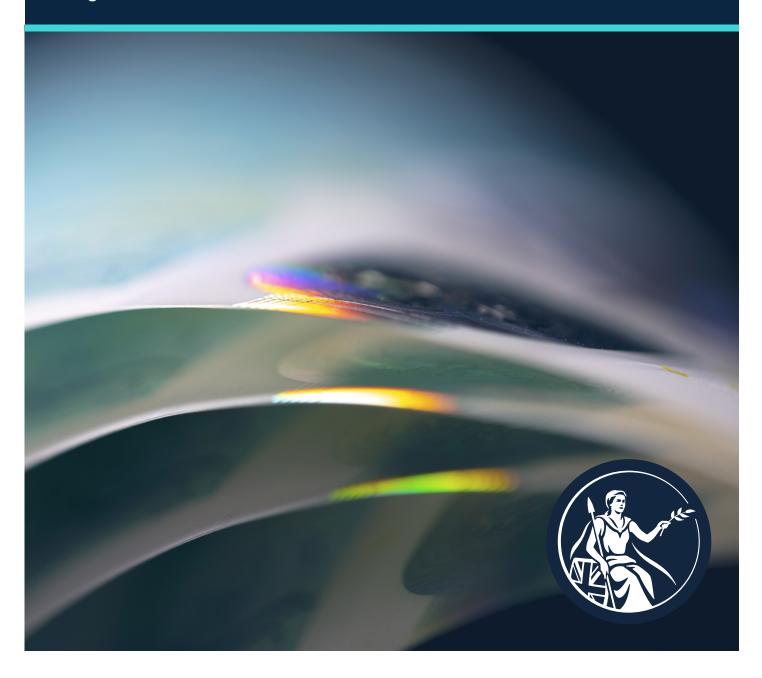
## **Bank of England**

# Monetary Policy Report

**Monetary Policy Committee** 

August 2024



## Monetary policy at the Bank of England

### The objectives of monetary policy

The Bank's Monetary Policy Committee (MPC) sets monetary policy to keep inflation low and stable, which supports growth and jobs. Subject to maintaining price stability, the MPC is also required to support the Government's economic policy.

The Government has set the MPC a target for the 12-month increase in the Consumer Prices Index of 2%.

The 2% inflation target is symmetric and applies at all times.

The MPC's <u>remit</u> recognises, however, that the actual inflation rate will depart from its target as a result of shocks and disturbances, and that attempts to keep inflation at target in these circumstances may cause undesirable volatility in output. In exceptional circumstances, the appropriate horizon for returning inflation to target can vary. The MPC will communicate how and when it intends to return inflation to the target.

## The instruments of monetary policy

The MPC currently uses two main monetary policy tools. First, we set the interest rate that banks and building societies earn on deposits, or 'reserves', placed with the Bank of England – this is Bank Rate. Second, we can buy government and corporate bonds, financed by the issuance of central bank reserves – this is asset purchases or quantitative easing.

## The Monetary Policy Report

The MPC is committed to clear, transparent communication. The Monetary Policy Report (MPR) is a key part of that. It allows the MPC to share its thinking and explain the reasons for its decisions.

The Report is produced quarterly by Bank staff under the guidance of the members of the MPC.

This Report has been prepared and published by the Bank of England in accordance with section 18 of the Bank of England Act 1998.

## The Monetary Policy Committee

- Andrew Bailey, Chair
- Sarah Breeden
- Swati Dhingra
- Megan Greene
- Jonathan Haskel
- Clare Lombardelli
- Catherine L Mann
- Huw Pill
- Dave Ramsden

PowerPoint<sup>™</sup> versions of the Monetary Policy Report charts and Excel spreadsheets of the data underlying most of them are available at <a href="http://www.bankofengland.co.uk/monetary-policy-report/2024/august-2024">http://www.bankofengland.co.uk/monetary-policy-report/2024/august-2024</a>.

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## **Monetary Policy Summary**

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.

At its meeting ending on 31 July 2024, the MPC voted by a majority of 5–4 to reduce Bank Rate by 0.25 percentage points, to 5%. Four members preferred to maintain Bank Rate at 5.25%.

The Committee has published an updated set of projections for activity and inflation in the accompanying August Monetary Policy Report.

Twelve-month CPI inflation was at the MPC's 2% target in both May and June. CPI inflation is expected to increase to around 2¾% in the second half of this year, as declines in energy prices last year fall out of the annual comparison, revealing more clearly the prevailing persistence of domestic inflationary pressures. Private sector regular average weekly earnings growth has fallen to 5.6% in the three months to May, and services consumer price inflation has declined to 5.7% in June. GDP has picked up quite sharply so far this year, but underlying momentum appears weaker.

The Committee's framework for assessing the medium-term outlook for inflation distinguishes between first and second-round effects. The MPC has been focused on second-round effects that capture more persistent inflationary pressures. The Committee continues to monitor the accumulation of evidence from a broad range of indicators.

The Committee expects the fall in headline inflation, and normalisation in many indicators of inflation expectations, to continue to feed through to weaker pay and price-setting dynamics. A margin of slack should emerge in the economy as GDP falls below potential and the labour market eases further. Domestic inflationary persistence is expected to fade away over the next few years, owing to the restrictive stance of monetary policy.

However, there is a risk that inflationary pressures from second-round effects will prove more enduring in the medium term. A stronger-than-expected path for demand, and structural factors such as a higher equilibrium rate of unemployment, could affect domestic wage and price-setting more persistently. Furthermore, the degree of restrictiveness of monetary policy could be less than embodied in the Committee's current assessment.

In balancing these considerations, at this meeting, the Committee voted to reduce Bank Rate to 5%. It is now appropriate to reduce slightly the degree of policy restrictiveness. The impact from past external shocks has abated and there has been some progress in moderating risks of persistence in inflation. Although GDP has been stronger than expected, the restrictive stance of monetary policy continues to weigh on activity in the real economy, leading to a looser labour market and bearing down on inflationary pressures.

Monetary policy will need to continue to remain restrictive for sufficiently long until the risks to inflation returning sustainably to the 2% target in the medium term have dissipated further. The Committee continues to monitor closely the risks of inflation persistence and will decide the appropriate degree of monetary policy restrictiveness at each meeting.

## 1: The economic outlook

Twelve-month CPI inflation was at the MPC's 2% target in May and June, close to the projection in the May Monetary Policy Report. GDP has picked up quite sharply so far this year, but underlying momentum appears weaker.

Four-quarter GDP growth is expected to fall back a little next year in the Committee's modal or most likely projection, but then increase again over the remainder of the forecast period, to around 13/4% (Key judgement 1). That pickup in part reflects the fading negative impact on growth from past increases in Bank Rate and the downward-sloping market-implied path of forward interest rates, which begin to boost growth towards the end of the period. The risks around the modal projection for GDP growth are skewed slightly to the upside over the first two years of the forecast period.

In the modal projection, aggregate demand and supply are judged to be broadly in balance currently, but a margin of economic slack is projected to emerge during 2025 and to remain thereafter, reflecting the continued restrictive stance of monetary policy (Key judgement 2). Unemployment is expected to rise somewhat. The risks around the modal output gap projection are judged to be skewed to the upside in part reflecting the possibility of a higher medium-term equilibrium rate of unemployment pushing down on supply relative to demand.

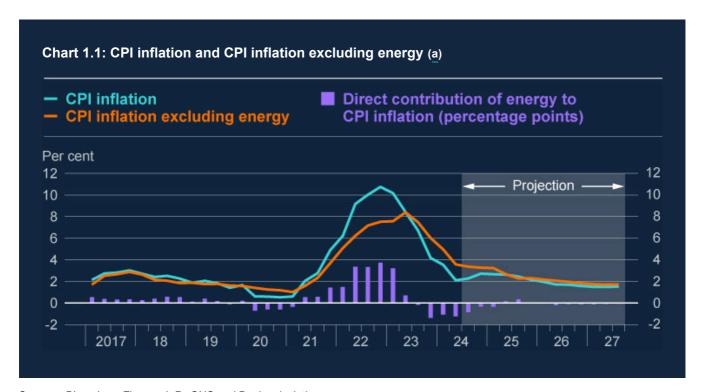
CPI inflation is expected to increase to around 2¾% in the second half of this year as declines in energy prices last year fall out of the annual comparison, revealing more clearly the prevailing persistence of domestic inflationary pressures (Chart 1.1). The Committee continues to expect second-round effects in domestic prices and wages to take longer to unwind than they did to emerge (Key judgement 3). There remains considerable uncertainty around the calibration of this judgement and a range of views among MPC members about the extent to which persistent pressures prove more enduring or continue to unwind as external cost pressures and inflation expectations have normalised.

In the MPC's modal projection conditioned on the market-implied path of interest rates, CPI inflation falls back to 1.7% in two years' time and to 1.5% in three years, reflecting the continued restrictive stance of monetary policy and the emergence of a margin of slack in the economy. The risks around the modal CPI projection are skewed somewhat to the upside throughout the forecast period, reflecting more persistence in domestic wage and price-setting. That could reflect more structural factors such as the possibility of a higher equilibrium rate of unemployment. Mean CPI inflation is 2.0% and 1.8% at the two and three-year horizons respectively.

Table 1.A: Forecast summary (a) (b)

	2024 Q3	2025 Q3	2026 Q3	2027 Q3
GDP (c)	1.5 (0.5)	0.8 (0.9)	1.4 (1.3)	1.7
Modal CPI inflation (d)	2.3 (2.2)	2.4 (2.5)	1.7 (1.8)	1.5
Mean CPI inflation (d)	2.3 (2.4)	2.5 (2.6)	2.0 (1.8)	1.8
Unemployment rate (e)	4.4 (4.3)	4.6 (4.7)	4.8 (4.9)	4.6
Excess supply/Excess demand (f)	0 (-1/4)	-1 (-1)	-11/4 (-11/4)	-3/4
Bank Rate (g)	5.1 (5.0)	4.2 (4.4)	3.8 (3.9)	3.5

- (a) Figures in parentheses show the corresponding projections in the May 2024 Monetary Policy Report.
- (b) Unless otherwise stated, the numbers shown in this table are modal projections and are conditioned on the assumptions described in Section 1.1.
- (c) Four-quarter growth in real GDP.
- (d) Four-quarter inflation rate. The modal projection is the single most likely outcome. If the risks are symmetrically distributed around this central view, this will also provide a view of the average outcome or mean forecast. But when the risks are skewed, as in the current forecast, the mean projection will differ from the mode.
- (e) ILO definition of unemployment. Although LFS unemployment data have been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report).
- (f) Per cent of potential GDP. A negative figure implies output is below potential and a positive that it is above.
- (g) Per cent. The path for Bank Rate implied by forward market interest rates. The curves are based on overnight index swap rates.



Sources: Bloomberg Finance L.P., ONS and Bank calculations.

(a) Energy prices include fuels and lubricants, electricity, gas and other fuels.

#### 1.1: The conditioning assumptions underlying the MPC's projections

As set out in Table 1.B, the MPC's August projections are conditioned on:

• The paths for policy rates in advanced economies implied by financial markets, as captured in the 15 working day averages of forward interest rates to 22 July (Chart 2.7). The market-implied path for Bank Rate underpinning the August projections declines to around 3½% by the end of the three-year forecast period, compared with an endpoint of around 3¾% in the May Report.

- A path for the sterling effective exchange rate index that is around 2½% higher compared with the May Report. The exchange rate depreciates slightly over the forecast period, reflecting the role of expected interest rate differentials in the Committee's conditioning assumption.
- Wholesale energy prices that follow their respective futures curves over the forecast period. Since May, oil prices have fallen, while gas futures prices are slightly higher. Uncertainty remains around the outlook for wholesale energy prices, including related to geopolitical developments.
- UK household energy prices that move in line with Bank staff estimates of the Ofgem price cap implied by the paths of wholesale gas and electricity prices (Section 2.4).
- Fiscal policy that evolves in line with UK government policies to date, as announced in Spring Budget 2024. The Government has announced that any changes in the stance of fiscal policy will be set out in the Budget on 30 October. These will be incorporated in the November Monetary Policy Report projections.

Table 1.B: Conditioning assumptions (a) (b)

	Average 1998–2007	Average 2010–19	2022	2023	2024	2025	2026
Bank Rate	5.0	0.5	2.8	5.3	4.9 (4.8)	4.1 (4.3)	3.7 (3.8)
Sterling effective exchange rate (d)	100	82	78	81	84 (82)	84 (82)	83 (81)
Oil prices	39	77	89	84	83 (85)	78 (79)	75 (75)
Gas prices	29	52	201	101	92 (88)	95 (91)	84 (79)
Nominal government expenditure (g)	71/4	21/4	4	7.0	23/4 (21/2)	21/4 (21/2)	2¾ (2¾)

Sources: Bank of England, Bloomberg Finance L.P., LSEG Workspace, Office for Budget Responsibility (OBR), ONS and Bank calculations.

- (a) The table shows the projections for financial market prices, wholesale energy prices and government spending projections that are used as conditioning assumptions for the MPC's projections for CPI inflation, GDP growth and the unemployment rate. Figures in parentheses show the corresponding projections in the May 2024 Report.
- (b) Financial market data are based on averages in the 15 working days to 22 July 2024. Figures show the average level in Q4 of each year, unless otherwise stated.
- (c) Per cent. The path for Bank Rate implied by forward market interest rates. The curves are based on overnight index swap rates.
- (d) Index. January 2005 = 100. The convention is that the sterling exchange rate follows a path that is halfway between the starting level of the sterling ERI and a path implied by interest rate differentials.
- (e) Dollars per barrel. Projection based on monthly Brent futures prices.
- (f) Pence per therm. Projection based on monthly natural gas futures prices.
- (g) Annual average growth rate. Nominal general government consumption and investment. Projections are based on the OBR's March 2024 Economic and Fiscal Outlook. Historical data based on NMRP+D7QK.

## 1.2: Key judgements and risks

## 1.2: Key judgement 1

Activity has picked up quite sharply so far this year, but underlying momentum appears weaker. Four-quarter GDP growth is expected to fall back a little next year in the Committee's modal or most likely projection, but then increase again over the remainder of the forecast period, to around 13/4%.

Following weakness last year, UK GDP increased by 0.7% in 2024 Q1 and is now expected to have risen by 0.7% in Q2 (Section 2.3), compared with projections of 0.4% and 0.2% respectively in the May Report. Based on readings from business surveys, underlying momentum in activity is judged to

be weaker than headline GDP growth. Quarterly GDP growth is expected to fall back to 0.4% in 2024 Q3 and to 0.2% in Q4, broadly consistent with the current signal from surveys.

The MPC's August projections are conditioned on fiscal policy that evolves in line with UK government policies, as announced in Spring Budget 2024. After taking account of those plans and of the fading impact of past loosening measures, the stance of fiscal policy tightens over the forecast period. This pulls down on the Committee's GDP growth projection beyond the near term.

Box C in this Report sets out the latest evidence on the transmission of higher Bank Rate to GDP through the domestic economy. Based on the average relationships over the past between Bank Rate and economic activity, Bank staff estimate that under the current market-implied path for interest rates, including its expected impact on broader financial conditions, most of the domestic impact of higher interest rates since the middle of 2021 on the level of GDP should be expected to have come through. The remaining impact is likely to drag further on the level of GDP in the near term.

Growth rates across advanced economies have generally converged at the start of this year (Section 2.1). UK-weighted world GDP increased by 0.5% in 2024 Q1 and is projected to grow at a similar pace for the rest of this year. In the August Report, the path of global growth is broadly unchanged from May, although the path of world trade is somewhat stronger during the middle of the forecast period reflecting developments in the euro area. Four-quarter UK-weighted world GDP growth is projected to rise to just over 2% in the medium term, slightly below its average rate in the decade prior to the pandemic (Table 1.D).

Overall, in the Committee's August modal or most likely projection, UK four-quarter GDP growth is projected to fall back a little next year but then increase again over the remainder of the forecast period, to around 1¾% (Chart 1.2). That pickup in part reflects the fading negative impact on growth from past increases in Bank Rate and the downward-sloping market-implied path of forward interest rates, which begin to boost growth towards the end of the period. Notwithstanding the higher starting point, the pace of GDP growth in the August projection is broadly similar to the May Report over much of the forecast period.

Within the key private domestic expenditure components underpinning the August modal GDP projection (Table 1.D), household spending growth is expected to be only slightly positive this calendar year, although this in large part reflects the effect on the annual average of declines in consumption in 2023 H2. Spending is expected to increase steadily throughout the forecast period. The saving ratio is expected to peak at around 12% of household income in 2024 Q3, before falling back over the remainder of the forecast period. Following a period of pronounced weakness in 2023, housing investment is expected to grow moderately over the forecast period, stronger than expected in the May Report. Business investment is projected to grow by around 2% on a year earlier throughout much of the forecast period, a smoother profile than in May.



The fan chart depicts the probability of various outcomes for GDP growth. It has been conditioned on Bank Rate following a path implied by market yields, but allows the Committee's judgement on the risks around the other conditioning assumptions set out in Section 1.1, including wholesale energy prices, to affect the calibration of the fan chart skew. To the left of the shaded area, the distribution reflects uncertainty around revisions to the data over the past. To the right of the shaded area, the distribution reflects uncertainty over the evolution of GDP growth in the future. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that the mature estimate of GDP growth would lie within the darkest central band on only 30 of those occasions. The fan chart is constructed so that outturns are also expected to lie within each pair of the lighter aqua areas on 30 occasions. In any particular quarter of the forecast period, GDP growth is therefore expected to lie somewhere within the fan on 90 out of 100 occasions. And on the remaining 10 out of 100 occasions GDP growth can fall anywhere outside the aqua area of the fan chart. Over the forecast period, this has been depicted by the grey background. See the Box on page 39 of the November 2007 Inflation Report for a fuller description of the fan chart and what it represents. The y-axis of the chart has been truncated to illustrate more clearly the current uncertainty around the path of GDP growth, as otherwise this would be obscured by the volatility of GDP growth during the pandemic.

In the modal GDP projection conditioned on the alternative assumption of constant interest rates at 5% over the forecast period, growth is weaker compared with the MPC's projection conditioned on the declining path of market-implied rates.

The risks around the modal projection for GDP growth are judged to be skewed slightly to the upside over the first two years of the forecast period.

There are risks in both directions around the central projections for UK GDP and, for a given path of potential supply, around the output gap (Key judgement 2).

Internationally, the continuing risk of higher commodity prices and disruption to trade flows associated with developments in the Middle East could, alongside other significant geopolitical uncertainties, lead to weaker economic activity as well as greater external inflationary pressures (Key judgement 3). There remains a downside risk to global growth if domestic demand in China proves to be softer than expected. In the other direction, there may be a near-term upside risk to global activity

if the recent resilience of advanced-economy labour markets were to persist, although that could also lead the stance of monetary policy to be more restrictive than otherwise. There is also uncertainty around the path of fiscal policy in advanced economies.

As discussed in Box C, there is some evidence that the impact of increases in Bank Rate on UK GDP has peaked a little earlier and at a smaller level than in the estimates underpinning the Committee's August central projection. It is also possible that the equilibrium real interest rate has risen somewhat, such that the stance of monetary policy is less restrictive than assumed (see Box C in the February 2024 Report). All else equal, these risks could imply a stronger path of demand over the forecast period. The Committee's forecast has for some time, however, incorporated a judgement to boost the expected path of demand relative to its standard determinants, and so it is also possible that a slightly faster or weaker monetary transmission mechanism in this rate tightening cycle rationalises part of this judgement and so is already captured indirectly in the August central projection. The Committee will continue to monitor closely the impact of past changes in Bank Rate.

Overall, the risks around the modal projection for UK GDP growth are skewed slightly to the upside over the first two years of the forecast period, allowing some of the recent momentum in domestic demand to continue for longer. This pushes up on the mean, relative to the modal, growth projections in the forecast. All else equal, this would also reduce slightly the degree of excess supply in the modal output gap projection (Key judgement 2) and hence increase domestic inflationary pressures slightly relative to the modal CPI projection (Key judgement 3).

### 1.2: Key judgement 2

In the Committee's modal projection, aggregate demand and supply are judged to be broadly in balance currently, but a margin of economic slack is projected to emerge during 2025 and to remain thereafter, in part reflecting the continued restrictive stance of monetary policy. Unemployment is expected to rise somewhat.

Following a period in 2021 and 2022 in which the economy was operating with excess demand, aggregate demand and supply are judged to have been broadly in balance by the end of last year.

Given the upside news on GDP expected over the first three quarters of 2024, the Committee has considered carefully the extent to which this reflects developments in the balance of aggregate demand and supply. In general, the MPC's approach is to calibrate its judgement on the starting level of the output gap based on a range of data and modelling approaches, including the extent to which news in GDP is consistent with developments in capacity utilisation, labour market tightness and other domestic inflationary pressures in the economy. In recent forecast rounds, GDP has first surprised to the downside and, more recently, to the upside (Annex 2). Indicators of utilisation and tightness have moved by much less across this period and, as a result, the Committee judges that the output gap has been more stable than movements in the GDP data might otherwise imply.

The MPC is continuing to consider the collective steer from a wide range of data to inform its view on labour market developments. As discussed in Box D in the May 2024 Monetary Policy Report and the June 2024 MPC Minutes, there remains considerable uncertainty around statistics derived from the

ONS Labour Force Survey, making it more difficult to gauge the underlying state of labour market activity.

