BANK OF ENGLAND

Monetary Policy Committee

Monetary Policy Report

February 2022

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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 remit 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

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PowerPoint™ versions of the *Monetary Policy Report* charts and Excel spreadsheets of the data underlying most of them are available at www.bankofengland.co.uk/monetary-policy-report/2022/february-2022

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Monetary Policy Summary

The Bank of England's Monetary Policy Committee (MPC) sets monetary policy to meet the 2% inflation target, and in a way that helps to sustain growth and employment. At its meeting ending on 2 February 2022, the MPC voted by a majority of 5–4 to increase Bank Rate by 0.25 percentage points, to 0.5%. Those members in the minority preferred to increase Bank Rate by 0.5 percentage points, to 0.75%. The Committee voted unanimously for the Bank of England to begin to reduce the stock of UK government bond purchases, financed by the issuance of central bank reserves, by ceasing to reinvest maturing assets. The Committee also voted unanimously for the Bank of England to begin to reduce the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, by ceasing to reinvest maturing assets and by a programme of corporate bond sales to be completed no earlier than towards the end of 2023 that should unwind fully the stock of corporate bond purchases.

The Committee's updated central projections for activity and inflation are set out in the accompanying February *Monetary Policy Report*. The projections are conditioned on a market-implied path for Bank Rate that rises to around 1½% by the middle of 2023. Wholesale energy prices are assumed to follow their respective futures curves for the first six months of the projections and remain constant beyond that, in contrast to futures curves, which are downward sloping over coming years. There are material risks around this assumption.

Global and UK activity returned to their pre-Covid-19 (Covid) levels towards the end of last year. The emergence of the Omicron variant is expected to have depressed activity somewhat in December and January. But its economic impact is likely to be limited and of short duration, and UK GDP is expected to recover in February and March such that output returns to its pre-pandemic level once again by the end of the first quarter. The Labour Force Survey unemployment rate fell to 4.1% in the three months to November, and is expected to fall further in the near term, to 3.8% in 2022 Q1.

Beyond the near term, UK GDP growth is expected to slow to subdued rates. The main reason for that is the adverse impact of higher global energy and tradable goods prices on UK real aggregate income and spending. As a result, the unemployment rate is expected to rise to 5% and excess supply builds to around 1% by the end of the forecast period.

Underlying earnings growth is estimated to have remained above pre-pandemic rates, and is expected to strengthen over the coming year, to around 4¾%. This is consistent with the results of the Bank's Agents' annual pay survey, with the tight labour market, and with some temporary upward pressure on wage settlements from higher price inflation.

Twelve-month CPI inflation rose from 5.1% in November to 5.4% in December, almost 1 percentage point higher than expected at the time of the November *Report*. Inflation is expected to increase further in coming months, to close to 6% in February and March, before peaking at around 7¼% in April. This projected peak is around 2 percentage points higher than expected in the November *Report*. The projected overshoot of inflation relative to the 2% target mainly reflects global energy and tradable goods prices. The further rise in energy futures prices meant that Ofgem's utility price caps were expected to be substantially higher at the reset in April 2022. Core goods CPI inflation is also expected to rise further, due to the impact of global bottlenecks on tradable goods prices.

In the February *Report* central projection, upward pressures on CPI inflation are expected to dissipate over time, as global energy prices are assumed to remain constant after six months, and as global bottlenecks ease and tradable goods prices fall back a little. Underlying wage growth is also projected to ease from 2023, as the labour market loosens gradually and inflation declines. Conditioned on the rising market-implied path for Bank Rate and the MPC's current forecasting convention for future energy prices, CPI inflation is projected to fall back to a little above the 2% target in two years' time and to below the target by a greater margin in three years.

In an alternative scenario that is conditioned on energy prices following forward curves throughout the forecast period and as set out in the February *Report*, excess supply is around ½ percentage point lower in the medium term than in the MPC's central projection, and CPI inflation is around ¾ percentage point below the 2% target in two and three years' time.

The MPC's remit is clear that the inflation target applies at all times, reflecting the primacy of price stability in the UK monetary policy framework. The framework also recognises that there will be occasions when inflation will depart from the target as a result of shocks and disturbances. In the recent unprecedented circumstances, the economy has been subject to very large and repeated shocks. In particular, should recent movements prove persistent, the sharp rises in prices of global energy and tradable goods of which the United Kingdom is a net importer will necessarily weigh on UK real aggregate income and spending. This is something monetary policy is unable to prevent. The role of monetary policy is to ensure that, as such a real economic adjustment occurs, it does so consistent with achieving the 2% inflation target sustainably in the medium term, while minimising undesirable volatility in output.

Given the current tightness of the labour market and continuing signs of greater persistence in domestic cost and price pressures, the Committee judges that an increase in Bank Rate of 0.25 percentage points is warranted at this meeting.

Consistent with the MPC's guidance set out in the August 2021 *Report*, the Committee agrees at this meeting that the Bank of England should cease to reinvest any future maturities falling due from its stock of UK government bond purchases. This reflects the MPC's intention to reduce its holdings of government bonds in a gradual and predictable manner.

In addition, the Committee agrees that the Bank of England should cease to reinvest any maturities falling due from its stock of sterling non-financial investment-grade corporate bond purchases, and that it should initiate a programme of corporate bond sales to be completed no earlier than towards the end of 2023 that should unwind fully the stock of corporate bond purchases.

The decision to initiate the programme of corporate bond sales reflects the specific characteristics of the corporate bond market and the MPC's involvement in it, and should not be taken as a signal regarding the commencement, scale or duration of any potential future UK government bond sales programme.

The Committee reaffirms that it will consider beginning the process of actively selling UK government bonds only once Bank Rate has risen to at least 1%, and depending on economic circumstances at the time. The Committee also reaffirms its preference in most circumstances to use Bank Rate as its active policy tool when adjusting the stance of monetary policy.

The extent of any further tightening in monetary policy will depend on the medium-term prospects for inflation. The MPC judges that, if the economy develops broadly in line with the February *Report* central projections, some further modest tightening in monetary policy is likely to be appropriate in the coming months. The Committee continues to judge that there are two-sided risks around the medium-term inflation outlook, primarily from wage developments on the upside and from energy and global tradable goods prices on the downside. The Committee will update its assessment on the balance of the risks to medium-term inflation in light of the relevant data as they emerge.

1: The economic outlook

Consumer price inflation has risen markedly in many countries including the UK. This mainly reflects the sharp increases in global energy and tradable goods prices, the latter due to global bottlenecks. UK CPI inflation rose to 5.4% in December, and in the Monetary Policy Committee's (MPC's) central projection peaks at 7¼% in April 2022. Three quarters of that further increase reflects higher contributions from energy and goods prices. UK domestic cost pressures are also rising and firms' expectations for the increase in their selling prices are robust. Underlying wage growth has picked up and is expected to strengthen over 2022, given the recent tightening in the labour market and some temporary upward pressure from higher price inflation.

Global and UK activity returned to pre-pandemic levels towards the end of 2021. The economic impact of Omicron is expected to be limited and of short duration. In line with the MPC's conventions, the forecast is conditioned on the path of Bank Rate implied by financial markets, which rises to nearly 1½% by mid-2023, and energy prices remaining constant beyond six months. On this basis, UK GDP growth slows to subdued rates. The main reason for that is the adverse impact of higher global energy and tradable goods prices on UK real aggregate income and spending. As a result, unemployment rises to 5% and excess supply builds to around 1% by the end of the forecast period.

After the peak in April, the upward pressure on CPI inflation is expected to dissipate over time, as global energy prices are assumed to remain constant beyond six months, global bottlenecks ease, and domestic cost pressures lessen somewhat as demand growth weakens and unemployment rises. CPI inflation is projected to fall to a little above the 2% target in two years' time and below the target by a greater margin in three years.

The degree of uncertainty around the outlook, including for energy prices, remains unusually high. The futures curves for energy prices are downward sloping, in contrast to the MPC's conditioning assumptions. In an alternative scenario where energy prices follow their futures curves throughout the forecast period, CPI inflation would fall back towards the target more rapidly and be around ¾ percentage points below the target in two and three years' time.

Abstracting from the uncertainties around the path of energy prices, the risks to the inflation projection are judged to be skewed slightly to the upside, given risks to wage growth.

In projections conditioned on the alternative assumption of constant interest rates at 0.5%, activity is projected to be somewhat stronger than in the MPC's forecasts conditioned on market rates. As a result, unemployment remains close to its current rate over the forecast period, instead of rising by around 1 percentage point. CPI inflation is forecast to be higher, with inflation projected to be 2.6% and 2.1% in two years and three years' time respectively.

1.1: Recent developments

Global GDP rose further in Q4, although Covid and global bottlenecks weighed on growth.
UK-weighted world GDP returned to its pre-Covid peak in 2021 Q3. Bank staff estimate that it grew by 0.8% in 2021 Q4, broadly as expected in the November 2021 *Report* but lower than in Q3. Activity in many countries was affected by an increase in Covid cases (Section 2.1). Supply chain disruption in global goods markets also appears to have continued to constrain output in some sectors (Box B).

UK GDP also grew in the three months to November, although many businesses were affected by supply constraints.
UK GDP grew by 1.1% in the three months to November and the level of activity was around 1% higher than projected at the time of the last *Report*. Monthly GDP regained its pre-Covid level, which partly reflected government sector output being around 6% above its pre-pandemic peak. Private sector activity remained slightly below its pre-Covid level, with many businesses reporting that shortages of materials, components or labour were limiting their output (Section 2.2).

UK GDP is expected to have fallen in December and January reflecting the effect of Omicron on activity. The impact is expected to be limited and of short duration, such that the level of GDP in Q1 is similar to Q4.
UK GDP is expected to have fallen in December and January as a result of the emergence of Omicron. Measures to control the spread of the virus and voluntary social distancing are thought to have lowered consumer spending, especially in retail and recreational venues. This is consistent with the evidence from high-frequency spending indicators. There has also been some impact on labour supply, with some staff unable to work because of sickness or self-isolation.

The economic impact of Omicron is expected to be limited and of short duration. Covid cases in the UK have fallen from their peak and many measures to control its spread have subsequently been ended. Bank staff expect GDP to recover in February and March, such that the average level of GDP over Q1 is likely to be similar to Q4.

Unemployment has continued to fall, despite the closure of the furlough scheme. The labour market is expected to tighten further in the very near term.
UK unemployment has continued to fall since the last *Report*, despite the closure of the Government's furlough scheme in September (Section 2.3). Unemployment fell to 4.1% in the three months to November, 0.4 percentage points lower than expected in the November *Report*. Demand for workers remains robust, with vacancies at a record high in the three months to December. Bank staff expect unemployment to fall a little further in the very near term.

The tightening labour market has put upward pressure on salaries for new staff and pay settlements for existing staff. Respondents to the Bank Agents' pay survey expect wage settlements to increase significantly in 2022 (Section 3).

CPI inflation rose to 5.4% in December, up from 0.6% a year earlier. The rise over the past year largely reflects increases in global energy and tradable goods prices.
CPI inflation was 5.4% in December, up from 3.1% in September and 0.6% a year earlier. Almost half of the rise in inflation over 2021 reflected the direct impact of higher energy prices (Section 2.4). Inflation rates for goods have also increased, due to the bottlenecks in supply. Services price inflation has also risen, though to a much lesser extent than goods price inflation. Its increase partly reflects changes to VAT for the hospitality sector, although services price inflation has risen in other sectors too.

CPI inflation is expected to rise further in the coming months.
CPI inflation is expected to increase to and peak at around 7¼% in April, much higher than expected at the time of the November *Report*. Three quarters of the rise between December and April reflects higher contributions from energy and goods prices. Based on Ofgem's published method for calculating energy price caps, recent developments mean that household gas and electricity prices will rise materially in April and by more than expected in the November *Report*.

1.2: The MPC's projections

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

	Projections			
	2022 Q1	2023 Q1	2024 Q1	2025 Q1
GDP[(c)]	7.8 (9.5)	1.8 (2.1)	1.1 (1.0)	0.9
CPI inflation[(d)]	5.7 (4.6)	5.2 (3.3)	2.1 (2.1)	1.6
LFS unemployment rate	3.8 (4.2)	4.2 (4.0)	4.6 (4.2)	5.0
Excess supply/Excess demand[(e)]	+½ (+½)	-¼ (+¼)	-½ (0)	-1
Bank Rate[(f)]	0.4 (0.5)	1.3 (1.0)	1.4 (1.0)	1.3

(a) Modal projections for GDP, CPI inflation, LFS unemployment and excess supply/excess demand. Figures in parentheses show the corresponding projections in the November 2021 *Monetary Policy Report*.
(b) Unless otherwise stated, the projections shown in this section are conditioned on: Bank Rate following a path implied by market yields; the Term Funding Scheme and Term Funding Scheme with additional incentives for Small and Medium-sized Enterprises; the Recommendations of the Financial Policy Committee and the current regulatory plans of the Prudential Regulation Authority; the Office for Budget Responsibility's assessment of the Government's tax and spending plans as set out in *Autumn Budget and Spending Review 2021*; commodity prices following market paths for six months, then held flat; the sterling exchange rate remaining broadly flat; and the prevailing prices of a broad range of other assets, which embody market expectations of the future stocks of purchased gilts and corporate bonds. The main assumptions are set out in the 'Download the chart slides and data' link at *Monetary Policy Report* – February 2022.
(c) Four-quarter growth in real GDP. The growth rates reported in the table exclude the backcast for GDP. Including the backcast 2022 Q1 growth is 7.8%, 2023 Q1 growth is 1.8%, 2024 Q1 growth is 1.1% and 2025 Q1 growth is 0.9%.
(d) Four-quarter inflation rate.
(e) Per cent of potential GDP. A negative figure implies output is below potential and a positive figure that it is above.
(f) Per cent. The path for Bank Rate implied by forward market interest rates. The curves are based on overnight index swap rates.

The conditioning assumptions underlying the MPC's projections

The MPC's projections assume that the economic impact of Omicron is limited and of short duration and that significant measures to control the pandemic are not re-imposed following this wave.

The economic outlook continues to be affected by the evolution of the pandemic. The economic impact of the Omicron variant on UK and global activity is expected to be limited and of short duration and many of the measures to restrict its spread have been lifted across the UK over the past few weeks (Section 2). The MPC's projections are conditioned on the assumptions that no material measures to control the pandemic that might lower economic activity are reimposed and there is no further widespread voluntary social distancing following this wave.

Fiscal policy continues to support demand especially in the near term, with that support waning over time.

The fiscal stance is assumed to evolve in line with announced policies. In its *Autumn Budget and Spending Review* in October 2021, the Government announced a higher path for government consumption, particularly over the next couple of years. When combined with the estimated effects of the measures announced since the beginning of the pandemic, fiscal policy in aggregate is projected to continue to support UK demand, especially in the near term. The policy stance gradually tightens over time in line with announced government policy, so the support from fiscal policy wanes.

The market path for UK interest rates suggests that Bank Rate is expected to reach 1.4% in mid-2023, higher than in the November Report.

In line with the MPC's convention, the forecast is conditioned on the paths for policy rates implied by financial markets. Over the past three months, market rates have increased in a number of advanced economies, particularly the US and UK (**Chart 2.5**). In the UK, the market path as shown by the 15-day average to 26 January suggests that Bank Rate was expected to reach nearly 1.5% in mid-2023, around 25 basis points higher, on average, than in November (**Table 1.A**).

Wholesale energy and futures prices have risen sharply over the past year.

Also in line with the MPC's convention, the forecast is conditioned on an assumption that energy prices remain constant beyond six months. Energy prices have been volatile recently, and remain much higher than a year earlier. Based on the 15-day average to 26 January, sterling oil prices were almost 90% above their 2020 Q4 level, and UK wholesale gas prices almost 400% higher. Higher gas prices have also led to a sharp pickup in wholesale electricity prices, which rose by over 300% over this period. Energy futures curves are also higher over the next year than in November. The rises in energy prices and futures curves reflect strong demand and rising geopolitical tensions.

In its projections, the MPC's conditioning assumption is that oil, gas and electricity prices follow their respective futures curves for the first six months of the forecast period, and beyond that remain constant (as set out in Box 5 of the August 2019 *Report*). These assumptions for wholesale energy prices feed into Bank staff forecasts for retail gas and electricity prices, based on the current method used by the UK's energy regulator, Ofgem, to set tariff caps. Those caps are updated twice a year in April and October. Based on Ofgem's published method for calculating the price caps, the latest developments suggest that household utility prices will rise by close to 50% in April.

The global outlook

The economic impact of Omicron is expected to be limited and of short duration.

UK-weighted world GDP is estimated to have surpassed its pre-pandemic level in the second half of last year as the global economy recovered from the effects of Covid. Evidence from countries furthest ahead in the Omicron wave suggests that case rates are likely to fall sooner and faster than in previous waves (Section 2.1). The economic impact of Omicron is therefore expected to be limited and to have largely dissipated in Q2, though the effects will vary across countries, in part reflecting progress on vaccinations.

But global activity is constrained by higher energy prices and supply chain constraints for tradable goods.

In the MPC's projections, global activity continues to grow thereafter, but is restrained by higher global energy prices over the forecast period. Activity is also held back by the impact of ongoing supply chain constraints for tradable goods (Box B). These constraints are expected to ease gradually over the next year, so their downward impact on activity fades over this period, as does the upward pressure on global tradable goods prices a little later.

World GDP growth is projected to return to around pre-Covid rates towards the end of the forecast period.

Annual UK-weighted world GDP growth is projected to slow from around 5% in 2021 to 3¼% in 2022. It slows further to around pre-Covid rates towards the end of the forecast period, with growth in 2024 around 2¼% (**Table 1.C**).

Global inflationary pressures are forecast to build further in the near term, before falling back sharply.

Global inflationary pressures have continued to build significantly, largely driven by the sharp increases in energy prices and the upward impact of the imbalance between the supply of and demand for tradable goods on their prices. On a UK-weighted basis, four-quarter world export price inflation, including energy, is expected to have risen to around 11% in 2021 Q4. These global pressures are the primary reason why consumer price inflation is elevated in many countries. World export prices are projected to rise a little further in the near term, given further upward pressure from global bottlenecks. Demand, particularly in the US, is then expected to shift gradually away from durable goods to services. Together with an expected increase in the supply of these goods, global bottlenecks ease and tradable goods prices fall a little over the forecast period, though the latter remain well above their pre-pandemic levels.

Together with the assumption that global energy prices remain constant beyond six months, four-quarter world export price inflation, including energy, is expected to fall sharply and turn negative early next year. This takes time to feed through to global consumer price inflation, which falls back more slowly.

UK growth

UK GDP growth slows over the forecast period, mainly driven by lower growth in demand.

Four-quarter UK GDP growth is estimated to have been 6.4% in 2021 Q4, with monthly output regaining its pre-pandemic level in November, as the impact of Covid continued to dissipate and spending was supported by monetary and fiscal policy (**Chart 1.1)**. The pace of expansion eases over the projection, driven mainly by slower growth in demand. Four-quarter GDP growth slows to around 1% in the second and third years of the forecast period (**Chart 1.2**).

Chart 1.1: GDP projection based on market interest rate expectations, other policy measures as announced

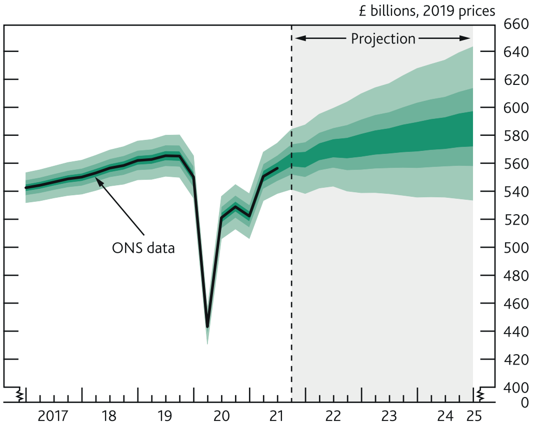
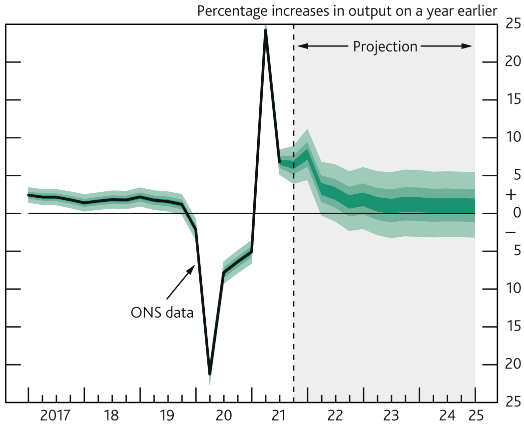


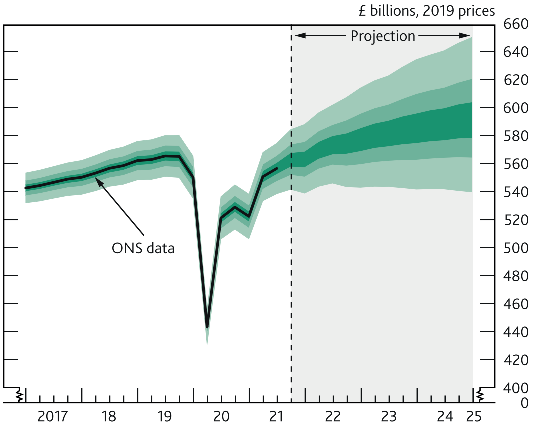
Chart 1.2: GDP growth projection based on market interest rate expectations, other policy measures as announced



The fan charts depict the probability of various outcomes for GDP and GDP growth. They have been conditioned on the assumptions in **Table 1.A** footnote (b). To the left of the vertical dashed line, the distribution reflects uncertainty around revisions to the data over the past. To aid comparability with the official data, it does not include the backcast for expected revisions, which is available from the 'Download the chart slides and data' link at *Monetary Policy Report – February 2022*. To the right of the vertical line, the distribution reflects uncertainty over the evolution of GDP and 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 (in **Chart 1.1**) or GDP growth (in **Chart 1.2**) 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 green areas on 30 occasions. In any particular quarter of the forecast period, GDP or 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 or GDP growth can fall anywhere outside the green area of the fan chart. Over the forecast period, this has been depicted by the light 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.

