National Institute of Economic and Social Research

National Institute UK Economic Outlook

Autumn 2023

Series A. No. 12

National Institute UK Economic Outlook – Autumn 2023
ISSN 2753-9350
© National Institute of Economic and Social Research, 2023
National Institute of Economic and Social Research
2 Dean Trench St
London SW1P 3HE
T: +44 (0)20 7222 7665
E: enquiries@niesr.ac.uk
W: niesr.ac.uk
Registered charity no. 306083

NATIONAL INSTITUTE OF ECONOMIC AND SOCIAL RESEARCH

OFFICERS OF THE INSTITUTE
PRESIDENT
SIR PAUL TUCKER

COUNCIL OF MANAGEMENT
NEIL GASKELL (INTERIM CHAIR)

Kofi Adjepong-Boateng CBE
Alex Baker
Jenny Bates
Professor Philip Brown
Stephen King
Peter C. Oppenheimer
Amanda Rowlatt CBE
Professor Jill Rubery
Alison Straszewski
Romesh Vaitilingam MBE
Keith Wade

DIRECTOR
PROFESSOR JAGJIT S. CHADHA OBE

2 Dean Trench Street, Smith Square
London, SW1P 3HE

The National Institute of Economic and Social Research is an independent research institute, founded in 1938. The vision of our founders was to carry out research to improve understanding of the economic and social forces that affect people's lives, and the ways in which policy can bring about change. And this remains central to NIESR's ethos. We continue to apply our expertise in both quantitative and qualitative methods and our understanding of economic and social issues to current debates and to influence policy. The Institute is independent of all party political interests.

Contents

Foreword	**3**
National Institute UK Economic Outlook – Autumn 2023	**5**
Summary	5
1. The Macroeconomic Outlook for the United Kingdom	**7**
Economic Background and Forecast Summary	7
Policy	9
Fiscal Policy	9
Monetary Policy	13
Box A: Public Confidence in the Bank of England	**16**
The Forecast in Detail	23
Conditioning Assumptions	23
Demand and Output	24
Supply and Costs	27
Key Risks	30
Current Economic Conditions	31
Demand and Output	31
Supply and Costs	34
References	39
2. Outlook for UK Households, the Devolved Nations and the English Regions	**41**
Ahead of the Autumn Statement	42
UK Distributional Analysis	44
Wages: the rise in the National Minimum Wage and the National Living Wage	44
Housing	46
Outlook for the Devolved Nations and English Regions	49
Scotland Economic Outlook	55
Wales Economic Outlook	58
Northern Ireland Economic Outlook	60
Economic Outlook for England's Regions	63
Box B: Productivity Paradox: Challenges and Opportunities	**66**
Concluding reflections ahead of the Autumn Statement	74
References	74
Forecast tables:	**77**

Foreword

A year after the 'mini-budget' took the United Kingdom to the brink of a financial crash, some stability has returned to the national economy. Unlike last September, there is no immediate fear about the short- to medium-term sustainability of the public finances leading to a sudden stop as debt and deficit levels are coming down. Both government and the opposition are committed to the fiscal framework for 'sound money' and for now they have broadly similar spending plans. Yet the new consensus has restored the old orthodoxy, leaving in place not just low-wage precarity and high-welfare dependency but also the prevailing approach to fiscal policy. We are told that 'there is no alternative' to debt and deficit targets, which are arbitrary and have been moved by all chancellors and successive governments.

At the heart of the United Kingdom's economic misery lies anaemic growth, resulting from flatlining productivity and low public and business investment, which leads to slow real wage growth. This slow wage growth has significant distributional implications, particularly impacting lower-income households and economically and socially deprived regions of the country. This is exacerbated by gaps in local and regional capital markets, in the provision of both STEM graduates and technical and vocational skills, as well as in the country's institutional ecology, which is overcentralised, top down, short-termist and lives in siloes. The prospects of an improvement in living standards across the country remain distant, as do those for sustained regional regeneration.

In this context, UK economic growth in 2023 and 2024 is expected to be sluggish at best. We project GDP growth of 0.6 per cent in 2023 and 0.5 per cent in 2024, with significant downside risks of a contraction given the stance of monetary policy, constraints on fiscal policy and the grievous international situation. While we think interest rates have peaked, inflation will not return to the 2 per cent target before the end of 2025, and interest rates are not expected to be cut until late 2024. As CPI inflation continues to fall, wage inflation will outpace price inflation, raising incomes and living standards, though not to pre-pandemic levels. We have calculated that raising the National Minimum Wage and National Living Wage in 2023 has economic benefits, including a 5-6 per cent increase in consumption spending by working families in the bottom income decile, and we look for more to be done next year.

With public-sector net debt falling as a percentage of GDP from 97.8 per cent at the end of the 2022-23 fiscal year to under 90 per cent at the end of the 2026-27 fiscal year and the deficit to GDP ratio falling below 3 per cent by the 2026-27 fiscal year (both in line with the fiscal rules), any ensuing fiscal space in 2024 should be used not to cut taxes but rather to raise public investment towards some 3 per cent of GDP on a sustained basis. Capital spending on physical and digital infrastructure as well as housing will not just boost economic growth and productivity but also help unlock more business investment on which shared prosperity and well-being depend. Higher public investment needs to be accompanied by supply-side reforms in areas such as energy, education, health, and childcare. Without targeted policy intervention, it is hard to see how the UK economy can grow and become more productive while inequalities are reduced at the level of both households and regions. A new fiscal-monetary mix and a sustained focus on raising investment are necessary if the United Kingdom is to avoid another period of protracted stagnation where we fall further behind other advanced economies.

The test for the Autumn Statement on 22 November will be whether the Government's main policy measures help cushion the impact of successive shocks on the hardest hit households and the most economically and socially deprived regions, and start the process of engineering economic regeneration. And now that the countdown to the next General Election has begun, we will continue to assess the Government's and the opposition parties' plans against the fundamental economic and social needs of the country: stronger economic and productivity growth, higher public and private investment, a closing of the skills gap, higher wages and living standards, as well as lower public and household debt and less dependency on welfare in order to get by. There are constructive alternatives to the status quo, and the country is crying out for a convincing vision of national renewal, allied with a long-term, credible programme of investment.

Adrian Pabst, Deputy Director (Social and Political Economy) , NIESR
November 2023

National Institute UK Economic Outlook – Autumn 2023

Summary

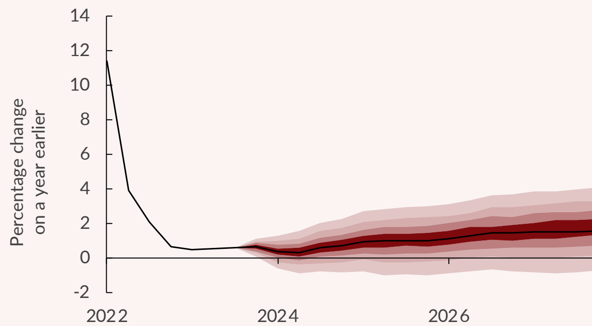
- **GDP growth remains sluggish in 2023 and 2024 as the monetary policy tightening continues to bite.** We expect GDP growth of 0.6 per cent in 2023 and 0.5 per cent in 2024.
- **We think the MPC has done enough to bring CPI inflation back down to target, which it reaches towards the end of 2025.** We think interest rates have peaked at 5.25 per cent and do not expect any cuts in rates until late next year. When interest rates do come down, we expect them to reach between 3 and 3.5 per cent, compared with the market's current view of an equilibrium rate of just over 4 per cent.
- **We expect wage inflation to remain high as workers attempt to bring their real wages back to where they were before the cost-of-living crisis hit.** We expect average earnings to increase by 7.2 and 7.1 per cent in 2023 and 2024, respectively, but we do not expect this to feed into higher price inflation as firms have space to absorb these increases by lowering margins.
- **Public-Sector Net Debt is falling as a percentage of GDP throughout our forecast and the deficit to GDP ratio falls below 3 per cent by 2027/28, in line with the fiscal rules.** This means that there is some limited fiscal space in 2024, which we feel should be used to increase public investment – particularly in infrastructure and housing – rather than to cut taxes.
- **We project that the living standards for people in income deciles 2-5 will not return to pre-pandemic levels until the end of 2026:** real household incomes are growing more strongly in 2023, but real wages fell the most for the poorest in 2022.
- **The number of destitute people will fall to around 1.1 million by the end of 2024, including 300,000 children.** We project that destitution – ie, going without the essentials everyone needs to eat, stay warm and dry, and keep clean – will fall from around 1.5 million to approximately 1.1 million, largely as a result of increasing real wages in 2024.
- **There are significant economic benefits from raising the National Minimum Wage and the National Living Wage.** We find that households in the bottom income decile will see a 5-6 per cent rise in their consumption in 2023-24 as a result of rises in the National Minimum and Living Wages.
- **Addressing London's productivity paradox – despite having the highest level of productivity in the United Kingdom it has the slowest productivity growth except the South-West – requires an overarching strategy.** Much better coordination across multiple tiers of government (Westminster, GLA, and the boroughs) is needed to design targeted investment and deliver more affordable housing, better access to transport, higher R&D spending and greater business investment.