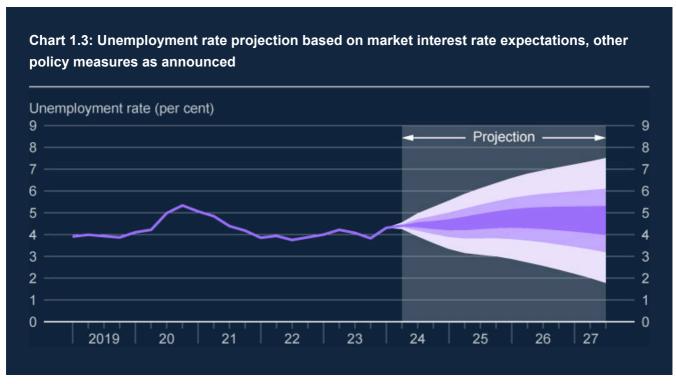
Based on a broad set of indicators, the MPC continues to judge that the labour market is loosening but that it remains relatively tight by historical standards (Section 2.3). Bank staff estimates suggest that the unemployment rate has been broadly stable over the past few quarters at a level somewhat below the LFS measure, which has risen to 4.4%. The number of vacancies and the vacancies to unemployment ratio have fallen further, the latter returning to around its pre-pandemic level. Underlying employment growth is estimated to have been stronger than LFS employment over the past few quarters, and to have been broadly in line with population growth. To the extent that businesses responded to weakness in GDP in the second half of last year by retaining their existing employees and using them somewhat less intensively, the recent strength of GDP growth has been accommodated without the need for businesses to increase headcount significantly.

Overall, the Committee judges in its modal projection that the margin of spare capacity in the economy is only slightly reduced at the start of this forecast compared with the May projection, and that demand and supply have remained broadly in balance so far this year.

The Committee has not adjusted its expectation of potential supply growth in this Report beyond the first half of this year. Four-quarter supply growth is projected to average around 1½% during the second and third years of the forecast period.

As in previous forecasts, demand growth is expected to be weaker than potential supply growth during 2025, such that a margin of economic slack is projected to emerge in the Committee's modal projection. That in part reflects the continued restrictive stance of monetary policy, alongside the assumed tightening in the stance of fiscal policy. Aggregate excess supply is expected to reach around 1¼% of potential GDP by the end of 2025, broadly similar to the May Report. Thereafter, demand growth is expected to be slightly stronger than supply growth, such that the margin of economic slack starts to narrow gradually.

Uncertainty around LFS data notwithstanding, the unemployment rate is projected to rise somewhat during the second year of the forecast period, such that it exceeds the assumed medium-term equilibrium rate of around 4½% by the middle of next year. The unemployment rate reaches around 4¾% by the end of 2025 (Chart 1.3), broadly similar to the May Report, and remains around that level thereafter.



The fan chart depicts the probability of various future outcomes for the ILO definition of unemployment and begins in 2024 Q2. Although LFS unemployment data have recently been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report). The fan chart has been conditioned on Bank Rate following a path implied by market yields, but allows the Committee's judgement on the risks around the other conditioning assumptions set out in Section 1.1, including wholesale energy prices, to affect the calibration of the fan chart skew. The coloured bands have the same interpretation as in Chart 1.2 and portray 90% of the probability distribution. A significant proportion of this distribution lies below Bank staff's current estimate of the long-term equilibrium unemployment rate. There is therefore uncertainty about the precise calibration of this fan chart.

In the modal projection conditioned on the alternative assumption of constant interest rates at 5% over the forecast period, the unemployment rate rises to a greater extent compared with the projection conditioned on market rates.

#### The risks around the modal output gap projection are judged to be skewed to the upside.

The Committee recognises the significant uncertainty around real-time estimates of the output gap, including the extent to which recent upside news in GDP could represent the re-emergence of a small margin of excess demand in the economy. All else equal, further positive surprises in activity data or signs of weakness in the supply side of the economy would suggest an upside risk around the Committee's central projection for the output gap and hence greater domestic inflationary pressures (Key judgement 3). Set against that, external forecasters generally assume that there has been a greater margin of spare capacity in the economy recently.

Reflecting the continuing uncertainties around interpreting estimates from the LFS, there are risks in both directions around the recent path of the unemployment rate, and hence the outlook for unemployment and labour market tightness. The labour market could remain tighter or looser than assumed for a number of economic reasons, including the risks around the outlook for demand (Key judgement 1).

There is also continuing significant uncertainty around the MPC's assumption for the path of the equilibrium rate of unemployment, news in which would, holding demand fixed, have implications for labour market tightness and inflationary pressures. The Committee made an upward adjustment to the medium-term equilibrium rate in the November 2023 Report, reflecting a greater degree of real income resistance following the terms of trade shock to the economy. It remains possible that the equilibrium rate of unemployment is even higher, consistent with more persistence in future wage growth. There has, however, been some evidence of a normalisation in the Beveridge curve relationship between the vacancies and unemployment rates that could imply a lower equilibrium unemployment rate if it were to continue.

Overall, the risks around the modal projection for the output gap are skewed to the upside at the start of and throughout the forecast period. This can be accounted for in part by the positive skew that has been incorporated into the GDP growth projection (Key judgement 1) but to a larger extent by the possibility of a higher medium-term equilibrium rate of unemployment pushing down on supply relative to demand. All else equal, this increases domestic inflationary pressures relative to the modal CPI projection (Key judgement 3).

### 1.2: Key judgement 3

CPI inflation is expected to increase to around 2¾% in the second half of this year as declines in energy prices last year fall out of the annual comparison, revealing more clearly the prevailing persistence of domestic inflationary pressures. The Committee continues to expect second-round effects in domestic prices and wages to take longer to unwind than they did to emerge.

Twelve-month CPI inflation was at the MPC's 2% target in May and June, close to the projection in the May Report. The decline in CPI inflation since the start of this year has primarily reflected lower goods price inflation, alongside a small fall in services price inflation. Many indicators of household and business inflation expectations have normalised to around their 2010–19 averages (Section 2.4).

CPI inflation is projected to increase in 2024 Q3 and in Q4, to around 2¾%, similar to the May Report. This profile of inflation over the second half of the year is accounted for largely by developments in the direct energy price contribution to 12-month CPI inflation, which is projected to become less negative during Q3 and Q4 compared with Q2 (Chart 1.1). CPI inflation excluding energy is projected to be around 3¼% during the second half of the year, revealing more clearly the prevailing persistence of domestic inflationary pressures.

Four-quarter UK-weighted world export price inflation, excluding the direct effect of oil prices, was negative at the end of last year, but is since expected to have picked up (Section 2.1). Over the forecast period, the recent appreciation of the sterling exchange rate and its assumed path is likely to put some downward pressure on UK import price inflation, and over time on CPI inflation, relative to the May Report. Import prices are projected to fall by 3/4% in 2024 and by 1% in 2025 (Table 1.D). The Committee has retained its judgement from the May Report that a greater-than-usual proportion of the pass-through of previous large-scale increases in import prices to consumer goods prices has occurred already.

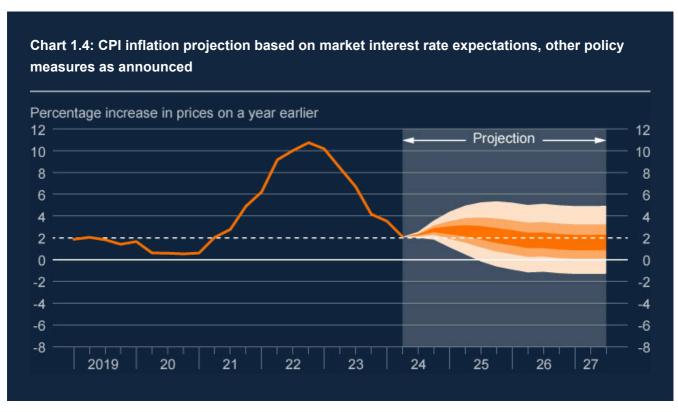
The MPC has been monitoring closely indications of persistent inflationary pressures and resilience in the UK economy as a whole, including a range of measures of the underlying tightness of labour market conditions (Key judgement 2), wage growth and services price inflation.

Annual private sector regular AWE growth declined to 5.6% in the three months to May, in line with expectations in the May Report, and broadly in line with alternative indicators of wage growth. The Bank's Agents report that pay settlements will average just over 5½% this year, with tentative expectations of lower settlements for 2025 (Box E). Private sector regular AWE growth is expected to slow further in the near term, to around 5% during the rest of this year, similar to the May Report.

Services CPI inflation has declined to 5.7% in June, higher than expected in the May 2024 Report. Services CPI inflation is expected to continue to ease only gradually over the course of this year, as wage growth weakens further.

In the August modal projection for CPI inflation, the Committee has maintained its broad judgement that second-round effects in wages and domestic prices will take longer to unwind than they did to emerge. There remains considerable uncertainty around the calibration of this judgement and a range of views among MPC members about the extent to which persistent pressures prove more enduring or continue to unwind as external cost pressures and inflation expectations have normalised (as set out in the subsequent risks sub-section). The Committee is also considering the interactions between the outlook for demand, the margin of spare capacity in the economy (Key judgement 2) and its judgement on excess persistence.

In the MPC's modal projection conditioned on the market-implied path of interest rates as captured in the 15-working day average to 22 July, CPI inflation increases from the 2% target to around  $2\frac{3}{4}$ % at the turn of the year. Reflecting the continued restrictive stance of monetary policy and the emergence of a margin of slack in the economy (Key judgement 2), CPI inflation then falls back again, to 1.7% in two years' time and to 1.5% in three years (Table 1.C and Chart 1.4). The August CPI inflation projection is similar to the May projection. Private sector regular AWE growth is expected to fall further during 2025 and reaches just under 3% towards the end of the forecast period, very similar to the May Report.



The fan chart depicts the probability of various future outcomes for CPI inflation and begins in 2024 Q3. It has been conditioned on Bank Rate following a path implied by market yields, but allows the Committee's judgement on the risks around the other conditioning assumptions set out in Section 1.1, including wholesale energy prices, to affect the calibration of the fan chart skew. If economic circumstances identical to today's were to prevail on 100 occasions, the MPC's best collective judgement is that inflation in any particular quarter would lie within the darkest central band on only 30 of those occasions. The fan chart is constructed so that outturns of inflation are also expected to lie within each pair of the lighter orange areas on 30 occasions. In any particular quarter of the forecast period, inflation is therefore expected to lie somewhere within the fans on 90 out of 100 occasions. And on the remaining 10 out of 100 occasions inflation can fall anywhere outside the orange area of the fan chart. Over the forecast period, this has been depicted by the grey background. See the Box on pages 48–49 of the May 2002 Inflation Report for a fuller description of the fan chart and what it represents.

Table 1.C: The quarterly modal projection for CPI inflation based on market rate expectations (a)

	2024 Q3	2024 Q4	2025 Q1	2025 Q2	2025 Q3
CPI inflation	2.3	2.7	2.7	2.6	2.4
	2025 Q4	2026 Q1	2026 Q2	2026 Q3	
CPI inflation	2.2	2.0	1.7	1.7	
	2026 Q4	2027 Q1	2027 Q2	2027 Q3	
CPI inflation	1.6	1.5	1.5	1.5	

<sup>(</sup>a) Four-quarter inflation rate.

In the modal projection conditioned on the alternative assumption of constant interest rates at 5% over the forecast period, CPI inflation is expected to fall below 2% from 2025 Q4 onwards. This path is lower than the Committee's modal projection conditioned on market rates.

The risks around the modal projection for CPI inflation are skewed somewhat to the upside, reflecting more persistence in domestic wage and price-setting.

There are upside risks to inflation from a more enduring shift in domestic price and wage-setting behaviour, perhaps associated with a higher medium-term equilibrium rate of unemployment. The possibility of some upside risks to demand or other downside risks to potential supply could, via a smaller margin of spare capacity in the economy and given a relatively tight starting point for the labour market, also motivate a higher medium-term profile for domestically generated inflation.

Acting in the other direction, the continued unwinding of the past shocks to energy and other imported goods prices may moderate the extent to which employees and domestic firms will seek higher nominal pay and domestic selling prices to recover the reductions in real incomes that they have experienced in the past. As headline CPI inflation and short-term inflation expectations have fallen further, inflationary dynamics could therefore adjust as rapidly on the downside as they did on the upside.

On balance, the risks around the modal projection for CPI inflation are judged to be skewed somewhat to the upside throughout the forecast period, reflecting more persistence in domestic wage and price setting. In turn this can be attributed to the upside risks around the modal output gap projection in this forecast in part related to the possibility of a higher equilibrium rate of unemployment (Key judgement 2).

The positive skew pushes up on the mean, relative to the modal, inflation projections in the forecast. Conditioned on market interest rates, mean CPI inflation is 2.0% and 1.8% at the two and three-year horizons respectively.

The risks around the modal projection for UK CPI inflation from international factors are more balanced. Although they have been higher than expected, developments in Chinese export prices could pose a downside risk to UK inflation if past weakness were to re-assert itself, particularly if that were to encourage other countries to reduce their export prices as well. Although there has so far been a relatively limited impact on trade and oil prices from events in the Middle East, there is a risk of further intensification over a longer period. The possibility of greater trade fragmentation and increased trade restrictions could also push up on world export prices.

Table 1.D: Indicative projections consistent with the MPC's modal forecast (a) (b)

	Average 1998–2007	Average 2010–19	2022	2023	2024	2025	2026
World GDP (UK- weighted) (c)	3	21/2	3	13/4	2 (2)	21/4 (2)	21/4 (21/4)
World GDP (PPP- weighted) (d)	4	3¾	31/2	31⁄4	3 (31/4)	3 (3)	3 (3)
Euro-area GDP ( <u>e</u> )	21/2	1½	3½	1/2	3/4 (1/2)	1½ (1½)	1½ (1¾)
US GDP ( <u>f</u> )	3	21/2	2	2½	2½ (2¾)	2 (1½)	2 (2)
Emerging market GDP (PPP- weighted) (g)	5½	5	4	41/4	4¼ (4¼)	4 (4)	4 (3¾)
of which, China GDP ( <u>h</u> )	10	73/4	3	51/4	4¾ (5¼)	41/4 (41/4)	4 (4)
UK GDP (i)	23/4	2	41/4	0	11/4 (1/2)	1 (1)	11/4 (11/4)
Household consumption	31⁄4	2	5	1/4	1/2 (1/4)	1½ (1¼)	1¾ (1¾)
Business investment (k)	3	41/4	91/2	51/2	1 (0)	21/4 (11/4)	2 (3½)
Housing investment (I)	31/4	4	9½	-71/2	<sup>3</sup> ⁄ <sub>4</sub> (-4)	23/4 (-1/4)	1½ (-1)
Exports (m)	4½	31/2	9	-1/2	-31/4 (2)	1¾ (1¼)	2¾ (1)
Imports ( <u>n</u> )	6	4	14¾	-11/2	-1½ (½)	41/4 (21/2)	31/4 (21/4)
Contribution of net trade to GDP (o)	-1/4	-1/4	-1¾	1/4	-1/2 (1/2)	-3/4 (-1/2)	-1/4 (-1/2)
Real post-tax labour income (p)	31⁄4	1½	-2½	3/4	3½ (3¾)	1½ (1¼)	1/2 (1/4)
Household saving ratio (q)	71/4	7 <sup>3</sup> / <sub>4</sub>	81/4	9¾	11¾ (11)	11¼ (11)	10½ (9¾)

0 s 3/4  1 1/4  51/4	2½ -1¾  1¼  3¼  6	1 1½ 3 1¼ 1 4	3/ <sub>4</sub> 1/ <sub>2</sub> -1/ <sub>2</sub> 1/ <sub>4</sub> 3/ <sub>4</sub>	1 (1)  -1/4 (-1/4)  11/2 (1/2)  0 (0)  3/4 (3/4)	1½ (1½)  -¾ (-1)  ½ (½)  1 (1)	1½ (1½)  -1¼ (-1¼)  ¾ (½)  ¾ (¾)  1 (1)
1 1 3/4 51/4	3/ <sub>4</sub> 11/ <sub>4</sub>	11/4	-½ 1/4 3/4	1½ (½) 0 (0) <sup>3</sup> / <sub>4</sub> (¾)	1/4 (1/2) 3/4 (1/2)	<sup>3</sup> / <sub>4</sub> ( <sup>1</sup> / <sub>2</sub> ) <sup>3</sup> / <sub>4</sub> ( <sup>3</sup> / <sub>4</sub> )
1 <sup>3</sup> ⁄ <sub>4</sub> 5¹⁄ <sub>4</sub>	11/4	11/4	1/4 3/4	0 (0) 3⁄4 (3⁄4)	3/4 (1/2)	<sup>3</sup> / <sub>4</sub> ( <sup>3</sup> / <sub>4</sub> )
<sup>3</sup> / <sub>4</sub>	3/4	1	3/4	3/4 (3/4)		
51⁄4					1 (1)	1 (1)
	6	4	3¾	A1/ (A1/)		
				4½ (4¾)	4¾ (4¾)	4¾ (4¾)
63	63½	63	62¾	62¾ (62¾)	62½ (62½)	62½ (62½)
11/2	21/4	10¾	<b>4</b> ½	23/4 (21/2)	21/4 (21/4)	1½ (1½)
-1/4	11⁄4	12½	1/2	-3/4 (-13/4)	-1 (-1/4)	-1/4 (-1/4)
1/4	1/4	3¾	-11/4	-1/4 (-1/4)	0 (1/4)	-1⁄4 (-0)
4	21/4	71/4	61⁄4	5 (5)	3 (3)	23/4 (23/4)
	1½	7	7	2 (3¾)	3 (2¾)	1¾ (1¾)
	2					

Sources: Bank of England, Bloomberg Finance L.P., Department for Energy Security and Net Zero, Eurostat, IMF World Economic Outlook (WEO), National Bureau of Statistics of China, ONS, US Bureau of Economic Analysis and Bank calculations.

(a) The profiles in this table should be viewed as broadly consistent with the MPC's modal projections for GDP growth, CPI inflation and unemployment (as presented in the fan charts). Staff have updated the set of profiles included here to align better with the data coverage in the wider Monetary Policy Report. The key changes relative to the table in the May 2024 Report are: the addition of population growth; the replacement of productivity growth (output per hour worked) with productivity growth (output per worker); the replacement of whole-economy average weekly earnings growth with private sector regular average weekly earnings growth; and the removal of real post-tax household income, average hours worked, and whole-economy unit labour cost growth.

- (b) Figures show annual average growth rates unless otherwise stated. Figures in parentheses show the corresponding projections in the May 2024 Monetary Policy Report. Calculations for back data based on ONS data are shown using ONS series identifiers.
- (c) Chained-volume measure. Constructed using real GDP growth rates of 188 countries weighted according to their shares in UK exports.
- (d) Chained-volume measure. Constructed using real GDP growth rates of 189 countries weighted according to their shares in world GDP using the IMF's purchasing power parity (PPP) weights.
- (e) Chained-volume measure. The forecast was finalised before the release of the preliminary flash estimate of euro-area GDP for Q2, so that has not been incorporated.
- (f) Chained-volume measure. The forecast was finalised before the release of the advance estimate of US GDP for Q2, so that has not been incorporated.
- (g) Chained-volume measure. Constructed using real GDP growth rates of 155 emerging market economies, weighted according to their relative shares in world GDP using the IMF's PPP weights.
- (h) Chained-volume measure.
- (i) Chained-volume measure.
- (j) Chained-volume measure. Includes non-profit institutions serving households. Based on ABJR+HAYO.
- (k) Chained-volume measure. Based on GAN8.
- (I) Chained-volume measure. Whole-economy measure. Includes new dwellings, improvements and spending on services associated with the sale and purchase of property. Based on DFEG+L635+L637.
- (m) Chained-volume measure. The historical data exclude the impact of missing trader intra-community (MTIC) fraud. Since 1998 based on IKBK-OFNN/(BOKH/BQKO). Prior to 1998 based on IKBK.
- (n) Chained-volume measure. The historical data exclude the impact of MTIC fraud. Since 1998 based on IKBL-OFNN/(BOKH/BQKO). Prior to 1998 based on IKBL.
- (o) Chained-volume measure. Exports less imports.
- (p) Wages and salaries plus mixed income and general government benefits less income taxes and employees' National Insurance contributions, deflated by the consumer expenditure deflator. Based on [ROYJ+ROYH-(RPHS+AIIV-
- CUCT)+GZVX]/[(ABJQ+HAYE)/(ABJR+HAYO)]. The backdata for this series are available at Monetary Policy Report Download chart slides and data August 2024.
- (q) Annual average. Percentage of total available household resources. Based on NRJS.
- (r) Level in Q4. Percentage point spread over reference rates. Based on a weighted average of household and corporate loan and deposit spreads over appropriate risk-free rates. Indexed to equal zero in 2007 Q3.
- (s) Annual average. Per cent of potential GDP. A negative figure implies output is below potential and a positive figure that it is above.
- (t) Real GDP (ABMI) divided by total 16+ employment (MGRZ). Although LFS employment data have been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report).
- (u) Four-quarter growth in the ILO definition of employment in Q4 (MGRZ). Although LFS employment data have been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report).
- (v) Four-quarter growth in Q4. LFS household population, all aged 16 and over (MGSL). Growth rates are interpolated between the LFS and ONS National population projections: 2021-based interim within the forecast period.
- (w) ILO definition of unemployment rate in Q4 (MGSX). Although LFS unemployment data have been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report).
- (x) ILO definition of labour force participation in Q4 as a percentage of the 16+ population (MGWG). Although LFS participation data have been re-instated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (see Box D in the May 2024 Monetary Policy Report). (y) Four-quarter inflation rate in Q4.
- (z) Four-quarter inflation rate in Q4 excluding fuel and the impact of MTIC fraud.
- (aa) Contribution of fuels and lubricants and gas and electricity prices to four-quarter CPI inflation in Q4.
- (ab) Four-quarter growth in Q4. Private sector average weekly earnings excluding bonuses and arrears of pay (KAJ2).
- (ac) Four-quarter growth in private sector regular pay-based unit wage costs in Q4. Private sector wage costs divided by private sector output at constant prices. Private sector wage costs are average weekly earnings (excluding bonuses) multiplied by private sector employment.

