

# Recent UK monetary policy in a changing economy – speech by Jonathan Haskel

Given at Bank of Israel

13 November 2022

# Speech

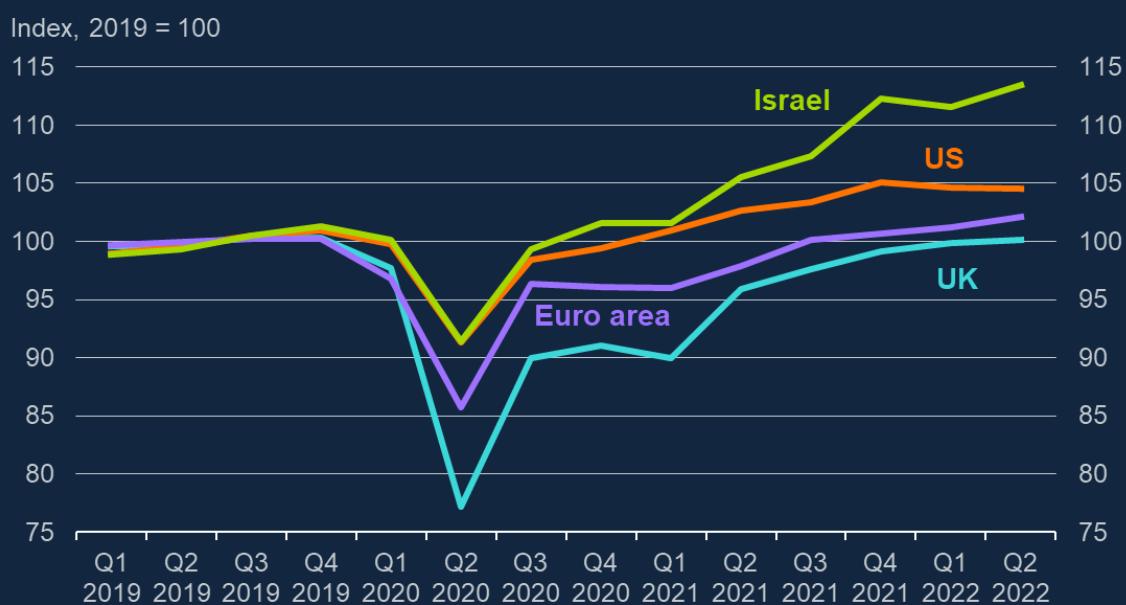
Good afternoon, and thank you for having me. It's a pleasure to be here at the Bank of Israel.

I have had the privilege to be a member of the Monetary Policy Committee at the Bank of England for the last four years, which has been an economically eventful period. But in some ways the old subjects keep coming back, not least the importance of raw material price rises. You will not be surprised therefore that the latest Monetary Policy Report (the quarterly document issued by the Bank with the latest inflation forecast) cites the work of former Bank of Israel governor, Michael Bruno. I met Michael when I was a graduate student and whilst I am not delighted about the rise in energy prices, I am delighted that his work lives on.

I'd like to say some brief words about UK monetary policy today. And to do that, let me first give you some context to the economic situation in the UK over the past couple of years.

## Chart 1: The UK has recovered slower from the pandemic downturn than other countries

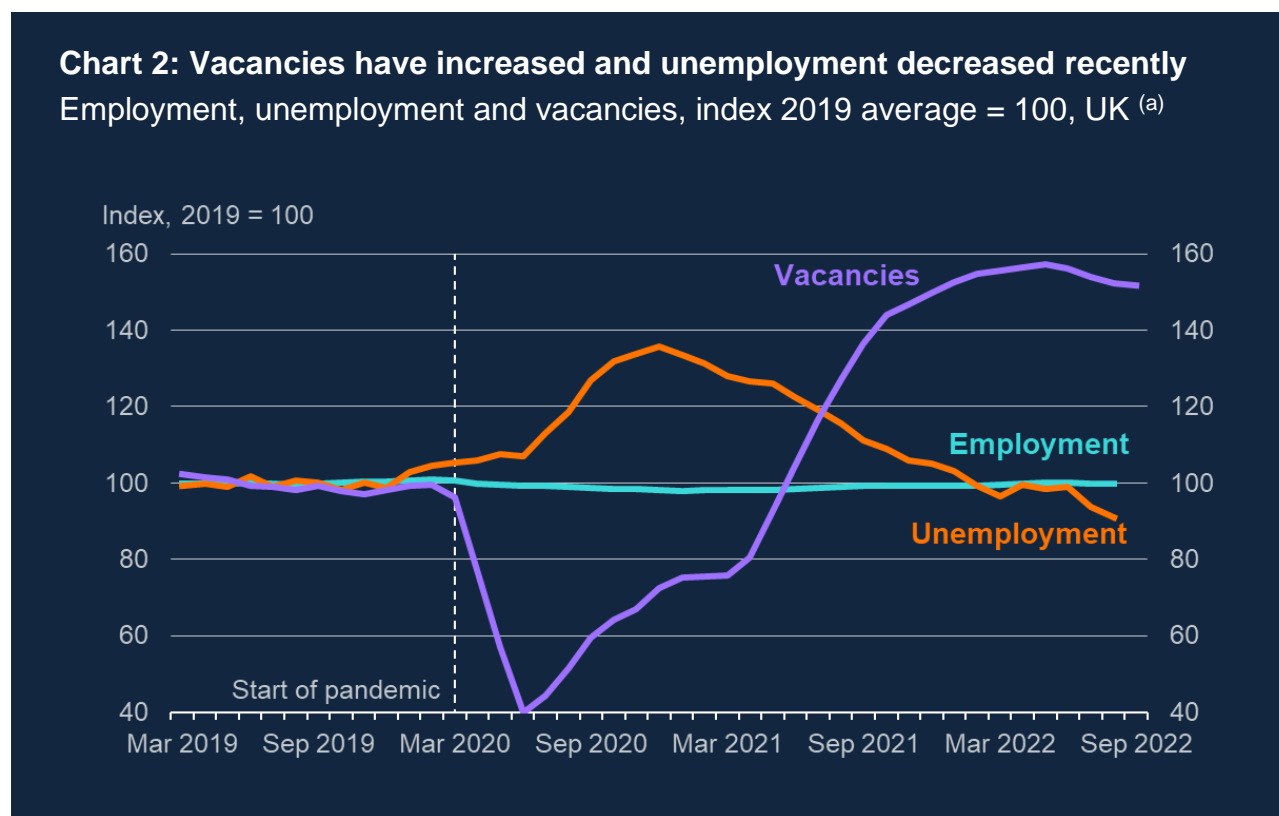
Real GDP, index 2019 average = 100, Q1 2019 to Q2 2022, selected countries



Source: OECD, author's calculations.

**Chart 1** shows that the UK, like many developed economies, saw a big decline in economic activity during 2020 as a result of the coronavirus pandemic and associated national lockdowns. The economy reopened and rebounded in 2021, but growth during the second half of 2021 and 2022 has been weak. As of the latest estimates, the UK economy is only just back to its pre-pandemic size in the middle of 2022. More timely indicators of economic activity, such as PMIs and early estimates of GDP for August, show a weak short-term outlook for growth.

