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UK economic prospects: Not out of the woods yet

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# Section 2 – UK economic prospects: Not out of the woods yet

Introduction

Monetary policy tightening continues to dominate the UK economic narrative and is a key theme of this chapter. This is because we are starting to see the effects of tighter monetary policy on the labour market and the real economy more generally. Crucially, as we show in the Figure below, our modelling indicates that we have only felt around half of the cumulative impact of the tightening cycle on economic activity. That means we are not out of the woods yet.

This chapter provides an overview of the outlook for the UK economy. It is split into three sections, covering economic growth, inflation and the labour market in turn:

2.1 Economic growth

2.2 Inflation

2.3 Labour market

Figure 2.1: PwC estimate of cumulative real GDP impact of policy tightening relative to no tightening
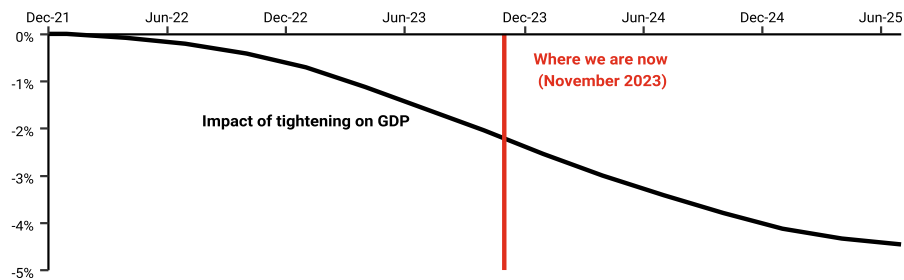
Sources: PwC analysis, Bank of England. Notes: Figure shows the estimated impact of policy tightening since the tightening cycle started based upon Bank of England estimates for Bank Rate multipliers.[1]

UK Economic Outlook

Key points

- **Monetary tightening to weigh on growth through 2023 and 2024.** Our analysis suggests that we have only felt around half of the impact from tightening so far. So a return to trend growth is not expected until 2025. From a regional perspective, we expect London and Northern Ireland to outperform most regions in 2023, though growth across all regions is relatively subdued.

- **Headline inflation to close the year under 5%.** Our modelling indicates that the government will reach its target to halve inflation by the end of this year. Even so, inflation will have left its mark. We expect real earnings to be lower this year than where they were in 2006. This is equivalent to close to two decades of no real earnings growth.

- **Private sector earnings growth is likely to remain elevated through most of 2023 and 2024.** Our modelling indicates record high earnings growth is being driven by labour market tightness. Though the labour market is cooling, on its current trajectory this implies that earnings growth will not return to more normal levels until late 2024 at the earliest.

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Economic growth

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Data revisions suggest economic growth during the pandemic period was stronger than previously thought, which means the UK no longer appears to be an international outlier

Large data revisions suggest UK output reached pre-Covid levels two years ago

The ONS recently announced revisions to UK economic growth over the 2020-21 period. Revisions to economic data are not uncommon, but due to the severity of the downturn they have significant implications for the UK's post-pandemic economic performance. The latest data suggests that the UK's recovery from the pandemic was much quicker than previously thought, with economic activity returning to pre-pandemic levels as early as Q4 2021.

This has turned the prevailing narrative of UK economic underperformance on its head. The latest estimates suggest UK real GDP is 1.8% larger than pre-pandemic levels, placing the UK in the middle-of-the-pack of its G7 peers (see Figure 2.3). The previous estimates had suggested that the UK was the only major economy where economic activity remained below pre-pandemic levels.

Lessons learned on economic statistics

GDP is currently the best tool we have for measuring economic activity. But for it to be useful, it needs to be accurate and timely.

These two features are often in conflict with each other. The approach favoured by the ONS is to release first estimates based upon partial information, and then to release revised estimates as more information becomes available. Revisions can also come through due to methodological changes, which in this case mostly relate to the treatment of public services output.

As a result of these changes, it is the view of the ONS that the UK now has "one of the most up-to-date sets of estimates for this period".[2] Our word of warning is to wait for the other economies to make corresponding changes to their GDP numbers before rushing to new conclusions about the UK's economic position.

This has limited implications for our growth prospects

As these revisions are backwards-looking, we do not expect that they will significantly affect the UK economic outlook. If anything, they may marginally dampen the UK's growth prospects, as they reduce the potential for bounce-back growth. We provide more insights into our views on the UK's growth prospects in the following pages.

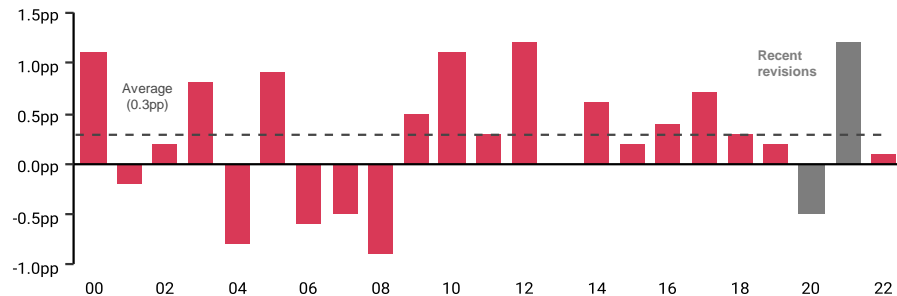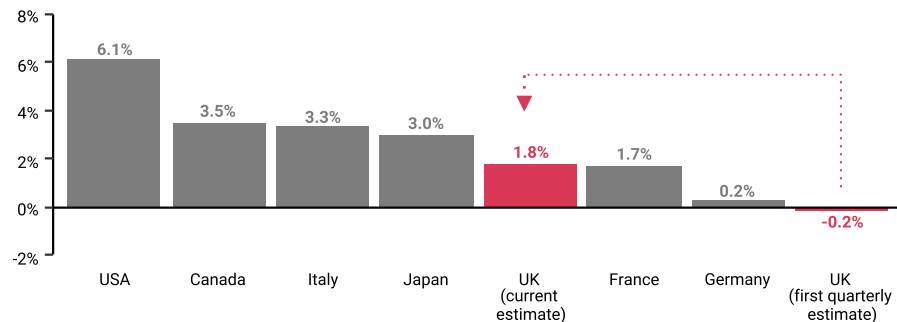**Figure 2.2: Annual real GDP growth revisions (positive = upward revision; negative = downward)**

Figure 2.3: Change in real GDP, Q4 2019 to Q2 2023, by G7 economy

Sources: PwC analysis, ONS, Refinitiv Eikon, national statistics authorities, Istat. Notes: Figure 2.2 is equal to the difference between the latest estimate and the month 2 estimate. Figure 2.3 uses data from national statistics agencies via Refintiv Eikon and Istat for Italy, which were accessed on the 26 October 2023.

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UK economic growth remains subdued as monetary tightening continues to weigh on economic activity

Figure 2.4: Month-on-month (MoM) change in real GDP, and 3-month moving average of the MoM growth rate
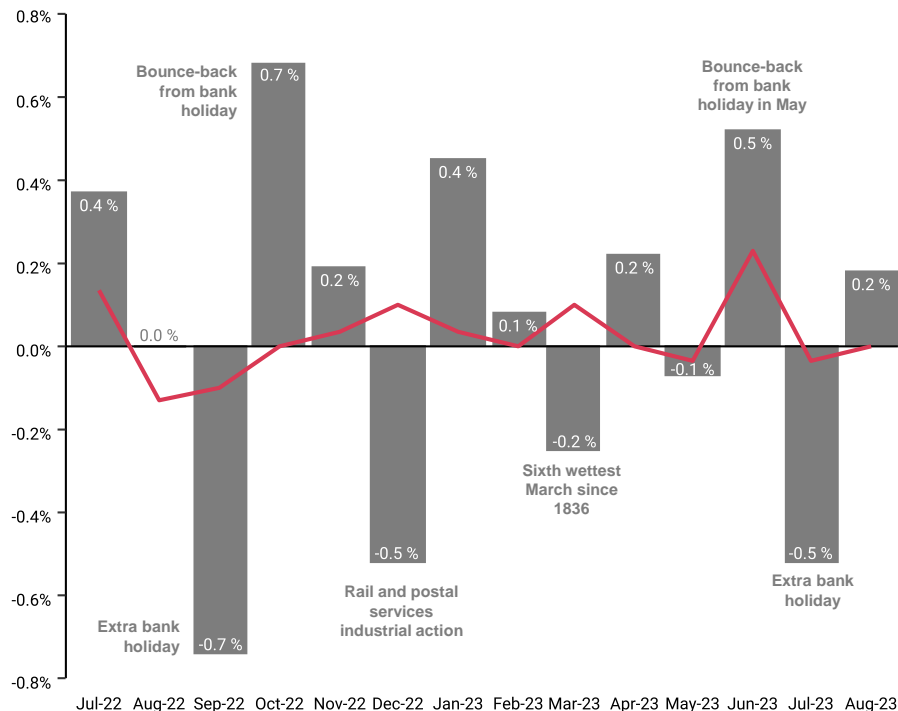
UK economic activity remains subdued

Economic growth turned positive at the end of last year, with quarter-on-quarter growth ranging between 0.1% and 0.2% over the past three quarters (up to Q2 2023). This was marginally higher than our expectations in our April publication but still equates to a below-trend annualised growth rate of less than 1%.

In general, growth has been supported by the easing of global supply chain pressures and lower household energy bills than anticipated at the end of last year. However, high inflation, consecutive interest rate rises and industrial action in key sectors of the economy continue to weigh on economic activity. Despite fluctuations in monthly GDP (see Figure 2.4), the net effect is that the economy has flatlined, with real GDP growing by just 0.4% since December 2022.