Table 1.1 Summary of the forecast (percentage change unless otherwise stated)

	2020	2021	2022	2023	2024	2025	2026	2027	2028
GDP	-10.4	8.7	4.3	0.6	0.5	1.0	1.3	1.5	1.7
Per capita GDP	-10.7	8.5	3.4	0.0	0.0	0.6	1.0	1.2	1.3
CPI Inflation	0.8	2.6	9.1	7.6	4.2	2.4	1.8	2.0	2.0
RPIX Inflation	1.7	4.2	11.5	9.0	4.7	3.0	2.5	2.7	2.8
RPDI	-0.5	1.5	-1.5	1.2	0.1	1.7	2.1	1.4	2.9
Unemployment, %	4.6	4.5	3.7	4.2	4.8	4.9	4.9	4.9	5.0
Bank Rate, %	0.2	0.1	1.5	4.7	5.2	4.7	4.1	3.5	3.3
Long Rates, %	0.3	0.8	2.4	4.1	4.2	3.8	3.6	3.4	3.4
Effective exchange rate	0.5	4.7	-2.2	1.2	0.4	-0.6	-0.6	-0.4	0.0
Current account as % of GDP	-2.8	-0.5	-3.2	-5.8	-6.9	-5.5	-3.8	-2.5	-2.0
Net borrowing as % of GDP	2.5	14.9	5.5	5.2	5.6	4.5	3.2	1.7	-0.7
Net debt as % of GDP	81.1	100.9	97.8	96.9	95.2	94.5	92.6	90.7	86.9

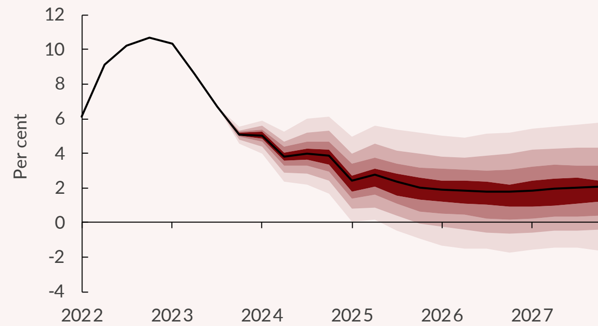
Note: Numbers reported are yearly averages except for net borrowing, which is reported for the full fiscal year, and net debt, which is reported for the end of the fiscal year.

Annual GDP growth



Note: The shades within the fan chart represent a 10 per cent chance that GDP growth will lie within the boundary of that shade. There is a 20 per cent chance that GDP growth will lie outside the shaded area of the fan. The black line represents our central forecast for GDP growth.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

CPI inflation



Note: The shades within the fan chart represent a 10 per cent chance that inflation will lie within the boundary of that shade. There is a 20 per cent chance that inflation will lie outside the shaded area of the fan. The black line represents our central forecast for inflation.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

1. The Macroeconomic Outlook for the United Kingdom

By Paula Bejarano Carbo, Huw Dixon, Hailey Low, Leaza McSorley, Stephen Millard and Max Mosley

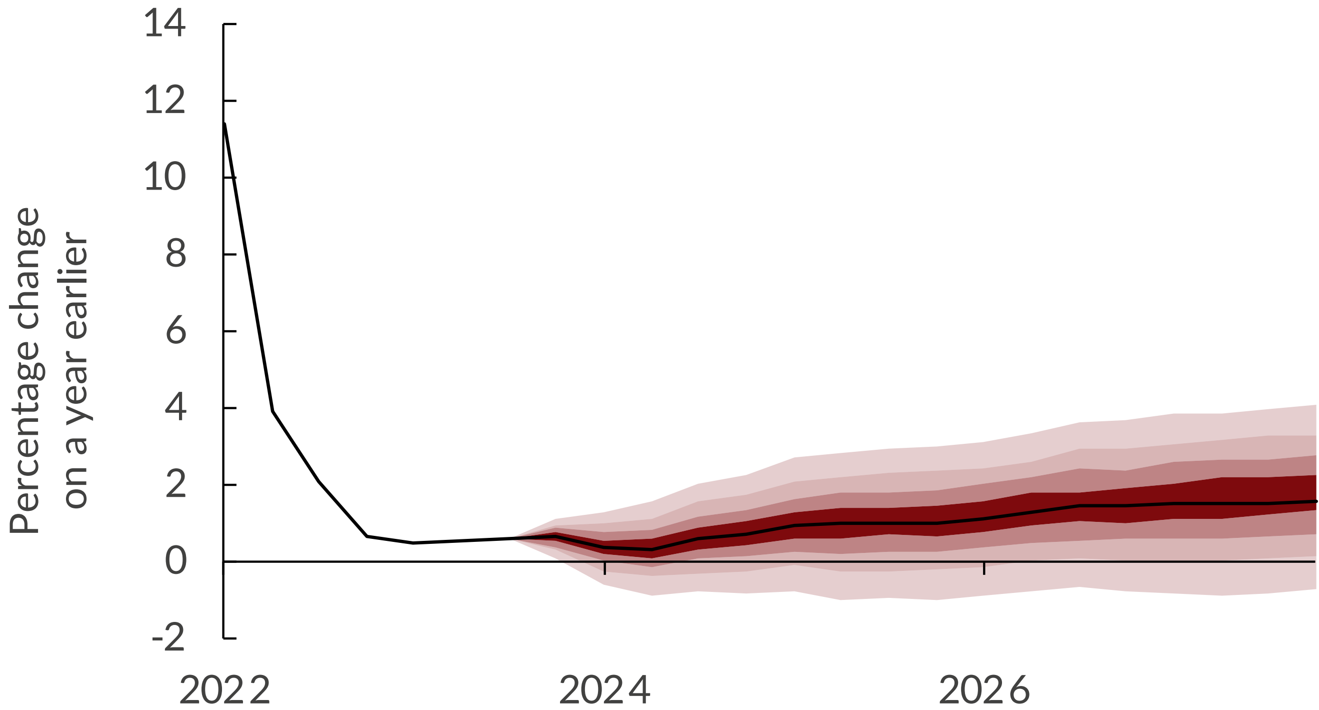
Economic Background and Forecast Summary

As we publish our Autumn Economic Outlook, the United Kingdom continues to face a challenging economic outlook as growth remains sluggish and the Bank of England's Monetary Policy Committee (MPC) struggles to tame high inflation. We think economic activity contracted in the third quarter of 2023 and will grow only slightly in the fourth quarter. Momentum remains weak as the war in Ukraine continues and events in Israel and Gaza raise the possibility of a wider conflict in the Middle East. The labour market continues to loosen, with vacancies falling and unemployment rising, while high inactivity on account of long-term sickness remains an issue. Finally, aggressive policy rate hikes – needed to tackle high and persistent inflation – have tightened financial conditions. In a more positive development, real incomes have finally started to rise as wage inflation has overtaken price inflation.

Against this background, the outlook for growth remains subdued. Our October GDP Tracker (Bejarano Carbo, 2023a) suggests GDP will have contracted by 0.1 per cent in the third quarter of 2023 but will grow by 0.2 per cent in the fourth quarter, consistent with our short- to medium-run view of low economic growth in the United Kingdom, though with no recession. Overall, we expect growth this year of 0.6 per cent. For 2024, we expect GDP growth of 0.5 per cent. Figure 1.1 plots a probabilistic range of values for GDP growth against our central forecast (the black line). Throughout the forecast period, we see the risks to GDP growth being balanced. However, this still means that there is roughly 30 per cent change of an annual fall in GDP in 2024 and a roughly 25 per cent change of an annual fall in GDP in 2025.

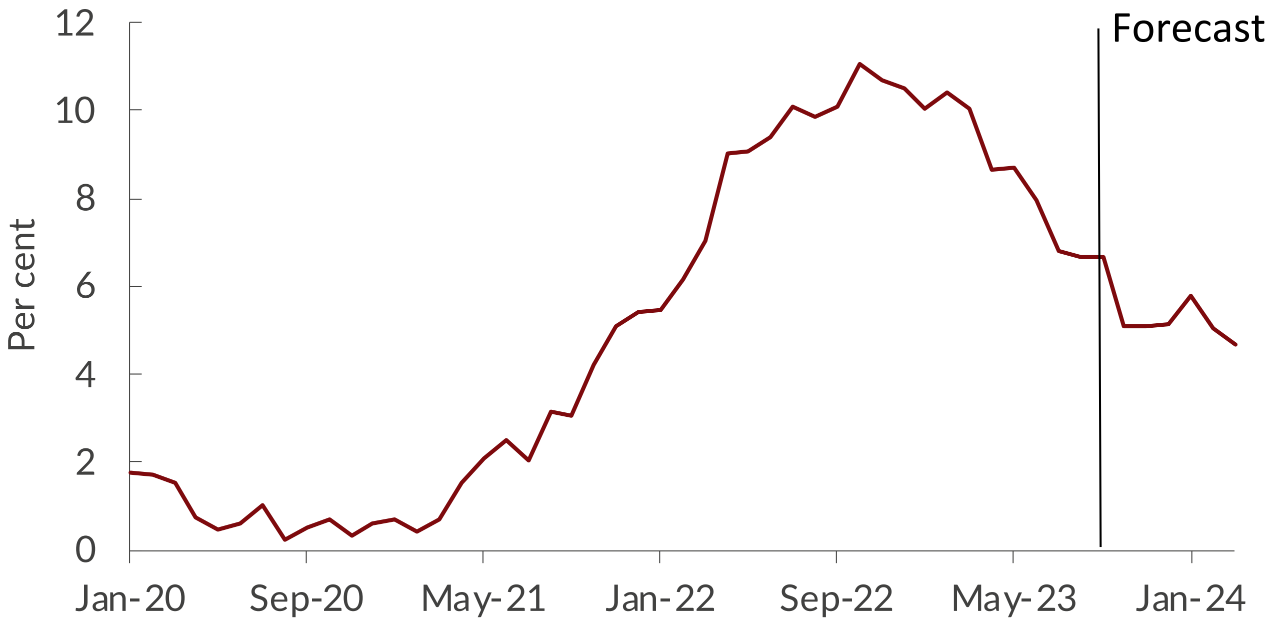
Twelve-month Consumer Price Index (CPI) inflation was 6.7 per cent in September, unchanged from August. Core inflation fell slightly to 6.1 per cent. As described in Dixon (2023), the headline rate of CPI inflation is likely to fall dramatically in October as the large rise in energy prices in October 2022 drops out of the inflation calculation. With this knowledge, together with the observation that core inflation looks to be falling, we think the Monetary Policy Committee (MPC) of the Bank of England has raised rates by enough to hit its inflation target of 2 per cent. That said, we do not expect interest rates to start falling until towards the end of 2024.