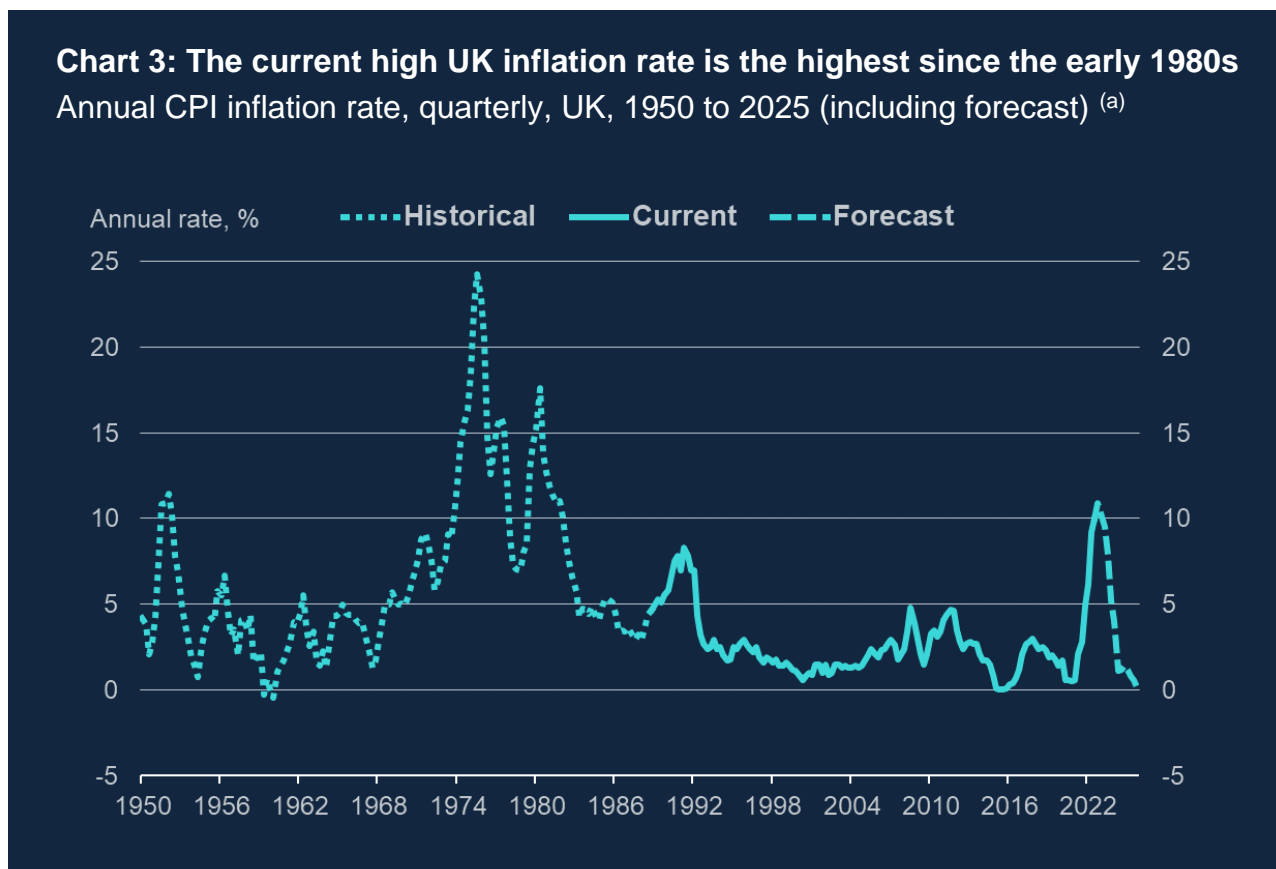
**Chart 2** shows that this weak story on activity has been coupled with a strong story in the labour market. Employment has been growing quite resolutely through 2021 and 2022, and unemployment has fallen, with the unemployment rate was at a near record low of 3.5% in the three months to September this year. The number of vacancies hit record highs in mid-2022, and the ratio of vacancies to unemployed (the V-U ratio) has also been historically high. In the latest data, there is more than one vacancy for every one unemployed person – before the pandemic, that ratio was about half, which is to say there were two vacancies for every unemployed person. These are signs of a very tight labour market, and pay growth has been accordingly very strong. I shall return shortly to another reason why the UK labour market appears so tight, which is a declining participation rate.



Source: ONS, author's calculations.

(a) Data are on a rolling three-monthly basis, with dates on x-axis the last in the three-month periods. Vacancy data to three-months to September 2022; employment and unemployment to three-months to August 2022. Dashed line in March 2020 indicates start of coronavirus pandemic effects in the UK.

**Chart 3** shows inflation. Now, like many other countries, the UK has seen a sharp rise in inflation over the past 18 months or so. The latest inflation rate, according to the UK Consumer Price Index (CPI), was 10.1%. Inflation in the UK has not been that high since before I met Michael Bruno in 1986 – which is to say, this period of high inflation is highly unusual.



Source: ONS, Bank of England, author's calculations.

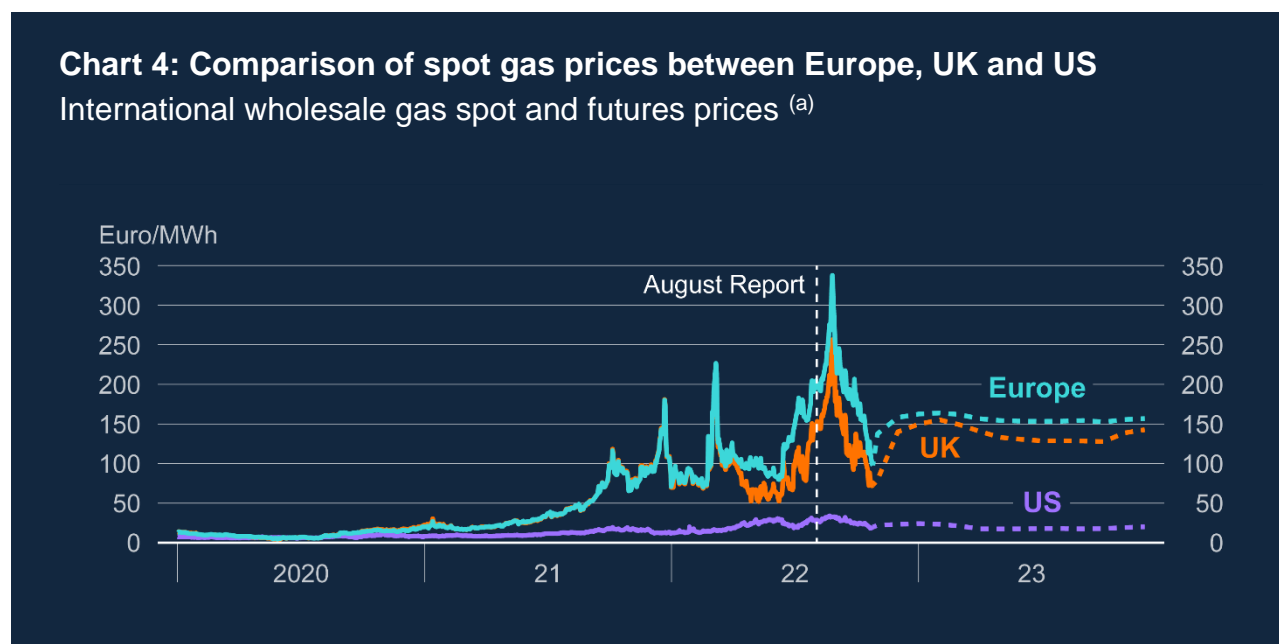
(a) Historical series are Q1 1950 to Q4 1988; quarterly change calculated by averaging index values and taking quarter-on-quarter change. Current series from Q1 1989 to Q3 2022. Forecast series from Q4 2022 to Q4 2025, from [November MPR](#).

Focussing on inflation, I want to discuss three points. First, what is the effect of energy on inflation, and in particular, why is inflation expected to fall so sharply in 2023 and 2024? Second, why has UK inflation differed from other countries? Third, what is the impact of the tight labour market?

