy and influence the economy. At the same time, keeping monetary policy restrictive for longer allows me to evaluate developments on inflation persistence. This combination is an activist monetary policy strategy.

The views expressed in this speech are not necessarily those of the Bank of England or the Monetary Policy Committee.

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1. See the FRBNY Economic Policy Review of August 1997 on 'German Monetary Targeting: A precursor to Inflation Targeting' and Bernanke and Mihov (1997). For the Fed, as Volcker became chair in 1979, the role of inflation expectations in determining the real interest rate became more apparent. From 1982, the Fed focused more on interest rates as a tool to guide inflation (Bernanke and Mishkin, 1992), as opposed to reserves targeting.
 2. See Salib and Ghazaleh (2025) for an in-depth historical and legal account of the Bank's statutory monetary policy objectives, as well as a discussion of their interpretation in practice. Even though, per the remit, the 2% inflation target applies "at all times", there is flexibility. The MPC can allow inflation to temporarily deviate from target in order to avoid undue volatility in the real economy.
 3. See for instance Broadbent (2022). The MPC's price stability remit recognises that "the actual inflation rate will on occasion depart from its target as a result of shocks and disturbances. Such factors will typically move inflation away from the target temporarily. Attempts to keep inflation at the inflation target in these circumstances may cause undesirable volatility in output due to the short-term trade-offs involved, and the Monetary Policy Committee may therefore wish to allow inflation to deviate from the target temporarily."
(HM Treasury, 2024).

4. Inflation expectations play a key role in the monetary transmission mechanism. Since Bank Rate is nominal, and households and firms make economic decisions (such as consumption, spending, investment, and price- and wage-setting) using real interest rates, the so-called 'ex-ante' real rate takes into account inflation expectations. For instance, if Bank Rate is 4.5% and inflation expectations are 2.5%, the perceived real rate is 2%. Therefore, monetary policymakers can affect real interest rates through changing Bank Rate, and by affecting inflation expectations (see Box A and Section 3.3.2 in Burr and Willems, 2024).
5. This is discussed in more detail in Anderson and Maule (2014).
6. Households might consider rising prices and/or costs that are not strictly in the CPI representative consumer basket, such as mortgage costs, in their expectation formation. In addition, the inflation target itself has changed since it was instituted, see footnote 14.
7. See for instance D'Acunto et al. (2019) and De Fiore et al. (2022). Anesti et al. (2024) find that food prices in particular impact not only short-run expectations, but also medium- (two-year) and long-term (five-year) expectations. The authors find this association to be disproportionately strong for *large* and *positive* changes in food price driven inflation in particular.
8. These type of risk premia can be estimated, for instance in advanced term structure models. See Joyce, Lildholdt and Sorensen (2010).
9. It is challenging to measure the effects of systematic policy on long-term inflation expectations empirically. For empirical identification of the causal effects of monetary policy on macroeconomic variables, economists typically use monetary policy surprises. In the context of inflation expectations, if I run the same model as in Chart 3, this time identifying a monetary policy shock, I find that monetary policy shocks move short-term inflation expectations, but long-term expectations are largely unchanged. From an anchoring perspective that is good news, as long-term inflation expectations should not respond to a short-term macroeconomic shock such as monetary policy. On the other hand, you do want monetary policy to be able to anchor long-run expectations. This is achieved through the systematic component of monetary policy.
10. Shown in Mann (2023a).
11. From a theoretical perspective, this time-varying expectations formation also represents a departure from the strict rational expectations formulation of the canonical New Keynesian Phillips curve. In this more complex formulation, monetary policy, by having an expected effect on macroeconomic outcomes, can feed back to affect the inflation expectations process and therefore current inflation outcomes. See Mann (2022) for more detail.
12. Based on Cornea-Madeira et al. (2016).
13. In the Cornea-Maderia and Maderia (2022) model, agents update their forecasting rule in the face of forecast errors incurred over the past 4 quarters, comparing, each quarter, the relative performance of the forward-looking and backward-looking strategies, subject to some sensitivity parameter of agents to selecting the optimal prediction strategy. The weights on the backward vs. forward-looking strategy therefore vary endogenously over time.
14. The inflation target in the UK is set by the UK government. In the past, between 1992-95, the inflation target was a 1-4% range measured using RPIX. From 1995-97, the target was asymmetric, 2.5% or below RPIX. From 1997 to 2003, the target changed to a symmetric 2.5% RPIX target, and from 2003, the 2% CPI target was introduced.
15. Changes in the quality of a product are challenging to measure, especially in real time. Quality adjustments are applied to some technology products, but only a small share of the basket. Therefore, measured inflation is likely higher than 'true' changes in the cost of living.
16. See for instance Blanchard et al. (2010) and Ball (2014).

17. Splitting sectors into those with price growth above and below 4%, Bunn et al. (2025) find that firms with average price growth above 4% exhibit a strongly non-linear response to positive versus negative shocks. Firms with average price growth below 4% do not exhibit such convexity in their price response, for instance to demand shocks.
18. This allows to produce a kernel density that is a non-parametric representation of the (continuous) probability density function. A kernel estimation in general allows to be largely agnostic to the true underlying distribution of the data. It builds a function to represent the probability distribution using the sample of data provided and sums the component smoothing functions. Compared to a histogram for instance, it therefore allows a much faster convergence to the true, underlying distribution. See Bowman and Azzalini (1997) for more information.
19. By doing this, I assume that changes in the volatility of asset returns is driven by changes in the volatility of the underlying shocks as opposed to changes in the reaction of financial markets to them.
20. Based on the 75% LTV 2-year and 5-year mortgage quoted rates that moved within a 57 and 47 basis point range respectively between 1 August 2024 and 28 February 2025.
21. See for instance Stein and Sunderam (2018) who develop a model of monetary policy that includes an aversion to bond market volatility. The authors find that, in an attempt to implement gradualism to avoid “spooking the bond market”, the monetary policymaker, in equilibrium, actually causes markets to (rationally) react more to a gradual move. This is in contrast with the Brainard (1967) principle, where gradualism is optimal when the monetary policymaker faces uncertainty about the transmission of monetary policy.



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