Figure 1.1 GDP growth



Note: The shades within the fan chart represent a 10 per cent chance that GDP growth will lie within the boundary of that shade. There is a 20 per cent chance that GDP growth will lie outside the shaded area of the fan. The black line represents our central forecast for GDP growth.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

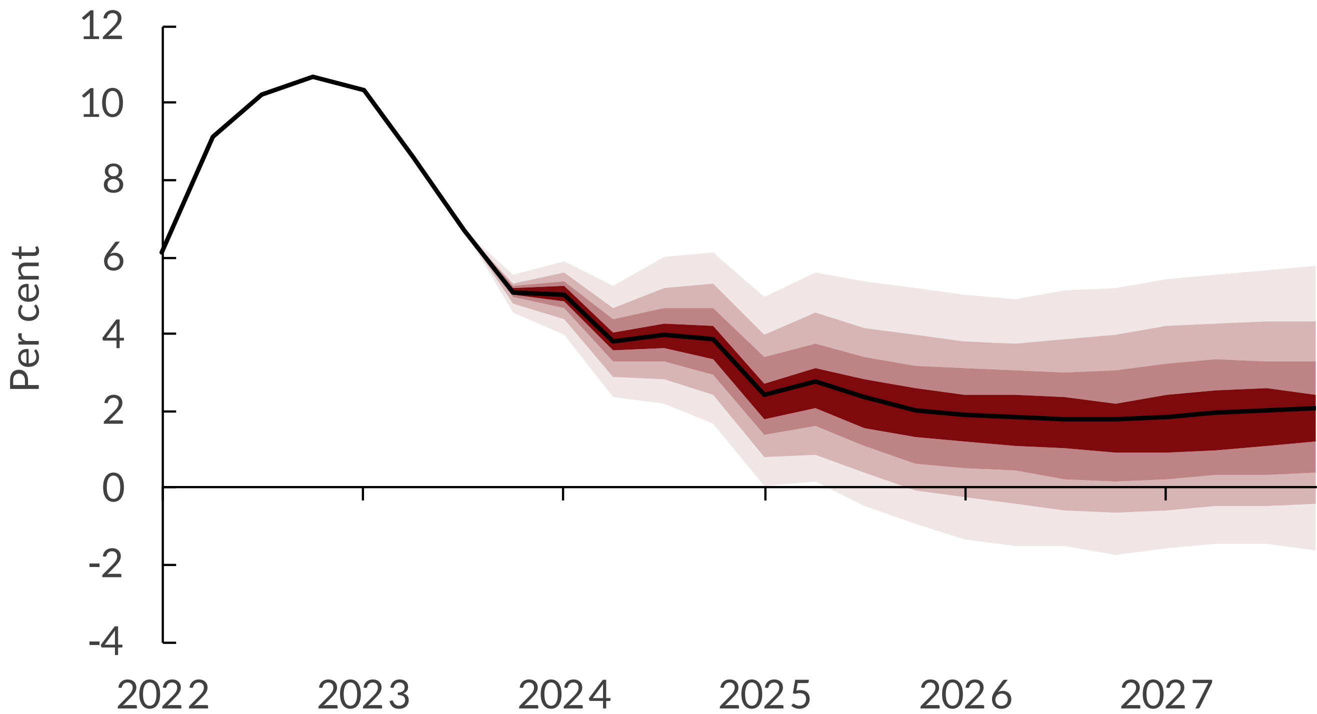
Figure 1.2 Annual consumer price index inflation



Source: ONS, NIESR calculations.

The fall in inflation in October means that we expect CPI inflation to be around 5.1 per cent in the fourth quarter of this year and the first quarter of 2024 (figure 1.2). Looking further out, we expect CPI inflation to be around the Bank of England's 2 per cent target by late 2025. Figure 1.3 plots a probabilistic range of values for inflation against our central forecast (the black line). Throughout the forecast period, we see the risks to inflation to be balanced. Our stochastic simulation suggests a less than 20 per cent chance that the annual rate of CPI inflation will still be above 4 per cent in the fourth quarter of 2025.

Figure 1.3 CPI inflation fan chart



Note: The shades within the fan chart represent a 10 per cent chance that inflation will lie within the boundary of that shade. There is a 20 per cent chance that inflation will lie outside the shaded area of the fan. The black line represents our central forecast for inflation.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

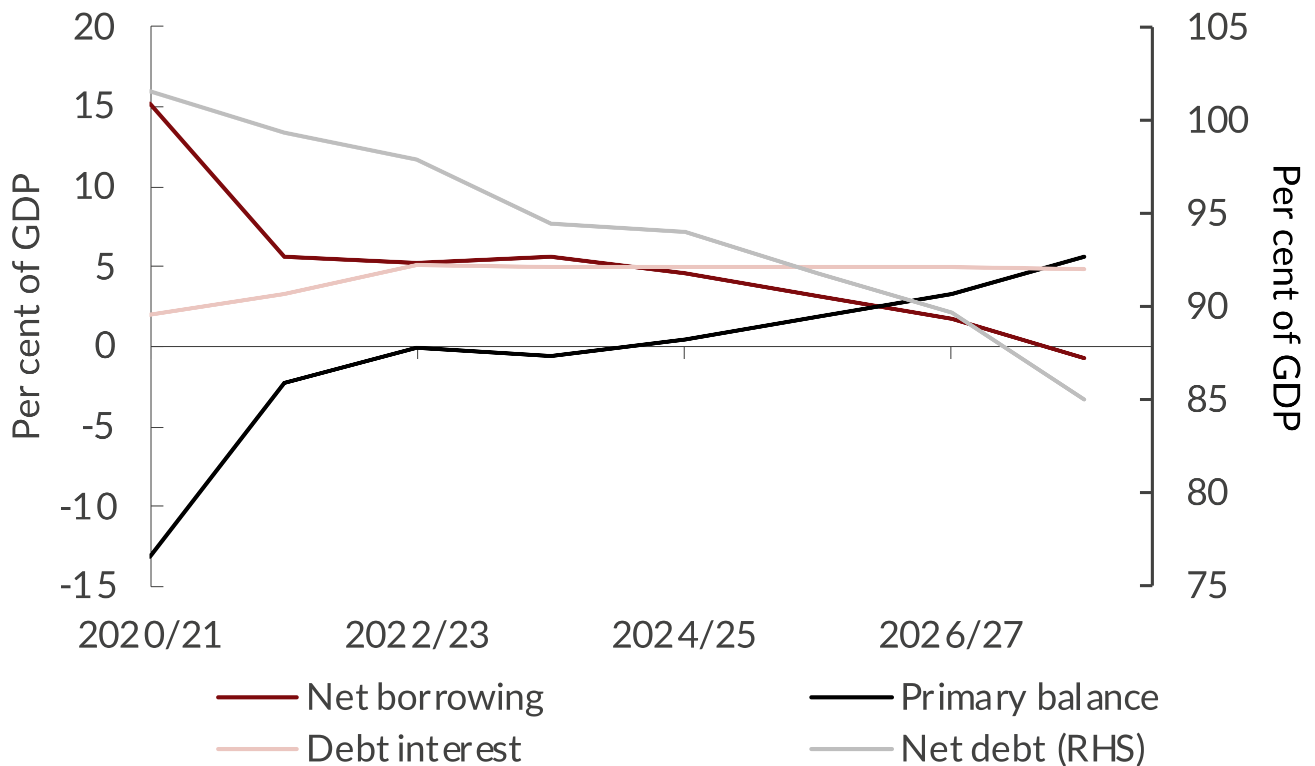
Policy

Fiscal Policy

Fiscal policy is moving into the pre-election period where the focus of the Chancellor and Prime Minister will increasingly be on the election. With the Chancellor making his Autumn Statement on 22 November, a key question will be his ability to cut tax given the current fiscal rules in place. NIESR has long argued against fiscal policy being bound by arbitrary fiscal rules (Chadha et al., 2021), but it is still worth considering the current state of public finances. The current fiscal rules mandate that public sector net debt excluding the Bank of England must be falling in the 2027-28 fiscal year and that borrowing must be less than 3 per cent of GDP over the same fiscal year. Figure 1.4 suggests that both the level of debt and the deficit are high but trending downwards, with both targets likely to be met on current policy settings. Furthermore, figure 1.4 suggests that fiscal policy is currently tight and getting tighter as we forecast the government to be running primary surpluses from the 2024-25 fiscal year onwards. The difference between the primary balance and net borrowing reflects the large increase in interest payments resulting from

higher government borrowing rates. As noted in our recent Term-Premium Tracker (Bejarano Carbo, 2023b), the rise in government bond yields has been driven by the rise in expectations of future interest rates rather than by an increase in the risk premium. In particular, the rise in the risk premium associated with the mini-budget of last October looks to have completely reversed.