### Energy and base effects

Let me turn to energy price changes. I start with the direct effects of energy price rises on inflation. An important feature of the recent inflation in the UK and EU has been the surge in energy prices, notably European gas prices. This has been primarily driven by Putin's illegal war in Ukraine which has limited supply, although an earlier driver was also a rapid

global recovery from the coronavirus pandemic which led to an increase in demand for both gas and oil that outstripped supply at the time. To understand the consequences for inflation, you need to know that household energy prices in the UK are driven by gas prices, due to the nature of UK power generation. They are also regulated through a price cap mechanism, which means they move markedly only every 6 months. There is also an active futures market in energy which gives us a market indication of the future path of energy prices, set out in **Chart 4**. Now, this market is quite thin beyond a year, but let us assume that energy prices follow this pattern of a fall following the previous sharp rise. The direct effects in UK inflation are then heavily influenced by base effects which are worth setting out in more detail.



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

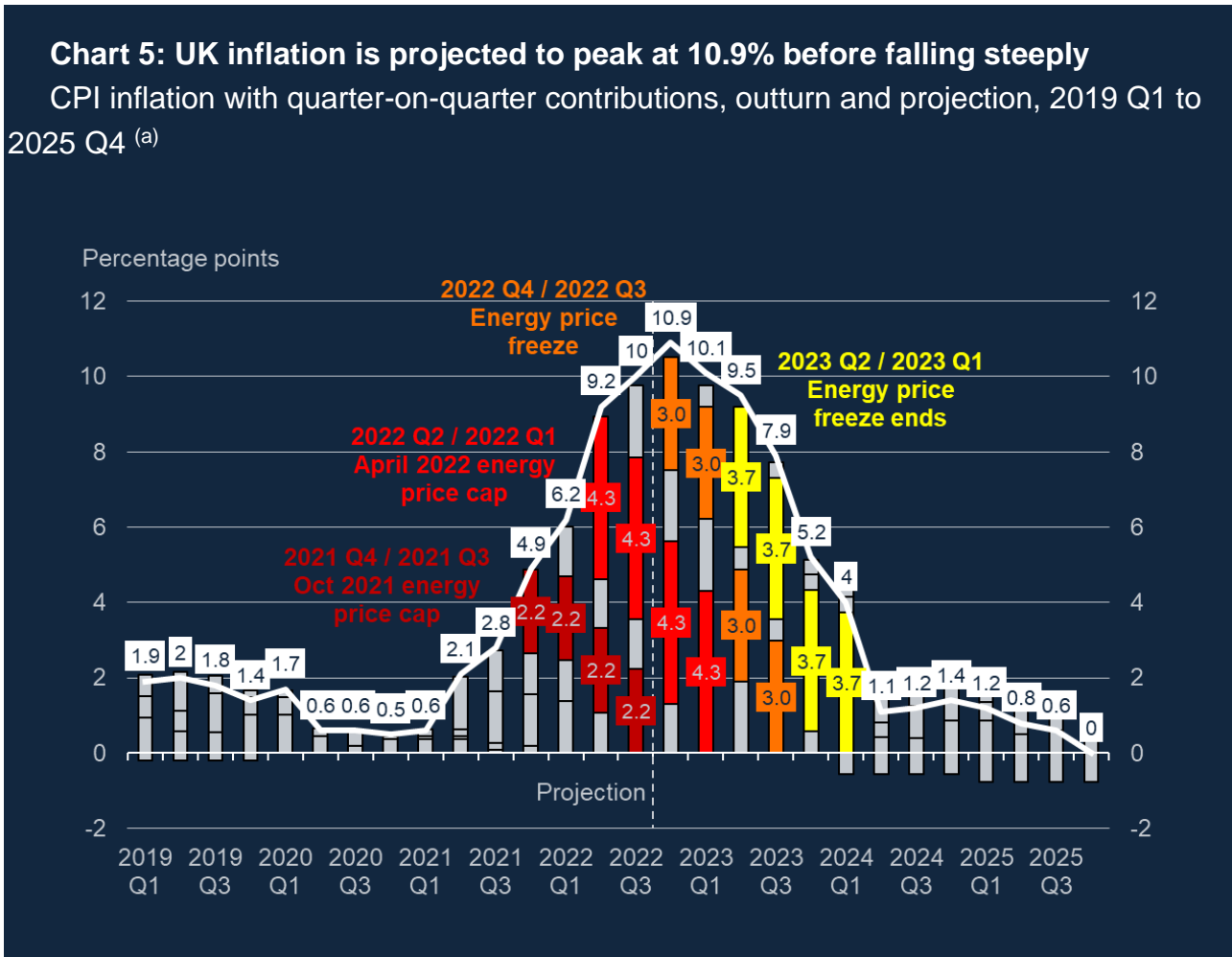
(a) The Dutch Title Transfer Facility pricing point is used for the European price. UK and US prices have been converted to euros. Dashed lines refer to respective futures curves using one-month forward prices based on the seven day average to 25 October 2022 for the UK and the fifteen day averages to 25 October 2022 for the US and Europe.

**Chart 5** shows the importance of these base effects.

The solid line in the chart shows CPI inflation, which rises dramatically and then is forecasted to fall. Since annual inflation is equivalently the cumulative growth between periods within the year, the inflation in each quarter is split into four bars in a vertical column; each of those bars show the contribution to annual inflation from each quarter of price rises.

To see this, consider the set of bright red bars, labelled “2.2”. The first major energy price rise was in October 2021 when the regulated price was increased following the rise in wholesale prices. Thus the price level rose between 2021 Q3 and 2021 Q4, contributing to

a higher price level in 2021 Q4, in comparison with the same quarter of the previous year (2020 Q4). The solid line shows that inflation rose from 2.8% annually in 2021 Q3 to 4.9%pa in 2021 Q4, whilst the red bar shows the contribution from the quarterly change from 2021 Q3 to 2021 Q4 was 2.2%. At the same time, because the quarter has advanced, the lowest grey box in the vertical column in the quarter before (the price rise between 2020 Q3 and 2020 Q4) drops out of the annual comparison. So the overall rate of inflation has risen because the small price rise four quarters ago is replaced by a very sharp price rise in the latest quarter.



Source: ONS, Bank of England, author’s calculations.

(a) Each vertical bar shows the four quarterly contributions (quarter-on-quarter changes) that make up annual CPI, the solid white line. Highlighted quarters contain energy price increases, but contributions are from the quarterly change as a whole, not only the energy price effect. Compounding effects are ignored, so the sum of the quarterly contributions will not exactly equal headline (annual) CPI. Projection from the November Monetary Policy Report.

In the next quarter, 2022 Q1, the overall inflation rate was 6.2%. Household energy prices did not rise in that quarter since regulation limited rises to every 6 months. The contribution of the previous UK rise is now two quarters ago, hence the red bar moves down the vertical

column. The upper grey bar in that column illustrates the new price rise over the latest quarter, which contributes to inflation, whilst the previous lower grey bar drops out.

As you can see, the 2.2% quarterly rise “works its way through” the annual rises, dropping out in 2022 Q4.

The graph also highlights the inflation contributions from quarters with further energy price rises, with the change in 2022 Q2 adding 4.3pp, and changes in 2022 Q4 and 2023 Q2 forecast to add 3.0pp and 3.7pp respectively. What do we learn from this?

First, the graph shows the importance of base effects. Assuming the final energy price rise is in 2023 Q1 (with the quarter adding 3.7pp) all the bright coloured bars have worked their way through the annual comparison and so inflation falls to a very low number, on these projections by 2024 Q2. As the quarters pass by, the older energy price rises drop out of the annual comparison, replaced by either smaller energy price increases and/or forecasted smaller non-energy price rises.

Second, had there been only one price rise, say the 2021 Q4 rise, and had the new “grey” bars been moderate, then inflation would have fallen back by 2022 Q4. This is another way of saying that inflation would have been transitory had it not been for additional energy price rises, and their associated effects.

Finally, the chart demonstrates the importance of the energy shock to the UK inflation profile but assumes other price rises are more moderate than energy price rises. For the forecast, we cannot foresee, and do not try to predict, future shocks. Assuming that energy prices and other factors evolve in line with the assumptions in the forecast, inflation is projected to be below target in 2024 and 2025. Of course, these things may evolve differently, with implications for the profile of inflation.