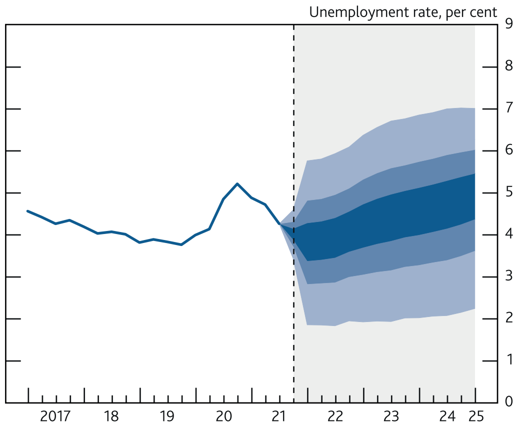
In projections conditioned on the alternative assumption of constant interest rates at 0.5%,(1) GDP growth is somewhat stronger than in the MPC's forecasts conditioned on market rates (**Chart 1.3**).

Chart 1.3: GDP projection based on constant interest rates at 0.5%, other policy measures as announced



This fan chart depicts the probability of various outcomes for GDP, conditioned on the assumptions in **Table 1.A** footnote (b), apart from for Bank Rate, with this chart conditioned on constant interest rates at 0.5%. The fan chart has the same interpretation as **Chart 1.1**.

Chart 1.4: Unemployment projection based on market interest rate expectations, other policy measures as announced



The fan chart depicts the probability of various outcomes for LFS unemployment. It has been conditioned on the assumptions in **Table 1.A** footnote (b). The coloured bands have the same interpretation as in **Charts 1.1** and **1.2**, and portray 90% of the probability distribution. The calibration of this fan chart takes account of the likely path dependency of the economy, where, for example, it is judged that shocks to unemployment in one quarter will continue to have some effect on unemployment in successive quarters. The fan begins in 2021 Q4, a quarter earlier than for CPI inflation. That is because Q4 is a staff projection for the unemployment rate, based in part on data for October and November. The unemployment rate was 4.1% in the three months to November, and is projected to be 4.0% in Q4 as a whole. 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.

Demand growth slows over the projection, driven mainly by the sharp increases in global energy and tradable goods prices.

The prices of global energy and tradable goods have risen sharply. The UK is a net importer of energy and tradable goods, so overall, under the assumption that global energy prices remain constant beyond six months, this will lower UK real aggregate income and spending.

(1) The assumption is that Bank Rate remains at 0.5% throughout the three years of the forecast period, before moving towards the market path over the subsequent three years.

Over the forecast period, consumption growth slows, as households cut back on spending in the face of the material adverse effects on their real incomes from the sharp rises in global energy and tradable goods prices, and the planned increase in national insurance contributions in April 2022. Four-quarter household real labour income growth is expected to have slowed sharply at the end of 2021 and is projected to be negative in 2022 and 2023 (**Table 1.C**). Although consumption growth therefore slows materially over the first two years of the forecast period, it does so by less than income growth. That reflects the assumption, similar to previous projections, that households spend some of the significant additional savings they have accumulated, in aggregate, during the pandemic. As a result, the household saving rate falls from 8.3% in 2021 Q3 to below 4% at the turn of this year (**Table 1.C**).

Business investment picks up over the next year and then falls back in the second half of the forecast period, as some spending is brought forward, given the support from the Government's capital allowance super-deduction in the near term. Contacts of the Bank's Agents have reported that their capital spending is currently below their relatively strong investment intentions as firms postpone projects given the sharp rises in global energy and goods prices and as global bottlenecks continue to limit supplies of their inputs (Box D).

Demand growth also slows over the projection as the support from fiscal and monetary policy wanes gradually as both evolve in line with their conditioning assumptions (Section 1.1).

Supply growth also slows, settling at around 1½% in the second half of the forecast.
Temporary supply disruptions for certain tradable goods weigh on UK output over the next year, contributing to a slowing in supply growth in 2022. As set out in the November *Report*, thereafter supply growth is projected to settle at around 1½% – similar to the rates seen before Covid. Within that, labour supply growth is modest, while productivity growth settles at around 1%.

Excess supply/demand

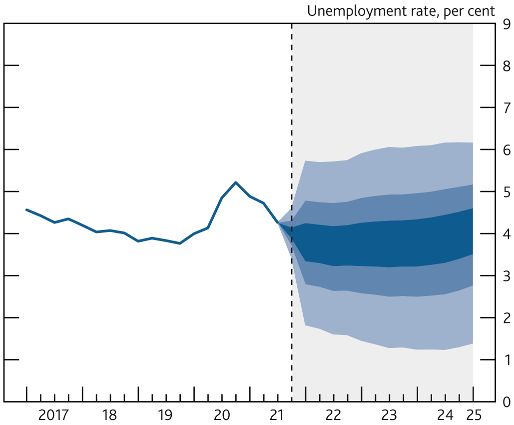
There is a lot of uncertainty about the degree of slack in the economy, although it is judged likely that there is a small margin of excess demand at present.
As the economy has recovered from the effects of Covid, both demand and supply have picked up rapidly, and it is difficult to judge the balance between them. Moreover, there have been material differences in the paths of the recovery between sectors of the economy, which can make the aggregate picture hard to assess. Those different paths have resulted in supply bottlenecks arising in some industries, while activity in other sectors has been less constrained.

Most indicators of the balance of demand and supply in the economy suggest that there is currently a small margin of excess demand across the economy as a whole. The labour market has tightened rapidly, with the unemployment rate having fallen below the MPC's assessment of the medium-term equilibrium rate of unemployment, despite the end of the furlough scheme in September 2021. Firms also continue to report significant recruitment difficulties and elevated levels of vacancies, and some surveys suggest above-average levels of capacity utilisation. On balance, the MPC judges that there is a small margin of excess demand in the economy at present, with some differences across sectors.

Excess supply is projected to emerge later this year and build over the forecast period.
The MPC expects demand to grow more slowly than potential supply over the projection, particularly in the near term. As a result, unemployment is expected to start to rise in 2022 Q2 (**Chart 1.4**). Conditioned on the assumptions above, including the market path for interest rates, a margin of excess supply emerges at the end of 2022 and builds over the forecast period to around 1% (**Table 1.A**). In part, that is accounted for by some slack in the labour market, with unemployment rising to around 5% by the end of the projection.

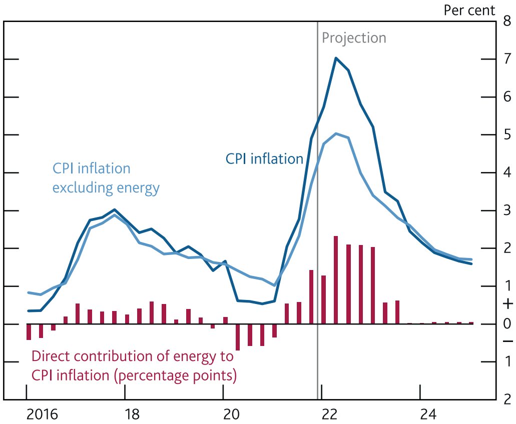
In projections conditioned on the alternative assumption of constant interest rates at 0.5%, unemployment remains close to its current rate over the forecast period, instead of rising by around 1 precentage point, as in the MPC's forecast conditional on market rates (**Chart 1.5**).

Chart 1.5: Unemployment projection based on constant interest rates at 0.5%, other policy measures as announced



The fan chart depicts the probability of various outcomes for LFS unemployment. It has been conditioned on the assumptions in **Table 1.A** footnote (b), apart from for Bank Rate, with this chart conditioned on constant interest rates at 0.5%. The coloured bands have the same interpretation as in **Charts 1.1** and **1.2**, and portray 90% of the probability distribution. The calibration of this fan chart takes account of the likely path dependency of the economy, where, for example, it is judged that shocks to unemployment in one quarter will continue to have some effect on unemployment in successive quarters. The fan begins in 2021 Q4, a quarter earlier than for CPI inflation. That is because Q4 is a staff projection for the unemployment rate, based in part on data for October and November. The unemployment rate was 4.1% in the three months to November, and is projected to be 4.0% in Q4 as a whole. 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.

Chart 1.6: CPI inflation and CPI inflation excluding energy[(a)]



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

CPI inflation

CPI inflation is projected to peak at 7¼% in April 2022, with the further increase driven largely by energy and goods prices and, to a lesser extent, domestic cost pressures.

CPI inflation is projected to rise further in the near term from 5.4% in December to a peak of 7¼% in April 2022. That, and the overshoot of inflation relative to the 2% inflation target, mainly reflects the sharp increases in global prices, with around three quarters of the rise in inflation between December and April due to higher contributions from energy and goods prices. The further rise in energy futures prices since the utility tariff caps were last set by Ofgem in October 2021 means that the caps are likely to be substantially higher when they are reset in April 2022. Food price inflation is also expected to increase in coming months, given higher input costs.

Informed by evidence from the Agents' pay survey that wage settlements are expected to be much higher in 2022 than in 2021 (Section 3), underlying private sector wage growth is projected to rise somewhat further to around 4¾% over the next year, given the recent tightening in the labour market. Consistent with the Agents' survey, higher inflation is also assumed to put some upward pressure on wage growth over this period but the effects do not persist thereafter. These stronger underlying domestic cost pressures put further upward pressure on CPI inflation this year. That is consistent with evidence from the Agents' survey that some firms have started to pass through part of the rise in their labour costs to their prices and that they and other firms will try to do so over the next year to rebuild their margins. Whole-economy average weekly earnings (AWE) growth is expected to be somewhat lower than underlying wage growth over the next year (**Table 1.C**), given an expected drag from compositional effects (Section 3).

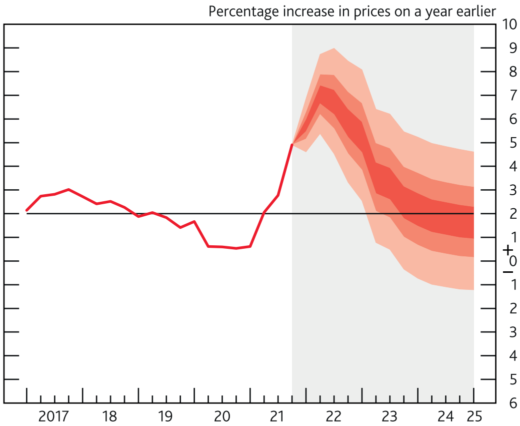
CPI inflation is projected to fall back to a little above the 2% target in two years' time, and below the target by a greater margin in three years.

The direct contribution from energy prices to CPI inflation is expected to peak at around 2¼ percentage points in 2022 Q2 and to fall to zero by the end of 2023 (**Chart 1.6**). Goods price inflation is also expected to fall back reflecting an easing of global imbalances between demand and supply for tradable goods (Box B).

Four-quarter whole-economy AWE growth falls back from 3¾% at the end of this year to 2¼% at the end of the forecast period, as unemployment rises and CPI inflation falls back.

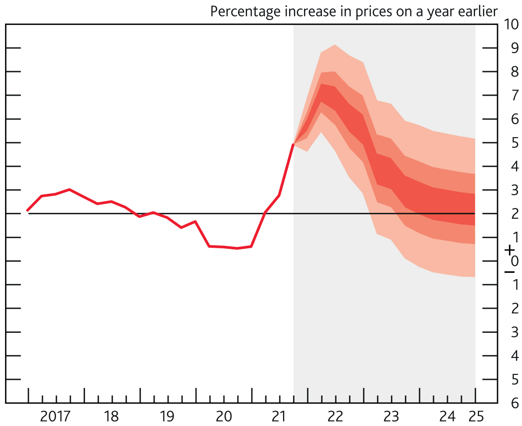
In line with the MPC's conventions, the forecast is conditioned on the path of Bank Rate implied by financial markets, which rises to nearly 1½% by mid-2023, and energy prices remaining constant beyond six months. On this basis, after the peak in April, CPI inflation is projected to fall back as the contribution from energy prices fades, global bottlenecks ease, and domestic cost pressures lessen somewhat as demand weakens and unemployment rises. CPI inflation is a little above the 2% target in two years' time, and is below the target by a greater margin in three years (**Chart 1.7**).

Chart 1.7: CPI inflation projection based on market interest rate expectations, other policy measures as announced



The fan chart depicts the probability of various outcomes for CPI inflation in the future. It has been conditioned on the assumptions in **Table 1.A** footnote (b). 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 red 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 red area of the fan chart. Over the forecast period, this has been depicted by the light 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.

Chart 1.8: CPI inflation projection based on constant interest rates at 0.5%, other policy measures as announced



This fan chart depicts the probability of various outcomes for CPI inflation in the future, conditioned on the assumptions in **Table 1.A** footnote (b), apart from for Bank Rate, with this chart conditioned on constant interest rates at 0.5%. The fan chart has the same interpretation as **Chart 1.7**.

In projections conditioned on the alternative assumption of constant interest rates at 0.5%, CPI inflation is projected to be 2.6% and 2.1% in two years and three years' time respectively, higher than in the Committee's forecast conditioned on market rates (**Chart 1.8**).

Comparison with the November *Report* projections

UK GDP is projected to be lower than in November throughout the forecast period.

The level of UK GDP is expected to be around ¾% lower than in November, on average, over the forecast period. That mainly reflects the adverse impact on UK real aggregate income and spending of the further increases in global energy and tradable goods prices. To a lesser extent, the lower expected path of GDP also reflects the impact of the higher market path for interest rates.

Unemployment has fallen and the labour market has tightened by more than expected in November. But unemployment is higher from the start of 2023, reflecting the weaker outlook for demand. As a result, excess supply builds by more over the forecast period than in November.

The projection for CPI inflation is materially stronger than in November over the first two years of the forecast period, but slightly lower in the third year.

The further recent rises in enrgy futures curves account for much of the upward revision to the projection for CPI inflation over the first year of the forecast period. In particular, the sharp rise in forward wholesale gas prices since November has resulted in a higher projection for retail energy prices from 2022 Q2, when tariff caps are next updated by Ofgem.

The MPC's projections are also based on an assumption that global bottlenecks will put more upward pressure on global tradable goods prices in the near term than in November. This also exerts some further upward pressure on CPI inflation over the next year. Global tradable goods prices put some downward pressure on CPI inflation further ahead, as the MPC now judges that they will fall back a little over the projection.

Underlying wage growth is materially stronger than in November over the coming year, given the greater tightening in the labour market than expected, higher inflation and the evidence on expected pay settlements in 2022 from the Agents' pay survey (Section 3).

As a result of these factors, the projection for CPI inflation is materially stronger than in November over the first two years of the forecast period, and slightly lower in the third year.

Policy decision

At its meeting ending on 2 February 2022, the MPC voted to increase Bank Rate by 0.25 percentage points, to 0.5%. The Committee voted for the Bank of England to begin to reduce the stock of UK government bond purchases, financed by the issuance of central bank reserves, by ceasing to reinvest maturing assets. The Committee also voted for the Bank of England to begin to reduce the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, by ceasing to reinvest maturing assets and by a programme of corporate bond sales to be completed no earlier than towards the end of 2023 that should unwind fully the stock of corporate bond purchases. The factors behind these decisions are set out in the Monetary Policy Summary on pages i–ii of this *Report* and in more detail in the Minutes of the meeting.

1.3: Key judgements and risks

Key judgement 1: higher global energy prices and supply chain constraints in the production of tradable goods hold back growth in world and UK activity and, together with strong demand for durable goods, push up on consumer price inflation over the next 18 months or so before their effects on growth and inflation dissipate.

As set out in Box 5 of the August 2019 *Report*, the MPC's forecasts are conditioned on paths for oil, gas and electricity prices which follow their respective futures curves for the first six months of the projection, and beyond that remain constant. Given the shape of those futures curves beyond the six-month point (**Chart 2.20**) this implies that the assumed paths of wholesale energy prices are significantly above the futures curves.

There are significant risks around these paths. The risks around global energy prices are broadly balanced in the near term. There are upside risks if there is a greater escalation of geopolitical tensions and downside risks if these are resolved more quickly. Higher energy prices would further restrain growth in global and UK activity and put more upward pressure on consumer price inflation over the next year or so, and vice versa if energy prices are lower.

Further ahead, there are downside risks to energy prices, if prices fall back to the more normal levels implied by futures curves. In that case, the level of GDP would be ¾% higher by the end of the forecast period and excess supply and unemployment around ½ percentage point lower. CPI inflation would fall back towards the target more rapidly than in the central projection and would be around ¾ percentage points below the target in two and three years' time (**Table 1.B**).

Table 1.B: GDP growth, excess supply/demand and CPI inflation in the MPC's central projection and in the alternative scenario in which energy prices follow their futures curves throughout the forecast period[(a)]

Per cent	2022 Q1	2023 Q1	2024 Q1	2025 Q1
Central projection				
GDP	7.8	1.8	1.1	0.9
Excess supply/Excess demand	+½	-¼	-½	-1
CPI inflation	5.7	5.2	2.1	1.6
Alternative scenario				
GDP	7.8	1.8	1.6	1.2
Excess supply/Excess demand	+½	-¼	0	-½
CPI inflation	5.7	5.1	1.2	1.2

(a) The table shows projections for: four-quarter growth in real GDP, excluding the backcast for GDP; four-quarter inflation rates; and excess supply/demand as per cent of potential GDP. The projections have been conditioned on the assumptions in **Table 1.A** footnote (b) unless otherwise specified.

In the MPC's central projection, world export prices rise a little further in 2022 H1, reflecting upward pressure from global bottlenecks. World export prices then fall back a little as these effects fade, though prices remain well above their pre-pandemic levels at the end of the forecast period. There are risks around this judgement.

In the near term, global bottlenecks could persist for longer if the impact of the Omicron variant is bigger and more persistent in some countries than expected. That could delay the demand rotation away from goods and back towards services and cause greater supply chain disruption. In its central projection, the MPC has assumed localised restrictions are sufficient for China to implement its zero-Covid policy. If more widespread restrictions are necessary, that would disrupt global supply chains to a greater extent than assumed. This would further constrain global and UK GDP growth and put more upward pressure on world export and consumer price inflation over the next year.

There are indications that some global bottlenecks may be stabilising, for example from measures of delivery times and shipping costs (Box B). If they ease by more than expected, for example if supply adjusts by more than assumed to stronger demand for durable goods, global goods prices could fall closer to their pre-pandemic levels over the forecast period. This could mean UK import and consumer price inflation fall and GDP, including business investment, increase to a greater extent than projected.

Key judgement 2: demand growth in the UK slows over the forecast period, reflecting the impact of higher global energy and goods prices on UK real aggregate income and waning support from fiscal and monetary policy.

UK demand growth slows over the forecast period, largely reflecting lower growth in real aggregate income and spending following the large rises in global energy and tradable goods prices and, to a lesser extent, fading support from fiscal and monetary policy, as both evolve in line with their conditioning assumptions. There are risks around those conditioning assumptions and around the expected path of demand more generally.

Demand growth could slow by more than expected if households cut back on their spending by more than assumed in the face of the squeeze in their real incomes. In aggregate, households have accumulated significant additional savings during the pandemic, which should support their ability to temporarily smooth consumption as real incomes decline. But this increase in savings has not occurred evenly across households and so not all of them may be able to do this. Energy bills form a larger share of lower-income households' spending, so their ability to use savings to support their consumption may be limited. In addition, the associated deterioration in the economic outlook may increase households' and firms' uncertainty about the future, leading them to increase their precautionary saving and lower their spending further.

If energy prices fall by more than is assumed in the MPC's central projections, demand growth will be stronger (Key judgement 1). Consumer spending could also be stronger than projected if households believe that the rises in global energy and tradable goods prices are likely to reverse quickly or they spend more of the additional savings they have accumulated, in aggregate, during the pandemic.

Labour participation is below its pre-Covid levels. So another upside risk is that some of those who have recently left the labour market return to work to support their income in the face of the real income squeeze. This would also increase the supply capacity of the economy and moderate the impact on inflation.

Key judgement 3: having increased rapidly over the past year, labour demand falls back, so unemployment rises somewhat and a degree of excess supply builds over the projection.

From the middle of this year, demand grows by less in the central projection than the MPC's assumed growth in supply, such that unemployment starts to rise in 2022 Q2 and picks up to 5%, the labour market gradually loosens and excess supply builds to 1% by the end of the projection (**Table 1.A**).

Unemployment would be higher, the labour market looser and excess supply greater than expected if the downside risks to the demand outlook set out in Key judgement 2 materialised, and vice versa if the upside risks crystallised.

As set out in Key judgement 1, there are downside risks to the UK's supply capacity in the near term from global bottlenecks and upside risks to supply from them further ahead. After growing rapidly as the economy recovered from the effects of Covid, supply growth is projected to slow to around 1½% in the second half of the forecast period. That is similar to the rates seen before Covid. As set out in the November *Report*, there are significant risks around the paths for labour supply and productivity growth underpinning this projection in both directions. Any changes in supply growth would be likely to feed through to demand growth over time, through their effects on household incomes, for example.

The degree of uncertainty around the outlook remains unusually high. Overall, the risks to the MPC's UK GDP growth projection are judged to be slightly to the upside, given upside risks to wage and household consumption growth (Key judgement 4).

Key judgement 4: although underlying wage inflation picks up a little this year, and companies seek to rebuild their margins, domestic price pressures moderate sufficiently to return inflation close to the 2% target by the end of the projection.

There are significant risks around the central projection for CPI inflation from both global factors, set out in Key judgement 1, and domestic cost pressures, set out here.

In the MPC's central projection, underlying wage growth initially remains strong given the recent tightening in the labour market and some temporary upward pressure from higher price inflation. Thereafter wage growth moderates, in part, as demand weakens due to the squeeze in real incomes from higher energy and tradable goods prices. Unemployment rises and firms' ability to raise prices lessens. CPI inflation falls back to a little above the 2% target in two years' time and below the target by a greater margin in three years.