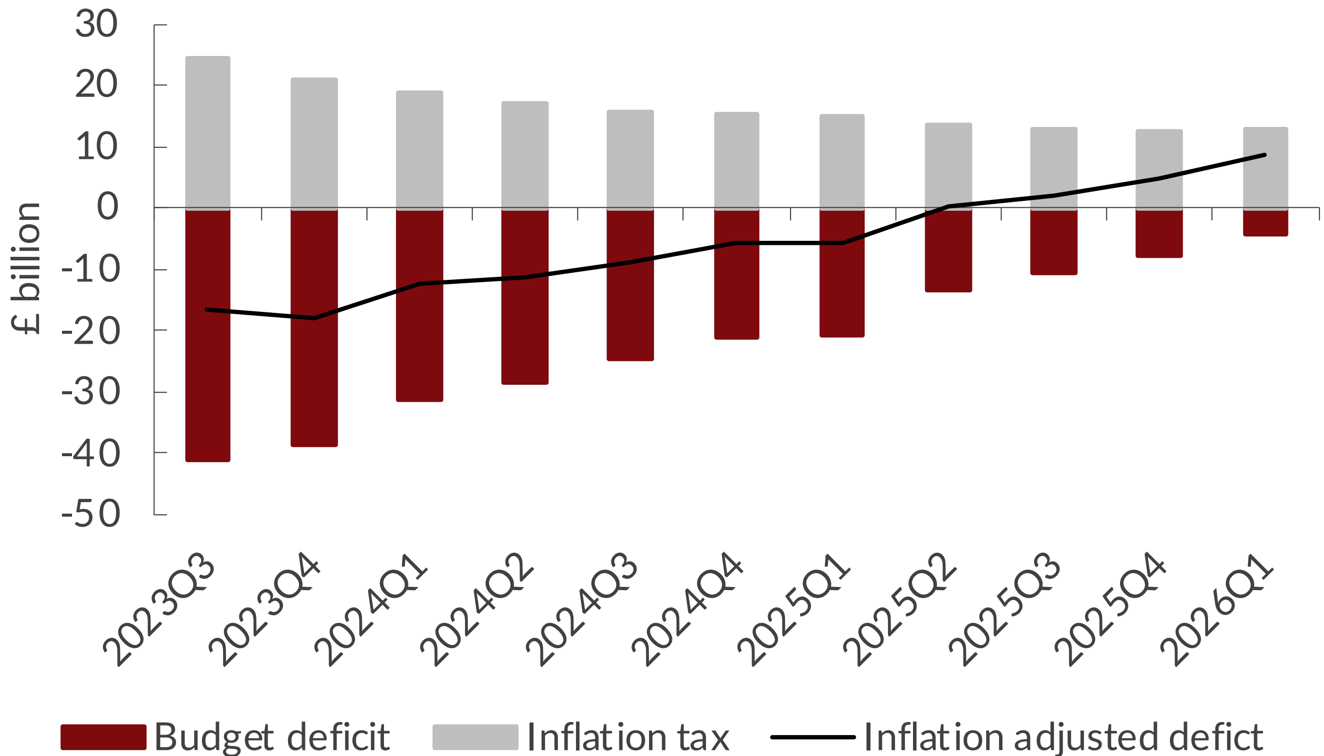
Figure 1.4 Public-sector net debt, net borrowing, primary balance and debt interest to GDP ratios



Note: Net debt to GDP ratio based on public-sector net debt including the Bank of England. This is not the same measure as in the fiscal rules, which excludes the Bank of England, and which NIESR does not forecast.
Source: NiGEM database and NIESR forecast.

Interestingly, although the debt/GDP ratio is (slowly) coming down, this has been combined with large budget deficits (greater than 5 per cent of GDP) in each of the fiscal years from 2020/21 to the current fiscal year, 2023/24. Normally large budget deficits would lead to an increase in the debt/GDP ratio. The reason deficits in this period have not led to a big increase in the debt/GDP ratio is that there have been large increases in nominal GDP, largely driven by inflation which was increasing up to its peak in the fourth quarter of 2022 and remains high. (Real output, by contrast, was largely flat through this period). The effect of inflation on public finances has been positive in the last two years. This can be viewed as a combination of an 'inflation tax' reducing the real value of outstanding non-indexed government debt, 'fiscal drag' whereby tax bands are not updated to keep up with inflation, and the real wages of public sector workers having fallen. The fiscal space provided by inflation has been fortunate for the government, which has had large demands placed upon it for increased expenditures. Most notable was the Energy Price Guarantee (EPG) introduced by the Liz Truss government and extended under Rishi Sunak. The total paid out to households and businesses under the various schemes from October 2022 to June 2023 was around £40 billion (source: Department of Energy Security and Net Zero), which on its own accounted for a large proportion of the deficit in that period. However, due to the fall in energy prices in 2022, the total amount paid out was much less than expected. (Estimates had been as high as £70 billion when the policy was first introduced).

Figure 1.5 Inflation adjusted budget deficit.



Source: NiGEM database, NIESR forecast and authors own calculations.

We expect the rate of inflation to be around 5 per cent by the end of the year and fall to around 4 per cent by the end of 2024. This implies that the fiscal space provided by inflation will diminish but not disappear and hence the government will have some room for a more expansionary fiscal stance in the run up to the election. In figure 1.5, we report our estimates of the approximate size of the inflation tax following the method described in Dixon et al. (2022), and the corresponding Inflation adjusted deficit (IAD) in absolute terms and relative to nominal GDP.

The fiscal space provided by inflation is reducing as inflation comes down. When we are back to a low inflation world with inflation on target, the fiscal choices of the government will become much more difficult. Interest payments are taking up a larger proportion of government revenues as a result of higher interest rates, which are likely to persist even after inflation has fallen closer to target, and higher debt.

There are always pressures on governments to raise expenditure and cut taxes. The pressures will be particularly strong in the coming year, in the run up to the General Election, which must take place before January 2025, but is most likely to in mid-2024.

The level of taxation in the United Kingdom is currently at its highest for decades, taking up around 40 per cent of GDP, and our forecast is for this to remain the case for the next few years. Given the tight fiscal position of the government, the scope for major reductions in taxation is limited. Should there by any room for tax cuts, NIESR would advocate that raising thresholds for tax and National insurance should be the priority. But this is unlikely, given a four-year freeze on thresholds was put in place in March 2021 and subsequently extended into 2027-28.

One way of reducing taxes is to reduce the size of the public sector as a proportion of GDP. But, as emphasised in a Productivity Commission evidence session in May (NIESR, 2023), UK public investment has been low relative to the median G7 and OECD levels of investment for a long time and we can see growing demands for the government to renew the public infrastructure, from schools and hospitals to roads. There are also growing demands for the government to increase health care and education expenditures, partly reflecting the deterioration in outcomes since the pandemic. In addition, there is pressure to increase defence spending given the increased geo-political risks now facing the western world.

One of the benefits of inflation for public finances has been that real public-sector wages have fallen as nominal wages have failed to keep up with inflation. There will continue to be pressures from public-sector employees for 'catch up' that will lead to increases in public-sector wage bills. Again, the tight labour market conditions make this difficult to avoid. If the government wants to recruit more doctors, nurses, and teachers in a tight labour market it will be difficult to keep real wages down. While we expect unemployment to rise gradually to around five per cent, there will still be labour shortages in key sectors.

The key long-term issues facing the government are productivity and inactivity: productivity continues to flatline whilst inactivity rates remain high, being part of the story underlying the tight labour market. As emphasised by the Productivity Commission in NIESR (2022), productivity can be improved by increasing both private and public investment. Investment has been low most years since the Great Financial Crash of 2009 and particularly since the pandemic and Brexit. Increasing incentives for firms to invest can be achieved through the corporate tax system, in particular, by extending the full capital expensing introduced in the March 2023 budget and due to end in 2026. Public investment has been particularly affected by austerity measures, despite its long-term beneficial impact on productivity, and this results from the incentives created by the fiscal rules around debt. To counter this, Chadha (2023a) argues that 'public investment should be excluded from calculations of the accrual of Debt to GDP, perhaps in conjunction with a more considered analysis of the whole of the government balance sheet in terms of liabilities and assets.' Indeed, NIESR continues to argue for a revised fiscal framework that that can provide enough flexibility and competence to respond to economic shocks while ensuring credibility is maintained and fiscal policy works for all (Chadha et al., 2021). With the credibility given by such a framework, public investment will be more likely to result in complementary private investment.