## UK susceptibility to gas prices

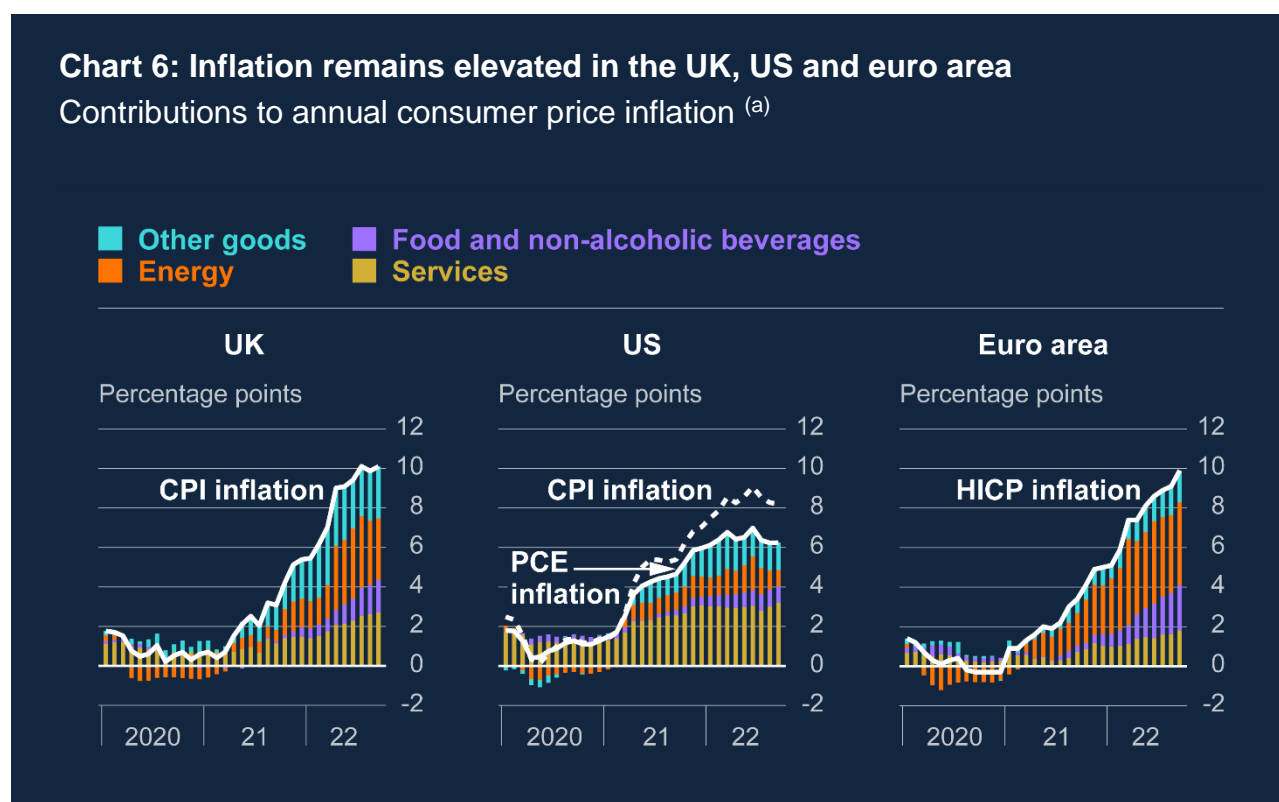
The UK is not unusual in facing an energy price shock – indeed, almost all countries have experienced this energy price shock to different degrees. However, the UK appears amongst the most susceptible country to this for a number of reasons.

**Chart 6** compares UK inflation to that in the US and the Euro Area, which a breakdown for each into the contributions from energy products, food and non-alcoholic beverages, other goods, and services. As of the latest data, the UK has higher inflation than the US and Euro Area, and its drivers appear somewhat different to both comparators. We may ask: why has UK inflation risen so dramatically and why differently to other countries?

First, the UK and most of the rest of Europe have historically got most of their natural gas via pipelines from a handful of supplier countries. This is in contrast with the US, and other

countries around the world, which rely more heavily on Liquefied Natural Gas (LNG); the US is also a major producer of gas.

This can be seen most clearly in **Chart 4**, which compares wholesale gas prices between the UK, US and Euro Area. While US gas prices have increased over the past two years, these moves are dwarfed by the changes in the UK and Euro Area. Gas prices in the US remain at a consistently lower level in comparison to Europe.



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

(a) Energy includes fuel and household energy bills. Other goods is the difference between overall inflation and the other contributions identified on the chart, and therefore includes alcohol and tobacco. The latest data are September 2022 outturns.

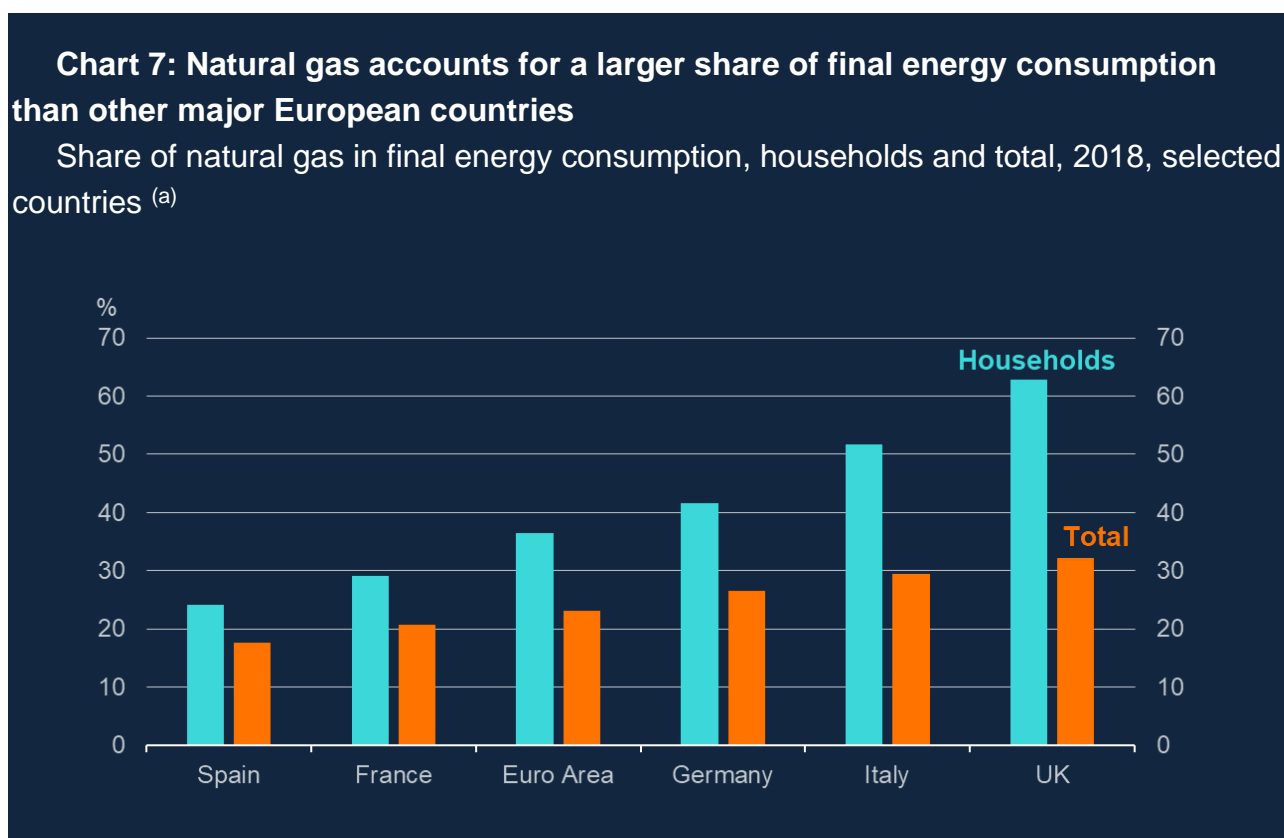
For the UK, important supplier countries of natural gas are Norway (by pipeline) and Qatar (as LNG) ([May 2022 MPR](#)). The UK gets relatively little of its natural gas directly from Russia, but Russia is a very important supplier for many central European countries, particularly Germany. Since gas is traded around Europe, gas prices in the UK are usually closely linked to prices in Europe. So, when Europe's gas supplies were affected by the war in Ukraine and prices went up, UK prices were similarly affected, and there are relatively few substitutes.