## Box A: Reviewing the process of quantitative tightening

Since February 2022, the MPC has been reducing the stock of assets held in the Bank of England's Asset Purchase Facility (APF) for monetary policy purposes, a process known as quantitative tightening (QT). In line with the commitment made by the MPC in the **minutes** of its August 2022 meeting, this box sets out the MPC's annual assessment of QT over the past year. At its September 2024 meeting, the Committee will vote on the target for the reduction in the stock of UK government bonds held for monetary policy purposes over the 12-month period from October 2024 to September 2025.

## Quantitative easing (QE) was introduced as part of the MPC's policy response to the global financial crisis (GFC).

In the wake of the GFC, central banks around the world used a variety of monetary policy tools to meet their inflation targets and support economic activity. In the UK, Bank Rate was reduced to close to zero. To further stimulate the economy when interest rates were close to their effective lower bound, the point at which further cuts in the policy rate no longer provide stimulus, the MPC also began a programme of asset purchases, known as QE. Several rounds of QE have been conducted in the years since then. The stock of these purchases, made up of both government and corporate bonds, peaked at £895 billion in late 2021.

#### In 2022 the MPC began to reduce the stock of purchased assets in the APF.

Over the past few years, the MPC has increased Bank Rate in order to return CPI inflation sustainably to the 2% target. This has moved the policy rate away from its effective lower bound. In 2022, once Bank Rate had been raised to a level that provided scope to ease policy as required, the MPC commenced the process of running down holdings in the APF, also known as QT. This process has the benefit of reducing the risk of a ratchet upwards in the size of the Bank's balance sheet over time, which in turn should increase the headroom and flexibility available to the Bank to use its balance sheet in the future if needed (Bailey et al (2020)).

#### The design of the MPC's QT process has been guided by three key principles.

Prior to commencing QT, the MPC laid out the key principles that would guide its unwind strategy (see Box A of the <u>August 2021 Report</u>). The parameters of that strategy, agreed in 2022, are designed with these principles in mind.

First, the MPC intends to use Bank Rate as its active policy tool when adjusting the stance of monetary policy. The parameters of the QT strategy are amended at a lower frequency than decisions on Bank Rate and are not calibrated with a view to fine-tuning the monetary policy stance.

Second, sales are being conducted so as not to disrupt the functioning of financial markets, and only in appropriate market conditions.

Third, to help achieve that, sales are being conducted in a relatively gradual and predictable manner over a period of time.

#### By the end of September 2024, the APF will stand at £658 billion.

In February 2022, the Committee agreed to cease gilt reinvestments and begin sales of the sterling corporate bond portfolio. In September 2022, the Committee voted to reduce the stock of gilts held in the APF by £80 billion over October 2022–September 2023 and, in September 2023, by a further £100 billion over October 2023–September 2024. Because ceasing reinvestments alone would not have been sufficient to achieve the MPC's target stock reduction, sales of gilts and corporate bonds were also conducted.

APF holdings of sterling non-financial investment-grade corporate bonds, which stood at £20 billion at their peak, have now been fully wound down. The final sales of corporate bonds occurred last year and a small number of shorter-maturity bonds matured in April of this year.

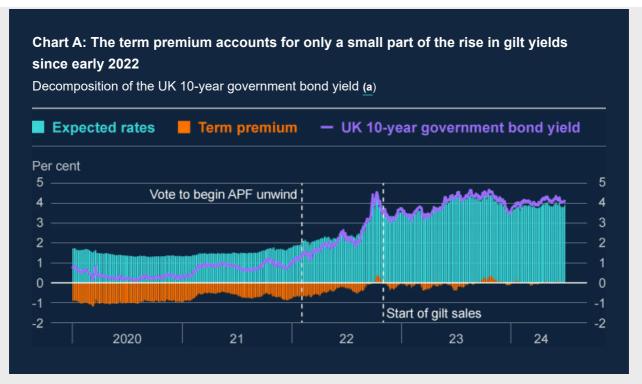
At the conclusion of the current 12-month gilt reduction programme in September, the APF will stand at £658 billion.

## The latest analysis by Bank staff suggests that QT has had a small impact on gilt yields...

Following a further year's worth of QT operations, Bank staff have updated their analysis of the effects of QT on gilt yields and the wider macroeconomy. While difficult to measure precisely, the impact of QT on gilt yields is judged to have been modest, in line with the evidence presented in Box A of the **August 2023 Report**.

One way to assess the impact of QT is through changes in UK term premia, the additional compensation investors demand to hold a longer-term bond relative to a series of shorter-term bonds. It is possible to decompose developments in gilt yields into those driven by estimated changes in the term premium, through which the effects of APF reduction are expected to operate, and those reflecting the expected path of policy rates. The 10-year gilt yield increased by around 275 basis points between February 2022 and June 2024 (Chart A). Within that, the term premium (orange bars) is estimated to have risen by around 75 basis points over the same period.

QT is likely to account for only a small part of the 75 basis points estimated rise in the term premium, which is influenced by a range of factors including uncertainty around the outlook for the economy and interest rates, and gilt supply and demand. Modelling work by Bank staff that attempts to isolate the impact of QT-related announcements and auctions suggests that APF reduction accounts for only around 10–20 basis points of the total rise in the term premium. Bank staff judge 10 basis points to be the central case estimate, while 20 basis points is considered to be a conservative upper bound. Market participants have suggested an impact of similar magnitude. The effects of APF gilt sales and maturities are judged to be similar.



Sources: Bloomberg Finance L.P., Tradeweb and Bank calculations.

(a) The numbers in the chart are based on estimates from a range of internal models of UK term premia, which split the 10-year gilt yield into expected rates and term premia contributions. Expected rates reflect investors' expectations of the average short-term monetary policy rate over the next 10 years, and the term premium is defined as the additional compensation investors demand to hold a longer-term bond relative to a series of shorter-term bonds.

Event study analysis, which seeks to isolate the impact of QT by focusing on movements in asset prices during short windows around announcements and auctions, also points to a small impact. Daily movements in a range of financial market measures have been a little more volatile on QT announcement days. But since QT announcements typically coincide with communications about wider MPC decisions, this additional volatility cannot be wholly attributed to QT. The same approach suggests no material difference in volatility between QT auction and non-auction days, consistent with the MPC's intention that sales should happen in a gradual and predictable manner. Further to that, analysis by Bank staff suggests that any impact of QT auctions on 10-year gilt yields has tended to fade entirely within one day.

#### ...and QT operations have had little impact on market functioning.

Measures of gilt market liquidity have, if anything, improved since the start of QT, with some signs that sales may in fact have had a positive effect by alleviating collateral scarcity at shorter maturities. As such, there is little evidence of a negative impact of gilt sales on market functioning across a range of financial market measures. In particular, the gilt market appears to be functioning well.

These findings are broadly consistent with those from other empirical studies and central banks.

There is a growing body of research examining the possible effects of QT on government bond yields, with conclusions broadly consistent with Bank staff's analysis. In one example, **Du et al (2024)** find that several cross-country QT programmes have been successfully run with minimal impact on market functioning and liquidity. Their analysis also suggests that the impact of QT on yields has been fairly small.

Several other central banks have begun winding down their stocks of purchased assets in recent years. Because of differences in operating frameworks and approaches to portfolio reduction, international experiences are not directly comparable. However, evidence from other central banks suggests that, while QT has led to some tightening across financial market indicators, that tightening effect has been relatively small.

#### The impact of QT on the real economy is also judged to have been small.

All else equal, the tightening effect of QT on yields would be expected to feed through to lower economic activity and inflation. It remains too early to assess this broader impact, but based on the UK's experience of QE, a 10 basis points increase in yields would be associated with a negative impact on GDP and inflation of less than 0.2% and 0.1 percentage points respectively. To the extent that these effects are priced into asset markets, they will feed into the MPC's projections and policy assessments via the conditioning assumptions on which the projections are based.

The tightening impact of APF reduction is expected to be smaller than the stimulus associated with QE. That is partly because, as noted in Box A of the <u>August 2021 Report</u>, increasing the target stock of purchased assets may have provided a signal about the need for a looser stance of monetary policy. By contrast, QT has been conducted in an environment in which Bank Rate is the active monetary policy tool and so the process of APF reduction does not signal a need for a higher path for Bank Rate. In addition, QE was at times deliberately conducted during periods of market stress in order to improve liquidity and market functioning. By contrast, the reduction of holdings in the APF is being undertaken only in appropriate market conditions and in a gradual and predictable manner.

## Given the limited economic impact associated with a gradual pace of reduction, the effects of QT can be offset with small adjustments in Bank Rate.

Any tightening effect on the macroeconomy from a reduction in the APF would require a slightly lower path for Bank Rate, all else equal. As described above, the MPC takes account of these anticipated effects from QT when taking decisions on Bank Rate, to the extent that the asset prices on which the MPC's economic projections and policy assessments are conditioned incorporate announced and expected APF reductions. That said, given that a gradual pace of APF reduction is expected to have a limited economic impact, any required adjustments in Bank Rate are likely to be very small. Consistent with that, there was no clear relationship between expectations for Bank Rate and the path of QT among responses to the Bank's July Market Participants Survey, indicating that the MPC's QT principles are working as intended.

The market path for interest rates, on which the MPC's August MPR projections are conditioned, implies a reduction in Bank Rate to 3½% by 2027 Q3 (Section 1). The MPC expects that the impact of QT – and hence the implications for the appropriate path for Bank Rate – will remain small as the policy rate is reduced. That is consistent with Bank Rate being the active tool of monetary policy and QT operating in the background.

So far, in the UK, QT has been conducted while Bank Rate has been increased or kept unchanged. There is therefore a degree of uncertainty about the interaction between these tools during periods in which Bank Rate is being reduced. In the unlikely event that the tightening impact of QT was larger than expected, the distance of Bank Rate from its effective lower bound provides scope for reductions to be made if policy needed to be loosened to offset the effect on the real economy. Nevertheless, the Committee will continue to monitor closely the interaction between these tools.

## The appropriate pace of total gilt stock reduction will continue to be guided by the MPC's key principles.

As has been the case up to this point, the MPC's key principles and analysis of the first few years of APF unwind will be central to its judgement on the appropriate pace of gilt stock reduction over the year ahead.

At its September meeting the Committee will vote on the target for the reduction in the stock of UK government bonds held for monetary policy purposes over the 12-month period from October 2024 to September 2025. Bank Rate remains the MPC's active tool of monetary policy and will be set to meet the 2% inflation target sustainably in the medium term.



Source: Bank calculations.

(a) Each year shows maturities in the period between October and September of the following year (ie a yearly QT review cycle). For October 2022–September 2023 and October 2023–September 2024 these bars show the target gilt stock reduction voted for by the MPC, including both maturities and active sales. In periods from October 2024–September 2025 onwards only the path of expected maturities is shown, as the Committee is yet to vote on the target gilt stock reduction for these periods.

(b) The amount of APF stock reduction set by the MPC is expressed in terms of the initial proceeds paid to purchase the APF holdings.

### Box B: Monetary policy since the May 2024 Report

At its meeting ending on 19 June 2024, the MPC voted by a majority of 7–2 to maintain Bank Rate at 5.25%. Two members preferred to reduce Bank Rate by 0.25 percentage points, to 5%.

Since the MPC's previous meeting, 12-month CPI inflation had fallen to 2.0% in May from 3.2% in March, close to the May Monetary Policy Report projection. Indicators of short-term inflation expectations had also continued to moderate, particularly for households. CPI inflation was expected to rise slightly in the second half of this year, as declines in energy prices last year fall out of the annual comparison.

UK GDP appeared to have grown more strongly than expected during the first half of this year. Business surveys, however, remained consistent with a slower pace of underlying growth, of around 1/4% per quarter.

The considerable uncertainty around estimates derived from the ONS Labour Force Survey made it very difficult to gauge the evolution of labour market activity. Based on a broad set of indicators, the MPC judged that the labour market continued to loosen but that it remained relatively tight by historical standards.

The collective steer from a range of indicators of aggregate pay growth had continued to ease in the latest data. Services consumer price inflation was 5.7% in May, down from 6.0% in March, but somewhat higher than projected in the May Report. This strength in part reflected prices that are index-linked or regulated, which are typically changed only annually, and volatile components.

Headline CPI inflation had fallen back to the 2% target. The restrictive stance of monetary policy was weighing on activity in the real economy, leading to a looser labour market and bearing down on inflationary pressures. Key indicators of inflation persistence had continued to moderate, although they remained elevated.

Monetary policy would need to remain restrictive for sufficiently long to return inflation to the 2% target sustainably in the medium term in line with the MPC's remit. The Committee had judged since last autumn that monetary policy needed to be restrictive for an extended period of time until the risk of inflation becoming embedded above the 2% target dissipated.

The MPC remained prepared to adjust monetary policy as warranted by economic data to return inflation to the 2% target sustainably. It would therefore continue to monitor closely indications of persistent inflationary pressures and resilience in the economy as a whole, including a range of measures of the underlying tightness of labour market conditions, wage growth and services price inflation. As part of the August forecast round, members of the Committee would consider all of the information available and how this affected the

assessment that the risks from inflation persistence were receding. On that basis, the Committee would keep under review for how long Bank Rate should be maintained at its current level.

## 2: Current economic conditions

UK-weighted global activity is expected to grow by around 2% over 2024. Global export price inflation is projected to pick up gradually. Headline consumer price inflation has fallen across advanced economies over the past year or so, but services price inflation remains high. The market-implied paths are consistent with reductions in policy rates across advanced economies. Sterling has appreciated by  $2\frac{1}{2}\%$  since the May Report.

Following weakness in the second half of 2023, UK GDP growth picked up quite sharply around the turn of the year and has been stronger than expected in the May Report. Underlying momentum in activity is judged to be somewhat weaker than the headline figures suggest, however, and GDP growth is expected to fall back in Q3.

Despite the recent strength in GDP, aggregate demand and supply remain in balance. The UK labour market has continued to ease, although it remains relatively tight by historical standards. Large uncertainties remain around the LFS labour market statistics. Bank staff's indicator-based models suggest that employment growth has remained positive but modest. Unemployment is expected to rise slightly in coming quarters reflecting the continued restrictive stance of monetary policy.

CPI inflation has fallen further since the May Report and was at the MPC's 2% target in May and June. Within that, goods price inflation was slightly negative, reflecting past declines in external cost pressures, while services price inflation remained elevated at 5.7%. Headline CPI inflation is projected to rise to around 2¾% by the end of the year, owing largely to a smaller drag on annual inflation from domestic energy bills. The fading drag from energy prices on headline CPI inflation reveals the persistence in services price inflation, which is expected to remain elevated in coming quarters due to continued strength in wage growth.

Annual private sector regular average weekly earnings (AWE) growth has fallen back since mid-2023 but remained elevated at 5.6% in the three months to May. Falls in short-term inflation expectations and the loosening in the labour market mean that wage growth is expected to fall further in the near term, to just under 5% in 2024 Q3, but to remain elevated relative to the past.



Sources: ONS and Bank calculations.

(a) The lighter diamonds show Bank staff's projections at the time of the May 2024 Monetary Policy Report. The darker diamonds show Bank staff's current projections. Projections for GDP growth and the unemployment rate are quarterly and show 2024 Q2 and Q3 (May projections show 2024 Q1 to 2024 Q3). Projections for CPI inflation are monthly and show July to September 2024 (May projections show April to September 2024). The GDP growth and unemployment rate projections for 2024 Q2 are based on official data to May, while the CPI inflation figure is an outturn. Although LFS unemployment data have recently been re-instated by the ONS, they are

badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (Box D, **May 2024 Report**).

#### 2.1: Global economy and financial markets

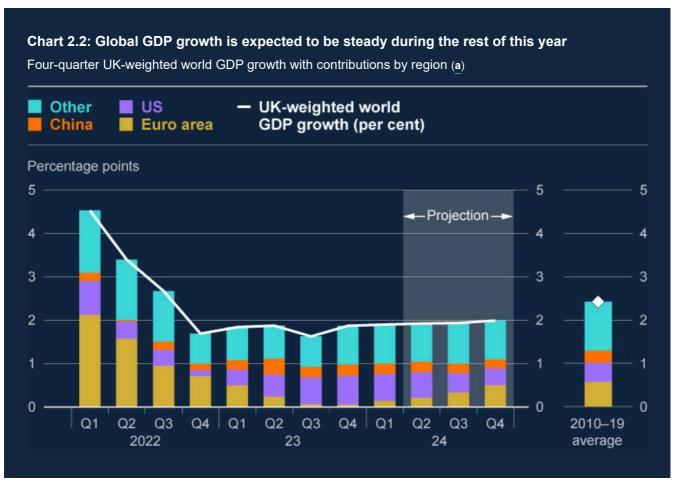
#### Global activity growth is expected to be stable over the remainder of 2024.

Demand conditions in other countries are an important determinant of UK trading prospects. UK-weighted world GDP grew by 0.5% in 2024 Q1 and is projected to have grown at a similar pace in Q2. Four-quarter global growth is expected to remain at around this pace for the rest of the year (Chart 2.2).

According to the Advance Estimate, US GDP expanded by 0.7% in 2024 Q2 following growth of 0.4% in Q1. Strength in US household consumption has moderated somewhat since the start of the year, but this has been offset by stronger than expected business investment and government spending. Quarterly US GDP growth is expected to be around 0.5% in the second half of the year, supported by continued strong supply growth.

According to the preliminary flash release, euro-area GDP grew by 0.3% in 2024 Q2, the same rate as in 2024 Q1 and in line with the May Report. Euro-area growth over the course of this year is expected to be supported by robust real income growth and the waning impact from past monetary tightening.

While China accounts for only a small share of UK exports, its prominent role in global manufacturing lends it an important influence in commodities and globally traded goods markets. Chinese GDP expanded by 1.5% in 2024 Q1, accounted for in part by strength in exports. Quarterly growth fell back to 0.7% in 2024 Q2, driven by a significant slowdown in consumption. Growth over the rest of the year is expected to be supported by public sector investment and by strong exports, partly due to increased competitiveness from past price falls and currency depreciation.



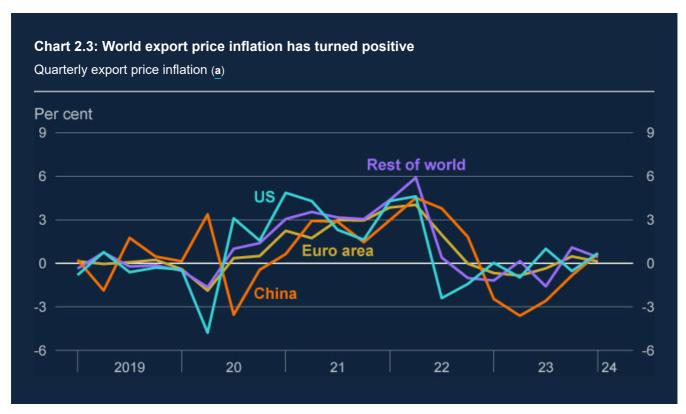
Sources: LSEG Workspace and Bank calculations.

(a) See footnote (c) of Table 1.D for definition. Figures for 2024 Q2 to 2024 Q4 are Bank staff projections. These projections do not include the advance estimate of US GDP in 2024 Q2 or the preliminary flash estimate of euro-area GDP for the same quarter, as the data were not received in time to incorporate fully into the forecast.

#### Global export price inflation is expected to pick up gradually.

Global export price inflation affects UK CPI inflation through the prices of goods and services imported for consumption, as well as the prices of imported inputs into domestic production (Section 2.4). Following high inflation in 2021 and 2022, quarterly global export price inflation had turned negative across regions by early 2023. That reflected the indirect effects of lower energy prices, the continued clearing of supply chain bottlenecks and weak global producer price inflation (Chart 2.3).

In recent quarters, global export price inflation has started to pick up. Chinese export price deflation in particular has moderated more quickly than expected. Disruptions to shipping routes through the Red Sea have also contributed to higher export price inflation by raising global shipping costs, although these costs have remained below their pandemic-era peaks. The rise in shipping costs has been exacerbated by stronger demand against a backdrop of capacity constraints, as producers appear to be filling inventories sooner than usual in anticipation of reduced shipping capacity throughout the second half of the year.