The level of inactivity reflected by the low participation rate is not expected to fall in the medium term. However, a more active temporary labour market policy that brings workers on the fringe of the labour force back into the labour force could increase the participation rate, partly offsetting the effects of increasing unemployment over the same medium-term time frame.

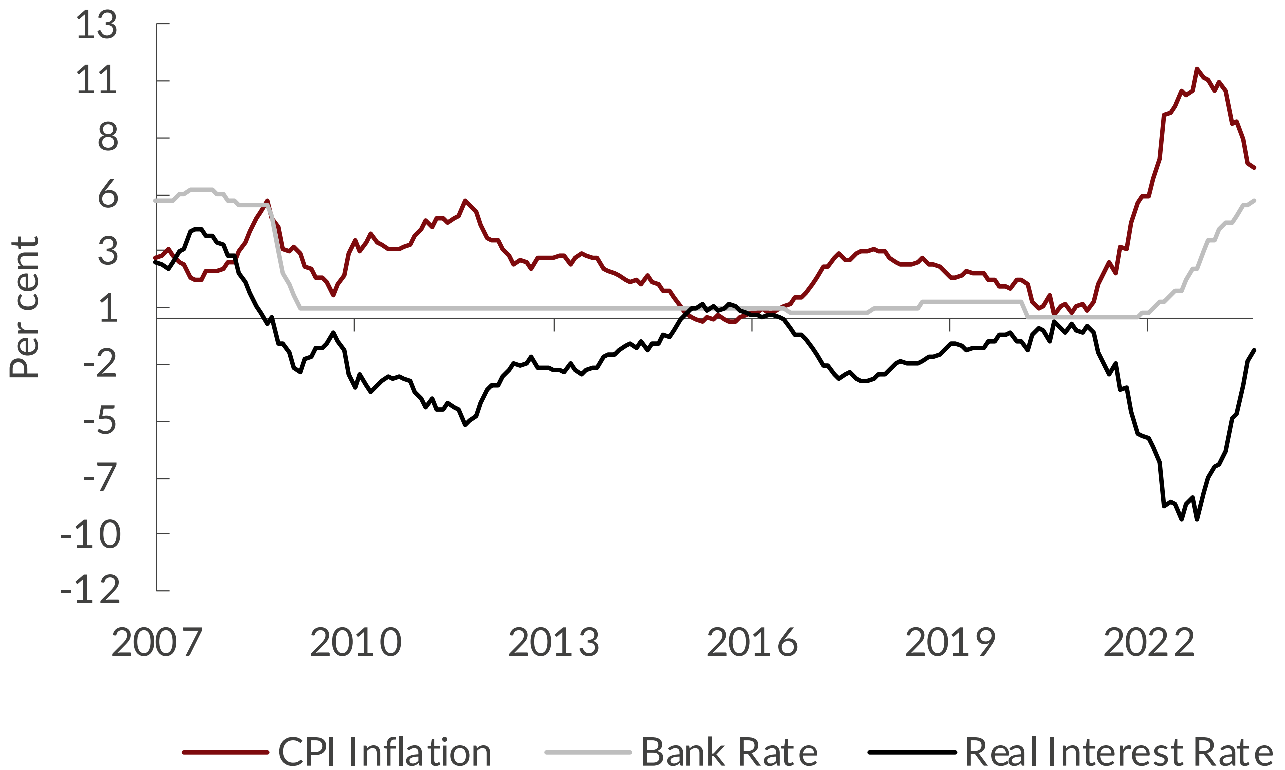
The other big long-term issue is the move to net zero. The government has already delayed by five years the transition to eliminating new fossil fuel cars to 2035. We heard in the party conferences many proposals for increasing energy efficiency and speeding up the transition to renewable energy. However, these moves take time and involve investment up front for a benefit that is felt in the longer run. It is hard to see the government giving this a high priority before the general election: we will probably have to wait for after the election to see decisive action being taken on this front. However, the financial sector is already implementing the environmental, social and governance (ESG) guidelines, which are going to have an increasing effect on the nature of private investment as we move forward.

Monetary Policy

The primary mandate of monetary policy is to keep inflation close to the target of two per cent. Inflation remained at 6.7 per cent in September, unchanged from August, but looks set to fall to 5 per cent or just above in October when the huge increase of October 2022 drops out. (The month-on-month increase was almost 2 per cent due to the very large increase in the OfGEM price cap that month.) However, the speed with which inflation falls from then on depends on how long the inflationary pressures persist. The first hurdle to pass is the January inflation figure. There was a very large 'January sale' effect in 2023, where the price level fell slightly. This may lead to an increase in inflation when it drops out in January 2024. Moving on from January, we expect inflation to remain above target for most of 2024 as the effect of wage inflation persists, particularly in services. Unemployment is set to increase, but only gently, reaching 5 per cent (NIESR's estimate of the natural rate of unemployment) towards the end of 2025, meaning that there will not be strong downward pressure on wage and price inflation. Currently, the general level of wages is still catching up with prices and real wages remain below their January 2021 level (although of course there is a great range across different types of labour).

For over a decade, since March 2009, the MPC kept interest rates close to zero (in the range 0.25-0.75 per cent). The MPC was eventually forced to raise interest rates due to the rapid post-pandemic rise in inflation and did so quickly starting in February 2022, with interest rates rising 0.25 or 0.5 percentage points at each successive MPC meeting to their current level of 5.25 per cent, reached in August 2023. It is important to note that the real interest rate, which can be approximated by the Bank rate minus the inflation rate, has been consistently negative since October 2008, with the brief exception of March 2015-2016 when CPI inflation fell to near zero. In figure 1.6, we show the nominal policy rate and the implied real interest rate with the inflation rate over the period 2006-2023. What is clear is that in the period of rising interest rates since February 2022, inflation rose faster than the policy rate and hence real interest rates became more negative reaching a low of -8.9 per cent in October 2022, the most negative rates have been since the 1970s. Currently, the gap between inflation and the policy rate implies a real interest rate of -1.4 per cent.

Figure 1.6 Real and nominal Bank Rates 2006-2023

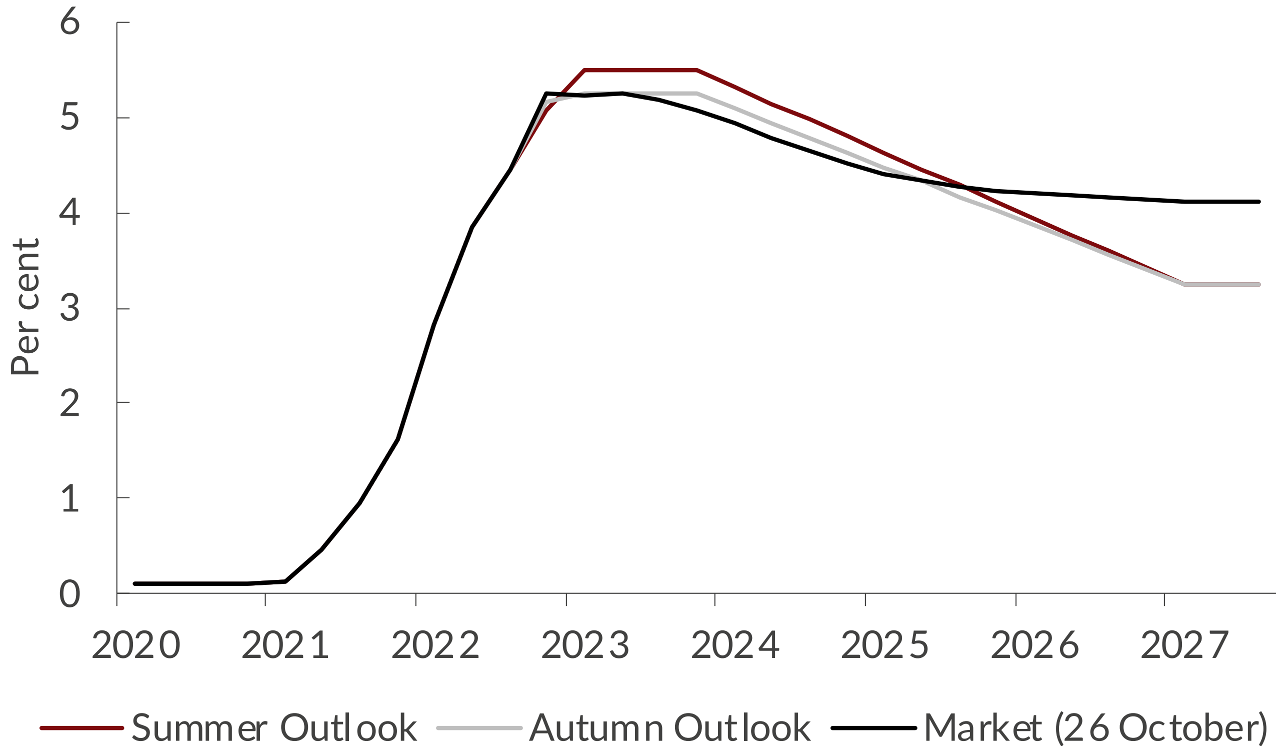


Source: ONS and Bank of England.