Second, the UK also uses gas to generate electricity ([May 2022 MPR](#)). Despite the rise of renewable sources and the decline of coal in UK electricity generation, gas still plays a



very important role, accounting for around a third of UK electricity generation. It is also the “marginal” fuel – used to meet demand when renewable sources are insufficient. As such, the price of gas is a large factor in the overall consumer price of electricity in the UK.

As well as the large use of gas in energy generation in the UK, gas also accounts for a larger share of final energy consumption (i.e. not to produce electricity) in the UK than major European countries. **Chart 7** shows that gas accounts for over 60% of household energy use in the UK, but less than 40% on average across the Euro Area. This likely reflects differences in household appliances, such as heating systems and cookers.



Source: Eurostat, author's calculations.

(a) Final energy consumption encompasses all uses of energy which are not the generation of electricity. “Total” includes use by businesses and governments, as well as “households”.

This does not, however, translate into a larger weight of energy in the inflation basket. In fact, the UK has a relatively small weight on energy products in the CPI relative to the Euro Area and the US, as seen in **Table 1**. The weights on energy products reflect the scope of the basket, and relative expenditures by households on energy products and other items. The scope of the baskets between the UK and Euro Area are similar, so this is not a driver of the difference. Differences in climate could lead Europeans to spend relatively more on energy than the UK, or cultural differences could lead the UK to spend relatively more on other categories. Additionally, persistently higher consumer prices for energy products in

the Euro Area, due for instance to different taxes (see **Chart 8**), could explain the difference in weights.

**Table 1: The weight on energy products is lower in the UK than Europe or the US**  
Current weights of energy products in CPI baskets, UK, Euro Area and US <sup>(a)</sup>

Product	UK CPI	EA HICP	US CPI-U (excluding OER)
Electricity	2.00%	3.12%	3.24%
Gas	1.40%	2.20%	1.16%
Other household fuels	0.20%	1.27%	0.25%
<b>Electricity, gas and other fuels</b>	<b>3.60%</b>	<b>6.59%</b>	<b>4.65%</b>
Diesel	1.15%	1.80%	4.95%
Petrol	1.92%	2.45%	
Other fuels for transport		0.10%	0.10%
Lubricants	0.03%	0.05%	
<b>Fuels and lubricants</b>	<b>3.10%</b>	<b>4.40%</b>	<b>5.05%</b>
<b>Total energy products</b>	<b>6.70%</b>	<b>10.98%</b>	<b>9.70%</b>

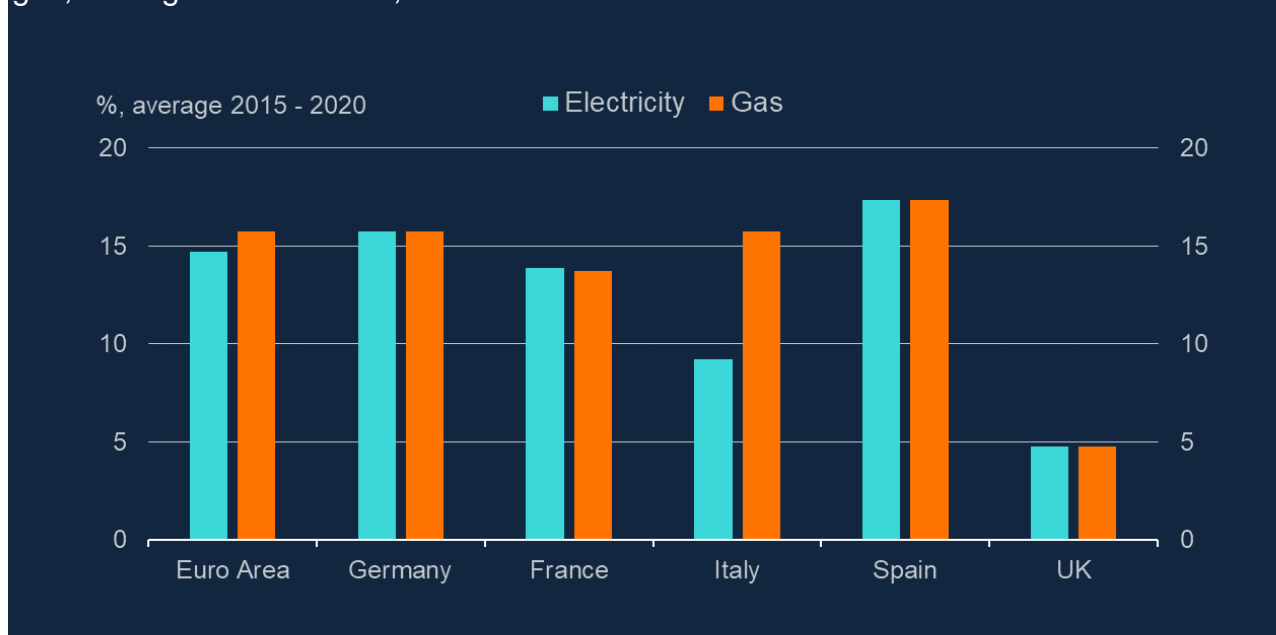
Source: ONS, Eurostat, BLS, author's calculations.

(a) The US CPI-U represents urban consumers only, which differs from the coverage of the UK CPI and Euro Area HICP which cover all consumers. "Owner equivalent rents" (OER) are removed from the US CPI-U, and weights for all other products re-scaled, to make the coverage more similar to the UK CPI. The figure of 4.95% for the US is for Diesel and Petrol combined. Weights correct as of November 2022, but are due to change in January 2023.

Finally, consumer prices for energy in the UK are more dependent on the wholesale price of energy since taxes and duties on energy products are lower than in Europe.<sup>1</sup> **Chart 8** shows that in the UK, taxes and levies other than VAT accounted for about 5% of the price of electricity and gas paid by consumers on average between 2015 and 2020. In major European countries, that figure is closer to 15%. Thus, for a given increase in the wholesale price, the UK consumer price would be expected to respond more than European consumer price.

### Chart 8: Taxes and levies account for a smaller proportion of consumer energy prices in the UK than other major European countries

Share of taxes and levies (other than VAT) in total consumer prices, electricity and gas, average 2015 to 2020, various countries <sup>(a)</sup>



Source: Eurostat, author's calculations.

(a) Arithmetic averages across all half-year periods from 2015 H1 to 2020 H2, and across all consumption bands. Data for 2020 H2 unavailable for UK.

In sum then, the UK is exposed to the energy price spikes resulting from the war in Ukraine, is a relatively bigger users of gas than other European countries, and is more susceptible to the wholesale price than European countries. However, the UK inflation measure has a lower weight on energy products than the Euro Area (until this point at least), reflecting differences in expenditure patterns.