Over the past few months, indicators of people's short-term inflation expectations have risen as inflation has picked up. The Agents' survey of expected pay settlements suggests that, in addition to labour market tightness, higher CPI inflation is a reason for the material pickup in pay settlements in 2022. Some firms report that they have started passing on their higher labour costs to their prices and will seek to do more so over the next year. An upside risk to the inflation outlook is that these effects are greater or more persistent than assumed in the MPC's central projection.

Measures of inflation expectations two to three years ahead, as well as some longer-term measures derived from household surveys and financial markets, have also increased in recent months, but by less than short-term measures. Professional forecasters continue to expect CPI inflation to be close to target two and three years ahead. A risk to the inflation outlook is that longer-term inflation expectations evolve such that wage and price setting are not consistent with inflation returning to the 2% target in the medium term. Overall, the MPC judges that inflation expectations remain well anchored at present. The Committee will, nevertheless, continue to monitor measures of inflation expectations very closely.

The degree of uncertainty around the outlook remains unusually high. Overall, and conditional on the paths for energy prices set out in Section 1.2, the risks, set out in Key judgements 1 and 4, to the MPC's inflation projection are judged to be slightly to the upside, as upside risks to wage growth outweigh downside risks to global tradable goods prices beyond the near term.

Table 1.C: Indicative projections consistent with the MPC's forecast[(a)(b)]

	Averages			Projections			
	1998–2007	2010–19	2020	2021	2022	2023	2024
World GDP (UK-weighted)[(c)]	**3**	**2½**	**-4¼**	**5¼ (5)**	**3¼ (3¾)**	**3 (3)**	**2¼ (2¼)**
World GDP (PPP-weighted)[(d)]	4	3¾	-3½	5¾ (5½)	4¼ (4½)	4 (4¼)	3½ (3½)
Euro-area GDP[(e)]	2¼	1½	-6½	5¼ (5)	3 (3¾)	2½ (2¼)	1½ (1½)
US GDP[(f)]	3	2¼	-3½	5½ (5½)	4 (4¾)	2¾ (3)	2 (2)
Emerging market GDP (PPP-weighted)[(g)]	5½	5	-2½	6¼ (6)	5 (5¼)	5 (5½)	4¾ (4¾)
of which, China GDP[(h)]	*10*	*7¾*	*2¼*	*8 (8)*	*4¾ (5)*	*5¾ (5¾)*	*5¼ (5½)*
UK GDP[(i)]	**2¾**	**2**	**-9½**	**7¼ (7)**	**3¾ (5)**	**1¼ (1½)**	**1 (1)**
Household consumption[(j)]	3¼	2	-10½	5¾ (4¾)	5½ (7¾)	1½ (1½)	1¼ (1)
Business investment[(k)]	3	3¾	-11¼	0 (¾)	13¾ (16¾)	2 (1)	-4¾ (-4)
Housing investment[(l)]	3¼	3¾	-12½	14¼ (12½)	5½ (6¼)	3¾ (4)	½ (¼)
Exports[(m)]	4½	3½	-14	-¾ (-2)	3 (6)	5¾ (6)	3¼ (3½)
Imports[(n)]	6¼	3¾	-16	2¾ (1 ½)	8¾ (12½)	7¾ (6 ¼)	2 (2)
Contribution of net trade to GDP[(o)]	-½	0	¾	-1 (-1)	-1¾ (-2)	-¾ (-¼)	¼ (¼)
Real post-tax labour income[(p)]	3¼	1½	1¾	1¼ (¾)	-2 (-1¼)	-½ (-¾)	¾ (¾)
Household saving ratio[(q)]	7¼	7½	13¾	10¾ (11¼)	4¾ (4½)	4 (3½)	4¼ (3¾)
Credit spreads[(r)]	¾	2½	2	1½ (1½)	1¼ (1½)	1½ (1½)	1½ (1¾)
Excess supply/Excess demand[(s)]	**0**	**-1¾**	**-1¾**	**-¼ (-¼)**	**0 (¼)**	**-½ (¼)**	**-¾ (-¼)**
Hourly labour productivity[(t)]	2	¾	1¼	1 (¼)	-½ (¼)	1 (1)	1 (1)
Employment[(u)]	1	1¼	-2½	1 (1½)	1 (1¼)	¼ (½)	0 (¼)
Average weekly hours worked[(v)]	32¼	32	30¼	31½ (31¾)	31¾ (32)	31¾ (31¾)	31¾ (31¾)
Unemployment rate[(w)]	5¼	6	5¼	4 (4½)	4 (4)	4½ (4¼)	5 (4½)
Participation rate[(x)]	63	63½	63½	63¼ (63½)	63½ (63¾)	63½ (63¾)	63½ (63½)
CPI inflation[(y)]	**1½**	**2¼**	**½**	**5 (4¼)**	**5¾ (3½)**	**2½ (2¼)**	**1¾ (2)**
UK import prices[(z)]	-½	1¼	2¾	1¼ (0)	1½ (½)	-1 (-¼)	-1 (¼)
Energy prices – direct contribution to CPI inflation[(aa)]	¼	¼	-½	1½ (1¼)	2 (¾)	0 (0)	0 (0)
Average weekly earnings[(ab)]	4¼	2¼	4½	4 (3½)	3¾ (1¼)	3 (2¼)	2¼ (2¾)
Unit labour costs[(ac)]	3	1¼	11¾	-1½ (-2¼)	2¾ (-½)	2 (1¼)	1½ (2)
Private sector regular pay-based unit wage costs[(ad)]	1¾	1¾	8¾	-1½ (-1¾)	3 (-¾)	2½ (1¾)	1½ (2)

Sources: Bank of England, Bloomberg Finance L.P., Department for Business, Energy and Industrial Strategy, 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 projections for GDP growth, CPI inflation and unemployment (as presented in the fan charts).
(b) Figures show annual average growth rates unless otherwise stated. Figures in parentheses show the corresponding projections in the November 2021 *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. Forecast was finalised before the release of the preliminary flash estimate of euro-area GDP for Q4, so that has not been incorporated.
(f) Chained-volume measure. Forecast was finalised before the release of the advance estimate of US GDP for Q4, so that has not been incorporated.
(g) Chained-volume measure. Constructed using real GDP growth rates of 155 emerging market economy (EME) countries, as defined by the IMF *WEO*, weighted according to their relative shares in world GDP using the IMF's PPP weights.
(h) Chained-volume measure.
(i) Excludes the backcast for GDP.
(j) Chained-volume measure. Includes non-profit institutions serving households. Based on ABJR+HAYO.
(k) Chained-volume measure. Based on GAN8.
(l) 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. GDP data based on the mode of the MPC's GDP backcast.
(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)].
(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) GDP per hour worked. GDP data based on the mode of the MPC's GDP backcast. Hours worked based on YBUS.
(u) Four-quarter growth in LFS employment in Q4. Based on MGRZ.
(v) Level in Q4. Average weekly hours worked, in main job and second job. Based on YBUS/MGRZ.
(w) LFS unemployment rate in Q4. Based on MGSX.
(x) Level in Q4. Percentage of the 16+ population. Based on MGWG.
(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 whole-economy total pay in Q4. Growth rate since 2001 based on KAB9. Prior to 2001, growth rates are based on historical estimates of AWE, with ONS series identifier MD9M.
(ac) Four-quarter growth in unit labour costs in Q4. Whole-economy total labour costs divided by GDP at constant prices, based on the mode of the MPC's GDP backcast. Total labour costs comprise compensation of employees and the labour share multiplied by mixed income.
(ad) 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, based on the mode of the MPC's GDP backcast.

Box A: Monetary policy since the November 2021 *Report*

At its meeting on 15 December 2021, the MPC voted by a majority of 8–1 to increase Bank Rate by 0.15 percentage points, to 0.25%. The Committee voted unanimously for the Bank of England to maintain the stock of sterling non-financial investment-grade corporate bond purchases, financed by the issuance of central bank reserves, at £20 billion. The Committee also voted unanimously to maintain the stock of UK government bond purchases, financed by the issuance of central bank reserves, at £875 billion, and so the total target stock of asset purchases at £895 billion.

Since the November 2021 MPC meeting, the Omicron Covid variant had emerged. It appeared to be spreading rapidly within the United Kingdom and around the world. The new variant appeared to be much more transmissible than the Delta variant and pose new risks to public health. Global risky asset prices had fallen in response but then largely recovered. Longer-term advanced-economy government bond yields had declined.

The level of global GDP in 2021 Q4 was likely to be broadly in line with the November *Report* projection, but consumer price inflation in advanced economies had risen by more than expected. The Omicron variant posed downside risks to activity in early 2022, although the balance of its effects on demand and supply, and hence on medium-term global inflationary pressures, was unclear. Global cost pressures had remained strong.

Bank staff had revised down their expectations for the level of UK GDP in 2021 Q4 by around ½% since the November *Report*, leaving GDP around 1½% below its pre-Covid level. Growth in many sectors had continued to be restrained by disruption in supply chains and shortages of labour. The impact of the Omicron variant, associated additional measures introduced by the UK Government and Devolved Administrations, and voluntary social distancing would push down on GDP in December and in 2022 Q1. The experience since March 2020 suggested that successive waves of Covid appeared to have had less impact on GDP, although there was uncertainty around the extent to which that would prove to be the case on this occasion.

The Labour Force Survey unemployment rate had fallen to 4.2% in the three months to October, while the number of payrolled employees continued to rise strongly in November. There was little sign in the available data that the closure of the Coronavirus Job Retention Scheme at the end of September had led to a weakening in the labour market. The LFS unemployment rate was now expected to fall to around 4% in 2021 Q4, compared with the 4½% projection in the November *Report*. Bank staff continued to estimate that underlying earnings growth had remained above pre-pandemic rates, and the Committee continued to see upside risks around the projection for pay in the November *Report*.

Twelve-month CPI inflation had risen from 3.1% in September to 5.1% in November. Relative to the November *Report* projection, there had been significant upside news in core goods and, to a lesser extent, services price inflation. Bank staff expected inflation to remain around 5% through the majority of the winter period, and to peak at around 6% in April 2022, with that further increase accounted for predominantly by the lagged impact on utility bills of developments in wholesale gas prices. Indicators of cost and price pressures had remained at historically elevated levels, and contacts of the Bank's Agents expected further price increases driven in large part by pay and energy costs. CPI inflation was still expected to fall back in the second half of 2022.

At its November meeting, the Committee judged that, provided the incoming data, particularly on the labour market, were broadly in line with the central projections in the November *Monetary Policy Report*, it would be necessary over coming months to increase Bank Rate in order to return CPI inflation sustainably to the 2% target. Recent economic developments suggested that these conditions had been met. The labour market was tight and had continued to tighten, and there were some signs of greater persistence in domestic cost and price pressures. Although the Omicron variant was likely to weigh on near-term activity, its impact on medium-term inflationary pressures was unclear at this stage.

The Committee judged that an increase in Bank Rate of 0.15 percentage points was warranted at this meeting.

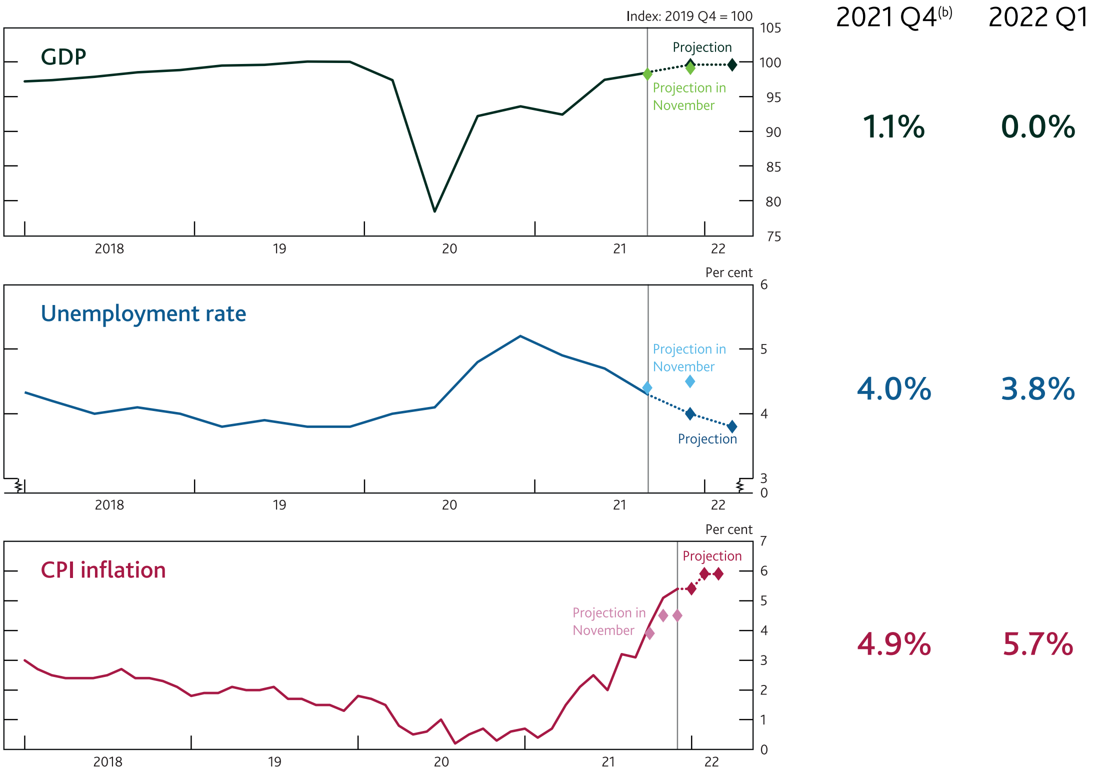
2: Current economic conditions

The recovery in UK and global output continued in Q4, although growth slowed as Covid cases rose and supply chains were disrupted. Omicron is expected to weigh temporarily on activity early in 2022 Q1. Labour markets have continued to tighten, and inflationary pressures have continued to build and are starting to become more broad-based.

UK GDP is expected to be flat in 2022 Q1 due to the impact of the Omicron variant. The impact of that is judged to be temporary and GDP recovers quickly, but a squeeze in real incomes caused by the rise in global energy and tradable goods prices weighs on activity through the rest of the year. The unemployment rate has fallen despite the furlough scheme ending, and declines to 3.8% in Q1 as the labour market continues to tighten.

CPI inflation was 5.4% in December, in large part reflecting higher global energy and goods prices. It is expected to peak at around 7¼% in April. Around three quarters of that further rise is due to higher energy prices – as previous increases in wholesale prices pass through into utility bills – and higher goods prices. The remainder reflects higher services prices, consistent with the tightening labour market.

Chart 2.1: GDP is expected to be flat in Q1, unemployment is projected to decline slightly, and inflation is expected to rise further above the target
Near-term projections[(a)]



Sources: ONS and Bank calculations.

(a) The lighter diamonds show Bank staff's projections at the time of the November 2021 *Monetary Policy Report*. The darker diamonds show Bank staff's current projections. Projections for GDP and the unemployment rate are quarterly and show Q4 and Q1 (November projections show Q3 and Q4). Projections for CPI inflation are monthly and show January to March (November projections show September to December).
(b) GDP and unemployment rate 2021 Q4 projections are based on official data to November. CPI inflation figure is an outturn.

2.1: Global developments and financial conditions

The global economy continued to recover…

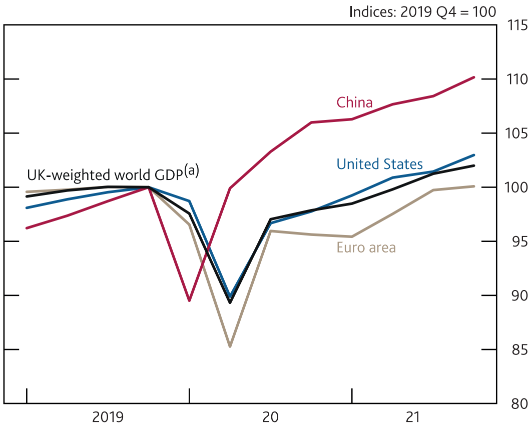
The global economy continued to recover towards the end of 2021 (**Chart 2.2**). Continued progress on vaccination programmes in advanced economies enabled a return to pre-pandemic levels of mobility and activity. Vaccination rates in emerging markets remain significantly below advanced economies, however. Bank staff estimate that UK-weighted world GDP rose by 0.8% in 2021 Q4, in line with the November *Report*, leaving it 2.0% above its 2019 Q4 level. Over 2021 as a whole, annual average global growth was 5.2%, after a 4.3% contraction in 2020.

…although global growth is expected to have slowed in 2021 Q4.

Global growth is expected to have slowed in Q4 as Covid cases rose in advanced economies (**Chart 2.3**) and global supply chains were disrupted. Outbreaks of the Delta variant meant Covid cases increased across the euro area, resulting in more voluntary social distancing by consumers and some mandated restrictions. Local outbreaks also continued to weigh on consumer demand in China. Elsewhere in Asia, activity looks to have recovered as the easing of the Delta wave allowed a loosening of restrictions. Global supply chains continued to struggle to meet elevated global goods demand (see Box B).

Chart 2.2: The global economy continued to recover…

GDP in selected countries and regions

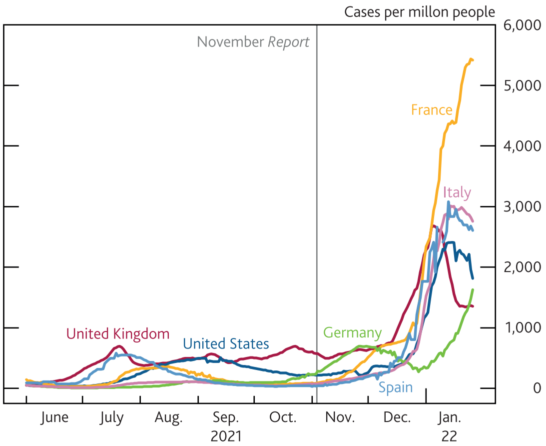


Sources: IMF *World Economic Outlook* (*WEO*), National Bureau of Statistics of China, OECD, ONS, Refinitiv Eikon from LSEG and Bank calculations.

(a) See footnote (c) of **Table 1.B** for definition. Figure for 2021 Q4 is a Bank staff projection.

Chart 2.3: …despite rising Covid cases

Daily new confirmed Covid-19 cases[(a)]



Sources: COVID-19 Data Repository by the Centre for Systems Science and Engineering at John Hopkins University, Our World in Data and Bank calculations.

(a) Seven-day moving averages. Data are shown to 26 January 2022 and are not seasonally adjusted.

The Omicron variant has spread rapidly…

The Omicron variant, first identified in late November, has become the dominant variant globally. At first, cases rose most quickly in South Africa and the UK, and later rose sharply in the US and the rest of Europe (**Chart 2.3**). While evidence suggests that the risk of severe disease is lower than for previous variants, the high rate of transmission has led to new restrictions being imposed temporarily, some voluntary social distancing by households and many people off work.

…and is likely to weigh temporarily on activity in 2022 Q1, but by less than in previous waves.

Economic activity is expected to be less affected by increases in Covid cases than during the early part of the pandemic. For example, global GDP was 10% higher in 2021 Q1 than in 2020 Q2, even though there were broadly similar degrees of restrictions in place at the time (see Chart 2.3 in the May 2021 *Report*). Therefore it is likely that the restrictions imposed more recently will have weighed less on global activity than earlier in the pandemic. And vaccinations, including accelerated booster programmes, and access to testing are likely to result in less voluntary social distancing in advanced economies in particular. Nonetheless, sharp increases in the number of people unable to work due to self-isolation may restrict activity somewhat.

For 2022 Q1 as a whole, Bank staff estimate UK-weighted world GDP will be broadly flat. Evidence from countries furthest ahead in this wave, such as South Africa and the UK, suggests that case rates are likely to fall sooner and faster than in previous waves, so most of the economic impact is expected to be short-lived and have little effect on activity in Q2.

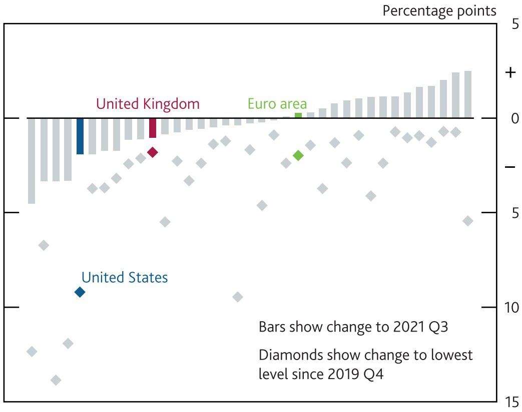
Labour markets have continued to tighten across countries.

As economies have approached pre-pandemic levels of output, employment rates have risen across countries (**Chart 2.4**). This reflects both a pickup in labour market participation – the number of people in employment or searching for work – and falling unemployment. On average across economies, employment rates are 0.2 percentage points below their 2019 Q4 level, compared to 3.6 percentage points at their lowest points during the pandemic.

That tightening in labour markets has been reflected in a pickup in wage growth in some countries. In the US, the Atlanta Fed's Wage Growth Tracker, which is less affected by compositional effects than headline measures, has risen over the second half of 2021 to above its pre-pandemic level, particularly for lower-income quartiles. But in the euro area, underlying wage growth has fallen over the same period and remains below its pre-pandemic level, despite unemployment falling to close to record lows.

Chart 2.4: Employment rates have recovered across countries

Change in employment rate since 2019 Q4[a]



Sources: OECD and Bank calculations.

(a) All OECD member countries, and the euro-area average, are shown, except Turkey. Age 15+ employment. For the UK, Iceland, Norway, Spain and US the lower age limit is 16.

Table 2.A: Inflation rates have risen further in advanced economies

Inflation in the UK, US and euro area

Per cent	Monthly averages		2021					
	1998–07	2010–20	Q1	Q2	Q3	Oct.	Nov.	Dec.
Annual headline consumer price inflation								
United Kingdom	1.6	2.1	0.6	2.0	2.8	4.2	5.1	5.4
Euro area	2.0	1.3	1.1	1.8	2.8	4.1	4.9	5.0
United States[a]	2.1	1.5	1.8	3.9	4.3	5.1	5.7	5.8
Annual core consumer price inflation (excluding food and energy)[b]								
United Kingdom	1.2	2.0	1.1	1.9	2.6	3.4	4.0	4.2
Euro area	1.6	1.0	1.2	0.9	1.4	2.0	2.6	2.6
United States[a]	1.8	1.6	1.7	3.4	3.6	4.2	4.7	4.9

Sources: Eurostat, ONS, Refinitiv Eikon from LSEG, US Bureau of Economic Analysis and Bank calculations.