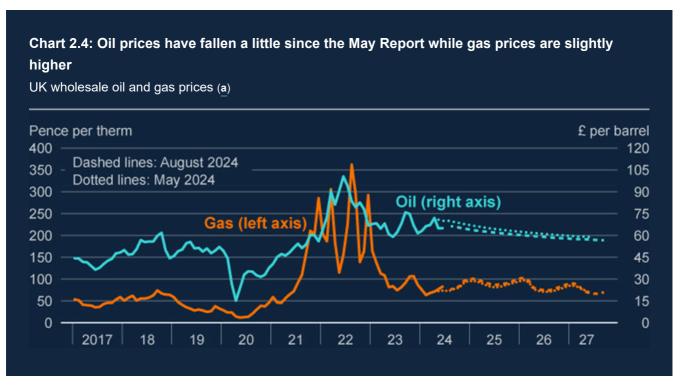
Sources: ECB, General Administration of Customs of the People's Republic of China, US Bureau of Economic Analysis, other national statistical agencies and Bank calculations.

(a) 'Rest of world' is a weighted average of 31 countries excluding major oil exporters and including China. Countries are weighted by their shares of UK imports. The final data points refer to 2024 Q1.

Annual world export price inflation, excluding major oil exporters, is projected to rise to around 1½% in the second half of this year. That increase is driven by past energy and commodity shocks continuing to fall out of the annual comparison, as well as the expectation of continued disruption in the Red Sea.

#### | Energy prices have not changed materially in recent months.

The Brent spot oil price, converted to sterling, has decreased by around 6% since the May Report, while European wholesale natural gas spot and near-term futures prices have increased by around 4% (Chart 2.4).



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) Oil prices are Brent crude, converted to sterling. Gas prices are Bloomberg UK NBP Natural Gas Forward Day price. Dashed lines refer to respective futures curves using one-month forward prices based on the 15-day average to 22 July 2024, while dotted lines are based on the 15-day average to 29 April 2024. The final data points shown are forward prices for September 2027.

## Inflationary pressures across many advanced economies are easing, though consumer services inflation is still elevated.

Headline and core consumer price inflation have fallen back from their 2022 peaks in the US and euro area, though they remain somewhat above their respective targets (Chart 2.5). In the US, headline PCE inflation ticked down to 2.5% in June, while core PCE inflation was unchanged at 2.6%. In the euro area, headline HICP inflation rose to 2.6% in July, while core inflation remained unchanged at 2.9%. Falls in core inflation over recent quarters have been accounted for by core goods prices, on account of easing global supply conditions and the indirect effects of lower energy prices.

Services price inflation has remained elevated at 4.0% in both the US and euro area, partly reflecting labour market tightness and strong pay growth. Labour markets are gradually loosening across advanced economies, but unemployment rates remain historically low and wage pressures elevated. In the US, continued strength in housing services inflation is also playing a role.



Sources: Eurostat, LSEG Workspace, ONS, US Bureau of Economic Analysis, US Bureau of Labor Statistics and Bank calculations.

(a) For the United States, the solid line represents PCE inflation, and the dashed line represents CPI inflation. The latest data points shown are for June 2024 except for US PCE inflation which is to May 2024. The estimate for US PCE inflation in June and the flash estimate for euro-area HICP inflation in July were released after the data cut-off.

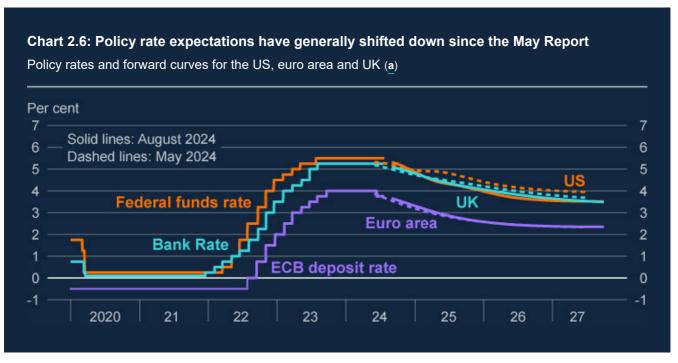
Bank staff expect US headline PCE inflation to remain at around its current rate over 2024, before edging down in 2025. That in part reflects the profile for services price inflation, which is expected to remain elevated at above pre-pandemic rates in the near term. Euro-area headline inflation is projected to moderate to around 2% by early 2025. Wage growth in both economies is expected to slow as inflationary pressures normalise, but the speed of this process remains uncertain.

#### Market-implied paths for policy rates have generally shifted down since the May Report.

Over recent years, central banks in the UK, US and euro area have increased their respective policy rates (Chart 2.6). The ECB Governing Council reduced its main policy rate by 25 basis points to 3.75% in June.

The latest market-implied paths are consistent with a reduction in policy rates in coming quarters across advanced economies, though the expected timings of cuts differ. Since the May Report, weaker than expected economic data up to 22 July have been associated with a shift down in the market-implied path for US policy rates of around 40 basis points on average over the next three years. Market expectations for euro-area policy rates have been broadly stable since the previous Report. And market expectations for UK policy rates have shifted down by around 10 basis points. Policy rates are now expected to stand at 3.5% in the US and UK and 2.4% in the euro area in three years' time.

Market-implied paths for policy rates have remained sensitive to recent data releases, which emphasises the degree of uncertainty over the outlook for inflation across advanced economies. That outlook will depend in large part on the evolution of domestic inflation persistence.



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) All data as of 22 July 2024. The May curves are estimated based on the 15 UK working days to 29 April 2024. The August curves are estimated using the 15 working days to 22 July 2024. Federal funds rate is the upper bound of the announced target range. ECB deposit rate is based on the date from which changes in policy rates are effective. The final data points shown are forward rates for September 2027.

#### Financial conditions are broadly unchanged, while sterling has appreciated.

Corporate bond spreads have not changed materially across advanced economies since May. Equity prices have picked up by 10% in the US and 3% in the UK but remain broadly unchanged in the euro area.

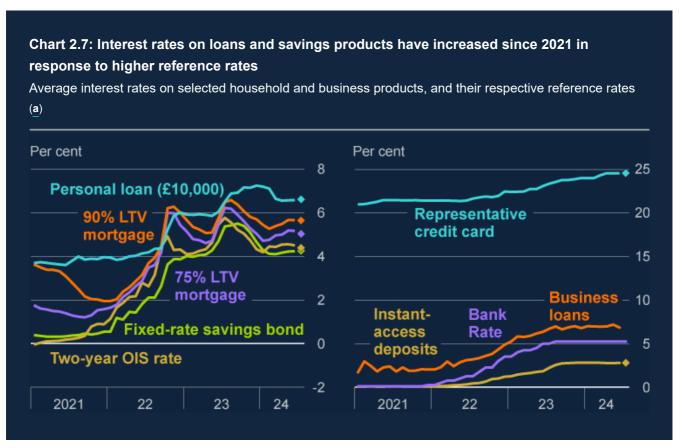
The sterling effective exchange rate has appreciated by 2½% since the May Report. All else equal, that will put downward pressure on UK import price inflation (Section 1). Within the overall 2½% appreciation, sterling has appreciated by around 3% against the dollar, partly reflecting the fall in market expectations for US policy rates since May. Sterling has appreciated by 1½% against the euro, mainly reflecting changes in relative currency risk premia.

#### 2.2: Domestic credit conditions

Saving and borrowing rates are little changed since the May Report for both households and firms.

Since the May Report, quoted interest rates on instant-access deposits have been little changed, while interest rates on new fixed-rate savings bonds have increased slightly (Chart 2.7). Quoted two-year mortgage rates have risen slightly since the May Report but remain substantially below the levels reached last summer, given falls in reference rates since then.

Quoted interest rates on credit card lending to households and effective rates on new bank lending to businesses have remained at or close to their recent peaks (right panel of Chart 2.7). Quoted interest rates on personal loans are a little below their cycle highs and have remained stable in recent months.



Sources: Bank of England, Bloomberg Finance L.P. and Bank calculations.

(a) Rates shown are average quoted rates, with the exception of the lending to businesses series which shows effective rates on new business lending. The Bank's quoted rates series are weighted monthly average rates advertised by all UK banks and building societies with products meeting the specific criteria. For more information, see Introduction of new Quoted Rates data. The 75% and 90% LTV mortgage rates are for two-year fixed-rate products. The reference rates for these, and for fixed-rate savings bonds, is the two-year overnight index swap (OIS) rate. Diamonds represent averages of daily quoted rates using data to 22 July 2024 and were provisional. OIS rate shows monthly averages, while Bank Rate shows month-end numbers. The OIS diamond shows the average of daily rates to 22 July 2024.

## Transmission from reference rates to household borrowing and term saving rates has been broadly as expected in this tightening cycle.

Bank staff judge that pass-through of the latest Bank Rate tightening cycle to the majority of household quoted rates, as well as to effective rates on new corporate borrowing, has been broadly in line with historical experience. Pass-through to quoted mortgage rates and fixed-rate savings bonds of increases in reference rates up to their peaks in July 2023 has been broadly consistent with full but lagged pass-through. Within this, there were some periods of faster pass-through when term

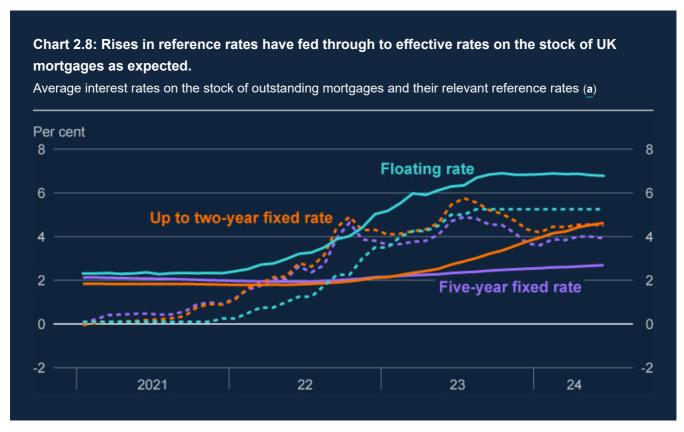
OIS rates moved up rapidly and mortgage spreads became very compressed. Pass-through to rates on consumer credit has been slow, broadly in line with historical experience and reflecting the importance for pricing of factors other than reference rates, including consumer creditworthiness.

The market-implied paths for interest rates have fallen since their peaks in July 2023. This fall in reference rates has also been passed through broadly as expected for quoted mortgage rates, but it is too early for a full assessment for all savings and borrowing products.

Pass-through of the latest Bank Rate tightening cycle to sight (instant-access) deposit rates has been partial. In turn, that has meant that the spread between quoted sight deposit rates for households and Bank Rate has widened, having been compressed when Bank Rate was close to zero. The rebuilding of sight deposit spreads has supported banks' interest margins which are now around their long-run average levels. Rates on term deposits have moved broadly in line with reference rates during the Bank Rate tightening cycle, consistent with a liquidity regulation framework which incentivises term deposit funding.

Changes in quoted interest rates will over time feed through to effective interest rates, with the lag depending on when borrowers on fixed rates refinance. The extent to which effective rates respond to increases in Bank Rate and the market path for interest rates is important in determining the strength of the cash-flow channel of monetary policy. Changes in reference rates since late 2022 have been passed through to the effective interest rates on the stock of UK mortgages somewhat more slowly than in past tightening cycles, owing to the greater prevalence of fixed-rate mortgages (Box C). The average effective rate on outstanding UK floating rate mortgages has increased by  $4\frac{1}{2}$  percentage points since the end of 2021, while the average effective rates on mortgages with up to two-year and five-year fixed rates have increased by  $2\frac{3}{4}$  and  $\frac{3}{4}$  percentage points respectively. (Chart 2.8).

As discussed in the June 2024 **Financial Stability Report**, while most fixed-rate mortgages have repriced since 2021 H2, around a third of mortgage accounts are still paying rates of less than 3%. Most of these fixed rates will expire before end-2026, meaning that effective interest rates will rise somewhat further over that period. That may be partly offset, however, if interest rates on variable rate mortgages start to fall and if those who are already paying higher rates can refinance at a lower rate over the next two years.



Sources: Bank of England, Bloomberg Finance L.P. and Bank calculations.

(a) The solid lines show the average effective interest rates on the stock of UK floating-rate mortgages, mortgages with a fixed interest rate up to two years, and mortgages with a five-year fixed interest rate. For more information, see <a href="Further details about effective">Further details about effective</a> interest rates data. The dotted lines show the relevant reference rates, namely Bank Rate, the two-year OIS rate and the five-year OIS rate. The latest data points shown are for June 2024.

### Lenders have reported little change in credit availability for households and firms.

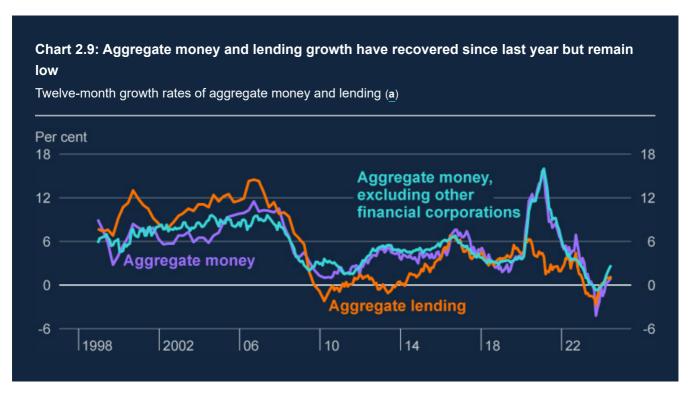
Lenders responding to the latest <u>Credit Conditions Survey (CCS)</u>, which was conducted between 28 May and 14 June 2024, reported little change in the availability of secured and unsecured lending to households.

The availability of credit to firms was reported to be broadly unchanged but increased somewhat for small and medium-sized businesses. This is consistent with intelligence collected by the Bank's Agents, which suggests little change in overall credit availability but a slight improvement in bank lending appetite for some firms in sectors such as hospitality, retail and construction. The latest Federation of Small Businesses Index suggests small improvements in credit availability and affordability.

#### Lending growth remains weak compared with pre-pandemic averages.

The annual growth rate of sterling net lending to private sector companies and households, or M4Lex, has recovered somewhat since its trough in September 2023 and was 1.2% in June, although it remains historically weak (Chart 2.9). Subdued growth in credit volumes for households and businesses is consistent with tighter monetary policy having weighed on credit demand.

Mortgage approvals, which are a timely indicator of secured lending to households, decreased slightly in June, while the annual growth rate of net secured lending to households picked up marginally to 0.5%. Banks responding to the latest CCS reported that demand for mortgage lending for house purchase increased somewhat in Q2 and was expected to be unchanged in Q3. Consumer credit volumes have remained strong in nominal terms, recording an annual growth rate of 8% in June. Credit availability was reported to be a constraint on spending for around 25% of consumers responding to the 2024 Q1 Bank/NMG survey, above the 2015–19 average of around 20%.



(a) Aggregate money, excluding other financial corporations refers to M4 excluding other financial corporations (OFCs). Aggregate money and aggregate lending refer to M4 and M4 lending respectively, both excluding intermediate other financial corporations (IOFCs). OFCs are corporations engaged in financial services that are not banks or building societies, for example insurance companies and pension funds. IOFCs are specialised entities that mainly provide intermediation services to banks and building societies. Only quarterly data are available for the aggregate money and aggregate lending series from 1998 Q4 to 2010 Q2. All other data are at a monthly frequency. The final data points refer to June 2024. For more information on these data, see <a href="Further details">Further details</a> about M4 data, <a href="Further details">Further details</a> about M4 lending excluding lending to intermediate other financial corporations data.

Net lending to non-financial businesses (including overdrafts) was 0.1% higher in June than a year earlier. Within that, the annual growth rate of lending to SMEs was particularly weak, at -4.3%, largely reflecting the continued net repayment of borrowing under Covid loan schemes. Lenders responding to the CCS expected little change in demand for bank lending from medium and large-sized businesses in the coming quarter.

#### Money growth has picked up but remains weak by historical standards.

Consistent with the slight increase in aggregate lending volumes, the aggregate growth rate of sterling broad money (M4ex) has turned positive since its trough in September 2023 and picked up slightly to 1% in June. It remains weak by historical standards, however. Within household deposits,

there has been a small compositional shift towards ISAs in recent months, which may in part reflect households responding to higher real interest rates on savings. The ratio of household M4 to annual gross disposable income remains at just over 100%, close to its pre-pandemic trend and below its level in 2020-21. This reflects a normalisation in the relationship between household deposits and household incomes since the pandemic. The MPC continues to monitor developments in money growth as set out in Box B of the **May Report**.

### 2.3: Domestic activity and the labour market

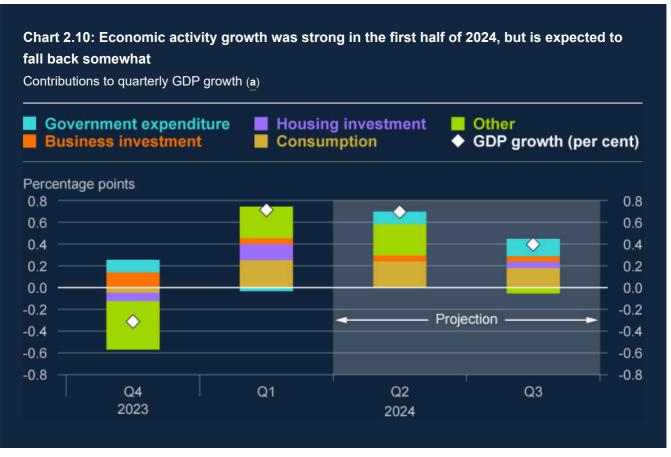
### | Quarterly GDP growth was stronger than expected in the first half of 2024...

Having fallen in the second half of 2023, UK GDP growth picked up quite sharply at the start of the year. GDP growth was 0.7% in 2024 Q1, 0.4 percentage points stronger than expected in the May Report. That pickup in growth was driven primarily by the market sector and was broad-based across the expenditure components (Chart 2.10). Output growth was also strong in the monthly data for May, such that GDP is expected to have risen by a further 0.7% in Q2.

#### ...but is expected to fall back somewhat in 2024 H2.

Underlying momentum in activity is judged to be somewhat weaker than recent headline GDP growth, albeit a little stronger than expected in the May Report. The collective steer from business surveys currently points to growth of around 0.3% per quarter. Consistent with that, the flash S&P Global/CIPS UK composite output PMI ticked up in July but remained below its historical average. Contacts of the Bank's Agents had become more positive about the growth outlook since the May Report, although sentiment varied by sector. Business services and manufacturing contacts had seen a pickup in activity, while construction activity had fallen.

GDP growth is expected to fall back to 0.4% in Q3 and to 0.2% in Q4. Recent strength in household real income growth is expected to support growth in consumption, while the past tightening in monetary policy continues to weigh on demand (Box C).



Sources: ONS and Bank calculations.

(a) Diamonds show quarterly headline GDP growth. Figures for 2024 Q2 and Q3 are Bank staff projections.

# The recovery in real incomes and rising consumer confidence are expected to support consumption growth.

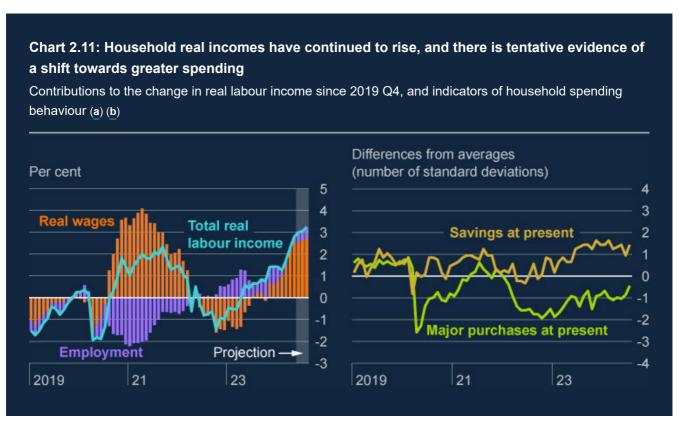
Household consumption rose by 0.4% in 2024 Q1, slightly above expectations in the May Report. That followed weakness in the second half of 2023, meaning that consumption remained below its 2019 Q4 level.

Tighter monetary policy, which incentivises a higher degree of saving, is judged to have been the primary cause of subdued household spending growth in recent quarters. Household real incomes have recovered since late 2022, as the waning effects of higher energy and other import prices have raised real wages (left panel of Chart 2.11). That recovery in real incomes has been associated with a rise in the household saving rate to 11.3% in 2024 Q1, its highest level since 2010, excluding the pandemic period. While tighter monetary policy is likely to have been the main driver of the pickup in the household saving rate, saving may also have risen as a precautionary response to the extreme economic events experienced in recent years, including the pandemic and subsequent rises in the cost of living. Saving patterns have varied across households, however. As discussed in the June 2024 Financial Stability Report, pressures associated with higher interest rates and living costs meant that savings buffers for renters and low-income households fell in the six months to 2024 Q1.

The aggregate household saving rate is expected to have risen slightly further in Q2 to close to 12%. Consistent with that, the balance of households responding to the GfK consumer confidence survey reporting that now is a good time to save has remained above its past average (right panel of Chart 2.11).