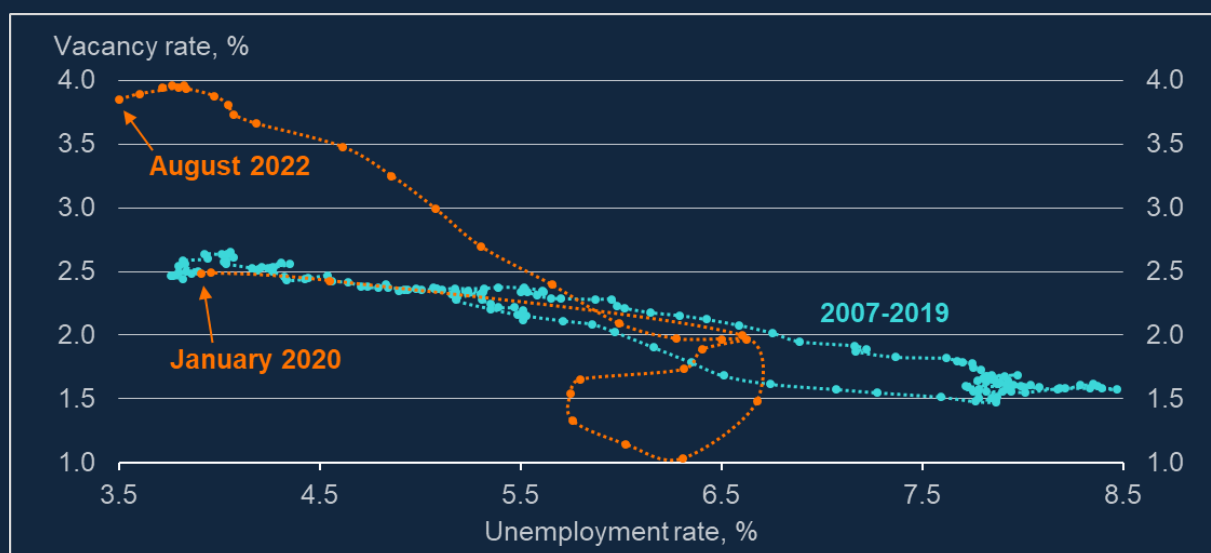
<sup>1</sup> For more, see Box E of the [August MPR](#).

## The labour market

The energy price shock is a major driver of the current high inflation in the UK, but not the only cause. Nominal wage growth has been strong in recent months in the UK, running at over 6% in the latest data. Wage growth that is not matched by increases in productivity will be inflationary, since this pushes up on unit costs. And productivity in the UK has been weak since the global financial crisis in 2007/08 – a fact that the coronavirus pandemic does not seem (yet) to have changed.

### Chart 9: The vacancy rate is much higher than before the pandemic even though the unemployment rate is lower

Vacancy rate and unemployment rate, January 2007 to August 2022, UK <sup>(a)</sup>



Source: ONS, HMRC, author's calculations.

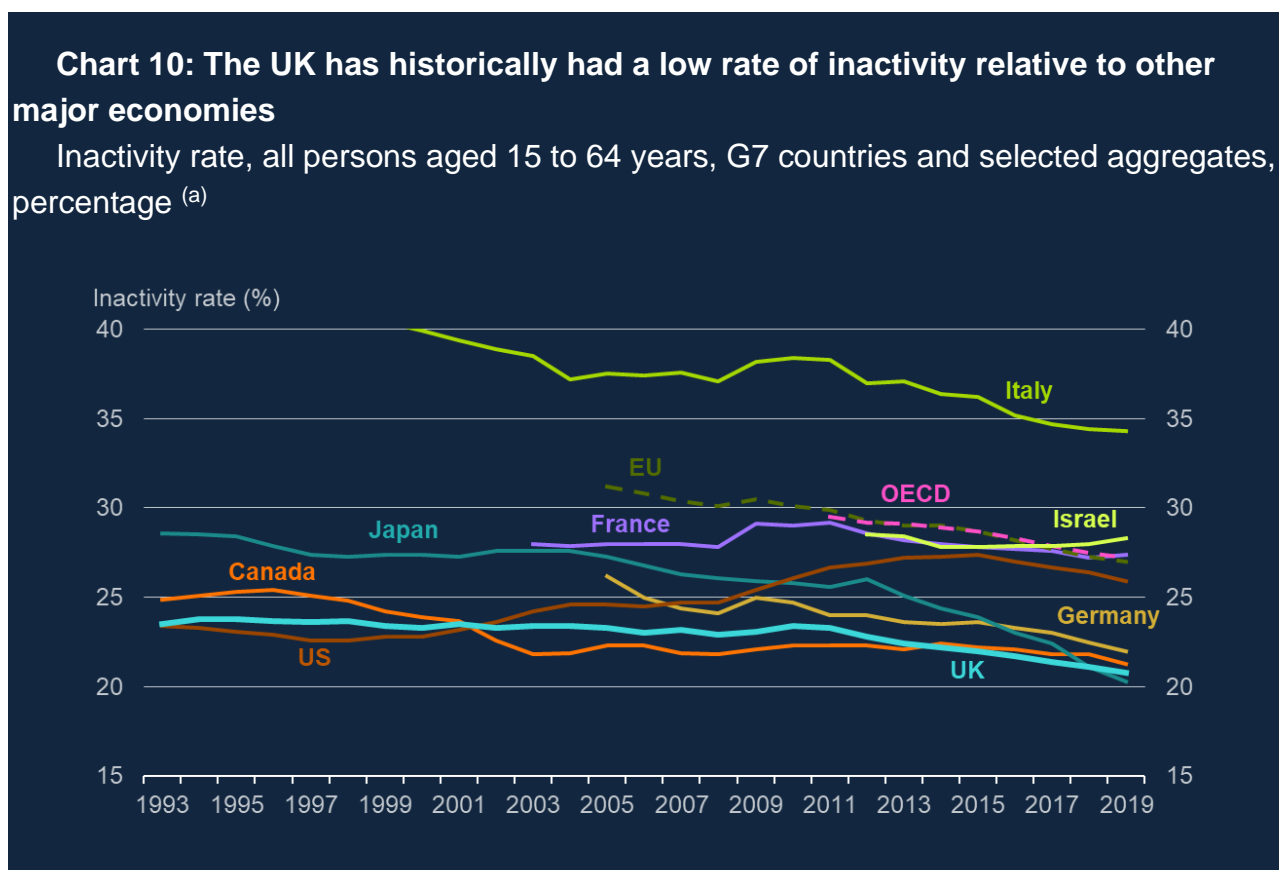
(a) Three-month moving averages. Latest data is three months to August 2022. Vacancy rate is the number of vacancies divided by total employment. Unemployment rate includes 10% of furloughed workers between March 2020 and September 2021. Chart based on [Haskel \(2021\)](#) and [August MPR](#).

One reason for this strong wage growth is a very tight labour market. The ratio of vacancies to unemployed is at a historic high of just over one – that is, for every unemployed person, there is more than one vacancy advertised. Historically, this ratio was closer to 0.5, or one vacancy for every two unemployed. Tracking this ratio over time yields the famous Beveridge curve (or V-U curve), developed by William Beveridge (see [Yashiv, 2007](#)). This curve usually shows an inverse relationship between the unemployment rate and vacancy rate, such that higher levels of vacancies occur with lower levels of unemployment, and vice versa. **Chart 9** shows that during and since the coronavirus pandemic, it seems that the curve has “shifted out”, such that for a given level of unemployed there are now more vacancies. This is taken as a sign of a tight labour

market – more firms are competing for scarce workers, bidding up wages. It could also signal lower matching efficiency in the labour market, reflecting mismatch of the geography, skills or experience of the demand and supply for labour.

Why are there so few available workers? A key driver appears to be the increase in economic inactivity in the UK labour market. People are classified as either employed, unemployed or inactive – to be unemployed they must meet two criteria set out by the International Labour Organisation: that they are available to start work in the next two weeks, and have looked for work in the past four weeks. Anyone without a job that does not meet *both* criteria is said to be economically inactive. Some of the inactive population do search for work, but do not qualify as unemployed if they are not available to start. Some of the inactive want a job, even if they are not searching.