(a) Personal consumption expenditure price index inflation.
(b) For the euro area and the UK, excludes energy, food, alcoholic beverages and tobacco. For the US, excludes food and energy.

Rates of consumer price inflation have risen further in many countries, with price pressures becoming more broad-based.

Global inflation rates have risen further. That in part reflects the rise in energy prices since the start of 2021 (**Chart 2.20**), and the impact of global bottlenecks on goods inflation (Box B). But more recently, higher inflation has been more broad-based, with services inflation picking up in the UK and US. That is consistent with tightening labour markets.

CPI inflation rose to 7.0% in December in the US. While autos and other durable goods accounted for much of the rise earlier in 2021, prices are now increasing in almost all components. Core CPI inflation, which excludes energy and other volatile items, was 5.5% in the same month. The Federal Reserve's preferred measures of inflation – personal consumption expenditures (PCE) and core PCE inflation – were a little lower at 5.8% and 4.9% respectively (**Table 2.A**).

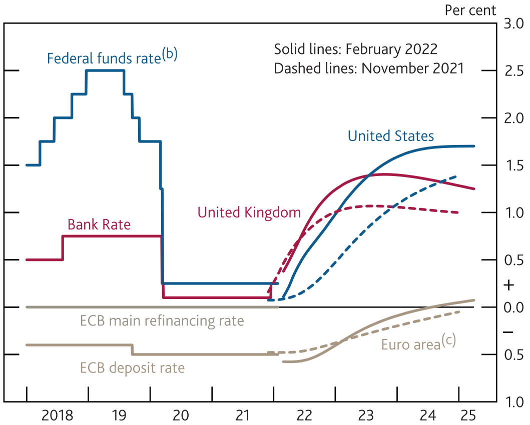
Euro-area HICP inflation rose to 5.0% in December. Core HICP inflation was 2.6% in both November and December, the first time it has been over 2% since before the financial crisis. While inflation has picked up in the vast majority of countries, it remains subdued in China and Japan, at 1.5% and 0.8% respectively.

Central banks are reducing the pace of net asset purchases in the US and euro area, and market participants expect policy rates to increase.

Some central banks are reducing the pace of net asset purchases in response to tightening labour markets and higher inflation outturns. At its December meeting, the US Federal Open Market Committee (FOMC) announced a reduction in the monthly pace of its net asset purchases from January 2022. In the euro area, the ECB Governing Council announced a reduction in the pace of net asset purchases under the Pandemic Emergency Purchase Programme at its December meeting, with an intention to discontinue such purchases at the end of March 2022.

Market participants continue to expect an increase in policy rates in many countries. In the UK, the expected path for Bank Rate is higher than in November (**Chart 2.5**), and remains higher in the near term than other countries. Consistent with that, the sterling exchange rate has strengthened, and is now around its highest level since the EU referendum in 2016. The results of the Bank's new Market Participants Survey also suggest expectations for Bank Rate have shifted higher in recent months, and are closely aligned with financial market prices in the near term. Market participants' expectations for the path of US policy rates have steepened since November, while euro-area expectations are slightly higher.

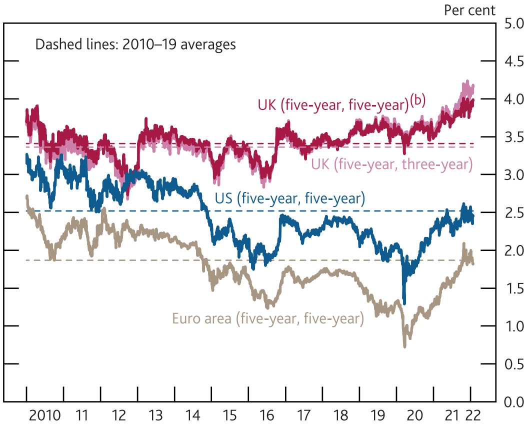
Chart 2.5: Market participants expect policy rates to increase, particularly in the UK and US
International forward interest rates[(a)]



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

(a) All data as of 26 January 2022. The February and November curves are estimated using instantaneous forward overnight swap rates in the 15 working days to 26 January 2022 and 27 October 2021 respectively.
(b) Upper bound of the target range.
(c) From 3 January 2022, the euro-area curve is based on €STR swaps, whereas previously it was based on EONIA swaps. Given the spread between EONIA and €STR, this change alone would have caused the curve to shift down by around 8 basis points.

Chart 2.6: Medium-term inflation expectations are around pre-crisis averages in the US and euro area
Financial market measures of inflation compensation[(a)]



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

(a) Five-year inflation, five years ahead and three-year inflation, five years ahead, derived from swaps. The instruments are linked to the UK RPI, US CPI and euro-area HICP measures of inflation respectively.
(b) UK RPI is due to be aligned with CPIH from February 2030, which will affect the pricing of this measure. Since 2000, CPIH inflation has averaged 85 basis points lower than RPI inflation.

Long-term bond yields have increased…

Long-term government bond yields have risen sharply since December, as financial markets reacted to central bank communications, in particular the December FOMC minutes. Reduced concern about the severity of Omicron, and its likely short-lived economic impact, is also likely to have pushed up on bond yields recently. Ten-year government bond yields in the UK, US and euro area are all around their highest levels since the start of the pandemic.

…reflecting higher real rates, while financial market measures of medium-term inflation expectations are broadly unchanged since November.

The increase in long-term government bond yields is reflected in higher real interest rates: financial market measures of inflation expectations at those horizons are broadly unchanged since November (**Chart 2.6**). That perhaps reflects expectations around the policy response to higher inflation outturns, in particular as the downside risks around Omicron receded.

Financial market measures of medium-term inflation expectations remain around their long-term averages in the US and euro area, but above for the UK (**Chart 2.6**). Results from the Market Participants Survey suggest respondents place weight on higher inflation expectations, but also technical factors such as the use of UK inflation markets for hedging pension liabilities, as the drivers of the level of UK financial market measures. When assessing UK inflation expectations, the MPC monitors a range of measures (see Box C of the November *Report*). The latest data are discussed in Section 2.4.

Risky asset prices have fluctuated in response to Omicron developments and movements in bond yields.

Like government bond yields, global risky asset prices have been driven by Omicron and central bank communications. Equity prices fell as Omicron emerged, cases rose, and a degree of mandated and voluntary social distancing returned. As concern about its severity reduced, equity prices quickly recovered across countries. But the associated increase in long-term real government bond yields weighed on some equity indices with sectors more exposed to higher real interest rates. Despite this, the S&P 500 and Euro Stoxx are around 2% higher than in the run-up to the November *Report*, while the FTSE All-Share is 3% higher, in part due to its composition.

In aggregate, mortgage rates have risen a little since November.
Rates on low loan to value (LTV) mortgages have risen by around 30 basis points since November, reflecting the pass-through of higher risk-free rates, but rates on high LTV mortgages have continued to fall (**Chart B** in Box C). Box C outlines how changes in Bank Rate affect the interest rates facing households and businesses.

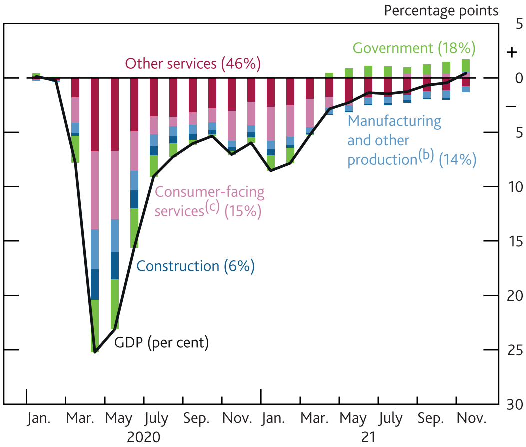
2.2: Domestic activity

In November, UK GDP recovered to around its pre-pandemic level.
UK GDP grew 1.1% in the three months to November compared to the previous three months. This left it around its 2019 Q4 pre-pandemic level and, partly due to upward revisions to earlier quarters, around 1% higher than the projection in November. The output of the government and consumer-facing services sectors were above pre-pandemic levels, while the output of other services and the production sector were below (**Chart 2.7**).

Supply constraints weighed on activity, although they appear to have eased in some sectors.
Disruptions to the supply of inputs have affected activity somewhat. They had been most evident in the manufacturing and construction sectors, although output in these sectors grew strongly in November. Nonetheless, over half of manufacturers responding to recent CBI *Industrial Trends Surveys* stated that material and component shortages were likely to limit production. These disruptions are global in nature, with other countries similarly affected (top panel of **Chart 2.8**).

Labour shortages have also weighed on activity: contacts of the Bank's Agents have cited these as one of the biggest constraints on growth. Surveys suggest that such shortages, while widespread, have been most acute in the accommodation and food, health, construction and manufacturing sectors. Business surveys suggest that labour shortages in the manufacturing sector were somewhat more acute relative to other countries (bottom panel of **Chart 2.8**).

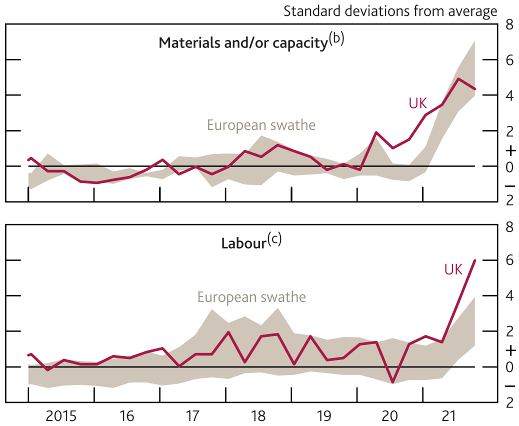
Chart 2.7: GDP recovered to its pre-pandemic level in November...
Contributions to change in monthly GDP since 2019 Q4[a]



Sources: ONS and Bank calculations.

(a) Figures in parentheses are weights in gross value added in 2019. Weights and contributions may not sum to the total due to rounding.
(b) Other production includes agriculture, mining and quarrying, and utilities.
(c) Consumer-facing services includes accommodation and food services, arts, entertainment and recreation, and wholesale and retail.

Chart 2.8: ...despite supply constraints weighing on production
Factors affecting manufacturers' production[a]



Sources: CBI, European Commission (EC) Business Climate Indicator and Bank calculations.

(a) Data are not seasonally adjusted. Standard deviations calculated between January 1995 and October 2021. European swathe includes France, Germany, Italy and Spain. EC question: 'Factors limiting production'. UK CBI question: 'What main factors are limiting your production over the next 3 months?'.
(b) Refers to a shortage of materials and/or equipment for euro-area countries and the average of the plant capacity and materials or components series for the UK.
(c) Refers to a shortage of labour for euro-area countries and the average of skilled and other labour series for the UK.

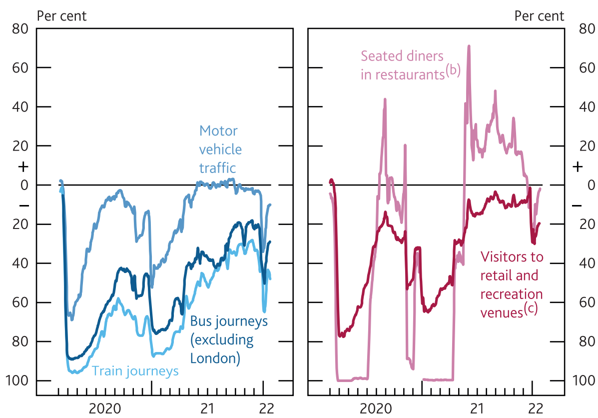
Bank staff expect GDP to have declined in December and January due to the spread of the Omicron variant...
The recent path of GDP is likely to have been adversely affected by the spread of the Omicron variant. Action taken to control the spread of the virus and voluntary social distancing are expected to have reduced GDP in December and January. That decline in part reflects a fall in demand, as Omicron weighed on contact-intensive spending. Indicators for this type of spending declined in December (**Chart 2.9**), although some of that weakness may have been seasonal. They have since recovered somewhat as the Omicron wave eased. The decline in activity also reflects an impact on supply, as hours worked are likely to have declined due to sick or isolating staff (Section 2.3).

…such that GDP is expected to be flat in Q1, although output recovers sharply during the quarter.
Based on the evidence from high-frequency indicators, GDP is expected to be flat in Q1 on average, driven by a softening in consumption growth. This slowdown is less severe than during previous Covid waves, however. Measures were much less onerous, partly because of more widespread testing, the population having greater immunity to Covid due to prior infection or vaccination, and the lower severity of the Omicron variant. Spending indicators fell less sharply and recovered more quickly than earlier in the pandemic (**Chart 2.9**), which may suggest there has been less voluntary social distancing recently. While consumer confidence fell slightly in January and more people said they were worried about Covid, concerns about the virus remained lower than earlier in the pandemic (**Chart 2.10**).

The effects of Omicron are expected to be temporary: GDP is expected to recover sharply during Q1. Weekly Covid cases and hospital admissions peaked in early January (**Chart 2.3**). The UK Government and devolved administrations have announced a number of relaxations to Covid measures, some of which had been put in place in response to the Omicron variant. The MPC's projections are conditioned on the assumptions that no material restrictions on economic activity are reimposed and there is no further widespread voluntary social distancing following this wave (Section 1). Omicron has little impact on activity and slack from Q2 onwards.

Chart 2.9: High-frequency indicators suggest that travel and high-contact activities declined in December before recovering more recently

High-frequency indicators of economic activity[(a)]

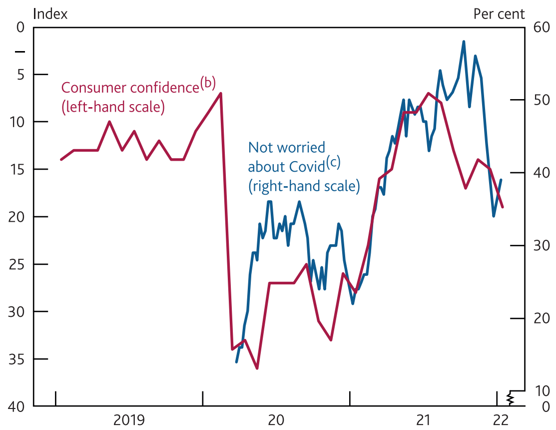


Sources: Department for Transport, Google Covid-19 Community Mobility Reports, OpenTable and Bank calculations.

(a) Seven-day moving averages to 25, 24 and 23 January for seated diners, transport and visitors respectively. Data are not seasonally adjusted. All data are shown relative to normal levels.
(b) Seated diners from online, phone and walk-in reservations. To limit base effects, bank holidays and the two-week period from 22 December each year have been removed.
(c) Numbers of visitors to places such as restaurants, cafés, shopping centres and cinemas.

Chart 2.10: Consumer confidence has fallen, but is higher than earlier in the pandemic

Consumer confidence and worries about Covid[(a)]



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

(a) Data are not seasonally adjusted.
(b) GfK Consumer Confidence Index. Latest data point is for January, with the survey conducted between 4 and 12 January 2022.
(c) Percentage of adults not worried about the effect of Covid on their life right now according to the ONS Opinions and Lifestyle Survey. Latest data is for the period 6–16 January.

A sharp slowdown in real income growth, driven by the rise in global energy and tradable goods prices, is weighing on consumer spending, and this effect is expected to intensify.
The sharp rise in global energy and tradable goods prices, the latter in part reflecting global bottlenecks (Box B), has squeezed household real incomes and is weighing on consumer spending. Four-quarter real income growth turned negative in Q3 last year and is projected to contract even more sharply in the middle of 2022 (**Chart 2.11**). Another rise in retail energy prices in April is expected to increase inflation further (Section 2.4). Incomes will also be affected by the planned increase in National Insurance contributions in April.

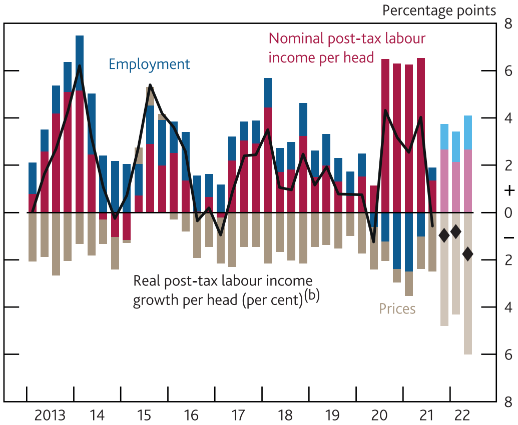
In aggregate, households have accumulated savings during the pandemic, which should support their ability to smooth consumption as real incomes decline. The savings rate averaged around 14% over the first year and a half of the pandemic, although it has fallen back recently to around 8% in 2021 Q3 (**Chart 2.12**). But this increase in savings has not occurred evenly across the income distribution. As discussed in Box 3 of the August 2020 *Report*, surveys suggested that lower and middle-income households had built up less savings or run them down during the initial stages of the pandemic. Energy bills also form a larger share of lower-income households' spending, so their ability to use savings will be limited. More generally, the scope for households to smooth consumption will depend on the extent to which the hit to real incomes associated with higher global energy and tradable goods prices is temporary or more persistent.

Demand in the housing market remains robust.

Housing market activity has been strong in recent months. The official UK house price index was around 16% higher than pre-pandemic levels in November 2021, while housing transactions and mortgage approvals remained robust in Q4 (see the December 2021 *Financial Stability Report*). This strength in house prices and activity has been reflected in housing investment, which was around 4% above pre-pandemic levels in 2021 Q3. Supply constraints in the construction sector may have weighed on growth somewhat since then, however.

Chart 2.11: Household real labour income growth is expected to be negative in 2022

Contributions to four-quarter real income growth[(a)]

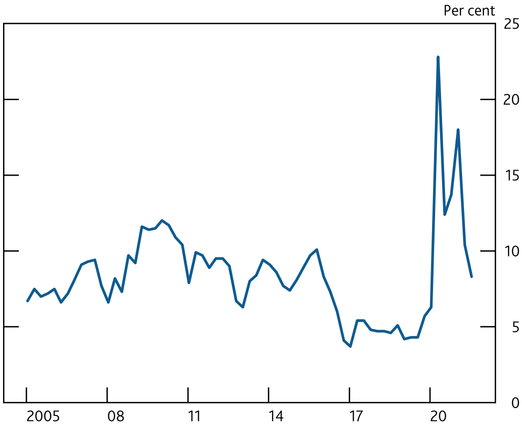


Sources: ONS and Bank calculations.

(a) Diamonds and light bars show Bank staff projections for 2021 Q4 and 2022 Q1 and Q2. Income include non-profit institutions serving households.
(b) See footnote (p) in **Table 1.B** for the definition of real post-tax labour income.

Chart 2.12: In aggregate, households saved a larger part of their income during the pandemic

Saving ratio[(a)]



(a) Saving as a percentage of household post-tax income. Includes non-profit institutions serving households. Data to 2021 Q3.

Business investment has lagged the wider recovery and is expected to remain subdued in Q1.

Business investment has recovered more slowly through the pandemic compared to other expenditure components and previous MPC expectations. It fell by 2.5% in Q3 last year, leaving it nearly 12% below its pre-pandemic level. The decline over the quarter mainly reflected weaker transport investment, particularly in the air industry.

Survey indicators suggest business investment has remained weak due to supply disruptions and Covid-related uncertainty. Since November, businesses have reported lower investment in the Decision Maker Panel (DMP) Survey, although expectations picked up in January relative to the December Survey (**Chart 2.13**). Contacts of the Bank's Agents report that investment is being constrained by shortages of materials, components and machinery, increases in the cost of materials, and shortages of specific types of skilled labour. As a result, Bank staff expect investment to have been subdued in Q4, and to remain weak in 2022 Q1. Beyond Q1, investment growth picks up, as Covid uncertainty wanes and the capital allowance super-deduction provides support (Section 1).

UK trade flows remain below pre-pandemic levels.

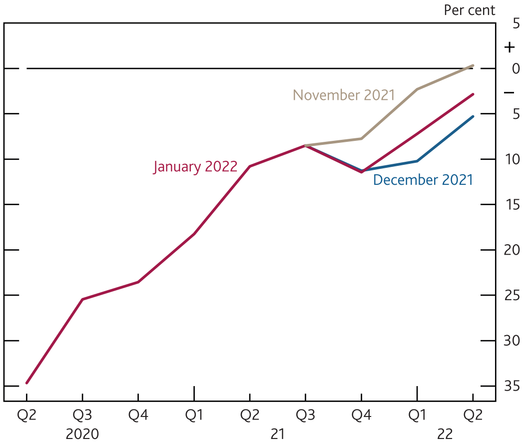
Trade flows have been affected by pandemic-related supply-chain disruption, as well as the new trading arrangements with the EU that came into force at the start of 2021. Trade in goods – the sum of exports and imports excluding unspecified goods – was around 8% below its pre-pandemic level in November 2021. Since then, new customs procedures applying to UK–EU goods trade were implemented at the start of 2022. This has increased checks and administration and may weigh on trade in the near term. Indicators such as the number of heavy goods vehicles around Dover suggest that freight volumes have been subdued in the early weeks of 2022, at similarly weak levels to last year.

The Government's fiscal plans should support activity in the near term.

Government consumption was around 8% above pre-pandemic levels in Q3. The Government's fiscal plans set out in its *Autumn Budget and Spending Review* last October, and the Covid support package for businesses announced in December, should support UK demand in the near term. Fiscal policy gradually tightens over the forecast period (Section 1).