The good news is that easing cost of living pressures have led to an uptick in consumer sentiment. Our latest Consumer Sentiment Survey suggests consumer sentiment has now reached its long-run average. This should gradually translate into higher consumer spending.

Despite weak overall growth, there are a number of sectors that performed strongly in the first half of the year, with the hospitality sector leading the pack

Most sectors grew in the first half of the year, even as the economy flatlines

Our analysis on the previous page shows that the economy has broadly flatlined since the start of this year. But this masks significant sectoral differences. Eleven of the nineteen sectors recorded positive growth rates in H1 2023. We identify three key trends that we outline in turn below.
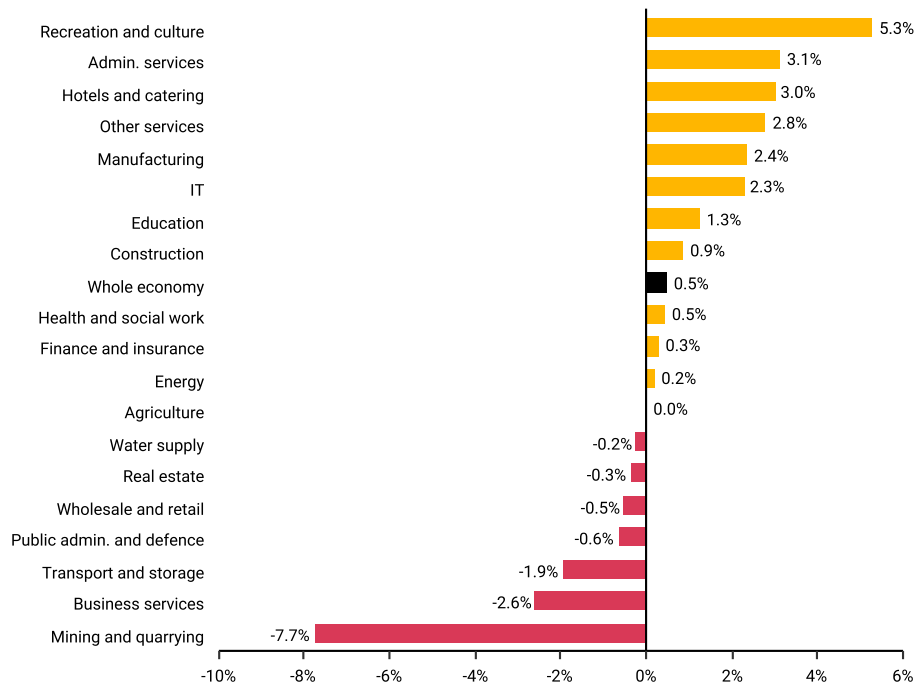
Bounceback in the hospitality sector. The two main hospitality sub-sectors (hotels and catering; recreation and culture) both recorded strong growth rates in the first half of the year. These sub-sectors have been buoyed by some easing in recruitment difficulties, rising consumer sentiment and lower cost of living pressures. The return of foreign tourists also helped to support demand over the summer months.

Business services activity slows. Though fee increases have maintained steady nominal revenue growth for the business services industry, in real terms activity in the sector contracted by 2.6%. This is relatively unusual as business services has historically been the country's third-fastest growing sector. In part, this reflects a return to more

normal levels of demand after booming in 2021 and 2022. However, it also likely reflects the impact of higher input costs (particularly labour and energy), which has affected business spend on specialised services. The one area of growing demand is insolvency and restructuring services, which is seeing a pick-up in activity amidst rising corporate insolvencies.

Monetary policy tightening is weighing on real estate activity. Output in this sector declined by 0.3% in the first half of the year. As expected, the first casualty of higher mortgage rates has been transaction volumes (totalling 95,000 this August, compared to 110,000+ last August). This is because sellers typically opt to 'wait and see' rather than accept lower prices when selling properties. In addition, higher interest rates and a cooling labour market have all weighed on demand for properties. Meanwhile, commercial real estate continues to face challenges in terms of weakening demand for retail and office space in particular, but also structural changes (shift to online, hybrid working). There are also some signs of office space continuing to be repurposed for residential use, according to Bank of England agents.

Figure 2.5: UK real GVA growth, 2022 Q4 to 2023 Q2, by sector

Sector	Growth
Recreation and culture	5.3%
Admin. services	3.1%
Hotels and catering	3.0%
Other services	2.8%
Manufacturing	2.4%
IT	2.3%
Education	1.3%
Construction	0.9%
Whole economy	0.5%
Health and social work	0.5%
Finance and insurance	0.3%
Energy	0.2%
Agriculture	0.0%
Water supply	-0.2%
Real estate	-0.3%
Wholesale and retail	-0.5%
Public admin. and defence	-0.6%
Transport and storage	-1.9%
Business services	-2.6%
Mining and quarrying	-7.7%

Our main scenario sees economic growth remaining weak until the second half of 2024 as monetary tightening continues to weigh on activity

Figure 2.6: PwC main scenario real UK GDP projections, quarter-on-quarter growth
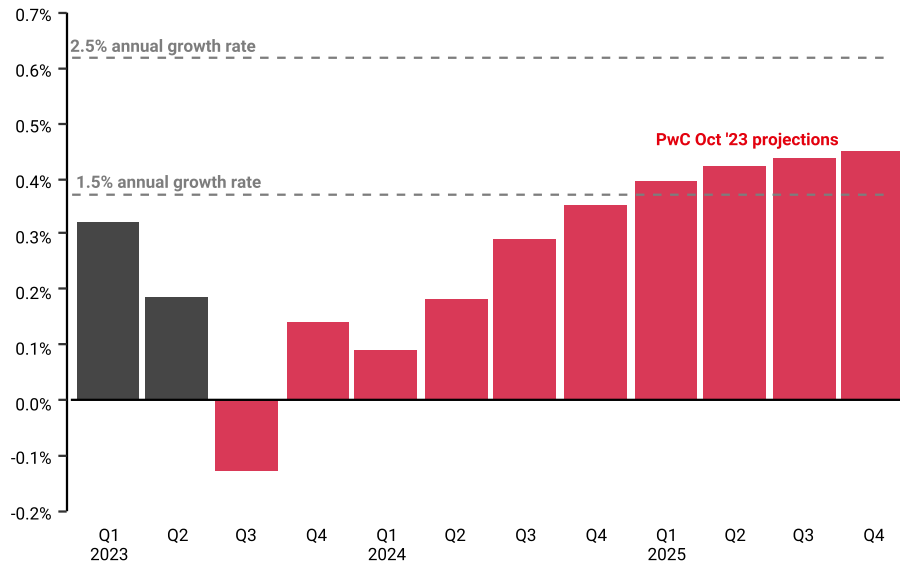

Table 2.1: PwC main scenario real UK GDP projections, average annual growth rate

	2023	2024	2025
Main scenario projections	0.5%	0.5%	1.5%

Subdued economic growth expected until the second half of 2024

We use econometric analysis to estimate main scenario projections for real GDP growth until the end of 2025 (see Appendix A for further details of our forecasting methodology). Our analysis implicitly assumes a continuation of relative policy certainty and limited volatility in global energy markets.

In our main scenario, we expect economic activity to contract by 0.1% quarter-on-quarter in Q3 2023. Economic growth is then expected to gradually pick-up, as the effects of monetary policy tightening on growth subsides and the squeeze on household incomes from high inflation eases in relative terms (see page 20 for our real earnings projections).

With this in mind, we expect real GDP to grow by around 0.5% both in 2023 and 2024. Though below trend, this is a marked improvement from consensus estimates of a recession six months ago, or our 0.1% base case expectation in April 2023 ("Subdued growth" scenario). By 2025, we expect there

will be enough momentum in the economy for growth to return to its annual long-run trend rate of circa 1.5%. However, this still means we would fall short of the pre-pandemic long-run average (1.8% over 2000-19) and the ambitious 2.5% growth target set by the Liz Truss government.

These high growth targets will be difficult to achieve without significant structural changes to the UK economy, which address chronic underinvestment, skills mismatches and shortages, elevated economic inactivity rates and a significantly lower trade intensity. All of which help support low levels of labour productivity growth.

0.5%

Our main scenario projections for economic growth in 2023 and 2024, below the trend level of circa 1.5%.

A series of economic shocks have put the UK on a seemingly permanent lower growth trajectory

Figure 2.7: PwC quarterly real UK GDP projections, annualised
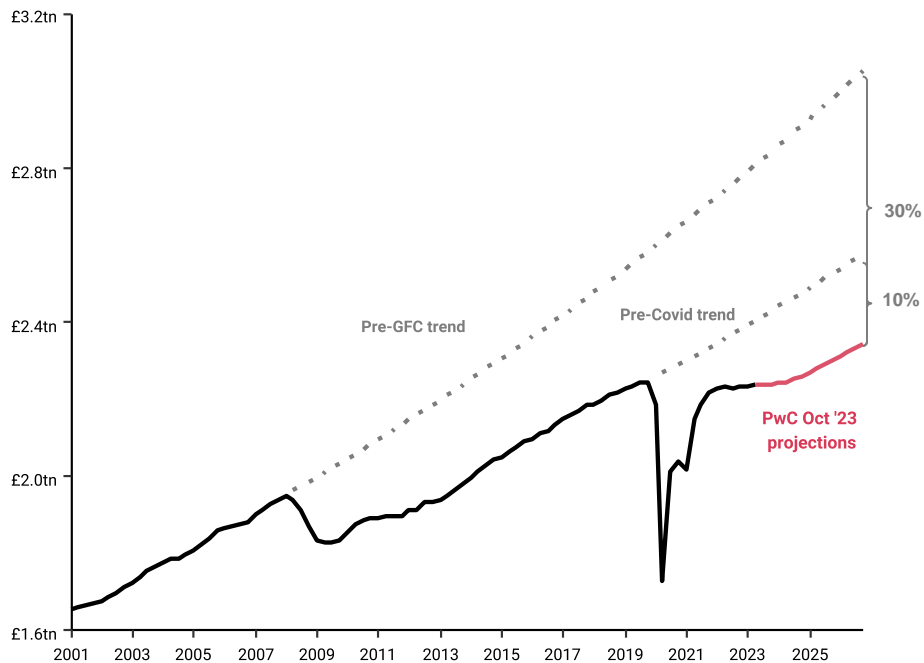
Weak overall picture for medium-term economic growth

The recent ONS data revisions have improved the UK's economic performance since the pandemic, but they have done little to improve the UK's overall economic standing. The cumulative effect of a series of economic shocks is starting to add up.