The period since February 2022 is often described in terms of a short-run response to rising inflation. Whilst this is true, it also represents a longer-term 'historic' shift of monetary policy from a period of negative real interest rates to one where the policy rate will exceed the inflation rate. Whilst there is evidence that the 'equilibrium' real interest rate has been declining over recent decades (and possibly over centuries), most estimates put it in the range 0-2 per cent, which indicates the gap that should exist between the policy rate and the inflation target in the long run.

The future path of interest rates can follow a range of scenarios, depending on exactly what happens to inflation. Given our forecast for inflation, we expect interest rates to follow the path implied by market interest rates shown in figure 1.7. We now think that Bank Rate has reached its peak; the big question will be for how long it stays there? We currently expect rates to start falling towards the end of next year, levelling off between 3 and 3.5 per cent, given our view that the equilibrium real interest rate is between 1 and 1.5 per cent. Our forecast is little changed since the Summer Economic Outlook, and the market takes a very similar view, except it sees the long-run policy rate being higher, levelling off at around 4 per cent, reflecting a more historical value for the equilibrium real interest rate of 2 per cent.

Figure 1.7 Bank Rate forecasts



Source: Bank of England and NIESR forecast.

The decisive moment for the MPC will be its December meeting. There will be a big drop in inflation in October, as the massive October 2022 month-on-month increase of 2 per cent 'drops out' of the annual inflation figures. The exact figure will be published in mid-November. It is quite possible that inflation will fall to around 5 per cent and hence below Bank rate leading to a positive real interest rate for the first time since 2016. Inflationary pressures will still be significant, with wage increases also likely to be higher than inflation as real wages 'catch up' to past levels. Furthermore, energy prices may again increase unless there is a mild winter, particularly given the recent terrorist attacks in southern Israel and the Israeli response to these may lead to a sharp and persistent rise in oil prices if the conflict spreads to the wider middle east and disrupts the world supply of oil and liquid natural gas.

The MPC will no doubt be under pressure from certain parts of the media and some elements in the government to start cutting rates earlier than we are expecting to inject a 'feel good' factor in the pre-election period. But, with inflation still high and public confidence in the Bank's ability to bring inflation down and closer to its target reaching a historical low (as described in Box A), we believe that the more prudent course for the MPC will be to delay any cuts until the downward path of inflation is more certain and keep interest rates steady. It can then follow inflation down keeping Bank rate about 1-2 percentage points above inflation. Following inflation down whilst remaining above inflation means that if there is an unexpected increase in inflation, the MPC can respond by 'holding steady' and delaying further cuts instead of having to reverse its previous cuts. Slow but steady will win the day.

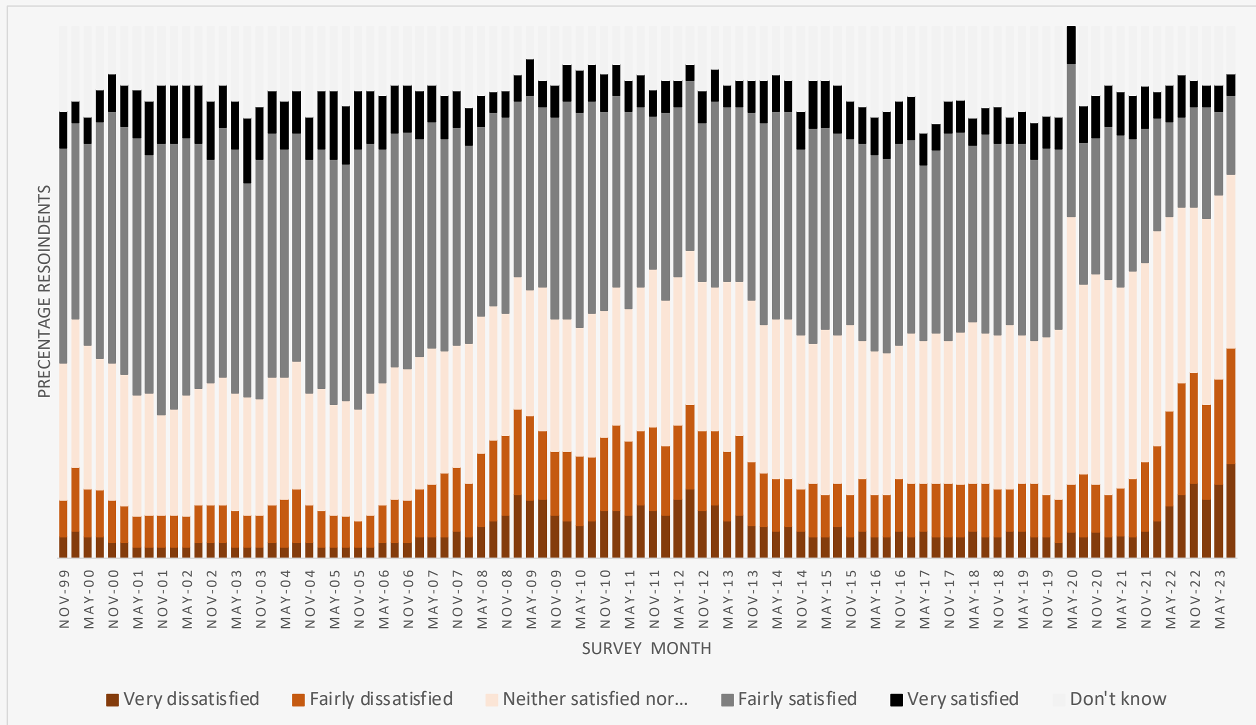
Box A: Public Confidence in the Bank of England

By Ana Carolina Garriga

Introduction

Even though inflation has consistently fallen in the past two quarters, public confidence in the Bank of England's ability to bring inflation down and closer to its target has reached its historical low since the Bank started recording these data (figure A1). These results from the Bank's Inflation Attitudes survey are surprising because when the survey was conducted, inflation had just reached its lowest rate in 15 months, falling from 11 per cent in October 2022 to 6.8 per cent in July 2023. This change was also reflected in the respondents' expectations about inflation, suggesting that they were aware of this improvement in inflation outcomes.

Figure A1 Responses to "Overall, how satisfied or dissatisfied are you with the way the Bank of England is doing its job to set interest rates in order to control inflation?"



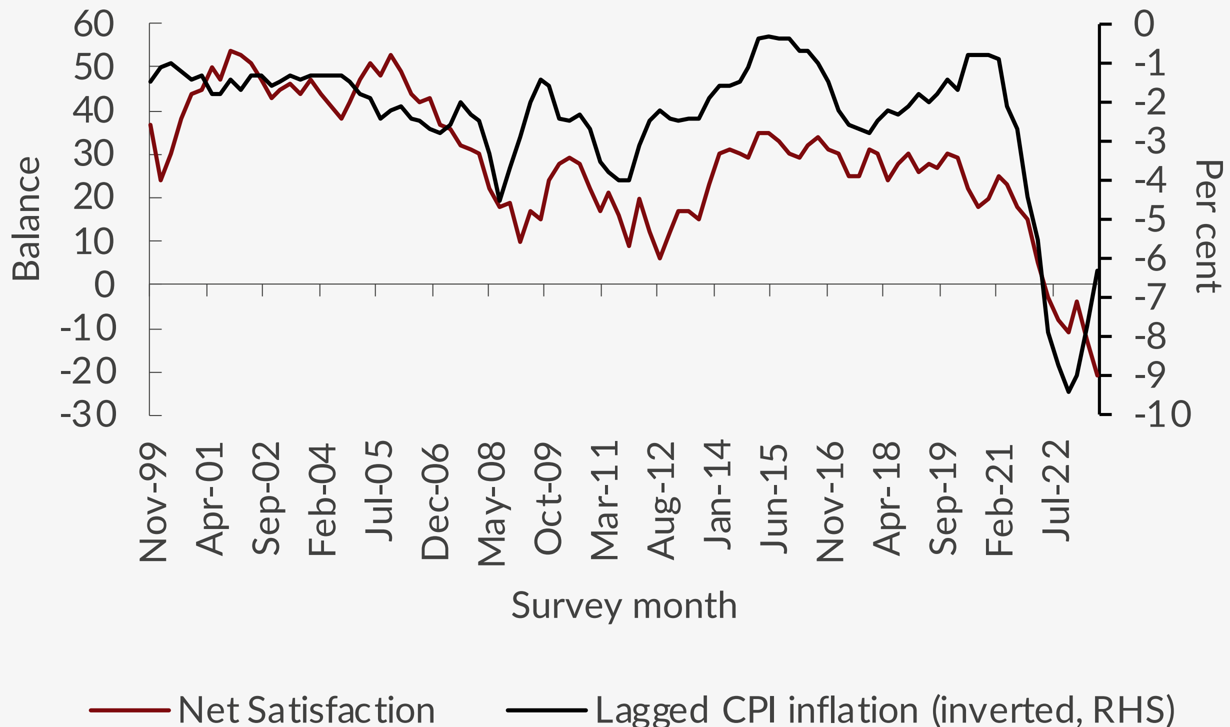
Source: Bank of England/Ipsos Inflation Attitudes survey.