Chart 2.13: Firms expect Covid to weigh on investment by more than expected in November

Impact of Covid on investment[(a)]

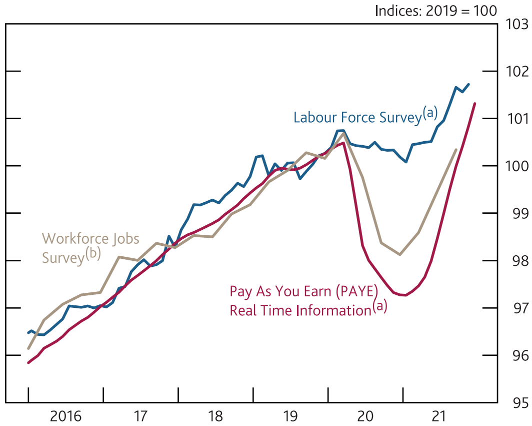


Sources: DMP Survey and Bank calculations.

(a) Question: 'Relative to what would have otherwise happened, what is your best estimate for the impact of the spread of coronavirus (Covid-19) on the capital expenditure of your business in the following quarters?'. Months refer to survey waves. The January survey was conducted between 7 and 21 January 2022.

Chart 2.14: The number of employees continues to rise

Number of employees



Sources: HMRC, ONS and Bank calculations.

(a) Three-month moving averages. Latest data point from the Labour Force Survey is for the three months to November 2021. Latest data point for PAYE Real Time Information is the flash estimate for the three months to December 2021.
(b) Data are quarterly. Latest data point is for 2021 Q3.

2.3: The labour market

Despite the end of the furlough scheme, the unemployment rate has declined further.

The Labour Force Survey (LFS) unemployment rate has continued to decline, despite the closure of the furlough scheme at the end of September. It fell to 4.1% in the three months to November, lower than the 4.5% expected in the November *Report*.

Employment has continued to increase. According to the LFS, there were 116,000 more employees in the three months to November compared to the three months to August. Her Majesty's Revenue and Customs (HMRC) data pointed to a further rise in the number of employees in December (**Chart 2.14**), although these data are prone to revision. While the number of employees is estimated to be above its 2019 Q4 level, the total level of employment is still around 460,000 lower (**Chart 2.15**), owing to a decline in self-employment. The private sector more than accounted for this shortfall; public sector employment was around 260,000 higher than pre-pandemic levels in Q3, with the NHS accounting for nearly half of the increase.

There are over 500,000 more people inactive in the labour market – those without a job and not actively searching for one – compared to before the pandemic (**Chart 2.15**). The majority of this increase reflects people leaving the labour force due to sickness or to study. Some of these people may return over time. But Bank staff estimate that around a third of the rise is related to the ageing of the UK population, where the effect on participation is likely to persist. The participation rate of those aged 65 and over is just over 10%, compared to just under 80% for those aged 16–64.

Surveys suggest that labour demand remains robust…

The temporary slowdown in activity associated with the spread of the Omicron variant seems to have had little impact on labour demand. PMIs suggest employment growth remained robust in December and January (**Chart 2.16**).

…redundancy indicators remain subdued…

Despite the slowdown in activity over December and January, redundancies and redundancy notifications have remained low (**Chart 2.17**). Contacts of the Bank's Agents also report that there have not been widespread redundancies. That is consistent with the latest ONS BICS which has not shown a notable rise in the share of businesses seeking to make redundancies over the next three months.

…and the unemployment rate is expected to decline to 3.8% in Q1.

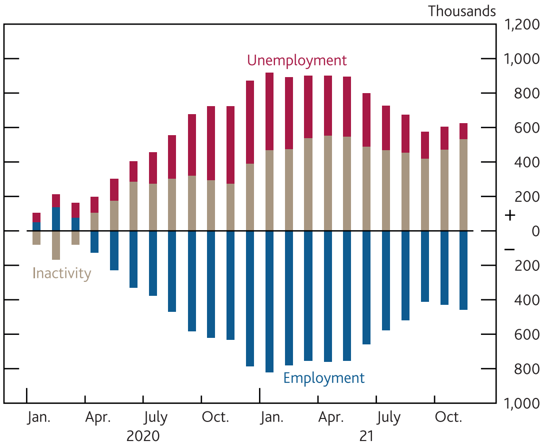
Bank staff expect the unemployment rate to decline to 3.8% in Q1 (**Chart 2.1**). Employment growth is expected to slow a little as it approaches pre-pandemic levels. Contacts of the Bank's Agents have reported a modest slowing in employment growth as companies' rehiring and expansion plans neared completion (Box D). But firms are expected largely to look through the contraction in activity early in the quarter and not make widespread redundancies. Nonetheless, total hours worked are expected to fall temporarily: the Bank's Agents and the latest BICS suggest that there were around double the number of staff on sick leave over the Christmas period relative to the previous year.

The unemployment rate is expected to rise beyond Q1.

The unemployment rate is expected to rise beyond Q1 (Section 1). This primarily reflects demand growing by less than the economy's supply potential, driven in turn by the increase in global energy and tradable goods prices squeezing real incomes. That typically affects employment growth with a lag.

Chart 2.15: Unemployment is only a little above pre-pandemic levels, but inactivity remains markedly higher

Changes in employment, unemployment and inactivity since 2019 Q4[(a)]

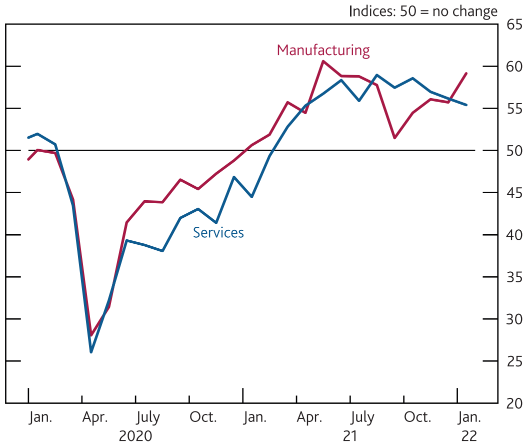


Sources: ONS and Bank calculations.

(a) Data from the Labour Force Survey and employment includes employees and self-employed. Changes do not sum to 0 as the population is estimated to have increased during the period.

Chart 2.16: Survey indicators pointed to robust employment growth in January

Surveys of employment growth[(a)]



Source: IHS Markit/CIPS.

(a) A reading of above 50 indicates positive growth on the previous month while a reading below 50 indicates negative growth.

The labour market has tightened sharply…

The labour market is tight and has tightened further recently. Job vacancies hit a record high in Q4 and the unemployment rate fell close to pre-pandemic levels. This meant their ratio – an indicator of labour market tightness – has also risen to a series high (**Chart 2.18**). Survey indicators point to increasing recruitment difficulties and labour shortages across the economy (**Chart 3.3**).

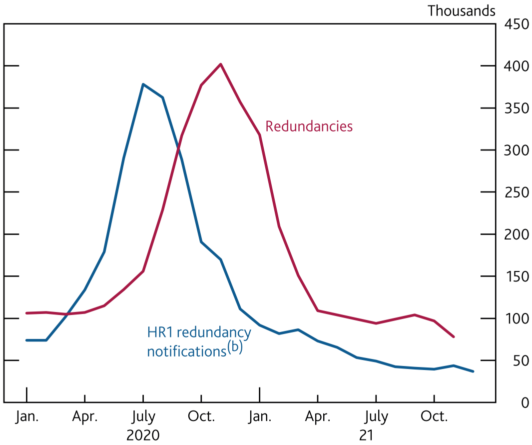
…and the high number of vacancies could also indicate mismatch, although these effects may have abated.

The elevated number of vacancies could in part indicate frictions in the labour market that are making it harder to match workers to jobs. However, hiring flows have kept pace with vacancies and some estimates of mismatch that rose during the pandemic have since fallen. That might suggest little deterioration in the labour market matching process. The scale of recruitment difficulties might point to frictions at a more granular level of the labour market though, such as a shortage of workers with particular skills. This may be one factor behind the rise in wage growth.

The tightness of the labour market has put upward pressure on wages.

Consistent with a tight and tightening labour market, firms have had to offer higher levels of pay to attract and retain workers. The pay of new hires in the KPMG/REC *UK Report on Jobs* was near record highs for much of the second half of 2021. Annual growth in private sector regular average weekly earnings was around 4% in the three months to November, while Bank staff estimate that underlying pay growth has been between 4% and 4½% over recent months (**Chart 3.1**). The outlook for wage growth and the implications for inflation are discussed in more detail in Sections 1 and 3.

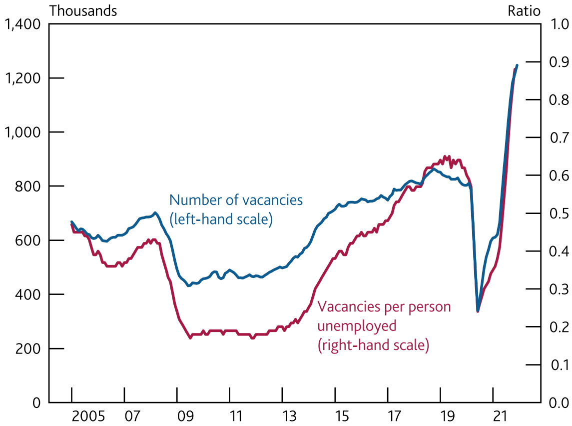
Chart 2.17: Redundancies have remained low
Redundancies and HR1 redundancy notifications(a)



Sources: Insolvency Service Redundancy Payment Services Database, ONS and Bank calculations.

(a) Three-month rolling sums. Latest redundancies data point is for November 2021; latest HR1 notifications data point is for December 2021. Both series are not seasonally adjusted.
(b) HR1 advance notices of redundancy are only required when employers propose to dismiss 20 or more employees at a single establishment. Not all employees given such notice will go on to be made redundant. The figures may also include some submissions relating to company restructures or changes in employee terms of contract. Great Britain only.

Chart 2.18: The number of vacancies has increased to a series high
Vacancies(a)



Sources: ONS and Bank calculations.

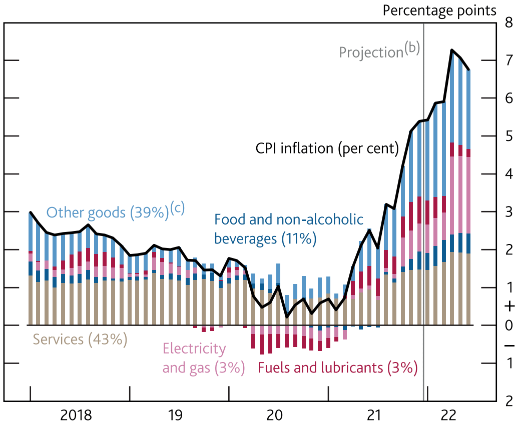
(a) Three-month moving averages. Latest vacancy data are for December 2021, latest unemployment data for November 2021.

2.4: Inflation

CPI inflation rose to 5.4% in December.

CPI inflation was 5.4% in December, a 2¼ percentage point rise since September (**Chart 2.19**). That is almost 1 percentage point higher than expected at the time of the November *Report*. Core inflation – which strips out energy and other volatile items – also picked up to 4.2% in December, a 1¼ percentage point rise since September.

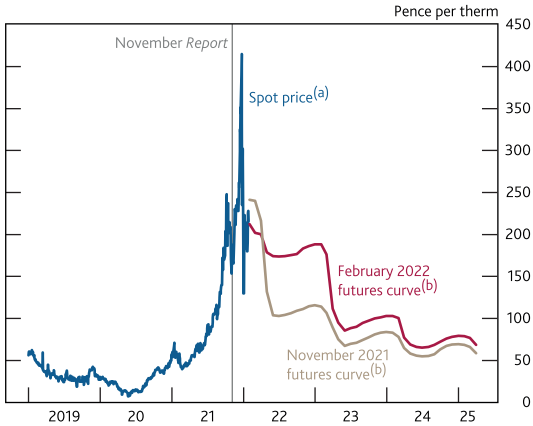
Chart 2.19: CPI inflation was 5.4% in December and is expected to rise to around 7¼% in April
Contributions to CPI inflation(a)



Sources: Bloomberg Finance L.P., Department for Business, Energy and Industrial Strategy, ONS and Bank calculations.

(a) Contributions to annual CPI inflation. Figures in parentheses are basket weights in 2021 and do not sum to 100 due to rounding.
(b) Bank staff's projection. Fuels and lubricants estimates use Department for Business, Energy and Industrial Strategy petrol price data for January 2022 and then are based on the sterling oil futures curve.
(c) The difference between CPI inflation and the other contributions identified in the chart.

Chart 2.20: Gas prices remain much higher than in the past, and the futures curve has risen since November
Wholesale gas spot price and futures curves



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

(a) One-day forward price of UK natural gas.
(b) February 2022 curve is the 15 working day average to 26 January 2022 and the November 2021 curve is the 15 working day average to 27 October 2021.

Higher global energy prices explain almost 1 percentage point of the recent rise in inflation…

Energy prices increased markedly during 2021 and explain almost 1 percentage point of the rise in inflation since September. Household utilities and fuel prices were both pulling down on inflation at the start of the year, but since then gas prices in particular have risen sharply (**Chart 2.20**). In October, the retail energy price caps set by Ofgem increased by 17% for gas and 9% for electricity, reflecting higher futures prices (see Box A of the November 2021 *Report*).

…with a slightly larger share explained by higher inflation among tradable goods.

The production of many goods relies on global supply chains. Strong global demand for particular goods – particularly in the US – as well as some disruption to supply have created bottlenecks in those supply chains. That has put upward pressure on prices globally (Section 2.1) and has also affected UK prices. The price of UK household appliances rose by over 9% in the year to December, for example, compared with negative inflation on average during 2020. Core goods inflation – which strips out volatile components such as food and energy – picked up to 5.2% in December, more than 1¾ percentage points higher than in September (**Chart 2.21**).

Higher inflation also appears to be broadening to services…

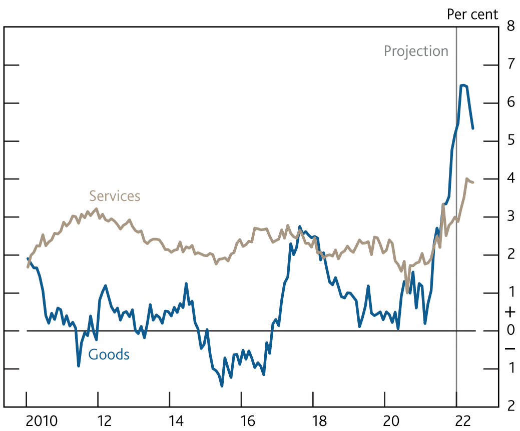
Consumer services inflation has picked up recently. This is partly due to the change in VAT rate in the hospitality sector, but services inflation has risen outside that sector too. Core services inflation, which focuses on a subset of the CPI basket that is largely domestically produced, averaged close to 3% over Q4. That is high relative to recent years (**Chart 2.21**), but broadly in line with its post-2000 average. Overall, with energy and goods inflation together accounting for a large part of the 2¼ percentage point rise in CPI inflation since September, the contribution to the increase from services was much smaller at 0.3 percentage points.

…which may have implications for the persistence of the current overshoot.

Tradable goods prices tend to be more volatile than other items in the CPI basket (Broadbent (2021)). For some goods, such as non-oil commodities, price increases have tended to be followed by below-average rates of inflation (Winkelried (2021)). Services inflation tends to be less volatile and more persistent than goods inflation (**Chart 2.22**). That extra persistence could reflect the role of domestic factors such as labour market tightness in determining services prices, which tend to evolve relatively slowly.

Chart 2.21: Core goods inflation has risen well above previous peaks, while core services inflation has also increased

Core goods and core services CPI inflation, excluding VAT(a)

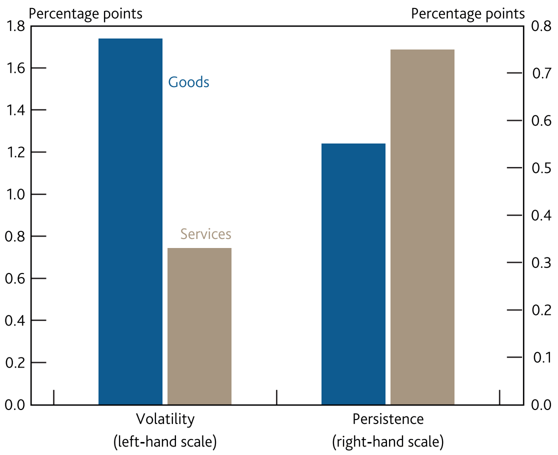


Sources: ONS and Bank calculations.

(a) Core services CPI excludes airfares, package holidays and education. Core goods CPI excludes energy, food, non-alcoholic beverages, alcoholic beverages and tobacco. Bank staff have adjusted for the estimated direct impact of changes in VAT and there is uncertainty around the precise impact of that adjustment.

Chart 2.22: Services inflation tends to be less volatile and more persistent than goods inflation

Volatility and persistence of goods and services inflation(a)



Sources: ONS and Bank calculations.

(a) Volatility is measured as the standard deviation over the sample (annual data from 2001 to 2021). Persistence is measured as the lagged coefficient in a first-order autoregression.

CPI inflation is expected to rise almost 2 percentage points further by April, peaking at around 7¼%…

Inflation is expected to rise to around 7¼% in April, an increase of almost 2 percentage points from December. It is then expected to fall back somewhat in May and June (**Chart 2.19**).

…with around half of that rise owing to a further increase in energy prices.

Wholesale gas and electricity prices have been volatile over recent months, but remain significantly higher than in the past. Gas futures prices over the next three years are 30% higher than in the run up to the November *Report*, although the curve is still downward sloping (**Chart 2.20**). Based on Ofgem's published method for calculating the price caps, the latest developments suggest that household utilities prices will rise by close to 50% in April. Higher utilities prices alone directly account for around two thirds of the rise in inflation between December and April. But fuel prices partially offset that, such that energy prices overall account for around half of the expected rise. These estimates also reflect upcoming changes to CPI weights, where energy prices are expected to account for a higher share of the CPI basket in 2022.

The rest of the expected rise in inflation to April is evenly split between higher goods prices…
Non-energy UK goods inflation is expected to increase further in the near term. Contacts of the Bank's Agents report that food price inflation is likely to rise a little further in the coming months, for example, reflecting cost increases among suppliers. It is expected to average 4½% over 2022 H1. There may be downside risks to some goods prices, however. Similar to gas prices, the futures curves for some agricultural goods are downward sloping. That could point to price falls among some of those goods. Core goods inflation is also expected to rise further in the coming months, peaking at around 6½%, before falling back somewhat during the rest of 2022 Q2 (**Chart 2.21**).

…and higher services prices.
Agency intelligence and a range of survey indicators point to a further increase in services inflation in the near term. That is also consistent with the tight and tightening labour market (Section 2.3). Private rents inflation is expected to increase further, in part reflecting the wider strength in the housing market. Overall, services inflation accounts for around 0.5 percentage points of the almost 2 percentage point rise in CPI inflation expected by April, similar to the expected contribution from non-energy goods prices.

There is uncertainty around the extent to which firms will raise prices in response to higher input costs…
The path of inflation will be affected by the extent to which firms pass on higher input costs by raising their own prices. Margins are difficult to measure accurately, but contacts of the Bank's Agents report that they were squeezed during the early part of the pandemic when firms in some sectors were facing particularly weak demand, with some normalisation since. Some firms may look to rebuild margins further, or maintain existing margins in the face of further cost increases. Agency contacts report that many firms are doing this by raising prices. Consistent with that, survey indicators of input and output prices have remained well above the 50 'no-change' mark recently.

…and the global spread of Omicron creates additional uncertainty around the inflation forecast.
The effect of the Omicron variant on prices is uncertain. It could weigh on inflation somewhat via weaker demand, although before the emergence of the latest variant the pandemic appeared to have been less deflationary than previously expected (Broadbent (2021)). Omicron could also add to global supply bottlenecks by hampering production if restrictions have to be introduced to curb its spread, which would have the opposite effect on prices (Box B).

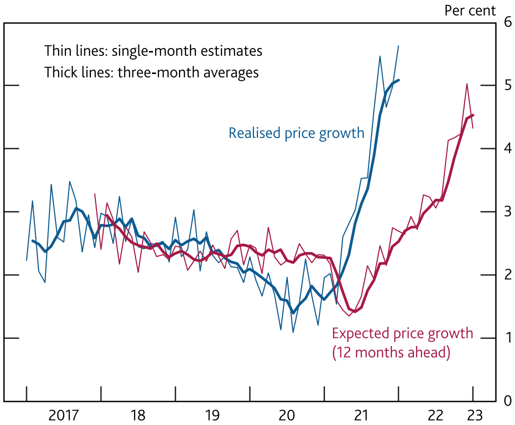
As CPI inflation has picked up, indicators of short-term inflation expectations have also increased…
According to both the Bank/Kantar and YouGov/Citigroup surveys, household inflation expectations at the one-year horizon have picked up as CPI inflation and the MPC's near-term projections have increased. Past evidence suggests that should be expected (Rowe (2016)). These moves are broadly consistent with previous periods of above-target inflation.

Short-term inflation expectations among businesses and financial market participants also picked up during Q4. In the CBI survey of the distribution sector, which includes some firms that sell directly to consumers, companies' one year ahead expectations rose above their 2010–19 average. The Decision Maker Panel (DMP) Survey, which covers a broader range of sectors, also suggests that firms expect to raise prices further over the coming year (**Chart 2.23**), although there have been significant differences between expected and realised price changes recently. Short-term indicators derived from financial market prices also picked up in Q4. The one-year spot inflation swap rate fell back a little in January, however (**Table 2.B**).

…while inflation expectations at the two to three-year horizon have also risen, albeit by a little less.
Looking two to three years ahead, inflation expectations also picked up, albeit by less than at the one-year horizon. Surveys of households and businesses at that horizon reported higher expectations in Q4, for example. Financial market prices were also consistent with higher inflation expectations in Q4, although some of that has unwound since late December. A question in the new Market Participants Survey suggests that respondents expect CPI inflation to fall back to 2% in three years' time. The expectations of professional forecasters are similar, on average.

Chart 2.23: Firms in the DMP Survey raised prices by 5% over the past year, and expect to raise them by a similar amount over the next 12 months

Realised and expected annual firm-level price growth[(a)]



Sources: DMP Survey and Bank calculations.