Starting with the Global Financial Crisis, our analysis indicates that the UK economy could have been just under a third larger by 2026 had it continued to grow at its pre-2008 pace (see Figure 2.7). This is roughly equivalent to adding another London to the economy.

Likewise, though the UK has now returned to pre-pandemic levels of output, it shows no signs of returning to its pre-pandemic trend. Our analysis indicates that by 2026 economic activity will be around 10% lower than where it could have been if the pandemic had never occurred. These growth shortfalls are not predetermined. According to the International Monetary Fund (IMF), the US economy is now even bigger than what they were forecasting before the pandemic.

UK Economic Outlook   Sources: PwC analysis, ONS, IMF, Refinitiv Eikon

London and Northern Ireland expected to be two of the fastest growing regions in 2023

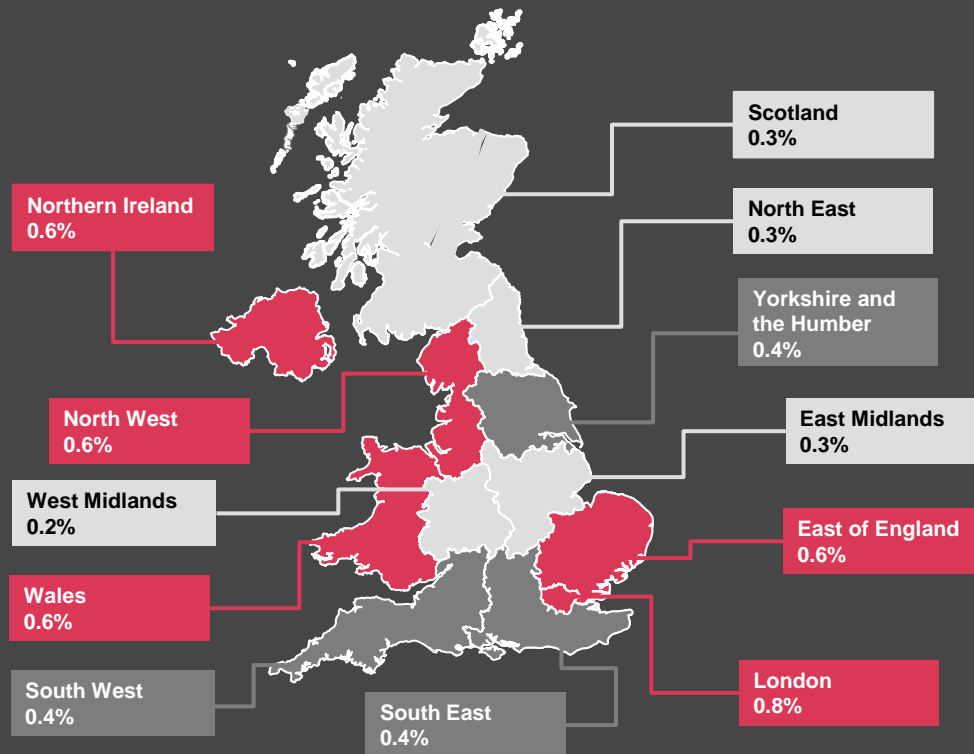**London and Northern Ireland set to record two of the fastest growth rates**

We expect London to be the fastest growing region across the UK for this year, as activity picks up following a sluggish end to 2022. The capital is expected to benefit from strong performance in consumer-facing sectors. Northern Ireland is expected to be the UK's second-fastest growing region, as the region benefits from greater certainty provided by the Windsor framework and strong growth in the public sector.

…while the Midlands and Scotland lag behind.

The Midlands and Scotland are expected to grow at a relatively lower slower pace, in part due to their high exposure to the manufacturing sector, which has been hit by supply chain issues (which have largely recovered now), high energy prices, and changes to the UK's trading relationship with the European Union (EU). We expect that activity will start to pick up in 2024 once lower energy prices starts to feed through to all businesses in the sector. 35% of businesses reported to the ONS in early October 2023 that they were still being "affected by recent increases in energy prices", but this was down from 48% in January.[3]

Real GVA 2023 growth estimates

0.2%　　　　　　　　　　0.8%

Figure 2.8: UK 2023 real GVA projections, by region, 2023

Scotland 0.3%

North East 0.3%

Yorkshire and the Humber 0.4%

East Midlands 0.3%

Northern Ireland 0.6%

North West 0.6%

West Midlands 0.2%

Wales 0.6%

East of England 0.6%

London 0.8%

South West 0.4%

South East 0.4%

2.2

Inflation

Headline inflation is down from its peak by around a third so far, with energy inflation doing most of the heavy lifting

Headline inflation down by a third as the UK narrows the gap with its peers

Consumer Price Index (CPI) inflation has fallen from a peak of 11.1% in October to 6.7% in September. This is broadly in line with our expectations (we expected 6.6% for Q3 2023 compared to 6.7% actual). This has helped the UK to narrow the inflation differential with its peers, with inflation as of September at 5.6% in France, 4.3% in Germany and 3.7% in the US.

However, the composition of headline inflation has been different to our initial projections. Energy inflation has accounted for almost all of the fall in headline inflation (see Figure 2.9). Meanwhile, services and core goods inflation have been more persistent than expected. This illustrates how large changes in global energy prices can lead to significant swings in the overall inflation rate, despite being a relatively small component of CPI.

On the next two pages, we focus on two key inflation components that have remained at high levels: services inflation and core goods inflation.

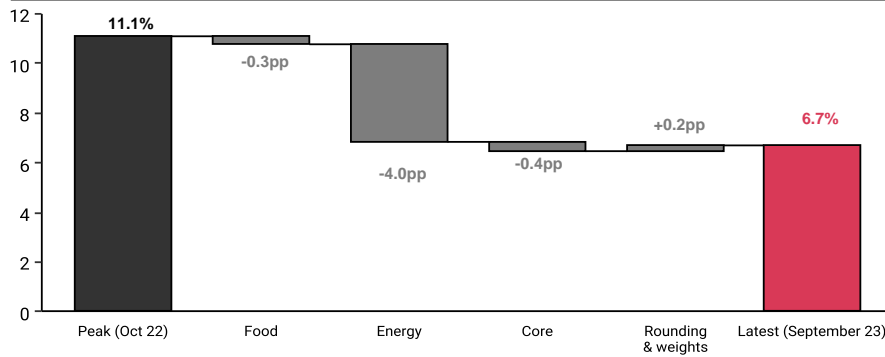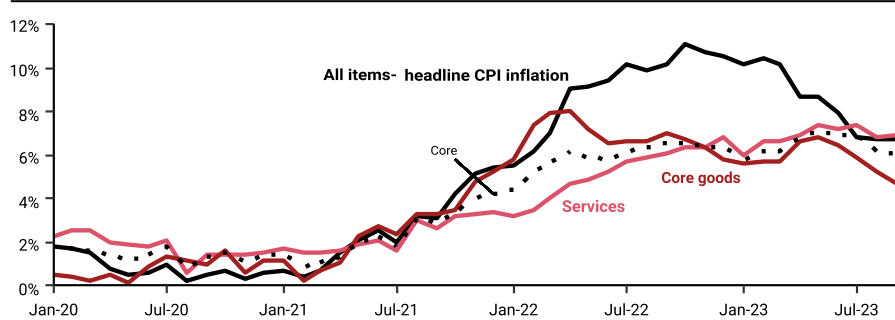**Figure 2.9: Contributions to change in headline inflation rate between October 2022 and September 2023, in pps**

Figure 2.10: Various measures of consumer price inflation

-4.0pp

Reduction in energy inflation contribution from October 2022 to September 2023, assuming constant weights

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We expect that services inflation will be closer to 6% by the end of this year, though it will take time to return to more normal levels due to high earnings growth

Services inflation remains elevated in the UK compared to its peers

Services inflation is a key focus for the Bank of England, at it is considered to be a useful indicator of domestic inflation pressures and thus inflation persistence. Services inflation was at 6.9% in September, which is significantly higher than its pre-pandemic level (circa 2.5%) and marginally higher than in the Eurozone (4.7%) and the US (5.7%).

This has been driven by a combination of high energy costs and labour costs. Many companies are on fixed-term energy contracts, so it takes time for falls to wholesale prices to feed through to all firms. Meanwhile, total pay growth was at 8.5% year-on-year in the three months to July 2023. This is far in excess of the circa 3% rate we would consider to be consistent with the Bank of England's 2% inflation target.

Hospitality inflation gradually easing as lower energy bills feeds through

Figure 2.11 breaks down services inflation into its main components. Inflation

originating from the catering sector contributes just under a third of services inflation, as firms in the sector have been hit by the trio of rising food, energy and labour costs. However, catering inflation is gradually starting to come down, in part due to lower energy bills. Travel-related inflation has also picked up in recent months, but these categories are typically volatile and less informative about inflation persistence.