This box explores the sociodemographic characteristics and perceptions of the respondents that are associated with satisfaction with the Bank's performance. Satisfaction with the work of the Bank matters because it is a measure of trust in the institution – that is, confidence that the Bank will fulfil its role in a satisfactory manner (Hudson, 2006). Trust is especially important for central banks for several reasons. The effectiveness of central banks' monetary policy measures hinges on anchoring inflation expectations. Furthermore, lack of satisfaction or trust in the central bank affects the Bank's legitimacy (Baerg and Cross, 2022) and exposes the institution to public or political pressures that can potentially undermine their independence (Goodhart and Lastra, 2018).

Trends in aggregate data

The Bank of England conducts quarterly surveys of public attitudes towards inflation and opinions about the Bank. The last survey was fielded between 4 and 7 August 2023 by Ipsos in the United Kingdom on a sample of 2,042 people aged 16-75. This wave showed the highest levels of dissatisfaction: 40 per cent of respondents expressed their discontent with the Bank's performance. The share of total dissatisfaction ranged between 33 and 35 per cent in the four previous quarterly surveys, above the two previous instances in which dissatisfaction had peaked – 28 per cent in the first quarter of 2009 and 29 per cent in the third quarter of 2012. More importantly, the net satisfaction balance, an indicator reported by the Bank of England as the percentage of satisfied minus the percentage of dissatisfied respondents, dropped from -13 per cent in the previous quarter to -21 per cent (figure A2).

Figure A2 Net satisfaction balance and CPI inflation

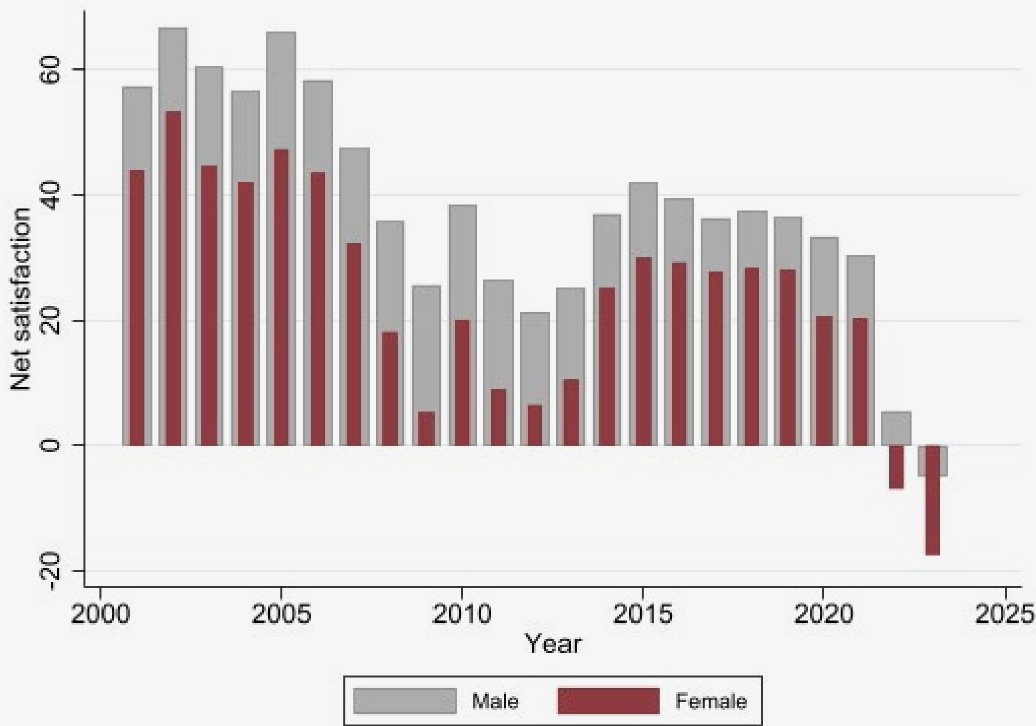


Sources: Bank of England/Ipsos Inflation Attitudes survey and ONS Data.

Although satisfaction does not directly follow current inflation rates, there is some correlation between satisfaction and consumer price index (CPI) inflation in the longer run. Figure 2 shows the annual CPI inflation rate, lagged by one quarter (reversed for presentation purposes). Interestingly, Net satisfaction maps closely with the movement of CPI inflation in the year prior to the surveys, suggesting that respondents have a longer horizon in mind when evaluating the Bank's performance – instead of just the data released immediately prior to the survey.

At the aggregate level, descriptive data suggest two salient dimensions that distinguish attitudes to the Bank of England. First, there is a gender difference in the net satisfaction regarding the work of the Bank (figure A3). Historically, more men than women tend to express positive views about the Bank. Since 2000, the share of men expressing positive views regarding the Bank is larger than the share of women– while a larger share of women have generally expressed negative views. The largest gap was right after the Global Financial Crisis: in 2009, the net satisfaction was 25.6 among men, and 5.3 among women. The net satisfaction of respondents who identify as women has been consistently negative in 2022 and 2023, while it is only in 2023 that male respondents have had negative net satisfaction. Although female respondents in 2023 have lower net dissatisfaction than male respondents, the gap in the share of respondents with negative evaluations is closing: in the last wave of the survey (August 2023), 43 per cent of male respondents and 43.6 per cent of female respondents expressed negative evaluations of the work of the Bank of England. In other words, the gender difference in net satisfaction is driven by a higher percentage of male respondents expressing satisfaction with the Bank's work.

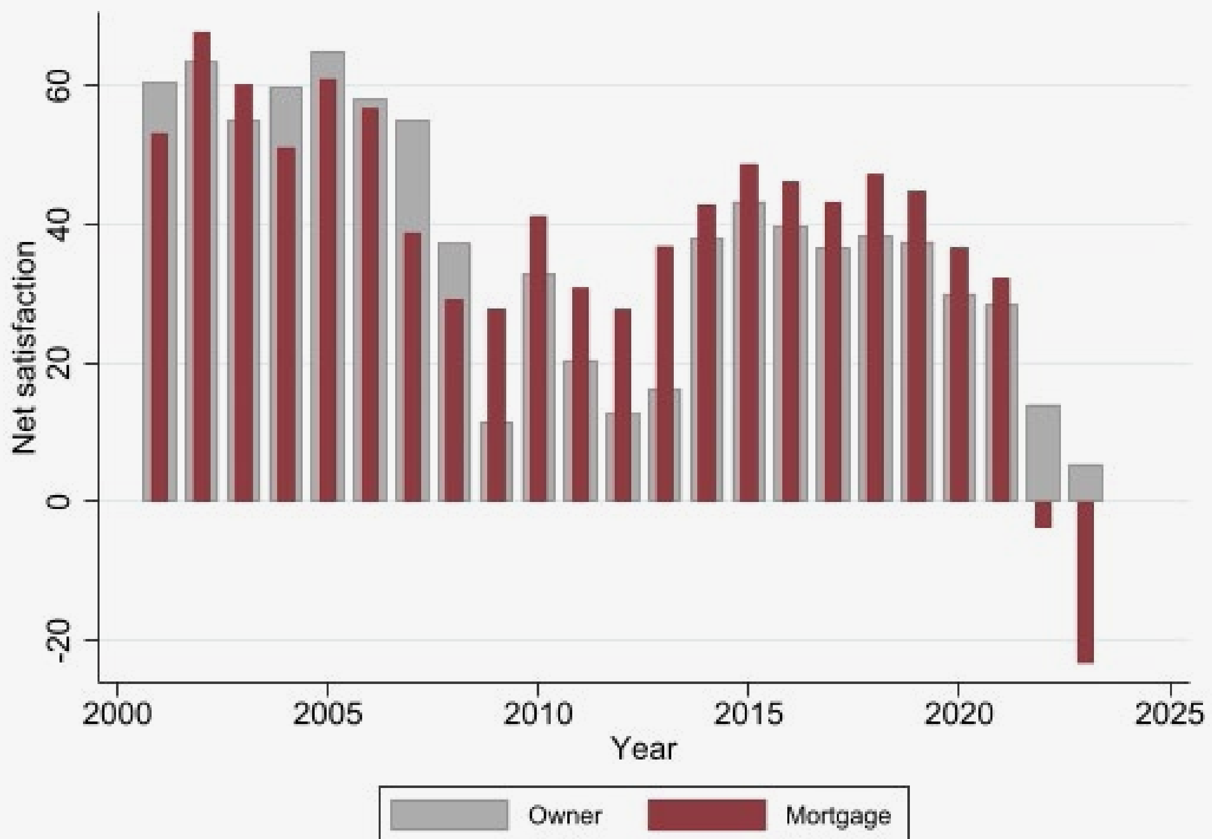
Figure A3 Net satisfaction with the Bank of England and gender



Note: The chart omits data on respondents who did not identify themselves as male or female.
Source: Bank of England/Ipsos Inflation Attitudes survey.