(a) Based on the questions: 'Looking back, from 12 months ago to now, what was the approximate % change in the average price you charge, considering all products and services?' and 'Looking ahead, from now to 12 months from now, what approximate % change in your average price would you expect in each of the following scenarios?'. The latest data point is January 2022 for realised price growth and January 2023 for expected price growth.

Table 2.B: Some measures of inflation expectations remain higher than past averages

Measures of inflation expectations[(a)]

Per cent	2000–07[(b)]	2010–19	2020	2021 Q1	2021 Q2	2021 Q3	2021 Q4	2022 Jan.
One year ahead inflation expectations								
Households[(c)]								
Bank/Kantar	2.4	3.0	2.9	2.7	2.4	2.7	3.2	n.a.
YouGov/Citigroup	2.5	2.5	3.1	3.0	2.8	3.4	4.1	4.8
Companies[(d)]	n.a.	1.7	1.1	0.5	1.1	1.5	2.6	n.a.
Financial markets[(e)]	2.8	3.0	2.5	3.4	3.6	4.4	6.3	6.2
Two to three year ahead expectations								
Households[(c)]								
Bank/Kantar	n.a.	2.8	2.3	2.2	1.9	2.2	2.4	n.a.
Companies[(d)]	n.a.	n.a.	1.4	0.6	0.9	1.3	2.3	n.a.
External forecasters[(f)]	2.0	2.1	2.0	1.9	2.0	2.2	1.9	2.0
Financial markets[(g)]	2.8	3.1	3.5	3.5	3.7	3.8	4.3	4.2
Five to ten year ahead expectations								
Households[(c)]								
Bank/Kantar	n.a.	3.3	2.9	2.9	2.7	3.0	3.1	n.a.
YouGov/Citigroup	3.5	3.2	3.2	3.3	3.4	3.6	3.7	3.8
Financial markets[(g)]								
Five-year, three year	3.0	3.4	3.6	3.7	3.8	3.9	4.1	4.1
Five-year, five year	3.1	3.4	3.6	3.6	3.7	3.8	3.9	4.0
Memo: CPI inflation	*1.6*	*2.2*	*0.9*	*0.6*	*2.1*	*2.8*	*4.9*	*n.a.*

Sources: Bank of England, Bloomberg Finance L.P., CBI, Citigroup, Kantar, ONS, YouGov and Bank calculations.

(a) Data are not seasonally adjusted.
(b) Averages from 2000, or start of series, to 2007. Financial market data start in October 2004, YouGov/Citigroup data start in November 2005 and external forecasters' data start in 2006 Q2.
(c) The household surveys ask about expected changes in prices but do not reference a specific price index. Summarised as a weighted median.
(d) CBI data for the distributive trades sector. Companies are asked about the expected percentage price change over the coming 12 months and the following 12 months in the markets in which they compete.
(e) One year spot RPI inflation, derived from swaps. This includes a slight lag and can be prone to volatility, particularly on RPI release days. Given those issues, past *Reports* have quoted one-year instantaneous rates, but volatility in the front end of the inflation curve means those have been misleading recently. Spot rates will be quoted in these tables while those issues persist.
(f) Bank's survey of external forecasters, CPI inflation rate three years ahead. January figure refers to expectations for three year ahead inflation in the 2022 Q1 survey.
(g) Instantaneous RPI inflation three years ahead, three-year RPI inflation, five years ahead and five-year RPI inflation, five years ahead, derived from swaps. UK RPI is due to be aligned with CPIH from February 2030, which will affect the pricing of longer-dated measures.

Medium-term indicators have generally been more stable, although some remain above past averages. The latest Bank/Kantar and YouGov/Citigroup surveys suggest household inflation expectations five to ten years ahead have picked up slightly. While the most recent moves have been relatively small, some of these indicators remain elevated compared with the past. The YouGov/Citigroup five to ten year ahead measure, which has a relatively long time series measured on a consistent basis, remains above its historical average. The Bank/Kantar measure is below its 2010–19 average, although recent results may have been affected by a change in survey method in mid-2020.[(1)]

Financial market indicators of medium-term inflation expectations are little changed from their November levels. Three-year inflation expectations, five years ahead, which are unaffected by the alignment of RPI and CPIH in 2030, remain above their 2010–19 average (**Chart 2.6**). The use of UK inflation markets for hedging large pension liabilities can at times cause these to move even in the absence of changes in inflation expectations or perceived inflation risks, but market intelligence suggests that recent moves in part reflect higher central expectations for inflation.

(1) See 'Bank of England/TNS Inflation Attitudes Survey – May 2020' for more details.

Overall, these moves are consistent with inflation expectations remaining well anchored.
The MPC considers a range of evidence on inflation expectations, based on a number of metrics across various sources. For the survey measures, for example, the distribution of responses can be informative, as well as the headline levels (Reis (2020)). Taking all the evidence together, recent moves appear consistent with inflation expectations remaining well anchored. The MPC will continue to monitor closely the risk that domestic and global demand and cost pressures could affect medium-term inflation expectations, and so wage and price-setting.

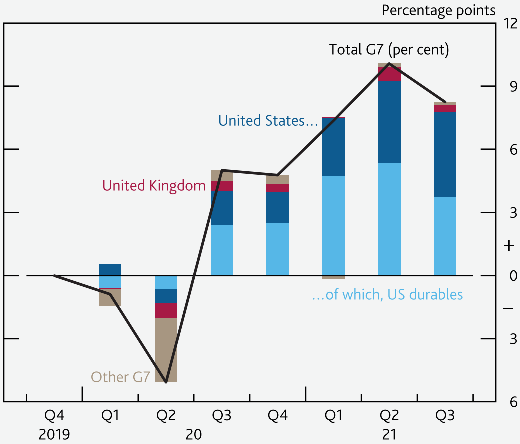
Box B: How are global bottlenecks in goods markets evolving, and what might that mean for inflation?

Bottlenecks occur when demand suddenly and significantly exceeds the maximum amount that can be supplied, constraining output and raising prices. As economies have recovered from the pandemic, these have emerged in goods, labour, and energy markets. This box covers bottlenecks in global goods markets, which reflect households having changed the composition of their spending, as well as disruptions to business supply chains (Broadbent (2021)). How these global bottlenecks evolve will be important for the inflation outlook both in the UK and abroad.

Consumer spending has rotated towards goods and away from services during the pandemic…
As of 2021 Q3, G7 goods consumption was 8% higher relative to 2019 Q4 (**Chart A**), but services consumption had yet to recover its fall in 2020. That was largely driven by three factors. First, measures taken to control the spread of Covid globally have limited opportunities for spending on certain services. Second, households appear to have shifted their preferences towards goods consumption, aided by the accelerated rise of online commerce. And third, a variety of policy measures have supported household incomes across countries to help finance this spending.

…driven in large part by the US.
Almost all of the increase in G7 goods consumption can be attributed to the US, and around half to US durable goods spending alone (**Chart A**). That is likely to reflect both a significant shift in consumer preferences towards durables, like household appliances and motor vehicles, and the scale of income support. In 2020, US disposable personal incomes rose 7½%, the largest annual increase for 20 years. A model estimated by Bank staff suggests that around one third of the increase in US durable goods spending since 2019 Q4 can be attributed to higher incomes.

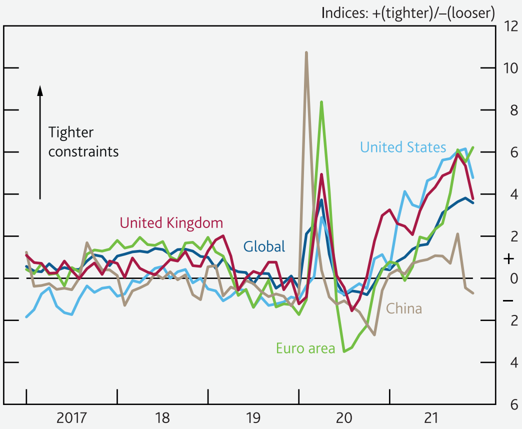
Chart A: Goods consumption has increased sharply, driven by spending in the US on durables
Contributions to change in G7 goods consumption since 2019 Q4[a]



Sources: OECD, Refinitiv Eikon from LSEG and Bank calculations.

(a) G7 countries are Canada, France, Germany, Italy, Japan, United Kingdom and United States.

Chart B: Supply constraints have tightened materially
Indicators of supply constraints[a]



Sources: IHS Markit, JPMorgan, Refinitiv Eikon from LSEG and Bank calculations.

(a) Indicators are estimated by Bank staff using principal component analysis on a range of PMI indicators for supply constraints in the manufacturing sector (supplier delivery times, stocks of purchases, stocks of finished goods, input prices and backlogs of work). Before principal components are estimated, these indicators are regressed on the new orders PMI to control for movements in demand. Latest data are for December 2021.

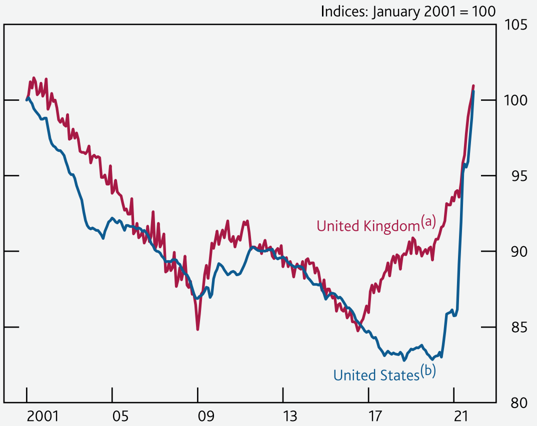
This rotation in demand has put pressure on supply chains, which have also been disrupted by Covid outbreaks.
The scale of this rotation has put pressure on supply chains. Although supply has increased in response, it tends to be able to respond less quickly than demand over short periods of time. In addition, supply chains have been disrupted by Covid outbreaks in China and other Asian economies that continued to impose local restrictions. An estimate of supply constraints, derived from a range of purchasing managers' indices, rose across advanced economies over 2021, despite less of an impact on China itself (**Chart B**).

Taken together, supply and demand imbalances have increased costs markedly.
The combination of heightened goods demand and disrupted supply chains has significantly increased costs and prices. Purchasing managers' indices of manufacturing input and output prices reached record highs in September. Consumer

price inflation has also picked up sharply across countries (see Section 2.1) driven, in part, by sub-components of CPI baskets that rely on global supply chains. For example, these sub-components account for a large part of the overshoot of UK inflation relative to the MPC's 2% target (**Chart 2.19**). In particular, durable goods prices have tended to fall in the past in the UK and US, aside from some increases linked to currency depreciations, for example, after 2016 in the UK. But since 2020, durable goods prices in both countries have picked up very sharply and reversed the deflation over the past 20 years, despite no significant fall in the dollar or sterling exchange rates (**Chart C**).

Chart C: Durable goods prices have risen sharply, reversing several years of decline

UK and US durable goods price indices

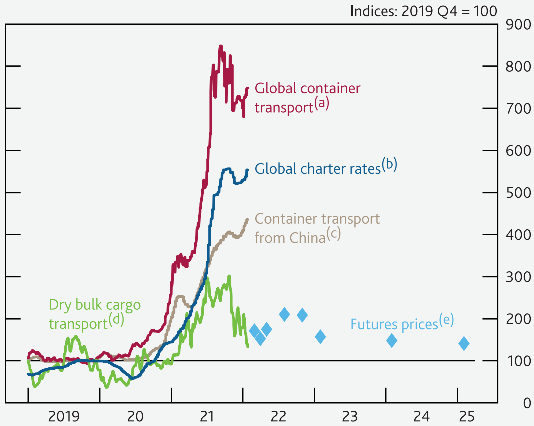


Sources: Federal Reserve Economic Data, ONS and Bank calculations.

(a) Consumer Price Index: Durables.
(b) Consumer Price Index for All Urban Consumers: Durables in U.S. City Average.

Chart D: Measures of shipping costs have stabilised, and in some cases have fallen from recent peaks

Shipping costs and forward freight agreement prices



Sources: Baltic Exchange, Freightos Baltic Index, Harper Petersen, Refinitiv Eikon from LSEG, Shanghai Shipping Exchange and Bank calculations.

(a) Freightos Baltic Container Index: a global measure of the cost of container transport.
(b) Harpex Charter Rates Index: a measure of the cost of chartering container ships.
(c) China Containerized Freight Index: a measure of the cost of container transport from China.
(d) Baltic Exchange Panamax Index: an index of average prices paid for the transport of dry bulk cargo around the world on Panamax-sized carriers.
(e) Baltic Exchange Panamax futures: forward freight agreements indicating market expectations of future dry bulk shipping costs on 26 January 2022 for Panamax-sized carriers.

Towards the end of 2021 it appeared that demand was starting to rotate back towards services…

Services consumption picked up markedly over the second half of 2021 across countries. Consumer spending appeared to have tilted back towards more contact-intensive services, as confidence increased with continued vaccination rollouts and mobility returned to around pre-pandemic levels. With services spending picking up, global goods consumption had started to stabilise. For the US, fiscal measures that supported incomes largely ended in 2021 Q3. Durable goods consumption fell by around 7% in that quarter, while services consumption increased despite rising Covid cases. And data for 2021 Q4 showed that services consumption in the US grew at a faster rate than goods consumption for a second consecutive quarter. The MPC's projections in the November *Report* were consistent with this stalling in global goods demand, and signs of a rotation back towards services.

…and supply chains were beginning to adapt…

Some businesses in global supply chains had begun to adapt to the rotation in demand and disruptions at ports and factories abroad. For example, car manufacturers increased their inventories of unfinished goods. This shift away from 'just-in-time' to 'just-in-case' production may allow backlogs to clear up faster. Indeed, manufacturing inventories of finished goods had been recovering in the US. However, intelligence from the Bank's Agency network in the UK suggests that this period of adjustment is likely to take some time, and in some cases require increased investment. And some adjustments, like building inventories, may actually exacerbate bottlenecks in the short term, even though it could make supply chains more robust going forward.

…such that global bottlenecks appeared to be stabilising, and starting to ease in places.

There were some signs that global bottlenecks had been stabilising and beginning to ease. The latest data from purchasing managers' indices for manufacturers input and output prices appeared to be flattening off. Some measures of shipping costs had also plateaued (**Chart D**), meaning price inflation would fall naturally, and some had fallen from their heightened levels earlier in 2021, putting further downward pressure on headline inflation. Prices in futures markets suggested some shipping costs and commodity prices were expected to fall further too. Collectively, the evidence from late 2021 appeared to be consistent with the MPC's judgement in the November *Report* that the effects of global bottlenecks would fade over 2022.

The emergence of the Omicron variant may mean that global bottlenecks temporarily worsen, but the effects may be more limited.

The emergence of the Omicron variant and the associated increase in cases (**Chart 2.3**) could intensify some aspects of global bottlenecks. Consumers may return to limiting spending on high-contact services, and substitute back into goods spending. Further disruptions may occur in those factories and ports in China and other Asian economies that are important for global supply chains, pushing up costs and prices. Indeed, some measures of shipping costs have begun to increase again more recently (**Chart D**).

But the effects may be more short-lived than previous waves, with less of an effect on inflation. Evidence from countries furthest ahead in this wave suggests that it is likely to last for less time. Accelerated rollouts of booster vaccination programmes and widespread testing may limit any rotation back towards goods spending and away from services. And households have already increased their share of spending on durable goods, such that any further increase from here is perhaps less likely. Supply chains may also be better able to handle disruption at key factories and ports in China and other Asian economies, having adjusted their production processes over the past year.

Global bottlenecks are expected to fade over the next 12 months, a little longer than in the MPC's previous forecast.

The MPC judges that global bottlenecks will last a little longer than in the November *Report*. The MPC's forecast is consistent with some delay in the rotation of spending back towards services from goods, and some further disruption to global supply chains, due to the spread of the Omicron variant. As such, the MPC expects the level of world export prices to rise a little further, and stay a little higher, than in the November *Report*. But world export prices are not expected to keep on rising beyond the near term. As case rates fall, global goods demand is likely to normalise, and supply disruptions lessen, in line with evidence from late 2021. That means world export prices fall back a little over the forecast, exerting downward pressure on UK inflation, but remain well above their pre-pandemic levels.

There remains uncertainty around this judgement, as it depends on how the pandemic evolves and how these bottlenecks interact with other price pressures. On the one hand, domestic supply constraints, such as shortages of workers (**Chart 2.8**), might mean that the cost of importing goods remains high even if global bottlenecks ease. On the other hand, were energy prices to follow paths implied by financial markets, UK inflation could fall more quickly than projected (see Section 1).

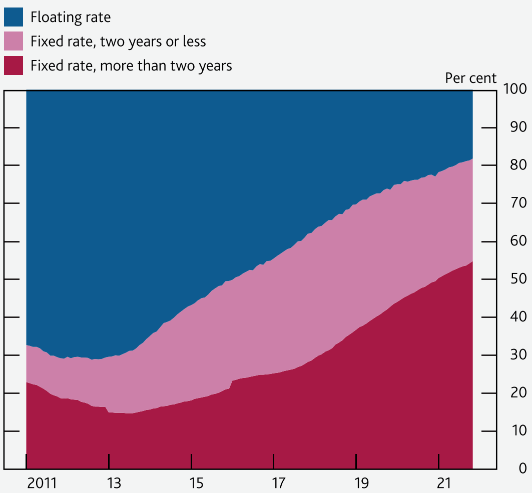
Box C: How do changes in Bank Rate affect the interest rates facing households and firms?

Since November, the MPC has raised Bank Rate modestly. Changes in the current and expected level of Bank Rate influence spending through a number of channels, including via the exchange rate and asset prices. A more direct channel operates via the interest rates that banks and building societies charge households and firms for borrowing, and the interest rates they pay for deposits. This box examines the impact of changes in Bank Rate on these retail interest rates.

Mortgages account for the majority of household debt.
Although only 30% of households have a mortgage, mortgage debt represents around three quarters of the overall stock of household debt. The effects of a change in Bank Rate on mortgage rates depend on whether the mortgage has a 'floating rate' – linked to Bank Rate or similar market interest rates – or a 'fixed rate'.

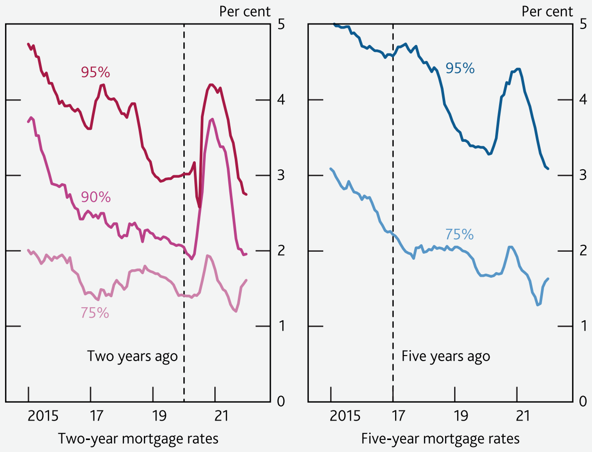
The minority of mortgagors with floating-rate mortgages will face higher interest rates relatively quickly.
Around 20% of the stock of mortgages, by value, have a floating interest rate (**Chart A**). Interest rates on these mortgages tend to change one-for-one with Bank Rate. A borrower with an average outstanding mortgage debt of £140,000 with a remaining repayment term of 17 years could expect to pay around £10 more in interest a month as a result of the increase in Bank Rate from 0.1% to 0.25% in December.

Chart A: A growing majority of the stock of mortgages by value are fixed rate
Distribution of mortgages by type of interest rate[(a)]



(a) Share of value of outstanding mortgages. Data from January 2016 are for individuals and individual trusts only. Latest data point is November 2021.

Chart B: Many mortgagors renewing a fixed-rate mortgage will get a similar or lower interest rate
Two-year and five-year fixed-rate mortgage interest rates at selected loan to value ratios[(a)]



(a) 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. Latest quoted rates data are flash estimates for January using data to 26 January and are subject to change until publication on 7 February.

Most mortgages have a fixed interest rate, so borrowers will not experience any changes until the end of the fixed period.
Around 80% of the stock of mortgages, by value, have an interest rate that is fixed for an initial period – usually two or five years. At the end of the fixed period, mortgagors can move onto a variable 'revert-to' rate, although they often remortgage with a new fixed-rate deal.

New fixed-rate mortgage rates are based on longer-term funding costs, which are influenced by expectations of Bank Rate. Expectations for the path of Bank Rate have risen in recent months (**Chart 2.5**), and longer-term risk-free reference rates have increased accordingly. Over time, these increases tend to be mostly passed through to new mortgage rates. As a result, remortgagors will face higher interest rates than they otherwise would have done had expectations for Bank Rate remained unchanged.

However, other factors also influence new fixed-rate mortgage rates, including bank funding costs, competition in the mortgage market, and the riskiness of the economic outlook. Developments in these factors have caused some mortgage rates to fall over the past year – particularly those for riskier, high loan to value mortgages (see Box B in the May 2021 *Report*).

Many mortgagors renewing a fixed-rate mortgage will currently get a similar or lower interest rate.
Overall, developments in recent years mean the rates on many new two-year fixed-rate mortgages are broadly similar to what they were two years ago (left-hand panel of **Chart B**), so a borrower remortgaging on similar terms will probably see little change in their interest rate. Five-year fixed rates are actually lower than they were five years ago (right-hand panel of **Chart B**), so someone moving from an expiring five-year deal to a new one could see their interest rate fall.

The increased share of longer fixed-rate mortgages mean that the average interest rate on the stock of mortgages will adjust more slowly to a change in Bank Rate than in the past.
The share of mortgages with a fixed rate has increased in recent years, and the average fixed period has lengthened (**Chart A**). As a result, changes in the interest rates on new mortgages will take a little longer to pass through into the average interest rate paid on the stock of mortgages than in the past. Nevertheless, over half of the outstanding stock of fixed-rate mortgages will still reach the end of a fixed-rate period within the MPC's three-year forecast horizon.