We expect that services inflation will gradually come down

Going forward, we expect that services inflation will be closer to 6% by the end of the calendar year. Lower energy prices are already feeding through to lower services inflation. Future slower earnings growth is likely to follow, albeit at a more moderate pace as contract renegotiations means that it takes time for these changes to pass-through to retail prices.

Figure 2.11: Services CPI inflation, by component
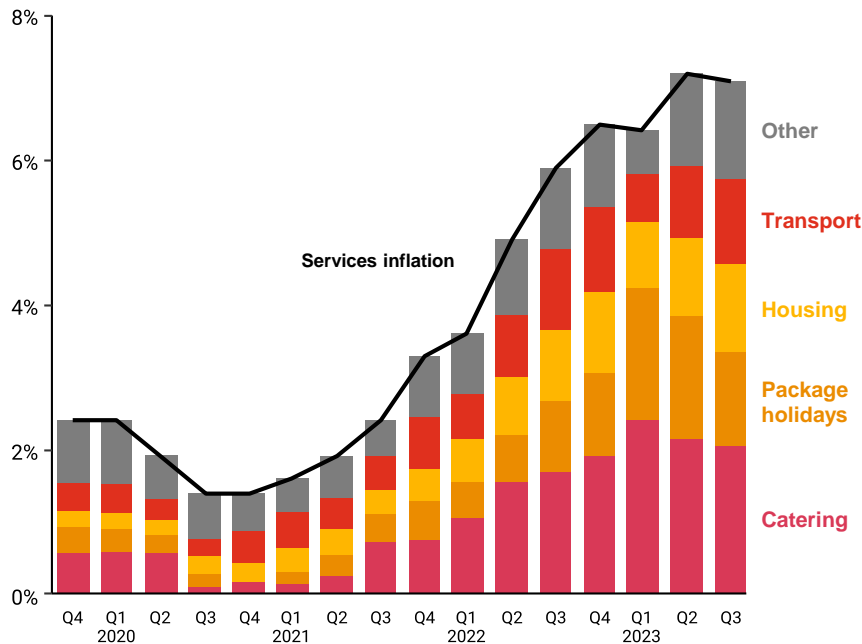
Core goods inflation is likely to continue to gradually edge down as cost pressures moderate for goods businesses

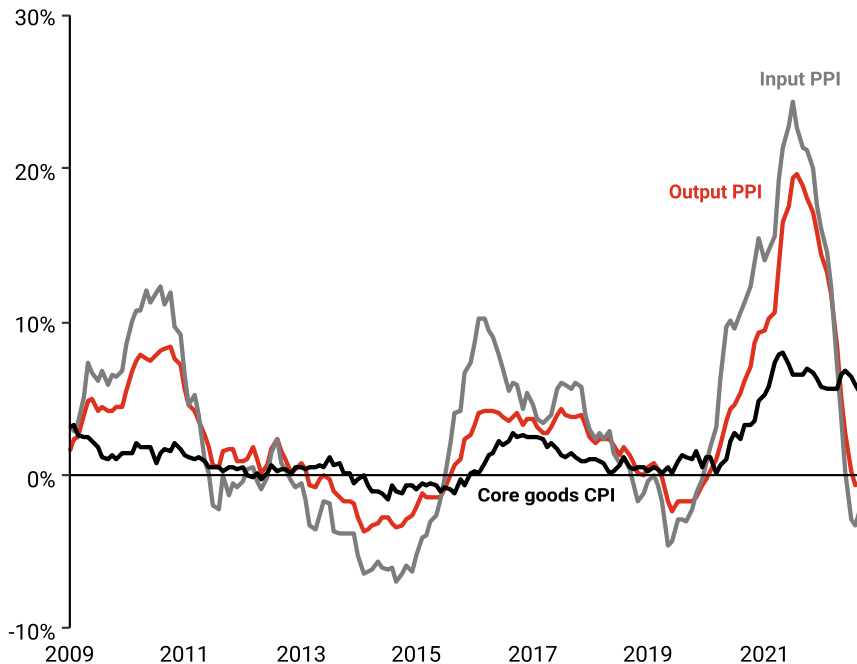**Core goods inflation is gradually declining to more normal levels**

In a competitive market, we would expect to see a strong relationship between producer cost pressures and consumer prices. However, as Figure 2.12 shows, this relationship has broken down in recent months in the goods market.

Why has this happened? One theory is that the magnitude of the economic shock has slowed the transmission mechanism. For example, this could be because a higher proportion of firms have signed up to long-term fixed price contracts with their suppliers or energy providers.

Another theory is that the reconfiguration of supply chains globally has led to price pressures building up in the global trading system which is also affecting the UK economy.

Ultimately, we expect that core goods inflation will only defy gravity for so long, given easing cost pressures, improved supply chains and slowing demand. Though it seems clear this will be a gradual process.

Figure 2.12: Input Producer Price Index (PPI) inflation, Output PPI inflation and Core goods CPI inflation

UK Economic Outlook

Sources: PwC analysis, ONS. Notes: PPI stands for Producer Price Index. It captures changes in the prices of goods bought and sold by UK manufacturers including price indices of materials and fuels purchased (input prices) and factory gate prices (output prices).

Box A: Geopolitical instability in the Middle East presents a near-term risk to the UK economic outlook

Energy prices have spiked in response to heightened instability in the region

The current situation in the Middle East, which is first and foremost a humanitarian crisis, has presented a new risk to the global economic outlook. From a global perspective, there is a risk that the conflict could lead to higher energy prices, higher inflation and slower growth.

The Middle East accounts for close to a third of global oil production and one fifth of natural gas production.[4] As a result, instability in the region raises the chance of disruptions to global energy supply. This heightened uncertainty raises the risk premium in oil and natural gas markets.

Since the conflict started earlier this month, sterling-dominated Brent crude oil futures have spiked by around 5%, while natural gas futures have increased by 21%. In part, this is due to the shutdown of a major natural gas field supplying Egypt. At full capacity, Egypt's liquified natural gas (LNG) plants produce nearly 5% of the European Union's gas consumption. Energy prices could rise

further if other major energy producers are brought into the conflict.

Risks to the UK inflation outlook

For the UK, the main risk is that geopolitical instability in the Middle East derails the progress the Bank of England has made to return headline inflation to target. In the April 2022 edition of this publication, we showed how shocks to global energy prices can add as much as two to four percentage points to UK headline inflation.[5]

The latest UK natural gas and power futures curves as of late October 2023 currently point to a rise in the household energy price cap of 10% in January 2024 and 4% in April 2024, before gradually declining. This is in part due to heightened geopolitical instability in the Middle East. As a result, our main scenario projections indicate headline inflation could increase by around one percentage point in early 2024.

On the next page, we outline our main scenario projections for headline inflation over the next two years, taking into account recent developments in the Middle East.

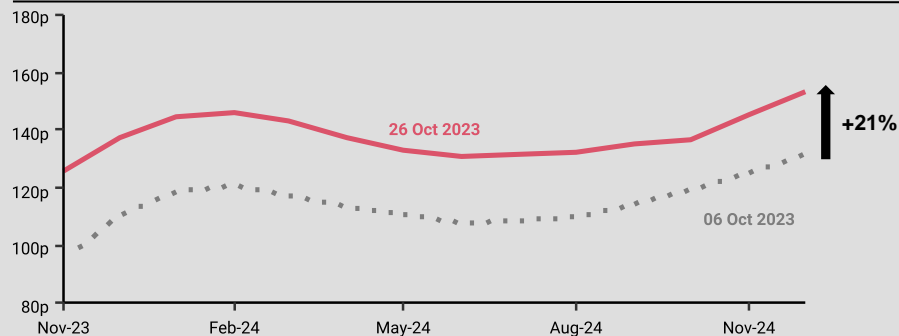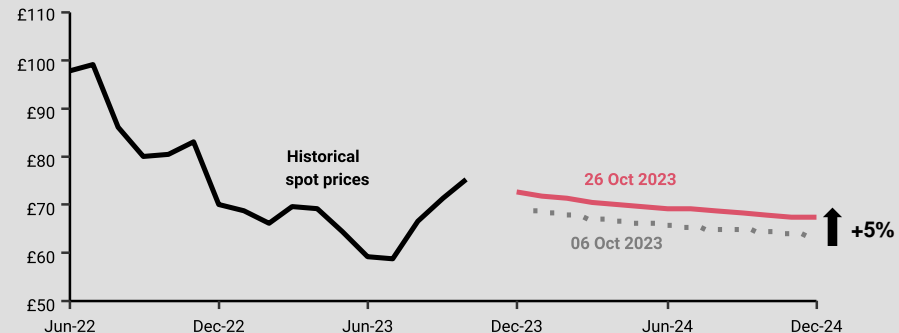**Figure 2.13: UK natural gas futures prices, p/therm**

Figure 2.14: Sterling-denominated brent crude oil spot prices (black) and futures prices, £/barrel

Sources: Refinitiv Eikon, BP, PwC analysis. Notes: +21% and +5% refers to the average increase in natural gas and brent crude oil futures until December 2024.

In our main scenario, we project that the government will meet its target to halve inflation by the end of this year

Inflation is expected to fall below 5% by the end of the year

In our main scenario projection, we expect headline inflation will close the year at around 4.6% in Q4 2023. This is higher than we expected in our last publication (3.5%) but still comfortably below the government's target of 5.4% for Q4 2023.

We expect most near-term deceleration of headline inflation will be driven by lower energy inflation, as the household energy price cap is cut by 7% in October and previous rises drop out of the annual calculation. We estimate this will take around 1.5pp off headline inflation.