There are signs that the continued recovery in real incomes and rising confidence are beginning to feed through to stronger consumption, however. Retail sales were broadly flat in Q2. But the balance of households responding to the GfK consumer confidence survey expecting an improvement in their financial situations has been above its past average since May. And the balance reporting that now is the right time to make major purchases has picked up (right panel of Chart 2.11). Contacts of the Bank's Agents have become increasingly confident that higher household real incomes would feed through into higher spending, although they noted that many lower-income households remained constrained by the increased cost of living.

Overall, consumption is expected to continue to grow at around 0.4% in the near term, while the saving ratio remains elevated. Consistent with the signs of recovery in consumer spending, the impact of tighter monetary policy may be close to its peak (Box C).



Sources: GfK, ONS, Refinitiv Eikon from LSEG and Bank calculations.

(a) Wages are defined as seasonally adjusted whole-economy regular average weekly earnings adjusted for inflation using seasonally adjusted CPI. Data are to May 2024. Projection is for June, July, and August 2024.

(b) Gold line shows the net balance of responses to the question 'In view of the general economic situation do you think now is: a very good time to save, a fairly good time to save, not a good time to save, a very bad time to save'. Green line shows the net balance of responses to the question 'In view of the general economic situation, do you think now is the right time for people to make major purchases such as furniture or electrical goods?'. Averages calculated over 2015 to 2024. Data are not seasonally adjusted. The final data points refer to July 2024.

#### Housing market activity has been subdued but there are signs of a pickup.

Indicators of housing market activity have been subdued, as past increases in interest rates have weighed on housing demand (Box C). House prices – measured using the ONS house prices series – fell slightly in late 2022 and 2023 but have picked up more quickly than expected in recent months and rose by 0.8% in Q1 (left panel of Chart 2.12). Timelier house price indicators, including the Nationwide, Halifax and Rightmove measures, have also picked up from their troughs last year. Contacts of the Bank's Agents expected some ongoing weakness, however, with house prices expected to be flat or to rise slightly (Box D).

Housing investment rose by 3% in 2024 Q1, higher than the almost 1% fall expected at the time of the May Report, although past weakness means that it remains around its level in 2021 (right panel of Chart 2.12). The unexpected strength in Q1 was concentrated in dwellings investment, reflecting strong growth in repair and maintenance of existing dwellings, as well as a flattening off in the weakness of new builds. Transfer costs rose by 2.3% in Q1, driven by a pickup in housing transactions.

Housing investment is expected to be flat in Q2 and to rise by 1.2% in Q3, higher than expected in the May Report, reflecting the recent pickup in housing activity and house prices. There are large risks around the projection for housing investment, however, since volatility in the data means that it is difficult to forecast with precision. Indicators of construction growth currently point in different directions, with timely indicators of private construction having ticked up in the latest data, while intelligence from the Bank's Agents points to continued weakness.



Sources: Nationwide, ONS, Refinitiv Eikon from LSEG, Rightmove.co.uk, S&P Global/Halifax and Bank calculations.

- (a) The latest data point for the ONS house price index is for May 2024. Halifax and Nationwide data to June 2024 and Rightmove data to July 2024 are advanced to reflect the respective timing of each data source in the house-buying process. The Nationwide and Halifax figures for July were released after the data cut-off.
- (b) Private existing dwellings investment captures improvements, repair and maintenance of existing dwellings. The other category mostly comprises dwellings investment in existing and new dwellings for non-financial public corporations. The latest data point for housing investment and its subcomponents is 2024 Q1. The diamonds show projections for 2024 Q2, Q3, and Q4.

#### Business investment growth has been subdued but some recovery is expected.

Business investment rose by 0.5% in 2024 Q1, higher than expected in the May Report, but remains close to its level at the start of 2023. Excluding air transport spending, which tends to be volatile (**Haskel (2019)**), business investment fell in 2024 Q1.

Overall, business investment is expected to grow by 0.5% in Q2 and Q3, higher than expected in the May Report. Contacts of the Bank's Agents have reported an improvement in investment intentions, with input cost inflation becoming less of a deterrent (Box D). A subset of firms reported investing in equipment to improve efficiency and offset higher labour costs.

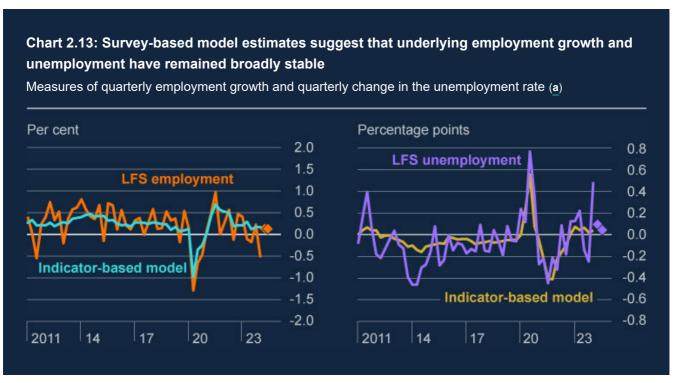
#### Large uncertainties remain around the LFS labour market statistics.

Owing to concerns about lower achieved sample sizes leading to greater volatility, the ONS continues to recommend caution when interpreting the latest LFS data (**Box D May 2024 Monetary Policy Report**). In an **update published in July**, the ONS noted that issues remain before the transition to the transformed Labour Force Survey (TLFS), which is intended as the long-term solution to falling response rates and quality challenges surrounding the LFS, can take place. The dual run of the TLFS and LFS has been extended to provide further quarters of data for comparison.

The MPC employs a wide range of data to inform its judgements on the labour market, including official data, business surveys and intelligence from the Bank's Agents. The ongoing uncertainties surrounding the LFS data underscore the importance of this approach.

### The collective steer from a range of indicators points to modest employment growth in coming quarters.

Despite the pickup in demand in 2024 H1, employment growth appears to have remained modest in recent quarters, and slower than in 2023 (left panel of Chart 2.13). The latest LFS data suggest that employment growth rose slightly by 0.1% in the three months to May. But underlying employment growth – the path for employment that abstracts from volatility in the LFS – is estimated to have been a bit stronger, at around 0.2% over the past few quarters, and broadly in line with population growth. That estimate reflects the steer from a range of indicators, including the HMRC RTI payrolls employee data, business surveys and the Bank's Agents' employment score. Employment is expected to grow at around that rate in coming quarters.



Sources: Bank of England Agents, Google Trends, HM Revenue and Customs, IHS Markit, KPMG/REC/S&P Global UK Report on Jobs, Lloyds Business Barometer, ONS, S&P Global/CIPS and Bank calculations.

(a) The left panel shows quarterly growth in employment for people aged 16+ from LFS data, and the right panel shows the quarterly change in unemployment. Although LFS employment and unemployment data have recently been reinstated by the ONS, they are badged as official statistics in development and the LFS continues to suffer from very low response rates, which can introduce volatility and potentially non-response bias (Box D May 2024 Monetary Policy Report). Bank staff's indicator-based models of near-term employment growth and unemployment use mixed-data sampling (MIDAS) techniques (Daniell and Moreira (2023)). A range of indicators inform the models, including (for employment) series from the Bank of England Agents, Lloyds Business Barometer, HMRC/ONS PAYE payrolls, S&P Global/CIPS purchasing managers' index and the KPMG/REC UK Report on Jobs, and (for unemployment) series from the Bank of England Agents, the KPMG/REC UK Report on Jobs, Google Trends on the searches for unemployment-related terms, ONS Vacancies, the ONS Claimant count, and IHS Markit measure of job security. Indicators are weighted together according to their relative forecast performance in the recent past. Latest data points shown for both employment and unemployment are for 2024 Q1. Diamonds represent projections for 2024 Q2 and Q3.

Underlying unemployment is expected to remain broadly stable in the near term before slowly picking up.

The latest LFS data suggest that unemployment was 4.4% in the three months to May, a little higher than expected in the May Report. There are relatively few indicators beyond the LFS when gauging developments in unemployment (**Broadbent (2023)**). But those that are available, such as the claimant count and Agents' score for recruitment difficulties, point to unemployment having been stable over the last few quarters (right panel of Chart 2.13) and a little below the LFS measure, suggesting a slightly tighter picture for the labour market than implied by the LFS data.

The LFS unemployment rate is projected to remain at 4.4% in coming quarters before rising slightly further out, as the restrictive stance of monetary policy continues to weigh on demand (Section 1). Consistent with that, a measure of unemployment based on the KPMG/REC survey, which has tended to lead the cycle, points to a small increase in unemployment to come (left panel of Chart 2.14).

# LFS data point to a low participation rate, whereas estimates based on Bank staff's indicator-based model are higher.

Labour market participation, as measured in the LFS data, has been declining since its post-pandemic peak a year ago, and was 62.7% in the three months to May, close to its lowest level since 1998. Measuring participation is inherently difficult as it is an individual decision which can only be monitored directly through surveys. The LFS is the main source of data for participation but suffers from the problems outlined above. Broad estimates of participation can still be derived indirectly, however, by taking a view on the trajectory of other labour market quantities and inferring participation as a residual to reconcile these. If employment has been as firm as implied by Bank staff's indicator-based model, while the unemployment rate has been flat or rising a little, then the participation rate may be higher than currently estimated using the LFS data.

# Other indicators point to a continued loosening in the labour market, although it remains relatively tight by historical standards.

A range of other indicators suggests that labour market tightness continues to ease. The number of vacancies, which does not suffer from the same data quality issues as the LFS, has continued to fall and was around 10% above pre-pandemic levels in June (middle panel of Chart 2.14). The vacancies to unemployment ratio had also fallen further in May. Similarly, the proportion of firms responding to the May DMP Survey who reported finding it much harder to recruit new employees was around 20% in June compared with a peak of over 65% in 2022.

The labour market remains relatively tight by historical standards, however, and the pace of loosening appears to have slowed somewhat. Vacancies, for example, remain above pre-pandemic levels and have fallen more slowly in recent months than in 2023. And after falling from 2022, the proportion of firms sighting recruitment difficulties and worker shortages in the ONS BICS survey has been broadly unchanged since late last year (right panel of Chart 2.14).



Sources: KPMG/REC, ONS and Bank calculations.

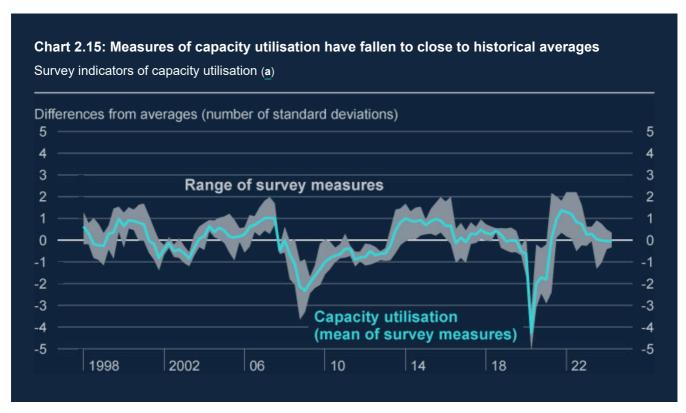
- (a) The final data point shown for the unemployment rate is for the three months to May 2024. The final data point for the KPMG/REC series is for June, which is then advanced six months. The comparable figure for July was released after the data cut-off. The KPMG/REC measure has been mean and variance adjusted to match the 12-month change in the unemployment rate over the period since 2000.
- (b) The LFS unemployment series in the middle chart uses the official LFS estimates up to June 2023 and the ONS's experimental alternative labour market statistics until February 2024 when the LFS was reinstated. The final data points are for the three months to May 2024 for the vacancies to unemployment ratio and for the three months to June 2024 for the vacancies series.
- (c) The right panel shows the percentage of firms responding 'Yes' to the questions 'Is your business currently experiencing a shortage of workers?', and 'Did your business experience any difficulties recruiting employees?' from the Business Insights and Conditions Survey. Values for the worker shortages series for February and August 2023 have been imputed in the chart. The latest data points are for July and June 2024, respectively.

#### Demand and supply are judged to be broadly in balance.

While UK output growth has been volatile over the past year, the MPC continues to judge that aggregate demand and supply remain broadly in balance. Consistent with that, survey measures of capacity utilisation are close to their historical averages, having fallen since 2021 (Chart 2.15).

Furthermore, recent fluctuations in output growth do not appear to have had a significant effect on labour market quantities. That is consistent with businesses having maintained employment during the period of weak growth in late 2023 and utilised their headcounts more intensively during the pickup this year. Contacts of the Bank's Agents reported that they had made more intensive use of their existing employees in recent months and would continue to do so in coming quarters.

A margin of spare capacity is expected to open up in 2025 reflecting the continued restrictive stance of monetary policy (Section1).



Sources: Bank of England Agents, British Chambers of Commerce (BCC), CBI, S&P Global/CIPS, ONS and Bank calculations.

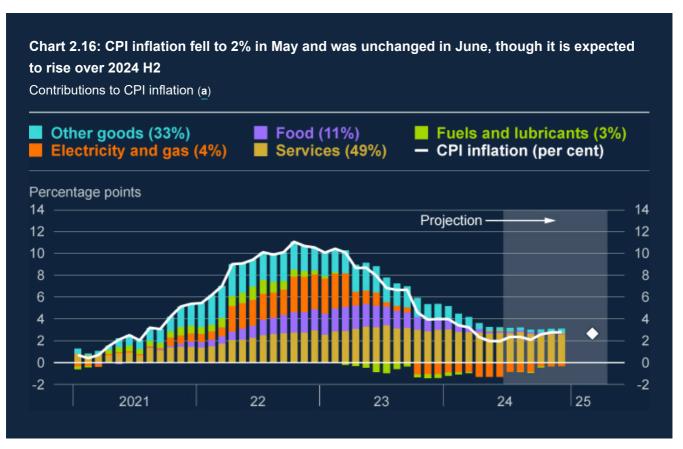
(a) Standard deviations from averages between 2000–19. The measures included in the swathe are from the Bank's Agents, the BCC (non-services and services), the CBI (manufacturing (capacity); financial services, business/consumer/professional services and distributive trade (business relative to normal)) and CIPS (manufacturing (backlogs); services (outstanding business)). Sectors are weighted using shares in gross value added. The BCC data are not seasonally adjusted.

### 2.4: Inflation and wages

Consumer price inflation has fallen further and was at the MPC's 2% target in May and June.

Twelve-month CPI inflation fell to the 2% target in May and remained at 2% in June (Chart 2.16). The decline since the start of the year has primarily reflected lower goods price inflation, alongside a small fall in services price inflation.

Core CPI inflation, which excludes energy, food, beverages and tobacco, has fallen by a similar margin, from 5.1% in January to 3.5% in June.



Sources: Bloomberg Finance L.P., Department for Energy Security and Net Zero, ONS and Bank calculations.

(a) Figures in parentheses are CPI basket weights in 2024. Data to June 2024. Component-level Bank staff projections from July to December 2024. Diamond indicates projection for headline inflation in 2025 Q1. The food component is defined as food and non-alcoholic beverages. Fuels and lubricants estimates use Department for Energy Security and Net Zero petrol price data for July 2024 and are then based on the sterling oil futures curve.

## CPI inflation is projected to rise over 2024 H2, owing to the smaller drag on annual inflation from domestic energy bills.

CPI inflation is projected to increase slightly in the second half of this year, reaching 2.8% by December, as the temporary drag from energy prices fades. Over the past year, electricity and gas prices have been dragging on headline CPI inflation (orange bars in Chart 2.16), reflecting the large declines in the 2023 Q3 and Q4 Ofgem price caps. In June, for example, household energy prices were 27.2% lower than a year prior. As those large declines fall out of the annual comparison over coming months, CPI inflation will rise slightly.

A further easing in food and services price inflation is expected to provide a small offset to the boost to CPI inflation from energy prices.

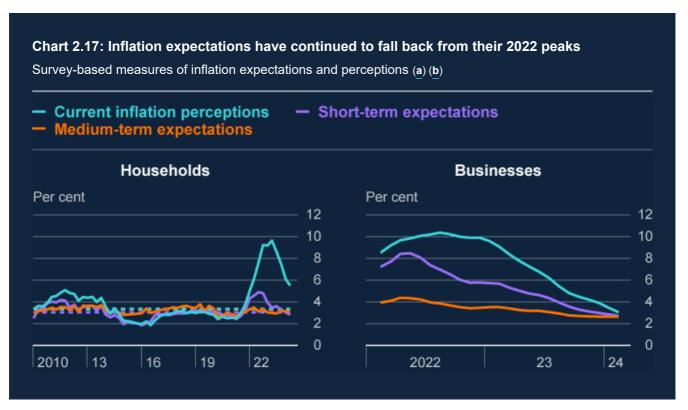
# Consistent with the return of inflation to the 2% target, most inflation expectations indicators have normalised.

Household and business inflation expectations are important determinants of CPI inflation, given their key roles in wage and price-setting dynamics. Most measures of inflation expectations have fallen back since their peaks in mid-2022 to around their 2010–19 averages.

Research suggests that household inflation expectations tend to move in line with recent experiences of actual inflation (Rowe (2016)). Consistent with that, households' inflation expectations have continued to fall alongside the observed decline in CPI inflation. The Citi/YouGov indicators of short-term and medium-term inflation expectations fell to 2.6% and 3% respectively in June, and are close to their 2010–19 averages. The equivalent measures reported in the Bank/Ipsos survey were also around their pre-Covid averages in Q2 (left panel of Chart 2.17). Households' perceptions of the current rate of inflation remained elevated, but this measure has tended to react to changes in headline CPI inflation with a lag.

Firms' short and medium-term expectations for inflation have also moderated from their peaks. The Deloitte CFO survey measure of businesses' expectations for CPI inflation in two years' time was 2.1% in Q2, down from 2.3% in Q1. In the DMP Survey, businesses' expectations for the inflation rate in one and three years' time, as well as their perceptions of current CPI inflation, have fallen back since mid-2022 (right panel of Chart 2.17).

Indicators of inflation expectations implied by financial markets are little changed since the May Report. The median respondent in the August Market Participants Survey expected CPI inflation of around 2.2% one year ahead, unchanged from May. Median five year ahead expectations were stable at 2%.



Sources: Bank/Ipsos Inflation Attitudes Survey, DMP and Bank calculations.

(a) Data shown are median responses from the Bank/Ipsos Inflation Attitudes Survey. 'Current inflation perceptions' refers to respondents' views on the current rate of inflation, 'Short-term expectations' refers to expectations in the next 12 months and 'Medium-term expectations' refers to expectations for inflation five years ahead. Dashed lines represent the series averages over 2010–19. A methodological break occurred during the Covid-19 pandemic that means a degree of caution should be taken when making long-run comparisons with these data, for more information please see the methodology notes linked in the latest IAS release for May 2024. The latest data points are for 2024 Q2.

(b) Data shown are from the DMP survey and are based on responses to the questions: 'As a percentage, what do you think is the current annual CPI inflation rate in the UK?' and 'What do you think the annual CPI inflation rate will be in the UK, one year from now and three years from now?'. The latest data points are for July 2024.

#### Core goods price inflation has fallen...

While the headline CPI outturn for June was close to the May Report projection, goods price inflation was lower than expected and services inflation was higher than expected.

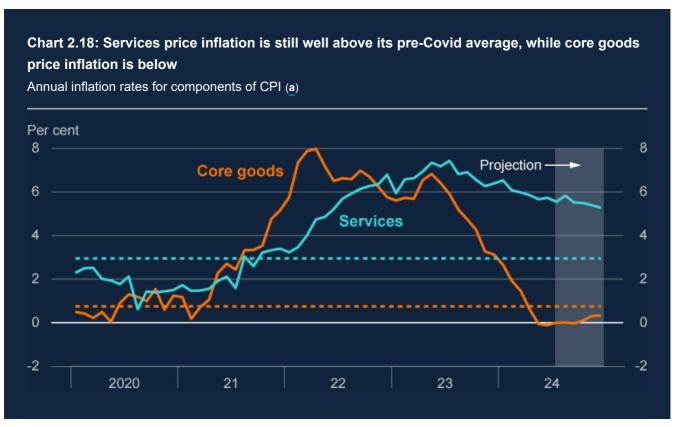
Annual core goods inflation was -0.1% in June, below its pre-Covid average rate (Chart 2.18). The downside news was spread across several components of the goods basket. Bank staff judge that the weakness could reflect muted input cost pressures, given the low rates of PPI input price inflation, or subdued growth in consumer spending (Section 2.3). More generally, core goods CPI inflation has fallen materially since 2022, driven by the declines in energy prices and other imported goods prices from their peaks in recent years (Section 2.1).

Food price inflation has also fallen, with contacts of the Bank's Agents attributing this to weaker energy and agricultural commodities prices. Food and non-alcoholic beverages price inflation fell to 1.5% in June compared with a peak of around 19% in March 2023.

#### ...and is expected to remain weak over 2024 H2.

Core goods price inflation is projected to remain muted over the remainder of 2024 (Chart 2.18). Consistent with that, rates of PPI input price inflation have remained subdued and the signal from the S&P Global/CIPS manufacturing UK PMI output price index points to modest price pressures for core goods.

Annual food and non-alcoholic beverages inflation is also expected to ease further, to 0.7% by the end of the year.



Sources: ONS and Bank calculations.