As **Chart 10** shows, the UK has historically had quite low levels of inactivity amongst the working age population relative to other major economies around the world.

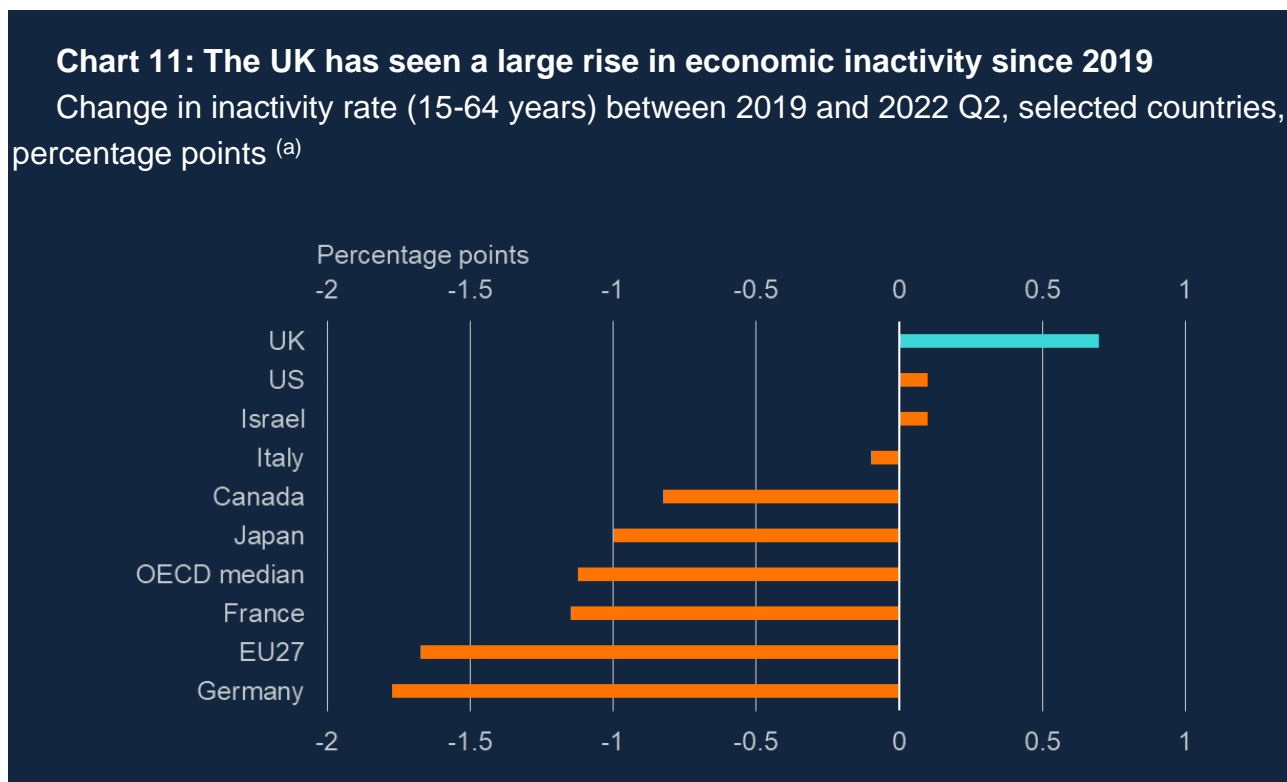


Source: OECD, author's calculations.

(a) Data for EU and OECD are weighted aggregates, rather than simple averages. EU aggregate comprises all current 27 members.

But during and since the coronavirus pandemic, the UK has rather unusually seen a sustained increase in the inactivity rate. In most countries in the OECD, inactivity rates

increased during the height of the pandemic, but quickly fell again and returned to their pre-pandemic level, or at least the pre-pandemic trend. In the UK, there was no return to trend – inactivity rates continued to increase. **Chart 11** shows that between 2019 and Q2 2022, the median OECD country had seen a fall in its inactivity rate of 1.1 percentage points, while the UK had seen an increase of 0.7 percentage points.



Source: OECD, author's calculations.

(a) Similar chart first shown in [Haskel \(2022\)](#), with data for Q1 2022. "OECD median" is the median change across 38 OECD member countries. "EU27" is the aggregate (weighted) change of the 27 EU countries. UK inactivity rates published by ONS typically use the age band 16-64, but 15-64 are used here for international consistency.

In recent work with colleague Josh Martin ([Haskel and Martin, 2022](#)), we suggest that this is driven by an increase in long-term sickness in the working age population. We use person-level data from the UK Labour Force Survey (LFS), the largest official household survey in the UK, to identify people who have long-term health conditions which limit the type of work they can do. The data shows that 17% of the working-age population in the UK are long-term sick, and many are economically inactive as a result. However, many long-term sick also work, and many more want to work and are seeking work.

During the pandemic, the increase in long-term sickness has matched quite closely the increase in economic inactivity – both increasing by around half a million people. We estimate that only around 100,000 of this is associated with long-covid – that is, ongoing symptoms after a coronavirus infection. And since coronavirus infections occurred across

the world, and hence long-covid is likely similarly prevalent across the world, long-covid cannot explain the unique UK situation of rising inactivity. We speculate that one major driver of the increase in long-term sickness, and a UK-specific factor, could be the National Health Service (NHS). The number of people on an NHS waiting list in England for more than a year was around 380,000 in July of this year, up from basically zero before the pandemic. Research is ongoing, but we think it plausible that delays in diagnosis and treatment could have led some working-age people to leave work.

So while the energy price shock might fade, the shortage of workers and labour market tightness, and thus upward pressure on inflation from wage growth, might persist in the longer-term. This could leave inflationary pressure in the UK for longer than other countries.

### Financial markets

Interest rates have risen significantly in the UK since the start of the year, as part of a broader re-pricing of financial assets as we have recovered from a period of coordinated and material easing in response to the coronavirus pandemic. There have been persistent negative supply shocks, impacting supply chains, food prices and, of course, energy. A lot of this development is global and does not affect only the UK. Many central banks have responded to act against inflationary pressures by raising policy rates. Global financial conditions are tightening, which also reflects on yields and prices of risky assets.

**Chart 12** shows long-term interest rates, weekly, since the start of the year up to 3 November 2022. The chart decomposes such changes into those due to conditions in the UK and global spillovers. It shows indeed that interest rates in the UK moved in line with these global factors for most of this year.

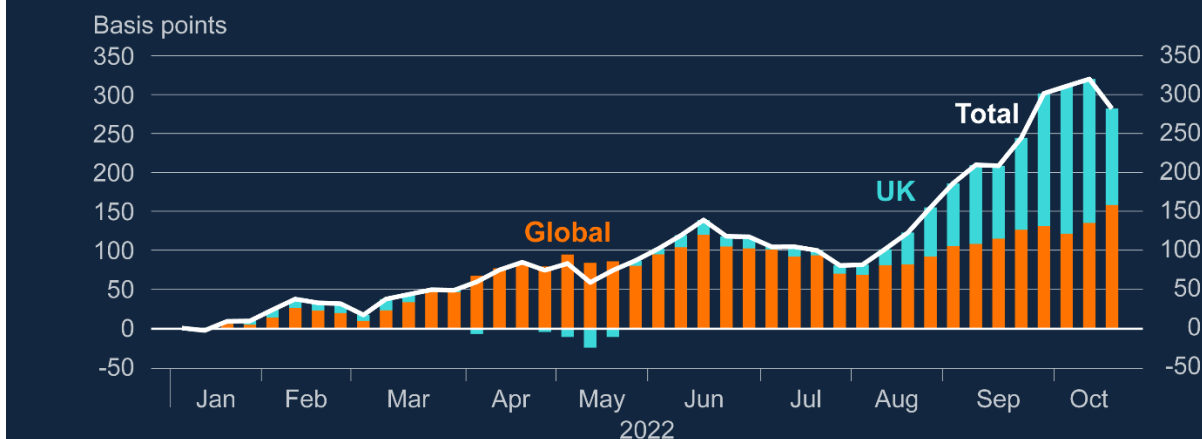
But in more recent times, in particular since mid-August, we have seen a period where interest rates in the UK diverged from that of other countries. Our decompositions show an increasing role for domestic factors. These could reflect UK-specific economic fundamentals, such as the labour market and inflationary issues I previously highlighted. However, it likely also reflects the volatility associated with the “fiscal event” on 23 September 2022, which induced an intervention by the Bank in the longer-dated gilt market, detailed by my colleagues Jon Cunliffe and Andrew Hauser<sup>2</sup>.