Recent falls to PPI inflation indicate that food and core goods inflation will also moderate over the coming months, albeit to a lesser extent. Based upon the PPI curves, it seems likely that food and drinks inflation will end the year under 10%, down from 13.6% now but still considerably above the circa 1.4% rate pre-pandemic.

However, the path back to target is unlikely to be all plain-sailing. Currently, our modelling indicates that there will be another small spike in headline inflation at the start of the 2024, due to rising energy prices. The latest natural gas and power futures curves as of late October 2023 point to a rise in the household energy price cap of 10% in January and 4% in April, before gradually declining. As we explain on the previous page, this is in part due to heightened geopolitical instability in the Middle East.

Services inflation will also take time to come down while earnings growth remains strong. Our analysis later in this chapter suggests that earnings growth is likely to remain at high levels until late 2024 at the earliest. As a result, a full return to the 2% inflation target is unlikely to be achieved until 2025.

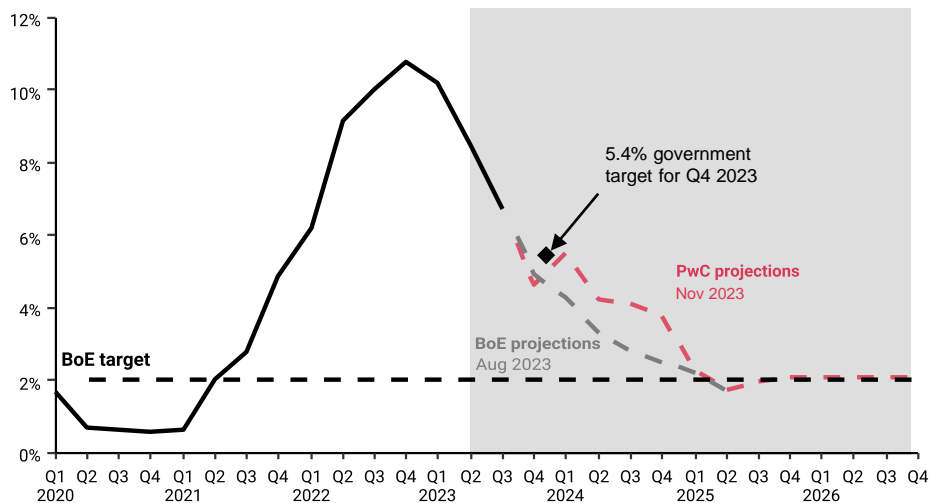**Figure 2.15: UK Consumer Price Inflation, main scenario projections from 2023 Q3**

Table 2.1: PwC main scenario real UK CPI projections, average annual growth rate

	2023	2024	2025
Main scenario projections	7.5%	4.4%	2.0%

The living standards squeeze is nearly over, but we don't expect to see strong real earnings growth until 2025

Real earnings growth is likely to be low or negative in 2023 and 2024

In the three months to July, the year-on-year growth of nominal earnings surpassed headline inflation. Does this mark the end of the cost of living crisis?

Our main scenario projections opposite shows that real earnings have turned a corner. Our current modelling points to a 0.6% fall to earnings in 2023, followed by a slight rise in 2024 (0.3%). This means that consumer spending is unlikely to take off any time soon. But it may start to pick-up gradually as households see inflation come down and thus feel more comfortable to dip into their excess savings.

Two years of high inflation combined with our long-term productivity challenges have left their mark on living standards. We expect real earnings to be lower on average this year than in 2006. This is equivalent to no net earnings growth for 17 years, with the average worker's earnings around £17,000 lower (in 2022 prices) than where they could have been. We do not expect earnings to grow meaningfully in real terms until at least 2025, once inflation has turned a corner.

Figure 2.16: Annual real average weekly earnings growth, main scenario projections from 2023
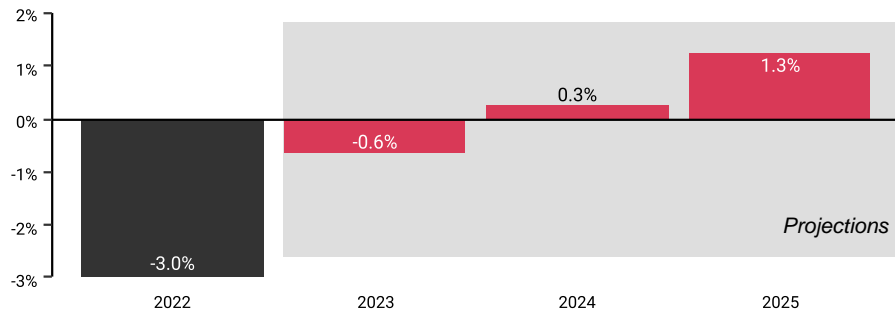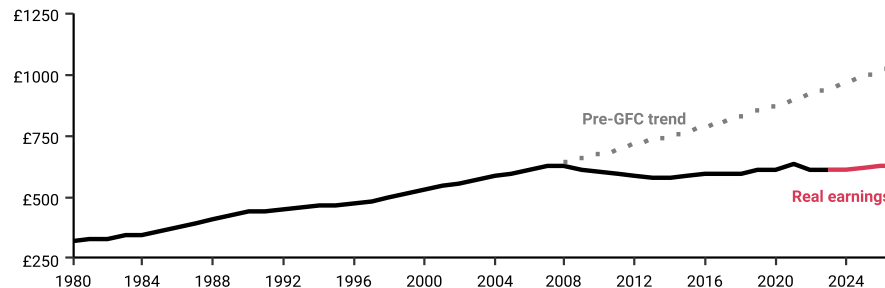

Figure 2.17: Actual and projected real average weekly earnings vs continuation of pre-GFC trend

"We expect real earnings to be lower on average this year than in 2006. This is equivalent to no net earnings growth for 17 years"

We expect that interest rates will be closer to their pre-pandemic levels than their current levels over the long-term

Long-term interest rates to remain low

Financial markets are currently pricing in a long-term interest rate of around 4%. This is lower than its current level (5.25%) but still significantly higher than pre-pandemic (around 0-1%). How likely is it that interest rates will remain this high?

Since the mid-1980s, real interest rates have been on a downwards trajectory in the UK and other advanced economies. Research by the IMF indicates that this was driven by falls to trend nominal interest rates, due mostly to weak productivity growth and demographic ageing.[7]

Ultimately, these challenges have not gone away. Demographic ageing is close to an inevitability for the advanced economies. It also seems reasonable to assume that productivity growth will remain modest, unless there are significant structural changes to the UK economy. For these reasons, it is our view that the medium to longer-term level of nominal interest rates is likely to be closer to its pre-pandemic level (in the range of 1-3%) than its current level of around 5%.

Figure 2.19: Bank of England policy rate vs financial market expectations (as of 2 November 2023)
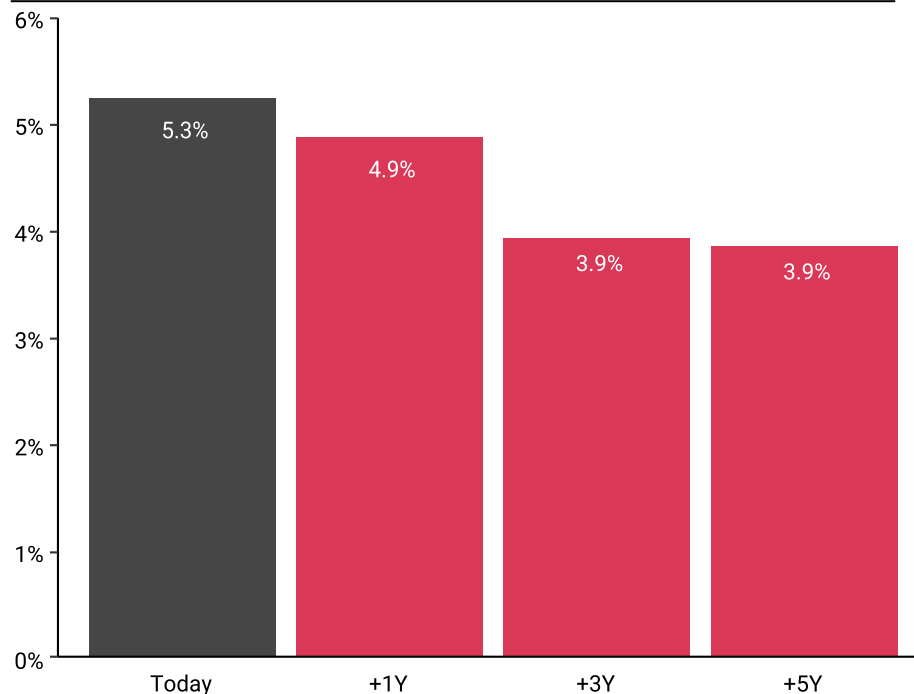
Box B: Our modelling indicates that the average mortgagor could see their annual mortgage payments increase by around £3,000 a year

Mortgage rates have risen sharply but it will take time to feed through

Mortgage rates have risen since our April publication. For instance, the average rate on a two-year fixed mortgage at 75% LTV has risen from around 4.6% to 5.6% as at 31 October 2023. This reflects the pass-through of higher expectations for the Bank Rate to banks' funding costs.

However, it will still take time for this to filter through to all mortgagers. We estimate that around one in three mortgaged households have yet to see their mortgage rates change since the Bank of England started hiking rates in late 2021. This is equivalent to around 1.2 million households.

£3,000

Our estimate for the average increase in annual repayments for households coming off a fixed term mortgage.