(a) The core goods component is defined as goods excluding food and non-alcoholic beverages, alcohol, tobacco and energy. Data to June 2024. Bank staff projections from July 2024 to December 2024. Dashed lines represent 2010-19 averages.

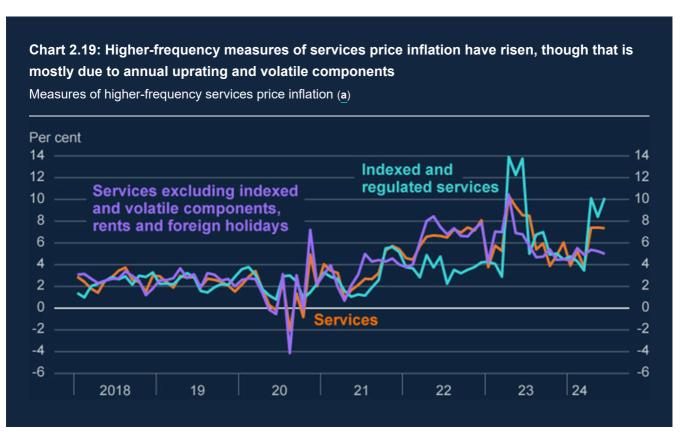
#### Services price inflation has continued to decline but remains elevated.

Alongside labour market tightness (Section 2.3) and wage growth, services CPI inflation is a key indicator of domestic inflationary pressures and inflation persistence. That is because a large proportion of services are produced domestically. By contrast, the prices of many goods are determined on international markets and will fluctuate according to changes in global supply and demand conditions.

Services consumer price inflation was 5.7% in June, unchanged from May but down from 6.5% at the turn of the year (Chart 2.18). That was 0.6 percentage points higher than had been expected at the time of the May Report and well above the 2010–19 average.

Higher-frequency measures of services price inflation, which can be indicative of near-term momentum in inflation, have picked up in the recent data (orange line in Chart 2.19). Much of that strength was due to a sharp uptick in components of the services basket that are index-linked or regulated, however, for which prices typically change in April and remain in the annual inflation rate for 12 months (aqua line in Chart 2.19). Some of the more typically volatile services components, such as accommodation services, also contributed to the strength observed in the three months to June. Near-term momentum in these more volatile components can be difficult to gauge.

After excluding these effects, services price inflation has been relatively stable, though it remains elevated. The purple line in Chart 2.19, which strips out index-linked and volatile components as well as rents and foreign holidays, points to a three-month average of the monthly annualised inflation rate of around 5%. Reflecting high rates of inflation, the frequency of price changes within services also remains elevated. The proportion of prices rising in each month, measured from CPI microdata, has been higher than the pre-pandemic average since 2022, although it has fallen back since its peak in 2023.

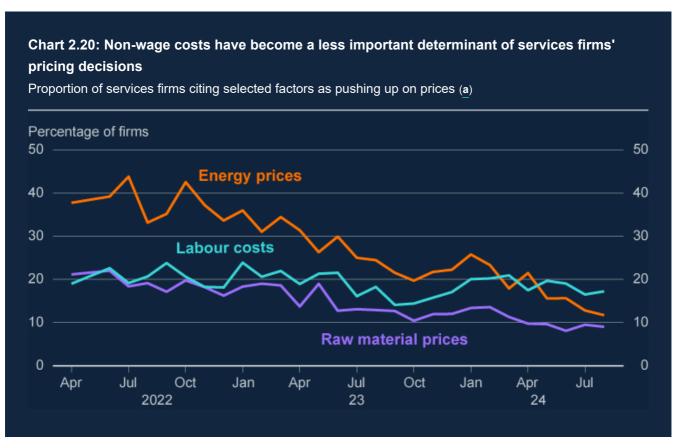


Sources: ONS and Bank calculations.

(a) Measures shown are three-month averages of seasonally adjusted monthly annualised inflation. Examples of indexed and regulated services includes telecom bills, vehicle excise duty and local authority rents. Examples of volatile services components include airfares and hotels. The latest data points shown are for June 2024.

Pay growth has become an increasingly important driver of the remaining strength in services inflation.

Evidence from the ONS Business Insights and Conditions Survey (BICS) shows that the proportion of services firms citing non-wage costs, including energy and raw materials prices, as pushing up on prices has declined since mid-2022 (Chart 2.20). Services firms continue to report labour costs as an important driver of price increases, however. Similarly, intelligence collected by the Bank's Agents suggests that the role of non-labour input cost pressures has waned over the past year, while wage pressures have continued to play a key role in pricing decisions.



Sources: ONS and Bank calculations.

(a) Responses from firms in the services sector to the ONS Business Insights and Conditions Survey, weighted together using expenditure weights consistent with Blue Book 2021 estimates published in the Quarterly National Accounts. The question asked is: 'Which of the following factors, if any, are causing your business to consider raising prices?'. Latest data shown are for August 2024.

### The outlook for demand will be important in determining the speed and extent to which firms pass through higher labour costs to prices.

There is evidence that, in the face of relatively soft consumer demand over the last few quarters, firms have been unable to fully pass through cost rises such that their profit margins have been squeezed. According to the latest National Accounts data from the ONS, non-oil profits for private non-financial companies have fallen back as a share of nominal GDP. Consistent with that, the Bank's Agents' scores for firms' profit margins are at levels consistent with margins having been eroded.

The speed and extent to which increased labour costs are passed through to services price inflation in coming quarters will in part be determined by the strength of demand. Intelligence from the Bank's Agents suggests that firms currently see limited scope to rebuild their margins through further price increases, particularly in the consumer-facing services sector. To the extent that demand recovers faster than expected, however, this could present an upside risk to the path of services inflation.

# Services price inflation is projected to edge down further but to remain above its pre-Covid average.

Following a small pickup in August, services price inflation is expected to fall back a little, to 5.3% by December, as wage pressures ease. That remains significantly above the pre-Covid average (Chart 2.18). The expected fall in services inflation is consistent with the directional steer from the July DMP Survey, in which consumer-facing services firms on average expected their own price inflation to fall by around one percentage point in a year's time.

#### Headline wage growth has eased further but remains elevated.

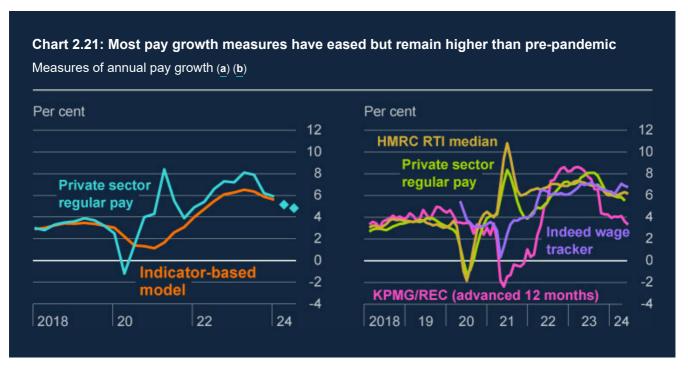
The MPC is closely monitoring developments in wage growth, which is another key indicator of domestic inflationary pressures and inflation persistence. Annual growth in private sector regular AWE eased to 5.6% in the three months to May. That was down from a peak of just above 8% in mid-2023 and in line with the projection at the time of the May Report.

#### Indicator-based estimates of underlying pay growth have also eased.

The slowing in the official pay growth measure is consistent with the steer from Bank staff's model of underlying pay growth, which has also trended down since last summer and stood at around 5½% in Q1. This model is based on the statistical combination of signals from a range of pay indicators and is shown in the orange line in the left panel of Chart 2.21.

While most indicators point to pay growth having remained elevated, some are giving a stronger steer for pay growth than others (right panel of Chart 2.21). The Indeed Wage Tracker, for example, measures the average annual change in the wages stated in job adverts and suggests underlying pay pressures may be a bit stronger than implied by private sector regular AWE growth. The latest Indeed Wage Tracker points to wage growth of 6.8% on a year ago in June. This series has also fallen back by less than some of the other indicators, despite the observed reduction in labour market tightness.

By contrast, the KPMG/REC UK Report on Jobs measure is giving a weaker steer for the current rate of pay growth. The KPMG/REC measure, which is an indication of the monthly change in wages for new permanent hires, is close to its historical average. The measure tends to lead official annual wage growth by around 12 months, although that relationship appears to have weakened somewhat in the past few years (right panel of Chart 2.21). Based on its historical relationship with private sector regular AWE growth, the series points to pay growth of around 3½% in the three months to June.



Sources: HMRC, Indeed, KPMG/REC UK Report on Jobs, Lloyds Business Barometer, ONS and Bank calculations.

(a) Series shown in the left hand panel are at a quarterly frequency. Bank staff's indicator-based model of near-term private sector regular pay growth uses mixed-data sampling (or MIDAS) techniques. A range of indicators inform the model, including series from the Bank of England Agents, the Lloyds Business Barometer, Indeed, ONS/HMRC PAYE payrolls and the KPMG/REC UK Report on Jobs. Indicators are weighted together according to their relative forecast performance in the recent past. Private sector regular pay growth is the ONS measure of private sector regular average weekly earnings growth (quarter on same quarter a year ago). Latest data points are for 2024 Q1, with diamonds showing projections for private sector regular pay growth for Q2 and Q3.

(b) Series shown in the right hand panel are at a monthly frequency. Definitions of wage growth vary between each of the measures. Private sector regular pay growth is the ONS measure of private sector regular average weekly earnings growth (three month average on same three month average a year ago). KPMG/REC shows average starting salaries for permanent staff compared to the previous month. HMRC Real Time Information (RTI) shows median of private sector employee pay growth. Indeed shows annual average job title matched pay growth for UK job vacancies. The KPMG/REC index is mean-variance adjusted to ONS private sector regular pay growth over 2002–19 and is advanced by 12 months, which better reflects the leading relationship between the KPMG/REC index and the ONS measure of pay growth. Latest data points are June 2024 for Indeed, HMRC RTI and the KPMG/REC index, and the three months to May 2024 for private sector regular pay.

# The new National Living Wage (NLW) came into effect in April but its impact on aggregate wage growth appears to have been small so far.

The second quarter of the year is an important time for pay-setting. A large proportion of the year's pay settlements typically take place over Q2, with around 40% of them taking effect in April alone. April is also the month from which the annual NLW increase takes effect. In line with the Low Pay Commission's recommendations, the NLW increased by around 10% this April, to £11.44 an hour for workers aged 21 and over (Low Pay Commission (2023)).

The effect of the NLW in the aggregate pay data appears to have been fairly limited so far. That is consistent with previous analysis by Bank staff, which suggested that the direct and indirect effects of the NLW increase would push up aggregate pay growth by around 0.3 percentage points (Section 2.3 of the **February 2024 Report**). The impact of the NLW has been notable for some firms, however, particularly those in the consumer-facing services sector.

The NLW will have narrowed pay differentials between those on the NLW and those paid just above it. Contacts of the Bank's Agents report that they are coming under pressure to maintain pay differentials between scales, which could provide some boost to wage growth over the remainder of this year. Bank staff's estimate of the effects of the NLW (described above) incorporates some degree of spillovers from this channel based on what has occurred over the past, although – given the size of the latest NLW increase – there is some risk that these spillovers could be larger than in previous years.

### The loosening in the labour market and falling inflation expectations have reduced wage growth over the past year and are expected to continue to do so.

Models decomposing the strength in wage growth over the past few years into its possible drivers have pointed to an outsized role for inflation expectations and labour market tightness (yellow and purple bars in Chart 2.22). Moderation in both of these factors appears to have contributed to a reduction in wage growth since 2023. Wage growth is somewhat firmer than can be explained by these fundamental factors, however, as demonstrated by the unexplained residual bars in Chart 2.22.

The most recent falls in inflation expectations and easing in the labour market (Section 2.3) mean that wage growth is expected to slow further in coming quarters. Consistent with that, contacts of the Bank's Agents have reported that they expect pay settlements that take effect in the second half of this year to average around 4%, lower than those taking effect over 2024 H1. Expectations for wage growth of firms responding to the DMP Survey have also continued to drift down, to 4.1% in one year's time.

Overall, private sector regular pay growth is projected to fall to 5.1% in the three months to June and to 4.8% in 2024 Q3 (Chart 2.22).



Sources: Barclays, Citigroup, ONS, YouGov and Bank calculations.

(a) Wage equation based on Yellen (2017). Pay growth is Bank staff's estimate of underlying pay growth between January 2020 and March 2022 and the ONS measure of private sector regular AWE growth otherwise. Short-term inflation expectations are based on the Barclays Basix Index and the YouGov/Citigroup one year ahead measure of household inflation expectations and projected forward based on a Bayesian VAR estimation. Slack is based on the MPC's estimates, informed by the vacancies to unemployment ratio. Productivity growth is based on long-run market sector productivity growth per head. The unexplained component is the residual. Data are to 2024 Q1, with projections for 2024 Q2 and Q3.

# Box C: Monitoring the impact of recent monetary policy tightening on the economy

In response to rising inflationary pressures, the MPC adjusted monetary policy by raising Bank Rate from 0.1% in December 2021 to 51/4% in August 2023. Commensurate with the rise in inflation, this was the largest sequential increase in Bank Rate since the late 1980s.

Increases in Bank Rate affect the economy through a range of channels. In the first stage of transmission, banks, building societies and capital markets pass through the rise in Bank Rate and future expected interest rates to the rates they offer to households and firms (Section 2.2). Higher Bank Rate will also reduce asset prices. In the second stage, higher interest rates and lower asset prices cause households and firms to change their spending patterns and plans, which ultimately leads to lower inflation because demand falls relative to supply in the economy. Higher Bank Rate can also impact inflation directly, by weighing on inflation expectations and – all else equal – through an appreciation of the exchange rate, which tends to reduce the cost of goods and services imported from abroad.

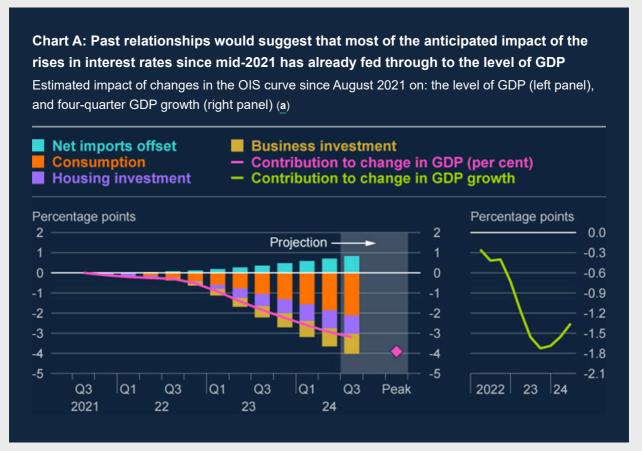
This box focuses on the transmission of higher Bank Rate to spending in the domestic economy. The subsequent impact of that change in spending on inflation will tend to occur with a lag. Estimates vary, but most suggest that the impact of interest rates on inflation peaks at around one to two years (see, for example, **Burgess et al (2013)**). Evidence on businesses' pricing decisions from the DMP Survey suggests that downward pressure on inflation from past rises in interest rates has been building over time. And, consistent with the role of monetary policy in anchoring inflation expectations, household inflation expectations have returned to around historical norms (Section 2.4).

Further details of the channels through which higher Bank Rate operates are outlined in a recent Quarterly Bulletin article by Bank staff, **Burr and Willems (2024)**. And Section 3.3 of the **November 2023 Report** summarises previous analysis of the impact of interest rate rises on GDP.

Past relationships would suggest that the impact of the latest Bank Rate tightening cycle on GDP growth has passed its peak, although there are large uncertainties around these estimates.

Based on the historical relationship between interest rates and the real economy, much of the total anticipated impact of increases in Bank Rate and the market-implied path for future interest rates since August 2021 should have already fed through to the level of UK GDP. The pink line in the left panel of Chart A, which is estimated using models that feed into the MPC's projections, suggests that higher interest rates over this period would have reduced the level of GDP by around 3%. The same models suggest that the impact would be likely to build a little further, to just under 4%. These estimates are relative to a counterfactual in which the market-implied path for interest rates remained fixed at its level as at the time of the August

2021 Report. The right panel of Chart A shows that, although the impact of higher interest rates since August 2021 on the level of GDP might have further to build, the estimated impact on GDP growth may well already be receding.



(a) OIS rates are the overnight index swap rates and represent market expectations for Bank Rate. Data up to 22 July 2024 are included. Estimates are based on the standard treatment of the impact of changes in Bank Rate and Bank Rate expectations in the Bank's forecasting models. The effects of the estimated impact of changes in the OIS curve on sterling exchange rates have been excluded. Both the total impact and the decomposition are uncertain and could be higher or lower than presented here.

There are large uncertainties around this analysis. The estimates in Chart A are based on the average historical relationship between Bank Rate and the real economy, but there is evidence that the relationship can change over time (Mumtaz (2010)). This could result, for example, from underlying changes in the structure of the economy, or from non-linear or asymmetric effects of monetary policy changes as found, for example, by Stenner (2022). Prevailing financial conditions at the start of the tightening cycle may also affect monetary policy transmission, as discussed in Mann (2023). During the latest tightening cycle, the impact of domestic interest rate changes may have been strengthened by the fact that central banks around the world have been tightening monetary policy at the same time; previous research has highlighted the important role that other central banks' actions can play, particularly the Federal Reserve (Brusa et al (2020)).

On balance, the latest evidence points to a risk that the peak impact of higher interest rates relative to August 2021 on the level of GDP will be a little smaller, and will occur earlier, than the estimate shown in the left panel of Chart A. While some channels of monetary policy discussed below – in particular the household cash-flow channel – may be slower than in the recent past, relatively swift increases in longer-term market rates during this hiking cycle (Chart C) may have caused others – including the house-price channel – to become faster.

Transmission of tighter monetary policy appears to be at a similar stage in other advanced economies. Analysis based on the relationship between financial conditions and the real economy suggests that the impact of tighter monetary policy on annual GDP growth may be around its peak in the euro area, but may have passed its peak in the United States. The estimates for the euro area appear broadly consistent with the **ECB's (2024)** view that the drag on growth from monetary transmission will fade during 2024.

The following sections summarise the latest evidence on the transmission of higher Bank Rate to the domestic economy.

### Consumption

Household consumption has been weak relative to household income growth over this tightening cycle, such that the saving rate has increased materially (Section 2.3). That would be consistent with tighter monetary policy having reduced consumption through the channels set out in this section. The latest evidence suggests that the impact of higher Bank Rate on the level of consumption may now be close to its peak.

Higher interest rates appear to be weighing on consumption as expected through the cash flow and intertemporal substitution channels.

Increases in Bank Rate and the market-implied path for interest rates have raised household deposit and loan rates (Section 2.2). This has given rise to two important channels of monetary policy transmission: the cash-flow channel and the intertemporal substitution channel. Evidence suggests that most of the effects of higher interest rates through these channels have come through, although there may still be more to come for those households who are yet to remortgage.

The cash-flow channel of monetary policy occurs when increases in Bank Rate pass through to higher mortgage and saving rates, causing a redistribution of income from net borrowers to net savers. As explained in Section 3 of the **November 2023 Report**, higher Bank Rate has led to higher aggregate household incomes, because the stock of household savings exceeds the stock of mortgages, and because changes in Bank Rate do not affect payments on fixed-rate mortgages immediately. Nevertheless, increases in Bank Rate are estimated to have reduced household consumption via this channel overall, since net borrowers tend to consume more out of a given change in income than net savers. In other words, their marginal propensities to consume are higher on average.

Structural changes in the UK mortgage market have probably slowed the transmission of monetary policy through the cash-flow channel somewhat compared with recent tightening cycles. Around 85% of UK mortgages are now on a fixed-term basis, compared with under half just prior to the 2008 financial crisis. As such, it now takes longer for changes in Bank Rate to feed through to the rates paid by households on the existing stock of mortgages. Many households adjust their spending and saving behaviour in expectation of increases in mortgage payments, however, partly offsetting this slower transmission. Estimates based on households' responses to the NMG survey point to an average marginal propensity to consume out of expected changes in repayments within the next year of around 0.3, compared with 0.5 for realised changes in repayments.

In addition to their effects on borrowers' and savers' incomes, higher interest rates also incentivise households to delay consumption and to save more. These effects are difficult to estimate since they cannot be directly observed. In the March 2024 NMG survey, households across the income distribution reported higher interest rates as a reason for saving more than usual over the last six months. Higher interest rates were less important for saving decisions than the increased cost of essentials, but the data are qualitatively consistent with the intertemporal substitution channel of monetary policy operating as expected. The observed pick-up in the aggregate household saving rate over this tightening cycle is also consistent with intertemporal substitution taking place.

# The effect of higher interest rates on house prices, and the subsequent effect on consumption, appears to have materialised more quickly than in the past.

Higher interest rates typically reduce house prices, which can subsequently weigh on household consumption by lowering homeowners' net wealth. The direct effects of lower net housing wealth on consumption are partly offset by the fact that lower house prices benefit first time buyers and homeowners wanting to move from a cheaper to a more expensive property (**Buiter 2010**). But lower housing wealth also tends to reduce the collateral households have available against which they can borrow, and this tends to weigh on economic activity.