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<sup>2</sup> For more details see [letter from Jon Cunliffe to the Rt Hon Mel Stride MP on 5 October 2022](#), [letter from Jon Cunliffe to the Rt Hon Mel Stride MP on 18 October 2022](#), and speech by Andrew Hauser: [Thirteen days in October: how central bank balance sheets can support monetary and financial stability](#).

### Chart 12: Recent rises in UK long-term interest rates have primarily reflected domestic factors

Decomposition of changes in of long-term interest rates in the UK into global and domestic factors, weekly, 3 January 2022 to 20 October 2022 <sup>(a)</sup>



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

(a) The decomposition is the Bank's Rigobon decomposition. It identifies country-specific drivers in yields. Foreign shocks are then summarised in the global spill-overs component, based on [Rigobon \(2003\)](#). More details in [Razcko, Wazzi and Yan \(2017\)](#).

Interest rates have since retraced their large moves since late September and the domestic factors in **Chart 12** have fallen back. However, a UK-specific element remains, which is also reflected in the pricing of UK risky assets since August. The near term outlook is also uncertain: the gap between the market-implied path for Bank Rate and the level expected by market participants<sup>3</sup> remains at a historic high in recent months. These participants tell us that that this is because they view the balance of risks skewed towards a higher path for Bank Rate, due especially to domestic factors, as well as global factor and market illiquidity and volatility.

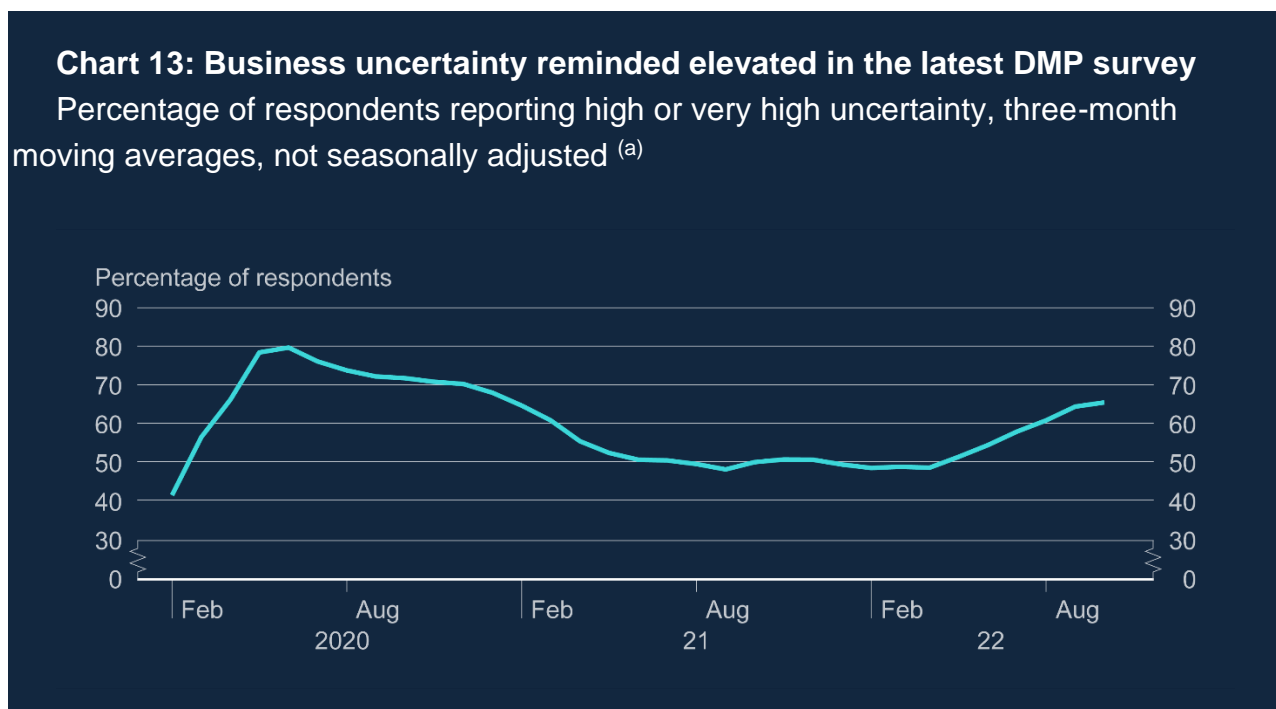
As well as financial market measures of uncertainty, business also tell us that they are feeling very uncertain at the moment. **Chart 13** shows that business uncertainty, as reported in by firms in the Decision Maker Panel survey, has been rising continuously this year, having fallen significantly since the peak during the coronavirus pandemic. Experience of past periods of uncertainty, and intelligence gathered by our network of regional Agents, has highlighted this as an important factor in firms' investment intentions.

<sup>3</sup> Data from the Bank of England's [Market Participants Survey \(MaPS\)](#). See also the [November MPR](#).



The latest ONS data show, extraordinarily, that the level of UK business investment in real terms is currently (2022 Q2) at much the same level as it was in 2007 Q4.<sup>4</sup>

The UK's record on investment underscores the importance of a stable macro environment. Exhorting entrepreneurs to invest is hopeless if they face continual uncertainty.



Sources: DMP Survey and Bank calculations.

(a) Based on the question 'How would you rate the overall uncertainty facing your business at the moment?'. Share of respondents that responded 'Very high – very hard to forecast future sales' or 'High – hard to forecast future sales'. Latest survey period was 7 to 21 October 2022 and received responses from 2,614 UK businesses.

## Conclusion

The MPC at its November meeting voted to increase Bank Rate by 75 basis points. I voted for a 75 basis points increase, which is the largest UK increase since 1989. Why did I do that?

As we have discussed, when the energy price shock fades, the mechanics of base effects lower inflation back towards target. Indeed, since UK inflation is more responsive to such changes than in other countries, this will mean a faster inflation reduction. Further, the latest signs of activity (GDP, investment, trade) suggest the UK is already slowing down,

<sup>4</sup> [ONS, 2022, Figure 1.](#)

raising the risk that a policy tightening now might further depress demand and push inflation down below target. Does this imply less tightening?

I would argue not. As we have seen, the UK has a very tight labour market. As documented above, the rise in inactivity is a particularly UK problem. Further, the very poor record on investment has depressed the supply capacity of the economy relative to what might have been expected. My concern is that these supply side stresses risk persistent inflationary pressure. I therefore voted to raise rates significantly now to lean against this upside risk to projected inflation.

How my vote evolves in the future depends on the inflation outlook and how the economy performs. The concern for me is the risk that if price rises become embedded, monetary policy would have to be tighter for longer, prolonging a UK recession. I wish to avoid such an outcome. Therefore, right now, I believe it important for monetary policy to stand firm against the risk of persistent inflationary pressure.

I am grateful to Josh Martin and Maren Froemel for all their help preparing this speech. Thanks also to Andrew Bailey, Huw Pill, Silvana Tenreyro, Fergal Shortall, Danny Walker, Martin Seneca, Lennart Brandt, Julia Giese, Kenny Turnbull and Jack Page for helpful comments. Any errors are my own.