We expect that the average household re-fixing their mortgage rate will see their annual repayments increase by 43%, equivalent to around £3,000. Though a significant rise, it is worth noting that overall consumer prices have risen by around one-fifth in the past two years. While nominal earnings have risen by 14% over the same period.

Overall economic impact is limited

Only around 30% of households have a mortgage, and the vast majority of these are on a fixed rate. As a result, the aggregate rise in mortgage interest payments each quarter is relatively small relative to total household consumption. Mortgages are also held disproportionately by higher-income households, who have higher savings buffers and so are relatively well-placed to absorb negative shocks to their incomes.

The remaining 70% of households are made up of owner-occupiers without a mortgage (40%) and renters (30%). It is likely that landlords will at least pass on some of increase in borrowing costs to renters, but the 40% of owner occupiers without a mortgage will remain largely unaffected.

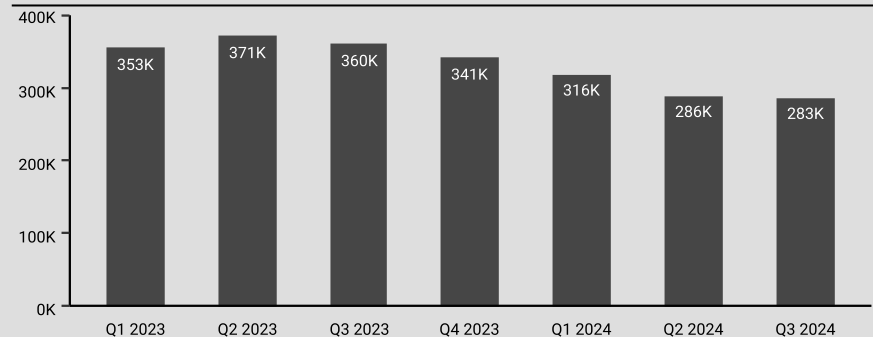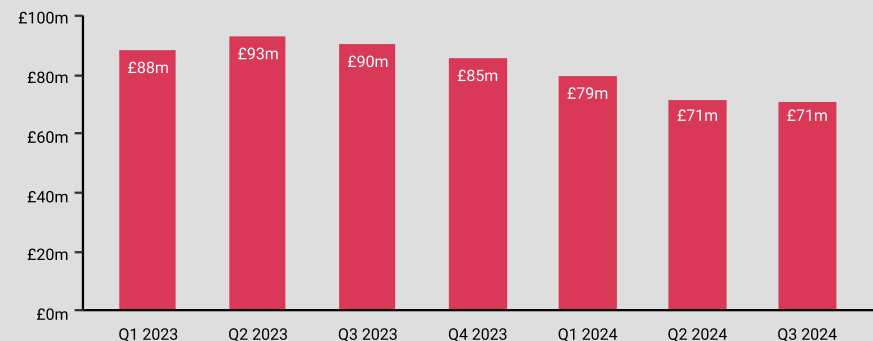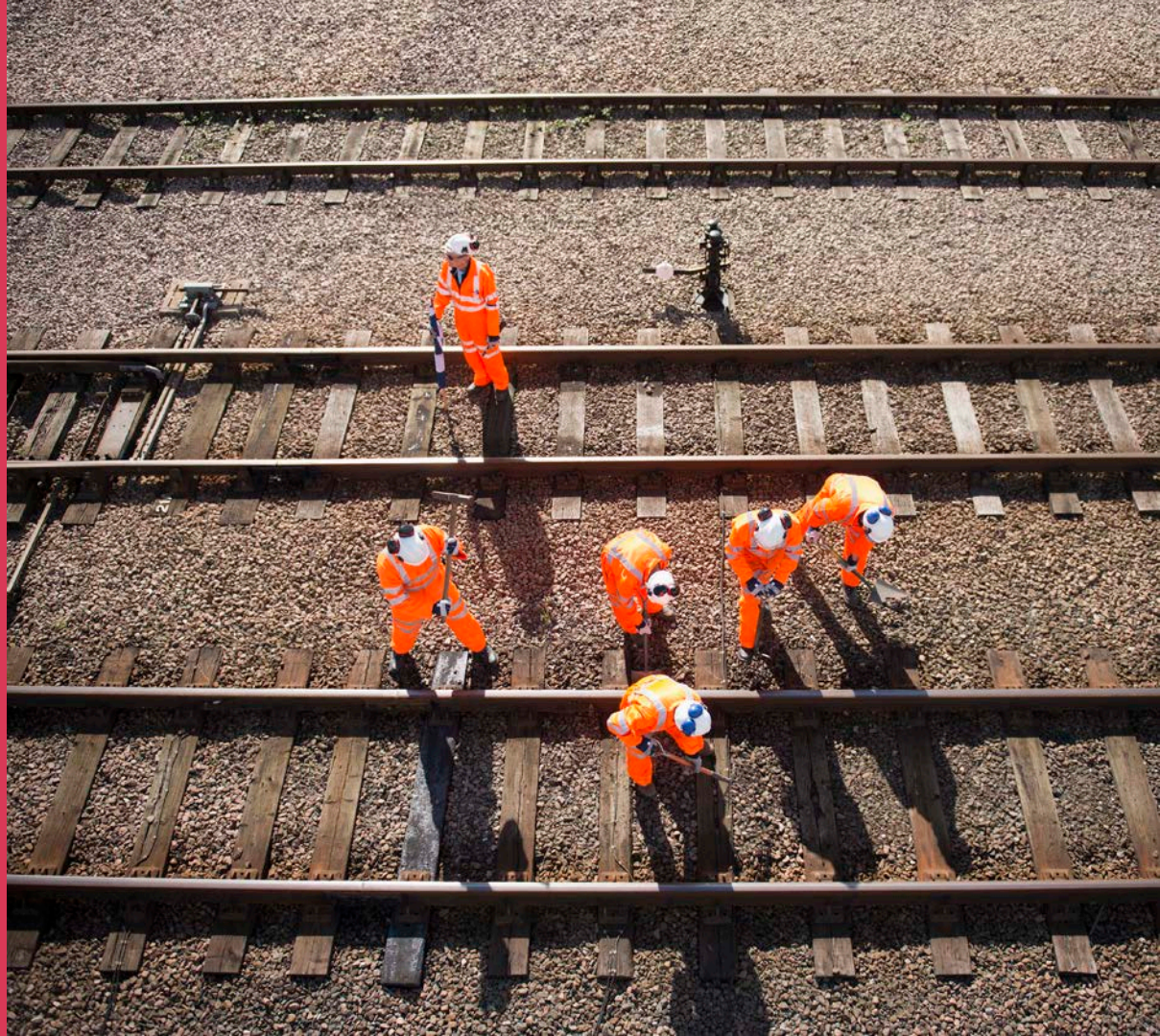**Figure 2.20: Number of fixed rate mortgages coming up for renewal by quarter, Q1 2023 to Q3 2023**

Q1 2023	353K
Q2 2023	371K
Q3 2023	360K
Q4 2023	341K
Q1 2024	316K
Q2 2024	286K
Q3 2024	283K

Figure 2.21: Expected quarterly rise in aggregate mortgage interest payments for households coming off a fixed term

Q1 2023	£88m
Q2 2023	£93m
Q3 2023	£90m
Q4 2023	£85m
Q1 2024	£79m
Q2 2024	£71m
Q3 2024	£71m

Sources: PwC analysis, Bank of England, Moneyfacts, Rightmove, Knight Frank, ONS. Notes: The standard mortgage repayment formula used to estimate monthly costs assumes a 25-year repayment period for a capital and repayment mortgage. Based on the latest average 2Y fixed mortgage rate (6.12%) accessed via Rightmove as at 23rd October 2023.

2.3

Labour market

The labour market is cooling in response to rate rises but so far there is limited evidence of this translating into lower pay growth

There are now clear signs that the labour market is cooling

All of the main indicators suggest that monetary policy tightening is starting to ease some of the pressures in the labour market. Employment fell by 207,000 in the three months to July 2023, relative to the previous three month period. This is the largest fall on record outside of a recession. At the same time, unemployment increased by 159,000.

Working-age inactivity also picked up by 63,000 over the same period, following a series of mostly consecutive declines since mid-2022. This was primarily due to a sharp rise in long-term health conditions, which reached another record high. We explore these trends in more detail further in the report.

Despite clear signs the labour market is cooling, earnings growth remains at high levels. Annual nominal regular pay grew by 7.8% in the three months to August 2023, which is an all-time high since comparable records began in 2001. Later in this chapter, we use econometric analysis to unpick what is driving current earnings pressures.