Nominal house prices have been broadly flat since 2022 and have fallen in real terms and relative to nominal household incomes (Chart B). That is consistent with a drag from tighter monetary policy: Bank staff estimate that increases in Bank Rate have reduced real house prices by around 8%, relative to a counterfactual of no rise in Bank Rate, since 2021.

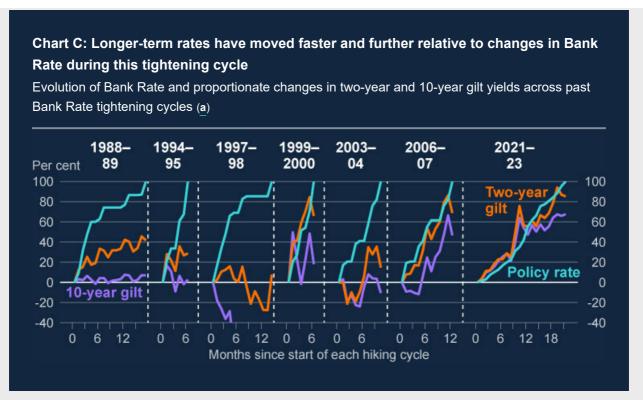


Sources: ONS and Bank calculations.

(a) UK house price index is the headline ONS house price index (HPI). The house price to income ratio is calculated based on gross national income per capita. The final data points are for 2024 Q1.

Updated analysis by Bank staff suggests that much of the effect of tighter monetary policy on house prices may have already come through. Higher interest rates appear to have weighed on house prices by somewhat more than expected based on the historical relationship between the two. That may reflect the fact that longer-term interest rates – which tend to be a more important determinant of house prices than short-term rates – have moved by more, and more quickly, over the most recent hiking cycle than in the past (Chart C). Consistent with the effect of higher interest rates on house prices having already come through, indicators of house price inflation have started to pick up earlier than expected (Section 2.3).

While house prices and consumption are highly correlated, there is uncertainty around the strength of the relationship and the precise mechanisms through which it operates. New modelling by Bank staff suggests upside risks to the speed of transmission from house prices to consumption estimated using the standard treatment in Chart A. Taken together with the faster impact of higher interest rates on house prices, any remaining drag from the house price channel is likely to be smaller than the estimates included within the 'consumption' bars in Chart A and presented in Chart 3.7 of the **November 2023 Report**.



Sources: Bank of England, Bloomberg Finance L.P. and Bank calculations.

(a) Tightening cycles shown include those lasting longer than six months since 1988. These are, in order: May 1988 to October 1989, August 1994 to February 1995, April 1997 to June 1998, August 1999 to February 2000, October 2003 to August 2004, July 2006 to July 2007 and November 2021 to August 2023. The 10-year gilt rate series for 1997 to 1998 is not shown for the full series to aid chart legibility. Rates are monthly averages. Gilt rates shown are nominal spot rates. Series show the changes in rates as a proportion of the trough-to-peak change in the Bank's policy rate over that hiking cycle.

#### Increases in interest rates have reduced consumption by lowering financial wealth.

Higher interest rates also reduce the prices of financial assets. Reductions in the value of financial assets tend to have modest impacts on aggregate consumption because most households do not own significant financial assets except through pensions (which tend not to be very visible). The effects can be material for households towards the top of the wealth distribution, however.

Total financial wealth has fallen since 2021, broadly in line with the expected drag from higher interest rates based on the historical link between the two. Evidence from the March 2024 NMG survey of households is qualitatively consistent with lower financial wealth having led to lower consumption, and time series estimates by Bank staff suggest a role for lower financial wealth in explaining weak consumption growth over the recent tightening cycle. This effect is likely to have now fully materialised.

# Higher interest rates will also have weighed on consumption through lower employment.

The direct reduction in consumption and investment caused by higher interest rates can lead to lower employment, which subsequently reduces consumption further. While the UK labour market remains tight (Section 2.3), evidence from the DMP Survey suggests that higher

interest rates have reduced employment by around 1.5% relative to a counterfactual of constant interest rates since mid-2021. These effects may have peaked, however: evidence from the same survey points to a fading impact of higher interest rates on employment from now on.

### Housing investment

Housing investment accounts for just 5% of GDP but is one of the most variable components. As such, it can have an outsized effect on GDP growth over the business cycle. During the 2008 financial crisis, for example, falls in housing investment accounted for close to one quarter of the overall fall in GDP.

#### Higher interest rates have weighed on housing investment.

Housing investment encompasses three main categories: investment in new dwellings; improvements, repair and maintenance of existing dwellings; and transfer costs, which include many of the costs of moving home such as legal fees. Each of these can be affected by higher interest rates.

Higher interest rates tend to reduce investment in new dwellings by weighing on expected future house prices, which in turn reduces the real returns on building new homes. Private new dwellings investment has fallen by around one quarter since its peak in 2022 (Chart 2.12).

Higher interest rates also reduce the transfer costs component of housing investment by reducing housing demand and hence the number of housing transactions. Mortgage approvals for house purchases, a forward indicator of housing transactions, fell to a trough of around 40,000 per month at the start of 2023. Since then approvals have recovered, reaching around 60,000 per month so far in 2024, in line with the 2010–19 average.

Although investment in new dwellings and transfer costs has fallen as expected in response to higher interest rates, investment in existing dwellings has been stronger than anticipated, rising by over a quarter between 2021 Q4 and 2024 Q1 (Chart 2.12). That is despite increases in borrowing costs and a fall in housing transactions, which, in previous tightening cycles, have acted to reduce this form of investment. Strength in existing dwellings investment might reflect the legacy of the pandemic, however, rather than a change in the transmission of interest rates. For example, contacts of the Bank's Agents report evidence of increased spending on repairs and maintenance, consistent with there being a continuing catch-up in the backlog of maintenance work following pandemic-driven supply constraints (Box D). In addition, some households were able to build up additional liquid savings during the pandemic, which may have been used to fund home improvements.

Evidence suggests that higher interest rates may weigh on housing investment by less than expected in coming quarters.

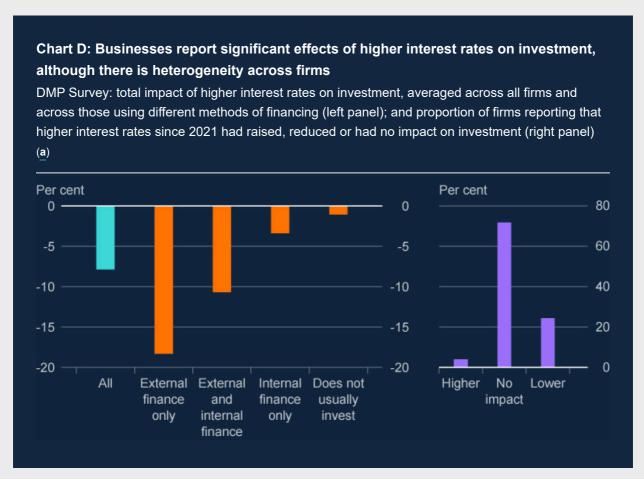
Housing investment growth is expected to be positive in coming quarters and stronger than expected in the May Report, reflecting the recent pickup in housing market activity and house price inflation (Section 2.3). Consistent with that, the effects of higher interest rates on housing investment are judged to have come through somewhat more quickly than depicted in Chart A.

#### **Business investment**

Higher interest rates tend to reduce business investment through similar mechanisms to those discussed above.

#### Businesses report that higher interest rates are reducing investment.

Respondents to the DMP Survey between November 2023 and January 2024 reported that higher interest rates had reduced business investment by around 8% in 2023 Q3 (left panel of Chart D). This is broadly in line with estimates based on the historical relationship between higher interest rates and business investment.

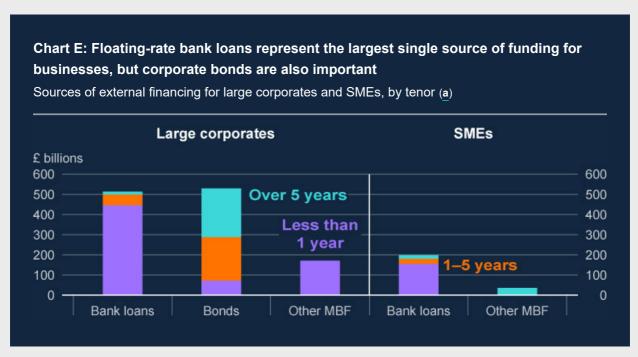


Sources: DMP Survey and Bank calculations.

(a) Data are based on the question: 'Holding other factors constant, what is your best estimate of the impact of changes in interest rates since the end of 2021 on the capital expenditure of your business in 2023 Q3'. Estimates are from the November 2023 to January 2024 DMP surveys.

Similar to households, tighter monetary policy affects business investment through its impact on the cost of new borrowing, as well as on existing cashflows and balance sheets. In the November 2023 to January 2024 waves of the DMP Survey, 10% of firms reported that they relied entirely on external finance for investment, 42% used a mix of external finance and internal cash flows, and 45% used only internal cash flows. Consistent with higher interest rates having fed through to the cost of finance, respondents that funded investment entirely through external financing reported a reduction in investment of 18% due to higher interest rates, whereas those relying only on internal financing reported impacts of less than 5% (orange bars in left panel of Chart D). Around three quarters of businesses reported no impact of higher interest rates at all (right panel of Chart D), which may be partly explained by those businesses making no investments over that period.

The structure of corporate balance sheets suggests that higher rates since 2021 will have largely fed through to businesses' cash flows. As Chart E shows, the largest single source of external financing for businesses is floating-rate bank loans. For these loans, increases in Bank Rate impact businesses' finances very quickly. Some large corporates, however, also raise significant external finance through bond markets. The average tenor of UK corporate bonds at origination is around 10 years (June 2024 Financial Stability Report), which means that the effects of reference rate rises can take time to be reflected in these businesses' financing decisions. Large corporates represent over half of total capital expenditure, meaning that the delayed effects of higher interest rates – as these businesses refinance – could result in a further reduction in investment, all else equal.



Sources: Bank of England, Bureau van Dijk, LSEG Workspace, ONS and Bank calculations.

(a) The bonds category includes commercial paper. 'Other MBF' refers to other forms of market-based finance. Financing with a tenor of less than a year includes all floating-rate financing products and fixed-rate products with a maturity of less than a year. The tenor of bank loans is based on tenor at origination; for bonds, it is based on the term outstanding. Data are based on the stock of external financing.

The indirect effects of higher interest rates through lower demand can also have a significant impact on business investment. Based on evidence from the DMP Survey, lower expected sales are estimated to account for around a third of the total impact of interest rates on business investment. Calculations based on responses to the November 2023 to January 2024 waves of the DMP Survey suggest that, for every 1% reduction in reported sales due to higher interest rates, businesses on average reduce capital expenditure by 0.5%. An alternative estimate based on identifying unexpected changes in firms' sales, rather than on self-reported impacts of interest rates, indicates a lower but still material effect on investment of 0.3% for every 1% change in sales (Alati et al (2024)).

Overall, however, survey evidence suggests that the peak impact of higher interest rates on business investment may have already come through.

Businesses responding to the DMP Survey reported that they did not expect the effects on business investment to build further between 2023 Q3 and 2024 Q3. As such, the full effects of higher interest rates on business investment may have come through earlier – and with a smaller peak impact – than depicted in Chart A and described in the **November 2023 Report**.

### Box D: Agents' update on business conditions

This box presents information from Agents' contacts considered by the MPC at its August meeting and summarises intelligence gathered in the six weeks to early July.

Agents described a more optimistic tone coming from contacts in the June Agents' summary of business conditions, a turnaround from the downbeat mood expressed in the May MPR. This optimism continues. Most sectors expect a return to growth over the rest of the year. Business services appears to have reached that point already. The exception is construction, where most contacts do not expect meaningful growth to emerge until 2025. On the expenditure side, real consumer demand appears to be at the point of turning positive and investment intentions continue to improve marginally. The labour market story is also largely unchanged from the June update. Employment intentions remain marginally positive and recruitment difficulties continue to ease though are still considered high. Intelligence continues to suggest that pay settlements for 2024 will average 5.7%. Settlements are highest for those with lower paid staff earning the National Living Wage (NLW) or close to it. Underlying inflationary pressures look set to moderate further in 2024 H2, although services inflation is likely to continue to ease more slowly than goods inflation, owing to the higher labour component in costs in the services sector.

Real consumer demand appears to be at the point of turning positive, although volatile weather is making it difficult to judge the strength of underlying demand across subsectors. Contacts remain optimistic of demand recovery in H2.

Supermarkets report increasing sales volumes supported by a continuing trend to eat at home. Elsewhere in retail, demand for goods remains subdued. This is most acute in the sectors most exposed to poor weather in early Q2, such as fashion and seasonal goods.

Demand for new cars is broadly flat and is constrained by weak private electric vehicle sales. Uncertainty around the adoption of, and transition to, new renewable technologies has weighed heavily on demand for home boilers and heating products.

Recent warmer weather and the UEFA European Football Championship helped drive a quarterly pick-up in volumes at pubs and restaurants in Q2 (even allowing for normal seasonal patterns), although growth is still modest compared to this time last year.

Accommodation providers are reporting modest growth in occupancy rates, with demand very price sensitive. Holidaymakers are prioritising their main summer holidays and economising on short breaks with any growth in tourism skewed to foreign holidays.

Investment intentions continue to improve marginally and are positive for the year ahead.

Many contacts report that business investment is settling back into normal patterns after a period of some volatility owing to the pandemic, the energy price shock, high costs and tighter financial conditions. For some who borrow to invest or are seeking to deleverage, intentions continue to be more subdued.

Intentions vary across sectors. Manufacturers are still investing in equipment to facilitate automation, improve efficiency and in some instances offset labour costs. Business service firms' spending on technology remains robust. Higher education institutions are cutting back in the face of fewer international students, flat nominal domestic fees, and cost inflation. Persistent high costs, combined with planning delays, has meant the volume of construction projects progressing remains low. In general, though, contacts mention cost inflation less often as a deterrent to investment than previous updates.

Annual growth in goods export volumes has moved from negative to flat and is expected to improve slowly through 2024 H2, while services export values growth remains robust.

Export volumes of manufactured goods are similar to the same period last year, with mixed performance across sectors. For example, defence and aerospace output grew strongly, while UK suppliers into automotive sector report lower sales reflecting declining orders for vehicles. Exports to the US continue to rise. European Union and Chinese demand remains weak.

The value of exports of engineering services remains strong, particularly in energy and defence projects. Inward tourism numbers show a slight pickup. Universities continue to report declining overseas student numbers from Asia owing to tightened Visa requirements.

The business services sector has seen a slight pickup in activity. Yet, revenue growth has remained steady, reflecting easing price inflation. Contacts expect that reductions in interest rates and general election uncertainty passing will boost volume growth further.

Audit, tax, and law firms continue to show strong revenue growth, with volumes picking up a little and slower fee growth. Advertising and marketing spend is rising as client firms look to rebuild brands after last year's subdued activity. Corporate events, hospitality and travel activity continue to strengthen modestly compared to this time last year. IT services revenues seem to have picked up on the back of digitisation, greater spending to counter cyber risk and greater use of artificial intelligence. Logistics and haulage volumes remain flat overall, and weakest in construction materials and consumer goods. Demand for recruitment agencies' services is down markedly on last year.

Manufacturing volumes are now slightly higher compared to a year ago. Although cautious about the timing of new orders, contacts expect further growth in coming quarters as demand recovers, initially for consumer goods and then for construction and housing.

Suppliers to aviation and defence have significant orders and strong forward order books. Output for specific projects in utilities, renewables, rail and cyber security projects is also up compared to a year ago, and in most cases contacts anticipate this continuing. Output of capital equipment for automation is growing a little. The slight pickup in food and drink output reported last round continued. Vehicle output growth is moderating with sales of electric vehicles below expectations. Output of construction machinery and materials remains subdued.

The annual rate of decline in construction output has eased and output is expected to stabilise by the end of 2024 helped by moderating input costs and an expected fall in borrowing rates.

Private and social housebuilding activity remains down on a year ago. Significant amounts of housing association funding have been diverted to repairs and maintenance, which along with office fitouts/refurbishments and residential improvements has grown compared to last year. This intelligence is consistent with the official construction data. Ongoing budget constraints are delaying new civil projects, although investment by utilities, ports and in core infrastructure provides a partial offset. New commercial development continues to be hindered by higher funding and build costs, and output is modestly down on last year.

Contacts continue to cite planning delays, a lack of utility connections and some labour/contractor shortages as constraints on output.

There has been a slight weakening in demand for house purchase, partly attributed to the general election.

Contacts reported that once the general election had happened, and given the potential prospect of lower Bank Rate, demand for houses could pick back up. Affordability constraints have slowed momentum in the new build markets. Demand for mid-market properties is impacted more than demand for higher-end properties, which remains strong. Expectations are for static house prices, or minimal increases.

Demand for rental properties continues to cool, although supply remains constrained. Rental price inflation has slowed, and some estate agents are reporting a rise in rental arrears.

Contacts report the supply of credit has begun to improve mildly, though from a low base.

Consistent with an expected return to growth, and potential cuts in Bank Rate, banks seem more willing to lend to the more profitable firms in sectors such as hospitality, retail, and construction, which have been struggling to access credit over recent times. Similarly, while access to credit is still a challenge for small and medium enterprises, there seems to be increased appetite from mainstream banks to lend to these firms. There are also signs of rising mid-market private equity activity and of more appetite for early-stage finance.

Demand for new borrowing remains soft as firms are focused on refinancing existing loans or deleveraging. Owing to the expectation of cuts in Bank Rate in 2024 H2, some borrowers are switching to floating-rate debt. Most demand for new borrowing continues to be for working

capital, but there are a few more examples of borrowing to finance investment and mid-market mergers and acquisitions than before.

Overall employment intentions remain slightly positive and point to low employment growth over the next 12 months.

There is a slightly higher net balance of contacts expecting to increase headcount over the coming year than the previous round. A focus on productivity improvements in response to skills shortages and higher labour costs means headcount is likely to grow at a lower rate than output. Some firms are still not replacing leavers, and a few say they may need to make redundancies to unwind continued labour hoarding if demand does not recover as expected.

Although generally still at levels that contacts consider to be high by historical standards, recruitment difficulties are continuing to ease with a small but increasing number describing the labour market as back to what is 'normal' for them. Job churn is down, in part reflecting higher-skilled staff's greater reluctance to move roles. Pockets of skill shortages remain in some industries and regions. Those who had been hoarding staff are now utilising them more fully.

Intelligence continues to suggest that pay settlements for 2024 average 5.7%, down from the 6% seen in 2023 but above the 5.4% suggested by the Agents' annual pay survey conducted at the start of 2024.

Settlements are highest for those with lower paid staff on, or close to, the NLW. Settlements appear to have peaked in April, as settlements over the rest of the year tend to be less subject to the NLW. Those contacts making lower pay settlements than last year cite easing wage pressures due to lower inflation, a looser labour market and affordability issues in maintaining pay differentials. Strategies to contain wage growth include skewing higher pay awards to the lower paid, cutting hours, increasing productivity and increasing non-pay benefits. Early tentative expectations of settlements for 2025 are lower than for 2024, though there are concerns around the potential level of the NLW and its ongoing impact on differentials.

Underlying inflationary pressures look set to moderate further in 2024 H2. Services inflation continues to ease more slowly than for goods, owing to a greater exposure to labour costs, which are moderating more gradually than non-labour input costs.

Input costs, such as raw materials and energy costs, are flat or falling compared to 12 months ago. So are imported finished goods and manufacturers' domestic prices, held down by weak global and domestic demand. While still a concern for some contacts, impacts from Red Sea disruption were limited.

Business services firms report that customers are more willing to push back on proposed price increases and change supplier if necessary.

Food inflation continues to ease more quickly than expected. Contacts now expect the level to remain below 2% in 2024 H2. There is some deflation in household goods owing to weak demand and favourable input costs. Wet weather has held back demand for seasonal goods,

including clothing. This has led some retailers to hold their summer sales earlier than usual and to discount more deeply than in 2023.

Consumer service firms report that customers have become more responsive to offers and discounts given stretched household budgets. Consequently, an increasing number of consumer service firms are finding it more difficult to pass through higher labour costs to prices and very few can pass them through fully. Generally, margins remain squeezed, with most firms expecting a very gradual rebuild in the face of intense competition for sales.

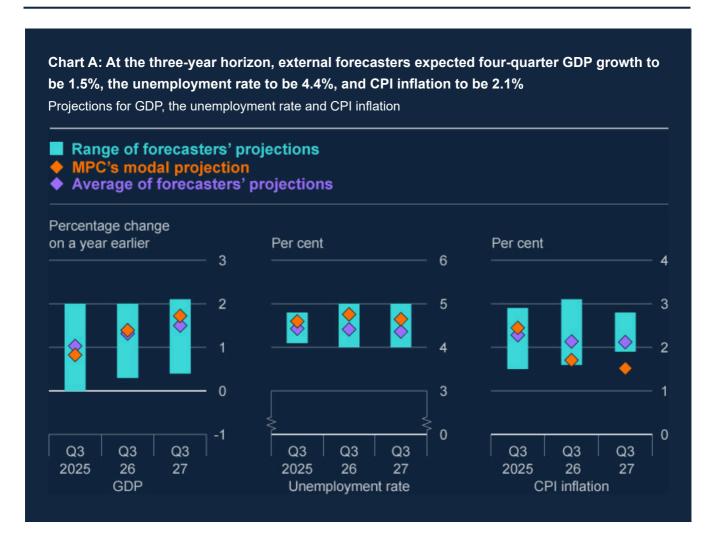
### **Annex 1: Other forecasters' expectations**

This annex reports the results of the Bank's most recent survey of external forecasters. Responses were submitted in the two weeks to 19 July and are summarised in Chart A. These are compared with the MPC's modal projections, which are conditioned on a range of assumptions (Section 1.1) that may differ from those made by external forecasters.