The cost of other forms of household borrowing is less sensitive to Bank Rate.
Other components of household borrowing such as credit cards and personal loans are less sensitive to Bank Rate. The interest rates on these products are often fixed, or driven predominantly by factors other than Bank Rate. Some households also have student loans, although the monthly repayments on these are determined by borrower income.

Household savings accounts often have variable interest rates, although changes to Bank Rate may not be passed through in full.
Over 60% of all household deposits are interest-bearing sight deposits, such as those in instant access savings accounts. These accounts typically have a variable interest rate. In recent years, changes in Bank Rate have tended to be followed by smaller changes in instant access savings rates. That is probably because the spreads between Bank Rate and savings rates have been unusually compressed while Bank Rate has been close to zero (see Box 2 in the February 2018 *Inflation Report*). How changes in Bank Rate pass through into deposit rates will also depend on banks' desire to attract deposits.

Interest rates on fixed-rate products where there is a penalty for early withdrawal, such as fixed-rate bonds, are generally higher than for instant access savings accounts. As with fixed-rate mortgages, the interest rates on fixed-rate savings products are influenced more by the expected level of Bank Rate in the future, rather than its current level. The average interest rate on a new five-year fixed-rate bond was 1.16% in January, around 30 basis points higher than six months ago.

Lower debt and higher savings mean the effect of a change in Bank Rate on net incomes may be somewhat smaller than before the global financial crisis.
As a rise in Bank Rate is passed through to retail interest rates, the sizes of household debt and deposits will determine the direct impact on households' net incomes. UK household indebtedness is lower today than before the global financial crisis (**Chart C**). In aggregate, household deposits increased relative to incomes over the same period, with a particularly large increase as a result of saving during the pandemic. These changes mean the impact on net incomes of a rise in Bank Rate may be somewhat smaller than before the financial crisis.

The impact of any changes in net income on spending will depend on how households respond. Historically, the spending of highly indebted households has been more sensitive to changes in interest rates. The proportion of highly indebted households has fallen in recent years. For example, the share of households with a mortgage debt-servicing ratio at or above 40% is significantly lower than in the past (Chart 1.2 in the December 2021 *Financial Stability Report*). However, many factors other than indebtedness will determine households' responses to changes in their net incomes.

Corporate bank debt is often linked to Bank Rate, although the interest rate on Bounce Bank Loans will be unaffected.

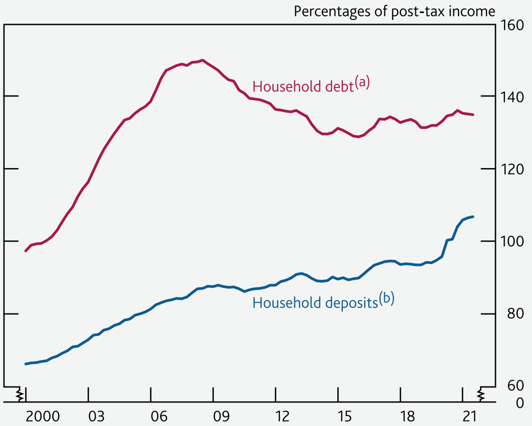
Around three quarters of corporate bank debt has a floating interest rate, so changes in Bank Rate tend to feed through fairly quickly to the cost of bank borrowing. Small and medium-sized firms are often more reliant on bank funding, as they are less likely than large firms to issue bonds and equity. However, many of these businesses made use of the Government's Bounce Back Loan Scheme during the pandemic: around one quarter of all UK businesses are thought to have used the scheme, with over 90% of the loans going to 'micro-businesses'.[(1)] Bounce Back Loans have a low, fixed interest rate of 2.5%, so are unaffected by changes in Bank Rate. The increase in borrowing during the pandemic may also mean firms have less demand for new loans in the near term. In recent quarters, firms have been repaying more finance than they raised.

Debt service remains affordable for most UK businesses.

The UK's corporate debt to earnings ratio is now close to its pre-pandemic level, having fallen to around 330% in 2021 Q3 (**Chart D**). The available data suggest that debt service remains affordable for most UK businesses (Chart 1.4 in the December 2021 *Financial Stability Report*).

Chart C: Aggregate household debt has fallen, and deposits have risen, relative to income

Aggregate household deposit and debt to income ratios



Sources: Bank of England, ONS and Bank calculations.

(a) Household financial liabilities as a percentage of the four-quarter moving sum of household post-tax income. Financial liabilities exclude unfunded pension liabilities and financial derivatives of the non-profit sector, and are not seasonally adjusted. Household income excludes the effects of Financial Intermediation Services Indirectly Measured (FISIM). Latest data point is 2021 Q3.

(b) Deposits with UK Monetary Financial Institutions, as a percentage of the four-quarter moving sum of nominal household post-tax income. Deposits data are not seasonally adjusted. Household income excludes the effects of FISIM.

Chart D: The UK corporate sector's debt to earnings ratio has fallen in recent quarters

UK businesses' debt to earnings ratio[(a)]

Sources: Association of British Insurers, Bank of England, Bayes CRE Lending Report (Bayes Business School (formerly Cass)), Deloitte, Eikon from Refinitiv, Financing & Leasing Association, firm public disclosures, Integer Advisors, LCD, an offering of S&P Global Market Intelligence, London Stock Exchange, ONS, Peer-to-Peer Finance Association and Bank calculations.

(a) Data are for private non-financial corporates. Earnings are defined as businesses' aggregate gross operating surplus, excluding the effects of FISIM. Latest data point is 2021 Q3.

(1) Firms with an annual turnover below £632,000.

Box D: Agents' update on business conditions

The key information from Agents' contacts considered by the Monetary Policy Committee at its February meeting is highlighted in this box, which summarises information gathered in the six weeks to mid-January.

Based on information obtained from contacts, the Agents' assessment is that economic growth will be modest in the coming few months as pressure on household incomes weighs on consumer spending, and supply shortages continue to constrain output. Many companies expect these shortages to persist for most of this year and in some cases beyond. As a result, input costs are expected to remain high and pay settlements are expected to pick up markedly this year. Increased costs are being passed through to consumer prices to a greater extent since the November *Report*.

Annual growth in consumer spending eased at the end of 2021, as Omicron dampened demand for consumer services, and supply-chain issues held back some goods sales.
Contacts reported that Omicron weighed on customer footfall in December 2021, following some months of buoyant demand. Spending on non-food goods increased only modestly, in part due to supply-chain issues, which constrained the availability of some items: in particular electrical goods containing microchips. By contrast, supermarket contacts reported a pickup in food sales as consumers cut back on dining out. Contacts in the leisure and hospitality sectors reported widespread cancellations, resulting in steep declines in revenues. Staff shortages, exacerbated by absences due to sickness or self-isolation, also curtailed activity. Looking ahead, many retail contacts said that they expected pressure on household disposable incomes to dampen consumer spending in the coming months.

Shortages of labour and goods weighed on output growth for some business services and in manufacturing and construction in particular.
In aggregate, business services contacts continued to report robust annual growth in turnover, but activity in some sectors, such as logistics, telecoms and IT was constrained by recruitment difficulties, staff absences due to sickness or self-isolation, and shortages of some goods.

Contacts in professional and financial services continued to report strong growth, supported by corporate transactions. Work relating to corporate restructuring and voluntary liquidations also picked up, though insolvencies remained low overall. Demand for engineering, architectural and advertising services also increased. By contrast, airport and airline revenues remained significantly below pre-Covid levels, and some contacts estimated that Omicron had delayed further recovery by a few months.

Manufacturing output grew at a modest pace, constrained by ongoing shortages of goods and labour. This was particularly the case for automotive and electronics manufacturers where semiconductor shortages persisted, leading to some production stoppages. Contacts also reported shortages of a range of other materials and products, as lead times for imported goods from Asia were reported to have lengthened significantly due to shipping delays. Production was also held back by shortages of workers with engineering skills.

Contacts expected only slow improvement in supply-chain disruption through 2022 and some thought problems might persist into 2023, in particular for semiconductors. Some companies had built, and were planning to maintain, higher levels of inventory to mitigate the effects of supply-chain disruption.

In construction, contacts continued to report strong activity in private and social housebuilding, publicly funded infrastructure projects and industrial developments. However, output growth had weakened due to shortages of materials and labour, as well as rising costs, which had caused delays to some projects being started. There were also a few signs of increased costs weighing on demand, for example for some types of commercial property development and home improvements. As a result, cash-flow pressures have increased, and the availability of credit and trade credit insurance were reported to have tightened for some companies.

Demand in the housing market and for some types of commercial property remained strong.
Demand in the housing market remained robust, though there were a few reports that Omicron may have dampened confidence. Activity was constrained by limited supply. Demand for rental properties remained strong, with supply shortages contributing to higher rents.

In commercial real estate, investor appetite for industrial properties remained strong, with high demand for warehousing, logistics and research facilities around the UK. Contacts generally reported downsizing office space when leases came up for renewal. For those seeking office space, demand was mostly concentrated on new or newly refurbished premises in city centre locations, offering improved energy efficiency and better amenities than older premises. Demand for retail property generally remained weak, with some premises being repurposed for leisure or other uses.

Investment intentions remained strong, although investment projects were increasingly held back by shortages of goods and labour; demand for bank credit was subdued.
There was widespread strength in investment intentions, with contacts reporting the reinstatement of projects that had been paused during the pandemic, and increasing capacity to meet demand. However, there were increasing reports of growth in investment activity being slowed due to shortages of goods, machinery and labour. And delays and increases in costs, in particular for building and construction, led to some slowing or postponement of investment.

Companies typically reported investing in IT-related projects, machinery upgrades, energy efficiency, product development or refurbishment of premises. Contacts in sectors that had been most affected by the pandemic, such as some retailers, entertainment and transport, were generally more cautious about investment.

Bank credit was available on the whole, though it was reported to remain tight for sectors most exposed to the pandemic, including construction. Demand for new bank credit was subdued among companies of all sizes. Large companies said they were able to raise funds from financial markets, whereas smaller firms generally reported that they had high cash balances and a limited appetite to take on more debt. However, rising input costs led to increased demand for working capital finance among some smaller companies.

Employment intentions eased slightly but recruitment difficulties remained intense; as a result, contacts expected average pay settlements to increase this year.
Employment growth slowed modestly as companies' rehiring and expansion plans neared completion. Employment growth was also held back by tight labour supply. Contacts in a wide range of sectors said recruitment difficulties remained a challenge, particularly for more experienced workers. The most acute shortages continued to be in logistics, hospitality, engineering, construction, professional services, IT and health and social care.

Omicron caused staff absences to increase sharply – in some cases to double those reported during previous waves of Covid-19 – but companies generally viewed it as a temporary issue.

Contacts also attributed labour shortages to: lower availability of migrant workers from the European Union; lower labour market participation by older workers and students; and people wanting to work fewer hours to achieve a better work/life balance. Contacts said that some of these shortages could take many years to be resolved. Most contacts expected labour market tightness to persist throughout 2022 at least.

Companies said they were taking a variety of actions to address skills shortages, including: launching or expanding apprenticeship programmes; hiring remote workers in other parts of the UK or overseas; providing in-house training; redeploying existing staff; increasing automation; and improving non-pay benefits.

Reflecting the tight labour market, pay settlements continued to rise and companies reported significant upward pay pressure to recruit and retain skills in short supply – for example in construction, hospitality, IT, and some professional services. Companies in these sectors commonly reported offering *ad hoc* bonuses to retain staff. A survey conducted by the Agents showed that pay settlements were higher than expected in 2021 and were anticipated to increase further in 2022 (Section 3).

Energy and wage costs were expected to put further upwards pressure on inflation in the coming months.
Input costs remained elevated overall, although the cost of some raw materials, and shipping rates on some routes appeared to be stabilising. Many contacts expected supply-chain issues to persist, which would keep input costs high over the coming year. Contacts said that energy and wage costs were now driving further inflationary pressure.

Manufacturing and construction firms continued to pass through materials and labour cost increases to prices. In business services, strong demand in some sectors, such as software and digital services, generally allowed high levels of pass-through into prices, with less pass-through in sectors where competition was greater.

Increased costs were also being passed through to consumer prices to a greater extent since the November *Report*. Supermarkets reported food price inflation continuing to rise, with further increases expected in the coming months. In non-food retail, discounting was lower and less widespread than normal during the post-Christmas sales as supply issues constrained the availability of some goods. Used-car prices continued to climb amid the ongoing supply shortages that affected the availability of new cars. And in consumer services, contacts reported passing higher wage costs through to prices, for example in veterinary clinics and hairdressers. Visitor attractions reported increasing ticket prices by 5%–10% and passing through higher food and beverage costs to customers.

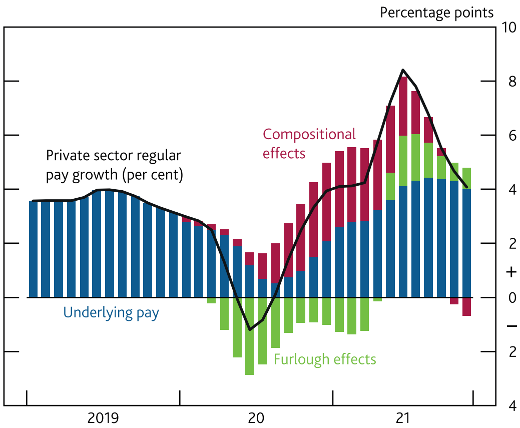
3: In focus – Wages and inflation

Firms are adjusting wages and prices in the context of a sharp rise in global energy and tradable goods prices, and a tightening domestic labour market. Bank staff estimate that annual growth in underlying pay remains somewhat above its rate prior to the pandemic, at around 4% to 4½%. This reflects a tightening in the labour market as the economy has recovered. It may also reflect a pickup in inflation and inflation expectations, and high rates of job churn. Prices are nonetheless rising faster than pay, such that households' real incomes are being squeezed. Underlying wage growth is expected to rise to just under 5% over the next year – higher than projected in November – due to a tighter than expected labour market and higher rates of inflation. Wage growth is expected to fall to around 2.5% over the medium term as the labour market loosens and inflation falls back.

Firms are adjusting prices and wages in the context of two key economic developments. First, there has been a rise in global energy and tradable goods prices, the latter in part reflecting bottlenecks (Box B). This external cost shock is the primary reason why inflation has risen well above the target (Section 2.4). Second, the labour market has tightened as the economy has recovered. This has pushed underlying wage growth above pre-pandemic rates (**Chart 3.1**), increasing domestic cost pressures. But pay has risen by less than prices, such that households' real incomes are being squeezed (**Chart 3.2**).

How firms and households respond to the rise in global energy and goods prices, the tightening labour market, and the squeeze on real incomes will be a key influence on the inflation outlook. This section focuses on the labour market, and wage growth in particular. Section 3.1 briefly recaps the latest data. Section 3.2 looks at the factors that have driven underlying wage growth above pre-pandemic rates. Section 3.3 sets out how underlying wage growth and inflation are expected to evolve over the MPC's forecast period.

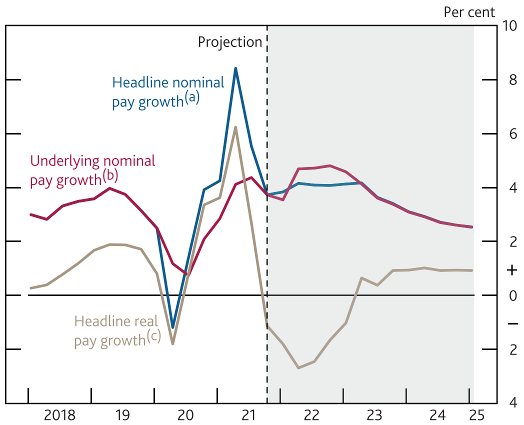
Chart 3.1: Underlying pay growth is somewhat above pre-pandemic rates at around 4% to 4½%…
Contributions to private sector regular pay growth(a)



Sources: HMRC, ONS and Bank calculations.

(a) Growth in three-month average pay relative to the same period a year earlier. Furlough effects, compositional effects and underlying pay growth are Bank staff estimates. Latest data are for November 2021.

Chart 3.2: …and is expected to pick up to just under 5% over the next year, before softening
Annual growth in private sector regular pay



Sources: ONS and Bank calculations.

(a) Private sector AWE excluding bonuses and arrears.
(b) Bank staff estimates of private sector regular pay adjusted for furlough and compositional effects.
(c) Bank staff estimates of headline pay adjusted for price changes using CPI.

3.1: What do the latest data tell us about wage growth?

As discussed in Box C of the August 2021 *Report*, headline measures of private sector average weekly earnings (AWE) have been affected by furlough and compositional effects since the onset of Covid. While the furlough scheme was in place, it helped workers stay in their jobs at generally lower pay than usual, which led to a drag on average wages (the green bars in **Chart 3.1**). As the furlough scheme drew to a close, this effect began to reverse during 2021. Changes in the mix of jobs acted to push up average wages over much of 2020–21, as job losses were skewed towards lower-paid roles. In recent months, these compositional effects (the red bars in **Chart 3.1**) appear to have been unwinding, alongside the recovery in employment, such that these effects were estimated to be dragging on headline annual pay growth.

In the latest data, the impact of furlough and compositional effects on headline annual pay growth are estimated to be broadly offsetting, such that Bank staff estimates for underlying pay growth (the blue bars in **Chart 3.1**) are now broadly in line with the headline measure, at around 4% in November. Underlying pay growth remains somewhat above its pre-pandemic rate of around 3½%. Given the difficulties in precisely measuring furlough and compositional effects, there is uncertainty around these estimates.

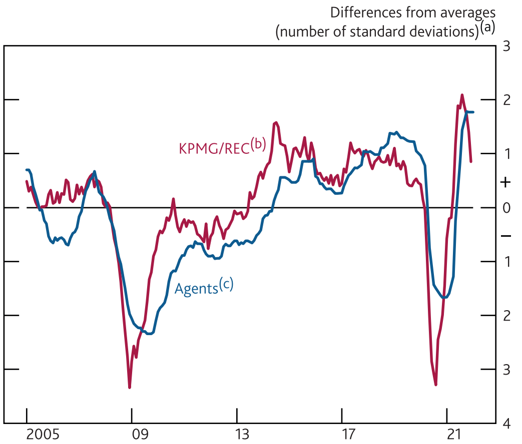
3.2: What factors might have driven underlying wage growth above pre-pandemic rates?

The pickup in pay growth during 2021 in part reflects a tightening in the labour market…

Wage growth is determined in part by labour market 'tightness': the balance between the demand for, and the supply of, workers. If demand increases, or supply falls, it makes it more difficult to recruit and retain staff and that can put upward pressure on wage growth.

The UK labour market tightened over the past year. The unemployment rate fell from around 5% at the start of 2021 to 4.1% in the three months to November (**Chart 2.1**), as the economy was recovering from the effects of Covid. The number of vacancies per person unemployed – another indicator of labour market tightness – has risen to new highs (**Chart 2.18**). And many firms continue to report significant recruitment difficulties (**Chart 3.3**).

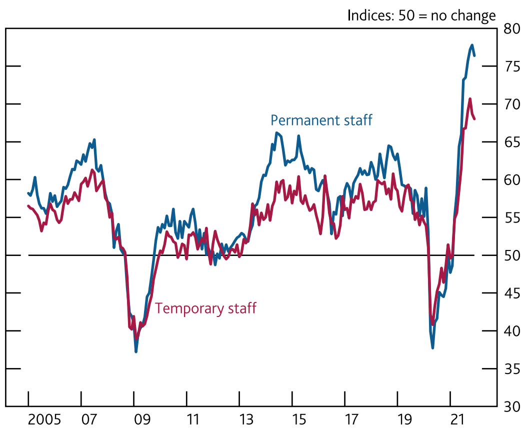
Chart 3.3: Firms still report recruitment difficulties
Indicators of recruitment difficulties



Sources: Bank of England, KPMG/REC *UK Report on Jobs* and Bank calculations.

(a) Differences from averages since 2000.
(b) KPMG/REC Staff Availability Index, inverted. Latest data point is for December 2021.
(c) Latest data point is for January 2022.

Chart 3.4: Pay rates for new hires have picked up sharply
Pay rates for new staff(a)



Source: KPMG/REC *UK Report on Jobs*.

(a) Latest data points are for December 2021.

This tightening contributed to a pickup in underlying wage growth. The KPMG/REC *UK Report on Jobs* attributed the strength in wage growth to demand for staff being greater than supply. A survey conducted by the Agents showed that pay settlements in 2021 were higher than expected. The tightness of the labour market also helps to explain the strength in pay of new hires: the KPMG/REC *UK Report on Jobs* permanent staff salaries index remained close to record highs in December (**Chart 3.4**).

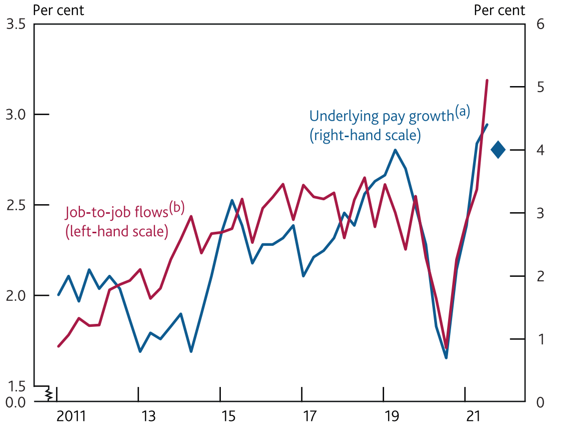
…and high rates of job churn may be playing a role.

Flows of workers between jobs picked up to new highs in 2021 Q3 (**Chart 3.5**), largely reflecting an increasing number of people resigning from jobs to move to new ones. Those who change jobs have typically experienced higher wage growth than those staying in the same job (**Chart 3.6**). And if firms believe their workers could be offered higher pay elsewhere, they may respond by increasing the pay of existing staff in order to retain them.

Some evidence suggests that higher job-to-job flows can play a role in explaining wage growth (Moscarini and Postel-Vinay (2017); Faccini and Melosi (2019)), so it is possible that the recent increase in the rate of job churn is putting upward pressure on wage growth. However, it is difficult to distinguish between the effects of falling labour market slack and higher job churn, as they tend to move together.