Figure 2.22: Change in UK unemployment, employment and economic inactivity, from pre-pandemic levels, in 000s
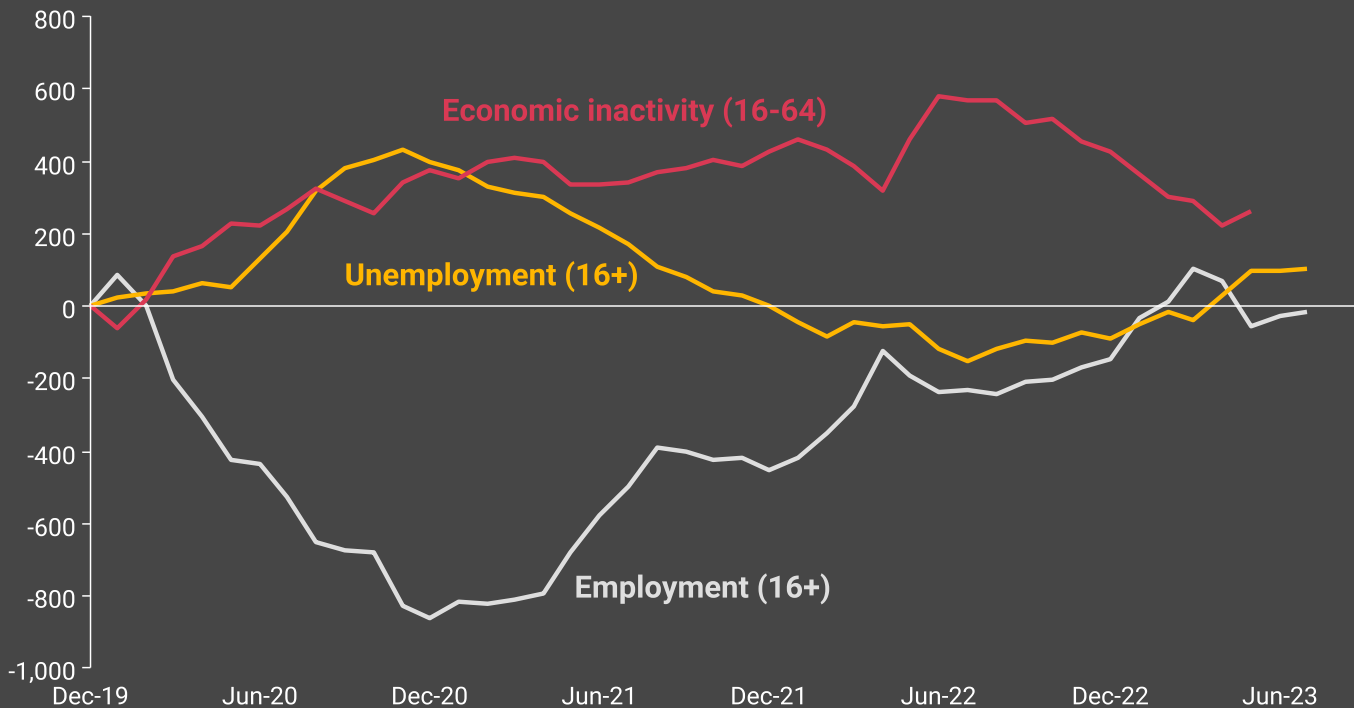
# The unemployment rate is ticking up gradually as interest rate rises slow labour demand

As expected, the unemployment rate is rising, but at a slow pace

The Bank of England raised rates 14 consecutive times to bring the base rate to 5.25%. This is the sharpest rate tightening cycle since the 1980s. However, so far, the corresponding rise in unemployment has been relatively muted. The unemployment rate has edged up from 4.0% in late 2021 to 4.3% as of the three months to July 2023.

The impact has been felt much more acutely on vacancies, a proxy for labour demand, which are now down around a quarter from their peak. As a result, the vacancies-to-unemployment ratio has fallen from a peak of 1.1 (equivalent to more than 1 vacancy per unemployed person) to around 0.7 now.

This supports the hypothesis of some Federal Reserve officials that, with vacancies so high, it may be possible to introduce slack into the labour market without significantly raising unemployment.[8] As overall demand for labour moderates, this should make it easier for businesses to fill open positions, and thus ease earnings pressures. We show later in this chapter there is only initial evidence this is starting to happen.

Fig 2.23: Cumulative change in the Bank Rate and unemployment rate during tightening cycles, percentage points

UK Economic Outlook   Sources: PwC analysis, ONS, Refinitiv Eikon
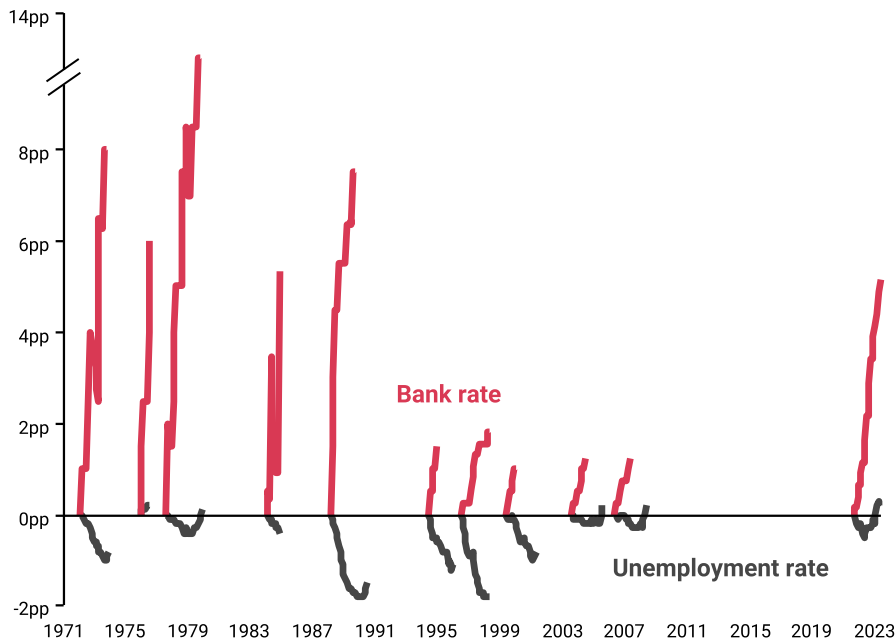
Vacancies are falling back at a more rapid pace, particularly in the consumer-facing sectors which experienced acute pressures

The strongest sign of slowing labour demand is rapidly falling vacancies

The number of vacancies posted has declined by a quarter of a million over the past year, equivalent to a 24% fall. At the same time, according to Bank of England surveys, the proportion of firms that are finding it "much harder" to recruit is now at 20%, down from a peak of 65% in 2022.

Figure 2.24 shows the vacancy rate before, during and after the pandemic in each sector. What is evident from the chart is that vacancies are fallingly the fastest in the consumer-facing sectors (incl. hotels and catering; recreation and culture; wholesale and retail), where labour shortages were particularly acute.

Vacancies have also fallen back in public sector dominated industries but to a lesser extent than in the private sector. The vacancy ratio declined by 4% in education, 10% in public administration and defence, and 16% in health and social work. This compares to a 23% decline across the economy as a whole. However, we expect that these gaps could start to narrow now that public sector earnings growth is catching up with the private sector.

Figure 2.24: Vacancy rate (job vacancies per 100 employee jobs), by sector, seasonally adjusted

UK Economic Outlook   Sources: PwC analysis, ONS, Bank of England

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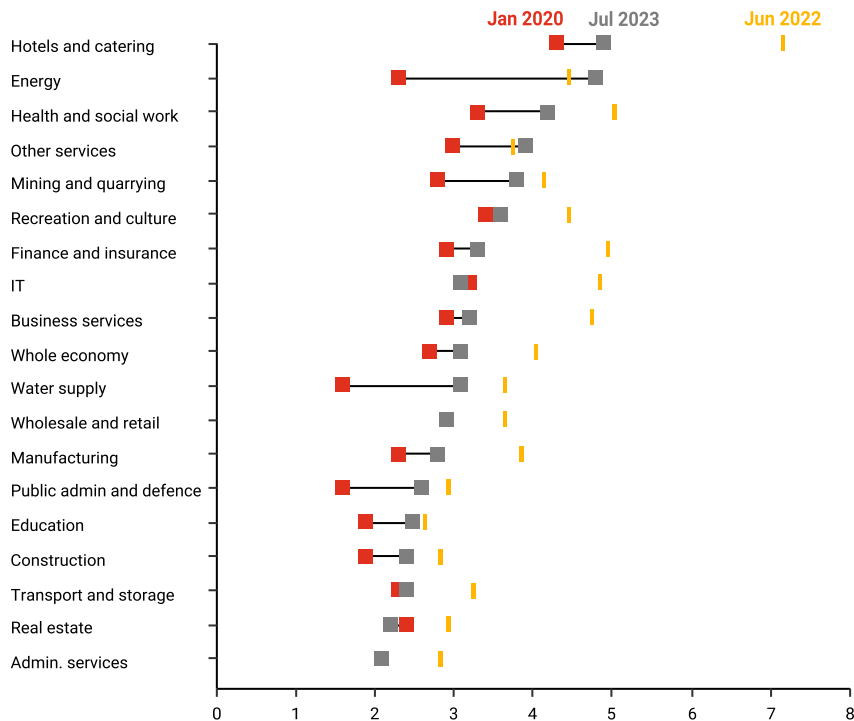
Inactivity due to long-term sickness has reached a new record high of 2.6 million, with the only saving grace being rising female labour force participation

Post-pandemic economic inactivity remains one of the UK's greatest economic and social challenges

Working-age inactivity picked up by 63,000 in the three months to July 2023. Though a relatively small rise over the quarter, this masks a significant increase of almost 130,000 amongst young people (16-24), likely due to higher numbers of students.

The main area of concern remains long-term sickness. The number of people out of work due to long-term sickness has risen by almost 500,000 over the course of the pandemic to reach a new record high of 2.6 million. There are also no signs its growth is tailing off, with an additional rise of 50,000 over the past quarter.