GDP over the four quarters to 2025 Q3 was expected to rise by 1.0%, with four-quarter growth increasing to 1.3% in 2026 Q3 and to 1.5% in 2027 Q3, on average (left panel of Chart A). The average external forecast is slightly above the MPC's modal projections for 2025 Q3 of 0.8%, and slightly below the projections for 2026 Q3 and 2027 Q3 of 1.4% and 1.7% respectively.

The unemployment rate was, on average, expected to be 4.4% in 2025 Q3, below the MPC's projection of 4.6% (middle panel of Chart A). External forecasters expected the unemployment rate to remain at 4.4% in 2026 Q3 and 2027 Q3. By comparison, the MPC's projection increases to 4.8% in 2026 Q3 and then falls slightly in 2027 Q3 to 4.6%.

CPI inflation was expected to be 2.3% in 2025 Q3, slightly below the MPC's projection of 2.4% (right panel of Chart A). The average forecasts for 2026 Q3 and 2027 Q3 were close to the 2% target at 2.1%. By contrast, the MPC's modal projections are 1.7% and 1.5% in 2026 Q3 and 2027 Q3 respectively.



# Annex 2: How has the economy evolved recently relative to the MPC's projections?

The MPC regularly assesses how the economy has performed relative to its forecasts. This box sets out how CPI inflation and GDP growth have evolved over the past year relative to the projections published in the <u>May 2023 Report</u>. Given continued concerns surrounding the LFS data, this box does not examine the evolution of unemployment relative to the MPC's projections.

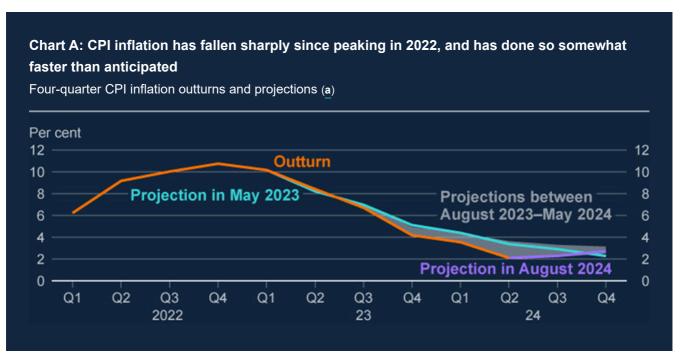
The UK economy has faced a sequence of historically large shocks over the past few years (**Bailey** (2023)). This has made forecasting particularly challenging. As noted by **Bernanke** (2024), these shocks have meant that central banks across the world have made larger forecast errors than in previous years. Nonetheless, analysis of forecast errors can be informative in several ways. It can improve understanding of how past economic shocks have propagated through the economy and to what extent they will continue to affect the economic outlook. Similarly, it can help in interpreting key trends in the economy such as changes in households' or businesses' behaviour.

More broadly, the nature of forecast errors can help in identifying whether forecasting models are well specified (Kanngiesser and Willems (2024)). The MPC's projections are conditioned on assumptions for how energy prices, asset prices (including Bank Rate) and fiscal policy will evolve, and so differences between the projections and subsequent outcomes will often reflect changes in these conditioning paths.

#### Evolution of the economy compared with projections made in May 2023

Inflation has fallen sharply over the past year, returning to the target sooner than expected in the May 2023 Report.

CPI inflation peaked in October 2022 at 11.1%. Since then it has slowed sharply, returning to the 2% target in May 2024. That slowdown was somewhat larger than expected: at the time of the May 2023 Report, CPI inflation was projected to fall from 10.2% in 2023 Q1 to 3.4% in 2024 Q2 (Chart A). Lower-than-expected inflation over the past year contrasts with the largely upside surprises over the previous year (see Annex 2 in the **August 2023 Report**).

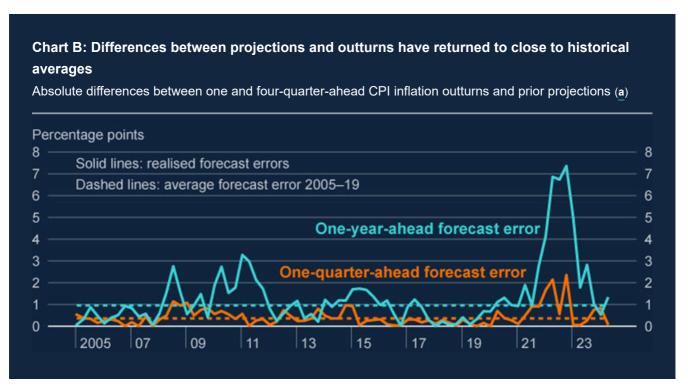


Sources: ONS and Bank calculations.

(a) The final outturn is for 2024 Q2 and the final projections shown are for 2024 Q4.

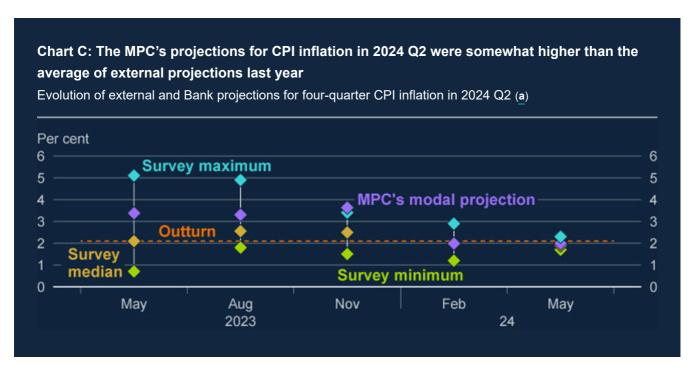
# The return of inflation to the 2% target has been accompanied by a normalisation in the scale of recent forecast errors.

The performance of the MPC's projections for inflation has improved since 2022, when inflation rose rapidly due to the economic repercussions of Russia's invasion of Ukraine. Since 2023 Q1, the one-quarter-ahead absolute forecast error has been broadly in line with the average error between 2005 and 2019 (Chart B). One-year-ahead forecast accuracy has taken longer to improve but that too has now returned to more typical levels. Much of the improvement in accuracy was to be expected given the fall in inflation over that period, since forecast errors will tend to decrease when data become less variable. When forecast errors are scaled by the size of the energy price shock, the improvement in performance of the MPC's projections since 2022 has been smaller than suggested in Chart B (Dhingra (2024)).



(a) Absolute forecast errors are calculated as the absolute difference between the outturn in each quarter and the projection made at the time of the Monetary Policy Report one quarter and one year earlier respectively. For example, the final data points are the absolute differences between the 2024 Q2 CPI inflation outturn and the corresponding projections from the May 2024 Report and August 2023 Report.

Reflecting continued economic uncertainty over the impact and evolution of energy and other shocks, the range of external projections for inflation one year ahead was particularly large in 2023 Q2 (Chart C). The range has narrowed over time as this uncertainty has fallen. The MPC's inflation projections for 2024 Q2 were somewhat higher than the average of external forecasters' projections in 2023, but have been close to the average since the start of this year. Differences between external projections and the MPC's projections may partly reflect differences in forecast conditioning assumptions, as well as slight differences in the timing of when projections were made.



Sources: LSEG Workspace and Bank calculations.

(a) The Bank projections are taken from successive Monetary Policy Reports for the 2024 Q2 inflation outturn. These have been matched to a survey of external forecasters for broadly contemporaneous projections – the surveys were conducted on 5 May 2023, 23 August 2023, 9 November 2023, 20 February 2024 and 16 May 2024.

# Falls in energy prices can explain at least two thirds of the difference between inflation outturns and the MPC's May 2023 projection.

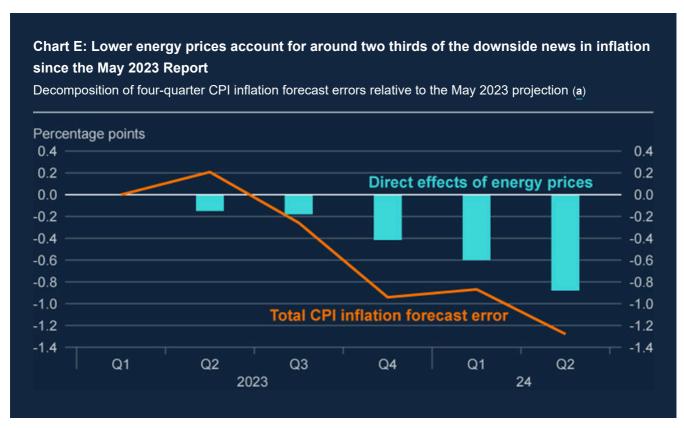
Wholesale gas prices – on which the MPC's CPI inflation projections are conditioned – have fallen materially in the UK over the past year (Chart D). During 2023, UK gas markets were pricing futures contracts for 2024 at around 140 pence per therm. Between the November 2023 Report and the February 2024 Report, the prices of futures contracts fell significantly, driven by a warmer than usual winter and healthier European gas storage levels. Futures contracts for the remainder of 2024 now average close to 85 pence per therm, 40% lower than the same period priced in May 2023. In contrast to gas prices, oil prices have risen, but by relatively small amounts: the average dollar oil futures price over the next three years is around 8% higher than at the time of the May 2023 Report.



Sources: Bloomberg Finance L.P. and Bank calculations.

(a) The spot price is a monthly average. The futures prices shown are 15-working day averages prior to successive Monetary Policy Reports. Grey lines are conditioning assumptions for Reports between August 2023 and May 2024.

The fall in energy prices accounts for most of the difference between the MPC's projection in May 2023 and the CPI inflation outturn. Falls in wholesale gas prices directly reduce inflation via household energy bills. Between October 2022 and June 2023, most households' energy bills were fixed by the Government's Energy Price Guarantee (EPG), which capped a typical household's energy bills at £2,500 a year. The fall in gas prices meant Ofgem's price cap, which is in part calculated from wholesale gas prices, fell below the EPG and so became the price that most households were paying for domestic energy. As a result, typical household's energy bills fell by around £500 on an annualised basis in July 2023 and have since fallen further, to under £1,600. Slightly offsetting the impact of lower gas prices, the small rise in oil prices since the May 2023 Report has pushed up CPI inflation via vehicle fuel costs. Taken together, Chart E shows that, had market expectations for energy prices in May 2023 been accurate, CPI inflation would have been 0.9 percentage points higher in 2024 Q2, equating to around two thirds of the total news in inflation.



Sources: ONS and Bank calculations.

(a) The direct effects of energy prices are based on the contribution of petrol, electricity, gas and other fuels to CPI inflation. The total inflation error and direct effects of energy prices are based on the difference between the headline CPI inflation data, the direct effects of energy prices and the respective projections consistent with the **May 2023 Report**.

These estimates only capture the direct effects of lower energy prices. Since energy is an input into the production of other goods and services, there will have been a further indirect effect of lower energy prices on inflation. Therefore, the total contribution of lower energy prices to the news in inflation will have been larger than suggested in Chart E.

The appreciation in sterling since May 2023 will also have weighed on inflation.

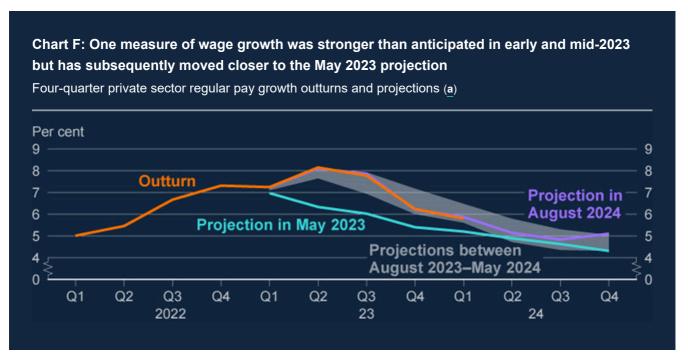
Sterling has appreciated by around 6% since the May 2023 Report. All else equal, that will have reduced inflation by weighing on the costs of imported goods and services.

Measures related to domestically generated inflation, including wage growth, have tended to be somewhat higher than projected at the time of the May 2023 Report.

Within the overall downside news in inflation, services inflation has on average been higher than projected – consistent with greater-than-expected inflation persistence – while goods price inflation has been lower. The MPC does not produce services and goods price inflation projections over its three-year forecast period. Since the May 2023 Report, however, four-quarter services price inflation has been 0.1 percentage points higher on average than Bank staff's one-quarter-ahead projections, and roughly in line with projections two quarters ahead. By contrast, the outturn for goods price inflation has been 0.2 percentage points below staff's one-quarter-ahead projections on average, and

0.8 percentage points below projections two quarters ahead. The pattern was smaller but similar for non-energy goods where the outturns have, on average, been 0.1 and 0.7 percentage points below the respective quarterly projections.

Pay growth – another key indicator of domestic price pressures – has also been somewhat stronger than the MPC's projections over the past year. Chart F shows the evolution of four-quarter private sector regular pay growth projections relative to outturns. Outturns in mid-2023 were substantially higher than the MPC's May 2023 projection, although some of that may reflect volatility in the data for private sector regular AWE growth (as indicated by the particularly large 'unexplained' aqua bar in Chart 2.22 for 2023 Q2). Wage growth has fallen back since mid-2023 and the outturn in 2024 Q1 was only modestly above the May 2023 projection. Nevertheless, the MPC's latest projection for wage growth remains above the projection at the time of the May 2023 Report.



Sources: ONS and Bank calculations.

(a) The final outturn is for 2024 Q1 and the final projections shown are for 2024 Q4.

The MPC monitors a broad range of indicators in assessing the medium-term outlook for inflation. It has identified services price inflation, labour market tightness and wage growth as key measures of inflation persistence (Section 3 of the <u>May 2024 Report</u>). The evolution of these measures has had important implications for the monetary policy outlook, even as headline CPI inflation has fallen.

#### GDP growth has been lower than projected in May 2023.

UK GDP fell during the second half of 2023. That contraction was not anticipated in the May 2023 Report or in survey indicators of economic activity, such as the PMIs, available at the time. Since the turn of the year, however, economic activity has strengthened such that the level of GDP is expected to be in line with the May 2023 projections in 2024 Q2 and higher thereafter (Chart G).

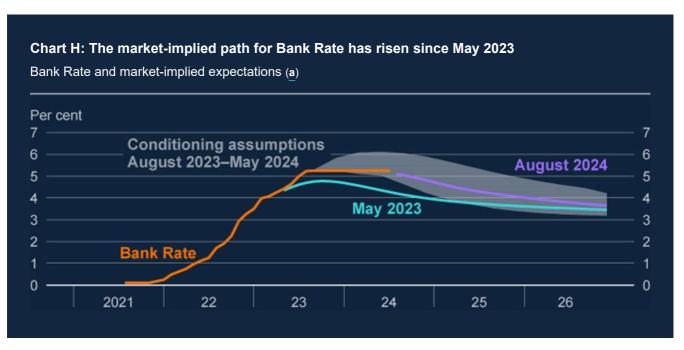


Sources: ONS and Bank calculations.

(a) The final outturn is for 2024 Q1 and the final projections shown are for 2024 Q4.

# Movements in the market-implied path for interest rates have been one driver of the news in GDP relative to the May 2023 Report.

The MPC's projections are conditioned on market expectations for future Bank Rate, as reflected in overnight index swap forward rates. At the time of the May 2023 Report, the market-implied path for Bank Rate peaked at around 4¾% by the end of 2023 and then gradually fell (Chart H). The MPC subsequently raised Bank Rate to 5¼% in August 2023, coinciding with a rise in market expectations for Bank Rate. Since then, Bank Rate expectations have fallen back from their peak, though they remain above those in May 2023.

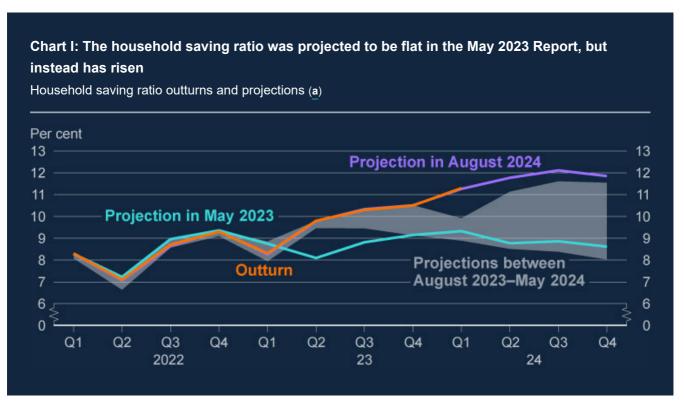


Sources: Bloomberg Finance L.P. and Bank calculations.

(a) The market-implied paths for future Bank Rate are 15-working day averages of OIS curves prior to publication of successive Monetary Policy Reports. The grey area shows the range of Bank Rate conditioning assumptions for Reports between August 2023 and May 2024. Final data points refer to December 2026.

The rise in the market-implied path for interest rates relative to the MPC's May 2023 conditioning assumptions can explain part of the relative weakness in GDP observed in the latter half of 2023. Higher interest rates led to increases in borrowing and saving rates, which in turn will have contributed to the higher-than-anticipated household saving ratio in 2023 (Chart I).

The market-implied path for future interest rates has fallen back from its peak at the time of the August 2023 Report (Chart H). Despite interest rates remaining higher than at the time of the May 2023 Report, that will have contributed to the pickup in growth since the start of the year.



Sources: ONS and Bank calculations.

(a) The final outturn is for 2024 Q1 and the final projections shown are for 2024 Q4.

# Sterling's appreciation and the fall in energy prices since the May 2023 projection will also have contributed to the news in GDP.

All else equal, sterling's 6% appreciation since the May 2023 Report will have weighed on GDP growth by making UK exports less competitive. The stronger pound is estimated to have reduced GDP by around 0.2% relative to the MPC's May 2023 projection in 2024 Q1 and can explain a little under half of the relatively small news in the level of GDP in that quarter.

Acting in the opposite direction, the fall in energy prices in late 2023 boosted household real incomes and reduced costs for businesses. In turn, that may have contributed to the unexpected strength in GDP growth in the first half of 2024. Energy price changes tend to take time to feed through fully to demand, in part because many businesses purchase energy through fixed-term contracts, which take time to reprice. The indirect effects of lower energy prices on the prices of other goods and services along the supply chain will also occur with a lag. The associated boost to household real incomes is expected to support consumption in coming quarters (Section 2.3).

### Glossary and other information

#### Glossary of selected data and instruments

AWE – average weekly earnings.

CPI – consumer prices index.

CPI inflation – inflation measured by the consumer prices index.

DMP - Decision Maker Panel.

ERI – exchange rate index.

GDP – gross domestic product.

HICP – harmonised index of consumer prices.

LFS – Labour Force Survey.

M4 – UK non-bank, non-building society private sector's holdings of sterling notes and coin, and their sterling deposits (including certificates of deposit, holdings of commercial paper and other short-term instruments and claims arising from repos) held at UK banks and building societies.

OIS - overnight index swap.

PCE – personal consumption expenditure.

PMI – purchasing managers' index.

PPI – producer price index.

REC – Recruitment and Employment Confederation.

#### **Abbreviations**

APF - Asset Purchase Facility.

BCC - British Chambers of Commerce.

CIPS – Chartered Institute of Purchasing and Supply.

ECB - European Central Bank.

EPG – Energy Price Guarantee.

GFC – global financial crisis.

GfK – Gesellschaft für Konsumforschung, Great Britain Ltd.

HMRC – His Majesty's Revenue and Customs.

ILO – International Labour Organization.

IMF – International Monetary Fund.

IOFCs – intermediate other financial corporations.

LTV – loan to value.

MBF – market-based finance.

MIDAS – mixed-data sampling.

MPC – Monetary Policy Committee.

MTIC – missing trader intra-community.

NLW – National Living Wage.

OBR - Office for Budget Responsibility.

OFC – other financial corporation.

Ofgem - Office of Gas and Electricity Markets.

ONS - Office for National Statistics.

PAYE – Pay As You Earn.

PPP – purchasing power parity.

QE – quantitative easing.

QT – quantitative tightening.

REC – Recruitment and Employment Confederation.

RTI – Real Time Information.

S&P – Standard & Poor's.

SME – small and medium-sized enterprise.

TLFS – transformed Labour Force Survey.

WEO - IMF World Economic Outlook.

### Symbols and conventions

Except where otherwise stated, the source of the data used in charts and tables is the Bank of England or the Office for National Statistics (ONS) and all data, apart from financial markets data and results from the Decision Maker Panel (DMP) Survey, are seasonally adjusted.

n.a. = not available.

Because of rounding, the sum of the separate items may sometimes differ from the total shown.

On the horizontal axes of graphs, larger ticks denote the first observation within the relevant period, eg data for the first quarter of the year.