Chart 3.5: Job-to-job flows have picked up markedly, alongside the rise in underlying pay growth

Job-to-job flows and underlying private sector annual pay growth

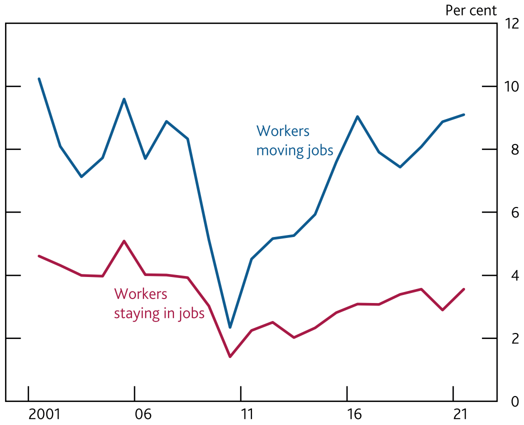


Sources: ONS and Bank calculations.

(a) Private sector regular pay adjusted for Bank staff estimates of furlough and compositional effects. Diamond shows the Bank staff estimate for the three months to November.
(b) Job-to-job flows are based on a percentage of total employment of people aged 16–69. Latest data point is for 2021 Q3.

Chart 3.6: People moving jobs typically experience higher pay growth

Median annual growth rates of pay[(a)]



Sources: Annual Survey of Hours and Earnings and Bank calculations.

(a) Annual data. Based on hourly pay for private sector employees where pay was not affected by absence or furlough. Workers moving jobs are defined as workers in employment in consecutive years but in a different job. Latest data point is for April 2021.

The pickup in pay growth could also reflect the rise in inflation and inflation expectations…

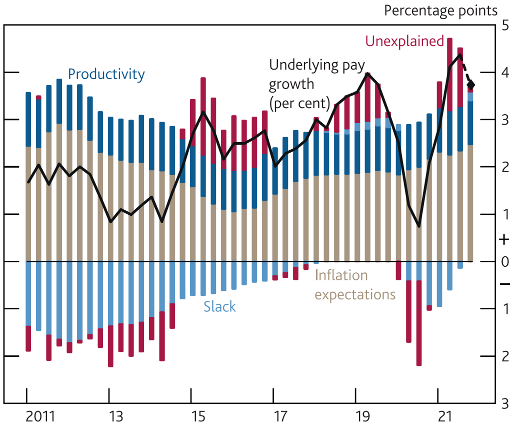
The rise in inflation and inflation expectations over 2021 may also have put pressure on employers to increase pay. But so far, consumer prices have risen faster than pay growth due to higher energy and tradable goods prices (Section 2.4), such that households' pay growth has slowed sharply in real terms (**Chart 3.2**). The extent to which this real income squeeze increases pressure on employers to increase pay further will affect the outlook for wages and prices (Section 3.3).

…as well as frictions in the labour market, although these appear to have fallen back.

Models used by Bank staff suggest that underlying wage growth during 2021 was somewhat stronger than the usual predictors of wage growth, such as labour market slack, would imply (**Chart 3.7**). This 'unexplained' component of wage growth (the red bars in **Chart 3.7**) may reflect the impact of temporary frictions in the matching of workers to jobs. As discussed in the November *Report*, one estimate of sectoral mismatch increased in the early stages of the pandemic (**Chart 3.8**). This indicator has since declined, alongside the 'unexplained' component of wage growth, suggesting that these frictions may be abating. That said, the scale of ongoing recruitment difficulties might point to continuing frictions on more granular dimensions of the labour market, such as a shortage of workers with specific skills.

Chart 3.7: Underlying wage growth was stronger than implied by its usual predictors during 2021, which may reflect labour market frictions…

Contributions to annual private sector regular pay growth[(a)]

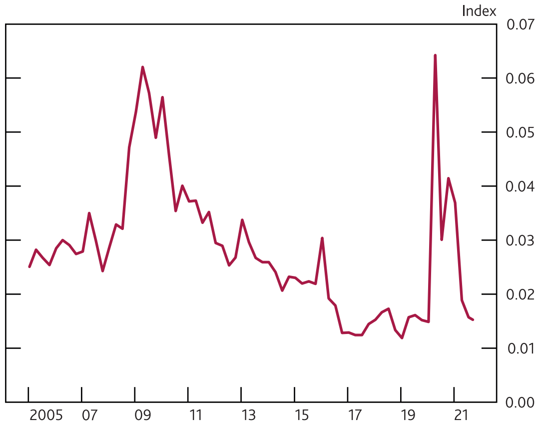


Sources: ONS and Bank calculations.

(a) Wage equation based on Yellen (2017). Inflation expectations are based on the Barclays Basix Index and the Citi one year ahead measure of household inflation expectations. Slack is based on the MPC's estimate of the unemployment gap. Productivity growth is based on the long-run market sector productivity growth per head. The unexplained component is the residual. The diamond shows the Bank staff projection for 2021 Q4.

Chart 3.8: …but one indicator suggests these have fallen back recently

Sectoral mismatch index[(a)]



Sources: ONS and Bank calculations.

(a) Estimates of sectoral mismatch are based on the methodology set out in Şahin *et al* (2014). Data are quarterly to 2021 Q3; final data point is for the three months to November 2021.

3.3: How are underlying wage growth and inflation expected to evolve over the forecast period?

The outlook for wages and prices will depend on how firms and workers respond to the increase in cost pressures and the tightness in the labour market.

Global energy prices have risen sharply (Section 2.4), and tradable goods prices are higher, the latter reflecting global bottlenecks (Box B). Other things equal, this means that the real purchasing power of the UK's aggregate income is lower. The MPC cannot affect this change in relative prices and the associated impact on real aggregate income. Its role is to ensure that as the adjustment to this shock takes place, inflation returns sustainably to the 2% target in the medium term.

Companies are adjusting their prices and the wages they pay their staff in the context of those external cost pressures, as well as the tightening domestic labour market. To limit the squeeze on their profit margins, they can try to reduce other costs such as wages, or pass on imported costs to consumer prices. However, employees may resist cost-cutting in the form of lower wages if the labour market is tight and consumer prices are rising sharply.

Over 2021, part of the adjustment to the external cost shock appears to have come through higher prices rather than lower domestic costs. Inflation has risen to above 5%, largely driven by higher energy and goods prices. As a result, while underlying nominal wage growth has picked up as the labour market has tightened, real income growth has slowed sharply (**Chart 2.11**). Firms may also have borne some of the increase in imported costs through a compression in their profit margins. Margins are difficult to measure accurately, but contacts of the Bank's Agents report that they were squeezed during the early part of pandemic when firms in some sectors were facing particularly weak demand, with some normalisation since.

In the MPC's central projection, underlying wage growth picks up to just under 5% by the end of 2022, as the labour market remains tight and inflation increases further in the near term.

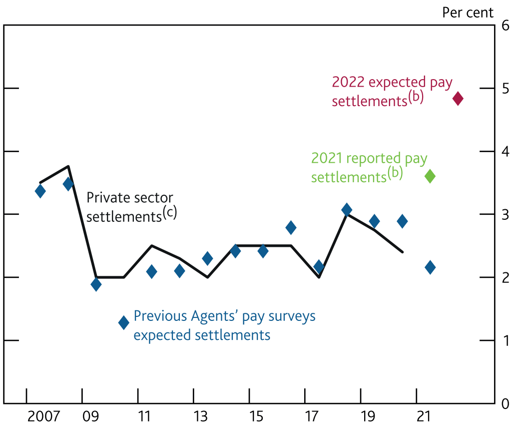
In the MPC's central projection, headline average pay growth remains around 4% in 2022 as compositional effects continue to drag on the headline measure, while underlying wage growth picks up to just under 5% (**Chart 3.2**). That rise is consistent with a recent pay survey by the Bank's Agents covering around 400 firms. In that survey, respondents expected average pay settlements to pick up to 4.8% in 2022 (**Chart 3.9**). Higher pay settlements were expected across small, medium and large firms, and across all major sectors in the economy.

The tight labour market is an important reason why respondents to the Agents' survey expected an increase in pay in 2022. Contacts cited the ability to retain staff and the ability to recruit UK workers as key factors pushing up their expectations for pay (**Chart 3.10**). In the MPC's central projection, the labour market remains tight in 2022, although the unemployment rate rises from 2022 Q2.

The pickup in inflation is also expected to affect the outlook for wages. In the Agents' survey, the increase in consumer price inflation was an important factor putting upwards pressure on pay in 2022 (**Chart 3.10**). In the MPC's central projection, inflation rises to around 7¼% in April, with the majority of that further increase being driven by energy and goods prices (Section 2.4).

Chart 3.9: Respondents to the Agents' pay survey expect pay settlements to pick up sharply in 2022

Pay settlements[a]

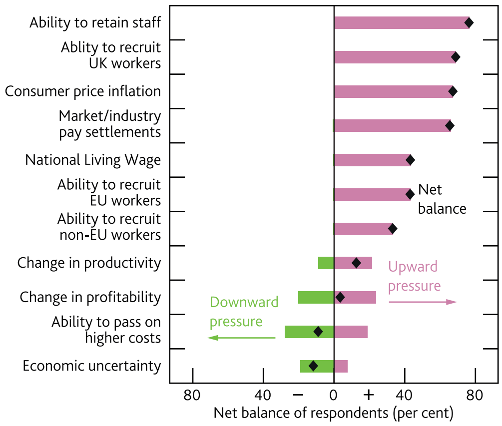


Source: Bank of England, including the wage settlements database (which draws on information from the Bank's Agents, Incomes Data Research, Incomes Data Services, Industrial Relations Services and the Labour Research Department).

(a) Companies were asked to state their average UK pay settlement for 2021 and their expected average UK pay settlement for 2022.
(b) Data gathered from the 2022 Agents' survey on pay and costs.
(c) Average over the previous 12 months, based on monthly data.

Chart 3.10: The tight labour market and higher inflation are expected to push pay higher in 2022

Factors affecting pay decisions in 2022[a]



(a) Taken from responses to the Agents' survey on pay and costs. Question: 'When considering your 2022 pay increase, how much of an impact are the following factors having/expected to have on your pay decisions?'. Reports of 'slight' pressure were given a 50% weight relative to reports of 'significant' pressure when calculating these balances.

Underlying wage growth then falls back to around 2.5% over the medium term as the labour market loosens and inflation falls back.

Wage growth is expected to fall to around 2.5% over the medium term (**Chart 3.2**). The factors currently pushing up on wage growth are expected to dissipate over the MPC's forecast horizon. The unemployment rate picks up over the forecast period as demand grows by less than the economy's supply potential. Over time, the impact of the global cost shock on inflation is also expected to dissipate. Conditional on the market path for interest rates, inflation is expected to return to target in just over two years' time (Section 1).

These projections imply that the adjustment to the external cost shock occurs largely through households' real incomes. The labour share – the share of national income that goes to workers – was a little above its longer-term average in 2021 Q2 according to ONS data (**Chart 3.11**). This is expected to decline a little over the forecast period to around its longer-term average, while firms rebuild profit margins. Over history, labour compensation and productivity in the UK and many other countries have generally grown at similar rates, such that the labour share has remained broadly stable. The US is a notable exception (Gutiérrez and Piton (2019)).

There is a risk that wage growth is stronger if the labour market is tighter than expected…

One possible risk to the MPC's central projection is that wage growth is stronger than expected. As discussed in Haskel (2021), there are various scenarios for how the labour market might develop. It could remain tighter than in the MPC's central projection if the expected softening in labour demand does not occur, job churn continues at high levels, or recruitment difficulties persist.

…or if elevated consumer price inflation leads to additional upward pressure on wages.

There is a risk that elevated levels of inflation and the squeeze on real pay growth lead to more sustained pressure on nominal wages than incorporated in the central projection. That said, the expected decline in inflation over the forecast period should ease those pressures. And the structural characteristics of the UK labour market may also mitigate this risk: worker bargaining strength has generally declined over time as unionisation has fallen (Abel *et al* (2018)).

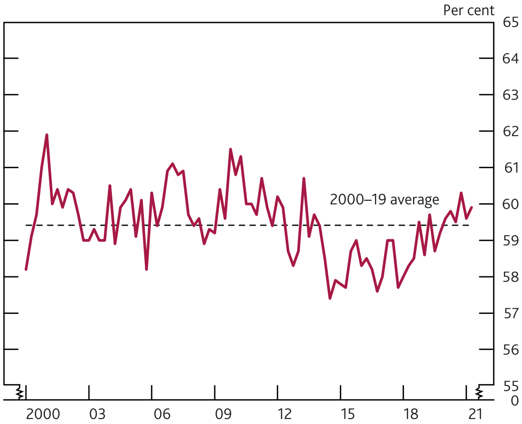
If stronger growth in labour costs is not matched by increases in productivity, this would put upward pressure on inflation.

If higher labour costs are not matched by increases in productivity, this would put upward pressure on inflation. There is evidence to suggest that firms have already begun to pass on some of the increase in labour costs to consumer prices. In the Agents' pay survey, around 20% of respondents reported that they had already increased prices to reflect at least some of the recent pay pressures (**Chart 3.12**).

There is also evidence suggesting that firms will continue to pass through higher labour costs over the next 12 months. In the Agents' pay survey, respondents expected total labour costs to be 8% higher, on average, in 2022 than in 2021. Many respondents expected to increase their prices over the next 12 months due to current wage pressures (**Chart 3.12**). There was some differentiation across sectors, however. Pass-through was expected to be stronger in business services and manufacturing, where almost half of respondents expected to fully pass through higher wage pressures. In contrast, just over half of respondents in consumer-facing firms expected not to be able to pass through any of their wage costs to prices.

Chart 3.11: The labour share was a little above its longer-term average in 2021 H1

Labour share of income[(a)]

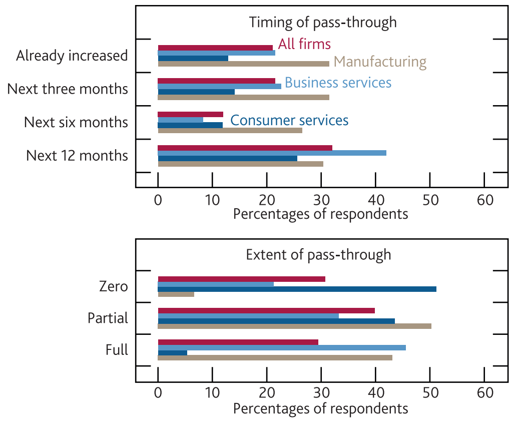


Sources: ONS and Bank calculations.

(a) Latest data point is 2021 Q2.

Chart 3.12: Many firms expect to pass through at least some of the increase in wage costs to prices

Expected pass-through of higher wages to prices[(a)]



(a) Taken from responses to the Agents' survey on pay and costs. Question: 'To what extent are current wage pressures resulting in an increase in your prices?'. Firms were able to select more than one option. Answers may not add up to 100% due to non-responses.

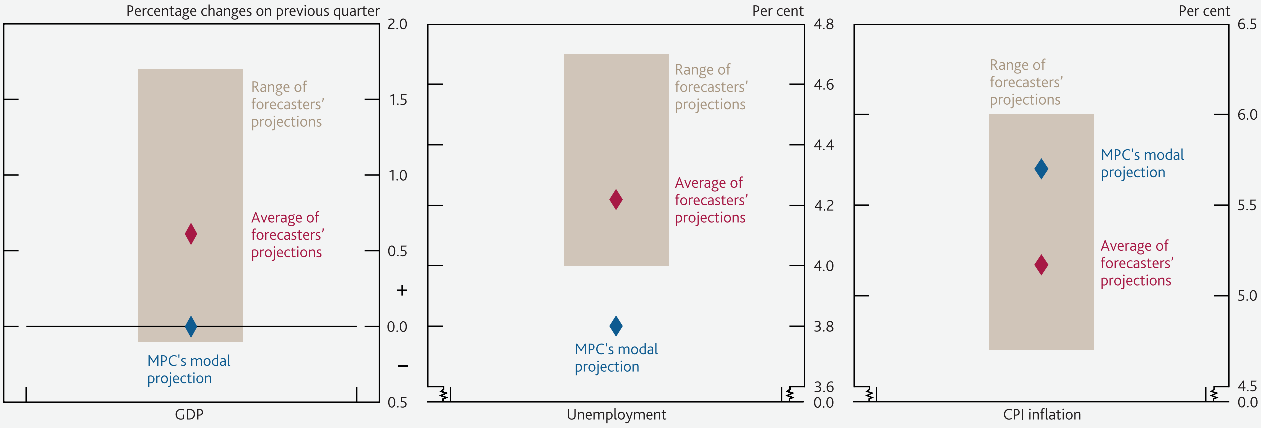
Annex: Other forecasters' expectations

This annex reports the results of the Bank's most recent survey of external forecasters. Expectations for the near term are summarised in **Chart A**, with those for further out shown in **Chart B**.[1]

On average, external forecasters expected quarterly GDP growth to be 0.6% in 2022 Q1 (**Chart A**). External forecasts for the unemployment rate ranged from 4.0% to 4.7%, but most forecasts were towards the bottom of that distribution. The average unemployment rate forecast was 4.2%, higher than the MPC's modal projection of 3.8%. CPI inflation was expected to be 5.2% in 2022 Q1, lower than the MPC's projection of 5.7%.

Chart A: On average, external forecasters expect GDP to rise by 0.6% in 2022 Q1, the unemployment rate to be 4.2%, and CPI inflation to be 5.2%

Other forecasters' central projections for GDP, the unemployment rate and CPI inflation in 2022 Q1[a]

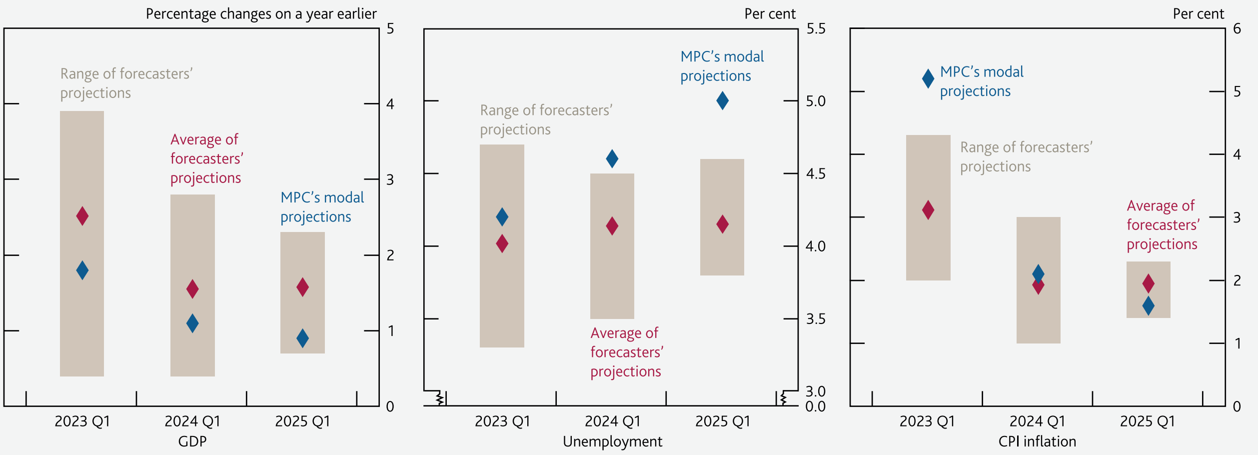


(a) One outlier has been removed from the reported results for GDP.

On average, respondents expected GDP growth of 2.5% in the four quarters to 2023 Q1 (left panel, **Chart B**). Four-quarter GDP growth is then expected to be 1.6% in 2024 Q1 and 2025 Q1. These projections are higher than the MPC's modal projection. External forecasters expect the unemployment rate to rise by less than in the MPC's modal projection over the next three years (middle panel, **Chart B**). CPI inflation is expected to fall to 3.1% in 2023 Q1, a faster decline than in the MPC's projection (right panel, **Chart B**). Respondents expected inflation to be close to the MPC's 2% target in 2024 Q1 and 2025 Q1.

Chart B: At the three-year horizon, external forecasters expect four-quarter GDP growth to be 1.6%, the unemployment rate to be 4.2%, and inflation to be in line with the MPC's 2% target

Projections for GDP, the unemployment rate and CPI inflation



(1) For detailed distributions, see '*Monetary Policy Report* chart slides and data – February 2022' link at *Monetary Policy Report – February 2022*. External expectations for monetary policy are now covered in the *Market Participants Survey*.

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.
CPIH – consumer prices index including owner-occupiers' housing costs.
DMP – Decision Maker Panel.
GDP – gross domestic product.
HICP – harmonised index of consumer prices.
LFS – Labour Force Survey.
PCE – personal consumption expenditure.
PMI – purchasing managers' index.
RPI – retail prices index.
RPI inflation – inflation measured by the retail prices index.

Abbreviations

CBI – Confederation of British Industry.
CIPS – Chartered Institute of Purchasing and Supply.
EC – European Commission.
ECB – European Central Bank.
EONIA – euro overnight index average.
EME – emerging market economy.
EU – European Union.
FISIM – Financial Intermediation Services Indirectly Measured.
FOMC – Federal Open Market Committee.
FTSE – Financial Times Stock Exchange.
G7 – Canada, France, Germany, Italy, Japan, the United Kingdom and the United States.
GfK – Gesellschaft für Konsumforschung, Great Britain Ltd.
HMRC – Her Majesty's Revenue and Customs.
HR1 form – Advance Notification of Redundancies form.
IMF – International Monetary Fund.
IT – information technology.
LTV – loan to value.
MPC – Monetary Policy Committee.
MTIC – missing trader intra-community.
OECD – Organisation for Economic Co-operation and Development.
NHS – National Health Service.
Ofgem – Office of Gas and Electricity Markets.
ONS – Office for National Statistics.
ONS BICS – Office for National Statistics Business Insights and Conditions Survey.
PAYE – Pay As You Earn.
PPP – purchasing power parity.
REC – Recruitment and Employment Confederation.
S&P – Standard & Poor's.
VAT – Value Added Tax.
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.