> "Having been a strong tailwind for two centuries, **health is now a strengthening headwind to UK economic growth**, for perhaps the first time since the Industrial Revolution"
>
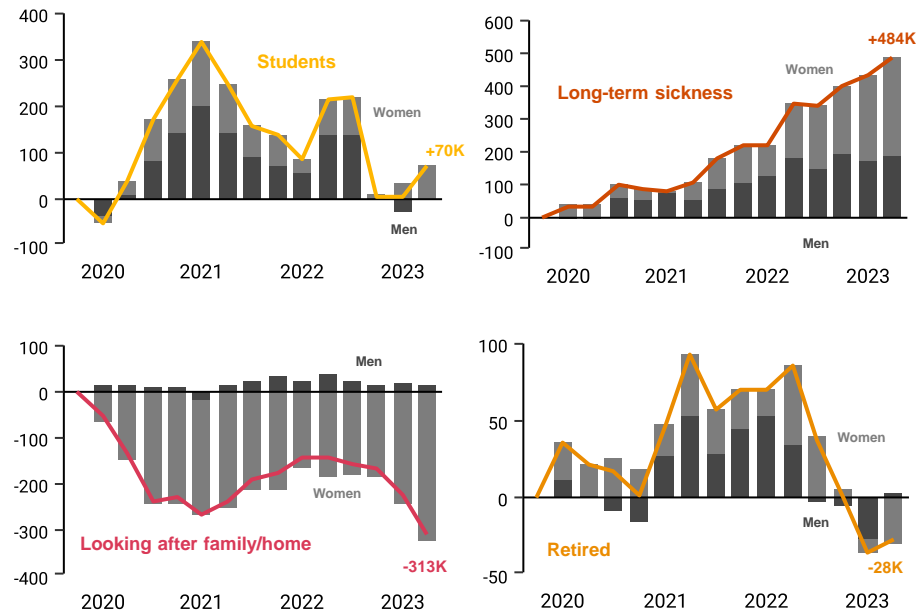> **Andy Haldane**
> former Bank of England
> Chief Economist

Our prior analysis from the Golden Age Index shows that there is a strong link between NHS waiting times and the employment rate of older workers, which is a major driver of post-pandemic inactivity. As at September this year, one in five adults aged between 50-65 that left work since the pandemic were currently on an NHS waiting list for medical treatment.

Increased female labour participation is a continued bright spot

The number of people out of work looking after their family/home is the one segment of inactivity that has persistently declined since the start of the pandemic, falling by around 300k. Women account for the lion's share of this decline.

Since records began in the 1970s, the rate of female participation has been on an upward trajectory in the UK and other advanced economies. The share of women in the UK labour market rose from around 60% in the 1970s to just under 80% now. However, female participation continues to lag behind men. Our recent Women in Work report highlights that high costs of childcare remain a significant barrier to female employment in the UK.

Figure 2.25: Change in economic inactivity relative to Nov-Jan 2020 levels in 000s, by quarter and reason

Sources: PwC analysis, ONS. Notes: These four charts are not exhaustive. There are three additional reasons given for being economically inactive ('temporary sickness', 'discouraged workers' and 'other'). However, these have not been significant drivers of inactivity trends in recent months.

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Our modelling suggests that private sector average earnings growth is likely to remain at relatively high levels in the short term

Labour market tightness is the main driver of current earnings pressures

Public sector earnings grew 12.5% in the three months to August, while in the private sector earnings grew by 7.1% over the same period, significantly above historic trends (see Figure 2.26).

We use econometric modelling to identify which factors are driving private sector earnings growth, following a similar approach to the Federal Reserve and the Bank of England.[9] Our modelling indicates that it is labour market tightness, rather than household inflation expectations, which is the primary driver of current average earnings growth. This implies that earnings growth will remain elevated while labour markets remain tight.

The labour market is clearly cooling, but worker shortages are likely to persist while levels of long-term sickness remain high. On its current trajectory, the unemployment- to-vacancies ratio (our proxy for labour market tightness) will not return to more normal levels until late 2024 at the earliest. This suggests the path back to 'normal' earnings growth will be gradual.

Figure 2.26: Annual regular earnings growth, by three-month period, private and public sector
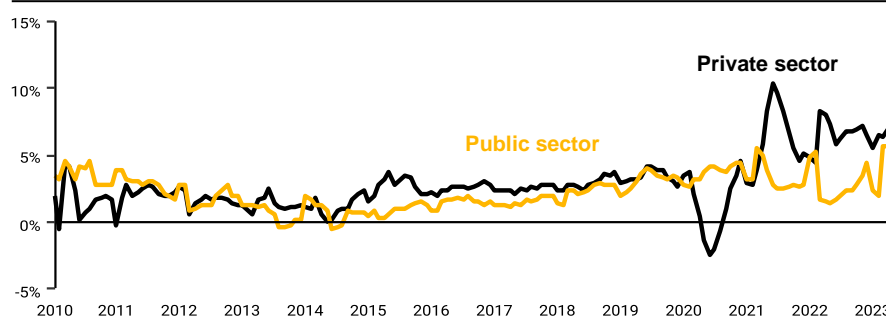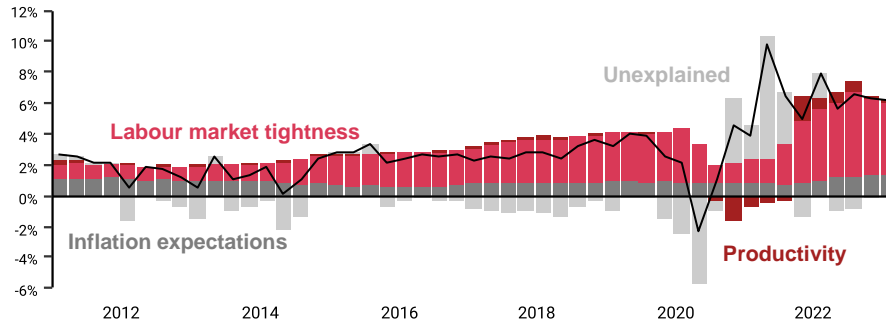

Figure 2.27: Modelled contributions to annual private sector total earnings growth, seasonally adjusted

Sources: PwC analysis, ONS, Bank of England. Notes: Modelling is broadly based on an approach used by Yellen in 2017. We regress earnings growth on labour market tightness (v/u ratio), household inflation expectations and productivity growth.

Appendix

Appendix A – Our approach to projecting UK national real GDP

Model structure

There are several classes of models that are commonly used to project forward macroeconomic aggregates, such as real GDP growth. We implement a Vector Autoregression (VAR) model, given they provide excellent short-term forecasting performance in a relatively simple framework. These models rely on empirical relationships between variables, often not imposing an assumption-based structure on these variables. Other models (e.g. structural simultaneous equations, DSGEs) are more resource intensive to maintain, require many assumptions, or tend not to forecast as well.

Mixed frequency data

Given the fast-moving nature of the economy, it is important that any forecasting model can use the latest-breaking data releases. Monthly data released through a quarter can pin-down real GDP forecasts far before official quarterly estimates are published by the ONS.

As a result, we utilise mixed-frequency data in our model. While our real GDP growth variable is quarterly, we can incorporate monthly series into our model. There are several approaches to this in the literature; we follow Ghysels (2016) and McCracken et al. (2021) in splitting monthly series into three quarterly series and 'stacking' these series together to estimate a VAR at quarterly frequency.

For example, stacking in terms of 'economic time' puts together the quarterly real GDP variable (y), with three quarterly series made from a monthly variable (x), relating to the first, second, and third month of each quarter respectively.

$$Y_t = [x_{t,1}, x_{t,2}, x_{t,3}, y_t]$$

A model is then estimated where the components of this vector depend on p lagged values of these series.

$$Y_t = \alpha + \beta_1 Y_{t-1} + \cdots + \beta_p Y_{t-p} + \epsilon_t$$

By stacking the series this way, we can impose actual data points released part way through the quarter to construct a 'conditional' forecast, using the framework of Waggoner and Zha (1999). This allows us to incorporate information through the quarter, constantly refining the forecast.

Bayesian estimation

Including multiple monthly series means the number of parameters to be estimated grows large very quickly. We therefore use the Bayesian methods, including the hierarchical prior selection methods of Giannone et al. (2015).

Variable selection

We collected data on over 100 macroeconomic series. To select the most suitable variables for our model, we conducted several 'live data' backtesting exercises, testing performance of various models in out of sample forecasts. Chosen variables include the BoE base rate, unemployment rate and consumer spending.

Scenario construction

Bayesian estimation recovers the entire posterior distribution of our model parameters, therefore giving a distribution of GDP forecasts. This gives an indication by percentile, of the range of possible outcomes for real GDP. We construct our downside scenario by combining points on this distribution of forecasts, with expert judgement and our scenario narrative. Given certain values for our initial negative shocks, we then use the conditional forecasting feature of our model to construct a path where growth returns to trend.

Ghysels, E. (2016), 'Macroeconomics and the reality of mixed frequency data', Journal of Econometrics

Giannone, D., et al. (2015), 'Prior Selection for Vector Autoregressions', Review of Economics and Statistics

McCracken, M., et al. (2021), 'Real-time Forecasting and Scenario Analysis Using a Large Mixed-Frequency Bayesian VAR', International Journal of Central Banking

Waggoner, D. and Zha, T. (1999), 'Conditional Forecasts in Dynamic Multivariate Models', The Review of Economics and Statistics

Endnotes

[1] Bank of England, 20 October 2022. **The inflationary consequences of real shocks – speech by Ben Broadbent**. Link

[2] ONS, 1 September 2023. **Impact of Blue Book 2023 changes on gross domestic product**. Link

[3] ONS, 21 September 2023. **Business insights and impact on the UK economy**. Link

[4] BP, 2021. **Statistical Review of World Energy – 2021**. Link

[5] PwC UK, April 2022. **UK Economic Outlook**. Link

[6] Bank of England, 21 September 2023. **Monetary Policy Summary, September 2023**. Link

[7] IMF, 10 April 2023. **Interest Rates Likely to Return Toward Pre-Pandemic Levels When Inflation is Tamed.** Link

[8] Federal Reserve, 29 July 2022. **What does the Beveridge curve tell us about the likelihood of a soft landing?** Link

[9] Federal Reserve, 26 September 2017. **Inflation, Uncertainty, and Monetary Policy**. Link

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