The second dimension of interest is the housing status of the respondents. At the individual level, the survey data identify four groups of respondents: those who own outright (Owner), those who own buying with a mortgage or loan (Mortgage), those who rent from local authority/housing association (Council Rent) and Other. Figure A4 shows that between 2009 and 2021, mortgage holders have expressed higher net satisfaction than owners. In the past two years, this tendency has not only reversed, but net satisfaction became negative among mortgage holders, the group most affected by the rise in interest rates. Of note, the last survey is the first time in which Owners' net satisfaction is negative (-3.3), but there is still a remarkable contrast with a -40 net satisfaction among Mortgage respondents (54.6 per cent of respondents who hold a mortgage expressed dissatisfaction with the Bank).

Figure A4 Net satisfaction with the Bank of England and housing tenure



Notes: The survey asks finer questions, but the public data does not allow us to identify 'part own and part rent' (ie, shared ownership), and 'rent privately'. Pooled responses from the three surveys conducted in 2023.
Source: Bank of England/Ipsos Inflation Attitudes survey.

At the aggregate level, more people declared disappointment at the Bank's work in 2022, and these negative views have increased throughout the three surveys conducted this year. Dissatisfaction seems correlated with inflation performance, gender, and housing tenure. However, it is possible that gender or housing tenure overlap with other characteristics at the individual level. The next section examines 2023 data at the individual level, controlling for potentially confounding characteristics.

Mapping dissatisfaction at the individual level

Figure A5 shows the characteristics associated with satisfaction or dissatisfaction regarding the Bank of England's work, pooling data from the three 2023 surveys (February, May, and August) and estimating the correlations in a multivariate baseline analysis. Estimates to the right of the vertical zero line indicate a positive association between the characteristic and the response.

Figure A5 Correlates of satisfaction and dissatisfaction with the Bank of England's work (2023)

Note: Estimates of the likelihood of responding 'very' or 'fairly dissatisfied' (left-side plot) 'very' or 'fairly satisfied' (right-side plot) with the way the Bank of England is doing its job to set interest rates to control inflation. Multivariate pooled regression analysis using data from Bank of England/Ipsos Inflation Attitudes survey (N=6,884).

As one might expect, there is a significant correlation between perceptions about inflation in the past 12 months and of expectations about inflation in the next 12 months, with the responses stating satisfaction and dissatisfaction. People perceiving or expecting higher inflation are more likely to express dissatisfaction (and less likely to express satisfaction) with the work of the Bank of England. This association does not disappear when controlling for knowledge regarding who sets the interest rate (not shown in figure A5). In fact, this knowledge is not correlated with dissatisfaction, but it is associated with higher likelihood of having a positive opinion about the Bank. However, it is important to hold expectations and perceptions constant when analysing other socioeconomic and demographic characteristics.

The most influential factor affecting (dis)satisfaction is the housing status of the respondent. Those who are outright owners are less likely to be dissatisfied with the Bank, and more likely to be satisfied than other categories (mortgage holders, renting and others). Those holding mortgages are more likely to express dissatisfaction, and less likely to express satisfaction than owners (additional analysis), but do not have a different inclination to express satisfaction than people with other housing status.

Interestingly, in contrast with aggregate data showing a larger share of female respondents expressing dissatisfaction with the Bank, at the individual level women are not more likely to express dissatisfaction than men once other socioeconomic characteristics, and perceptions and expectations about inflation, are taken into consideration.

In contrast with the findings of Brouwer and de Haan (2022) and Hudson (2006) regarding the European Central Bank (ECB), neither age, employment, nor socioeconomic status are correlated with satisfaction or dissatisfaction in this baseline model, but separate analyses show that the youngest respondents (aged 25 or less) are more likely to express dissatisfaction. Finally, respondents in Scotland are more likely to express negative views (and less likely to express positive views) regarding the Bank's work.

Why does this matter?

The Bank of England is not the only central bank facing public distrust. Public trust in the ECB has been negative, even among those who support the euro (Bergbauer et al, 2020). Yet, the Bank of England is experiencing unheard of levels of dissatisfaction.

Lack of trust affects central banks in two ways. On the one hand, it undermines its ability to anchor inflation expectations. The data presented here show a correlation between trust in the central bank and inflation expectations (figure A5). This may in turn decrease the effectiveness of the central bank and further deteriorate satisfaction with its performance, and even lead to larger macroeconomic fluctuations (Bursian and Faia, 2018). On the other hand, distrust may result in challenges to the Bank's legitimacy: Baerg and Cross (2022) stress that the degree to which central banks fulfil their respective mandates is the most direct source of their legitimacy. This opens the door to pressures and challenges to the Bank's independence (Goodhart and Lastra, 2018).

What can be done?

Trends in satisfaction with the Bank of England should be interpreted in the broader context of general trust in the country's institutions. The data analysed here do not include information on the extent to which the public separates the Bank's performance from the government's effectiveness, for example, or other factors traditionally associated with trust in institutions. Consequently, this box needs to be read as a descriptive, not a causal, account of factors associated with lower satisfaction with the Bank's performance. This information however, points to areas that the Bank could target to improve satisfaction, to reinforce improvements in price stability.

Research shows the importance of financial knowledge and central bank communication for legitimation and trust purposes. Central banks need to explain to the public what actions

are within the scope of the Bank's mandate, and what are the reasons that made the Bank unable to fulfil its purposes. Communication may also be tailored to be more accessible to (or relevant for) those who are less likely to have positive views about the work of the Bank of England. New research also stresses the effects of diversity in central bank's committees and in who delivers monetary information to reach different audiences (Bodea et al, 2021, D'Acunto et al, 2021).

References

Baerg, Nicole, and James P. Cross. "Central banking in the 21st century-A crisis of accountability?" European Journal of Political Economy (2022): 102294.

Bergbauer, Stephanie, Nils Hernborg, Jean-Francois Jamet, Eric Persson, and Hanni Schölermann. "Citizens' attitudes towards the ECB, the euro and Economic and Monetary Union." Economic Bulletin, European Central Bank 4 (2020).

Bodea, Cristina, Federico Maria Ferrara, Andrew Kerner, and Thomas Sattler. "Gender and Economic Policy: When Do Women Speak with Authority on Economic Issues? Evidence from the Euro Area." (July 2, 2021) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3881069.

Brouwer, Nils, and Jakob de Haan. "Trust in the ECB: Drivers and consequences." European Journal of Political Economy 74 (2022): 102262.

Bursian, Dirk, and Ester Faia. "Trust in the monetary authority." Journal of Monetary Economics 98 (2018): 66-79.

D'Acunto, Francesco, Andreas Fuster, and Michael Weber. "Diverse policy committees can reach underrepresented groups." National Bureau of Economic Research, 2021. No. w29275.

Goodhart, Charles, and Rosa Lastra. "Populism and central bank independence." Open Economies Review 29 (2018): 49-68.

Hudson, John. "Institutional Trust and Subjective Well-Being across the EU." Kyklos, 59 (2006): 43-62.

Following the advice given in Chadha (2023b), we would also recommend some forward guidance both saying what the Bank plans to do to bring inflation down to target (as discussed above) and what the Bank thinks the end of the process is likely to be: interest rates will keep falling until inflation reaches its target of 2 per cent at which time the policy rate will remain in the range 3-3.5 per cent. This forward guidance will provide a clear way forward for markets, firms, and households as to what to expect in the medium term. Whilst our best guess is that inflation will be heading downwards over time, there is a great deal of uncertainty, particularly geopolitical uncertainty as to the resolution of the Ukraine conflict, how the current troubles in the Middle East will play out, and whether there will be an escalation of tensions between the United States and China. Any of these flashpoints could cause another cycle of high inflation, quite possibly larger than what we saw in 2022.

The other big issue facing the Bank of England and the Treasury is how to deal with the legacy of quantitative easing (QE) in terms of the assets held by the Asset Purchase Facility (APF). On the asset side the Bank holds a large amount of gilts which have fallen in value as interest rates rise; on the liability side it has the reserves of commercial banks, on which since 2009 it has been paying interest equal to the policy rate. From the point of view of public finances, the government has replaced its long-term debt instruments (the gilts owned by the APF) with short-term debt in the form of bank reserves for which it must pay the current policy rate. This means that the interest payments on government debt are highly sensitive to increases in interest rates. Furthermore, the APF is making losses on its bond holdings which are ultimately underwritten by the Treasury. Both problems are a result of the Bank of England having failed to formulate an exit strategy from QE, a point that had been made in Allen et al. (2022), which also put forward a proposal for such an exit strategy. There is a gradual quantitative tightening (QT) that has been operating since November 2022 when the Bank of England started selling bonds. (It had stopped re-investing the proceeds from maturing bonds in February 2022.) In September 2023, gilt sales were at the level of £450 million per week. The total stock of gilts held by the APF is currently £757,000 million, down from its peak of £875,000 million in 2022. (For an excellent review of the issues, see Allen, 2022) We should assume that the MPC will continue to pursue QT at this slow rate. Ultimately, we should see the yield curve return to its historic norm with long-rates being equal to the short rate plus a risk premium of around 1-2 per cent. However, when the Bank Rate does start to fall, there will be a bull market for gilts (at least those with a shorter maturity), so that the process of QT could be cautiously speeded up.

The Forecast in Detail

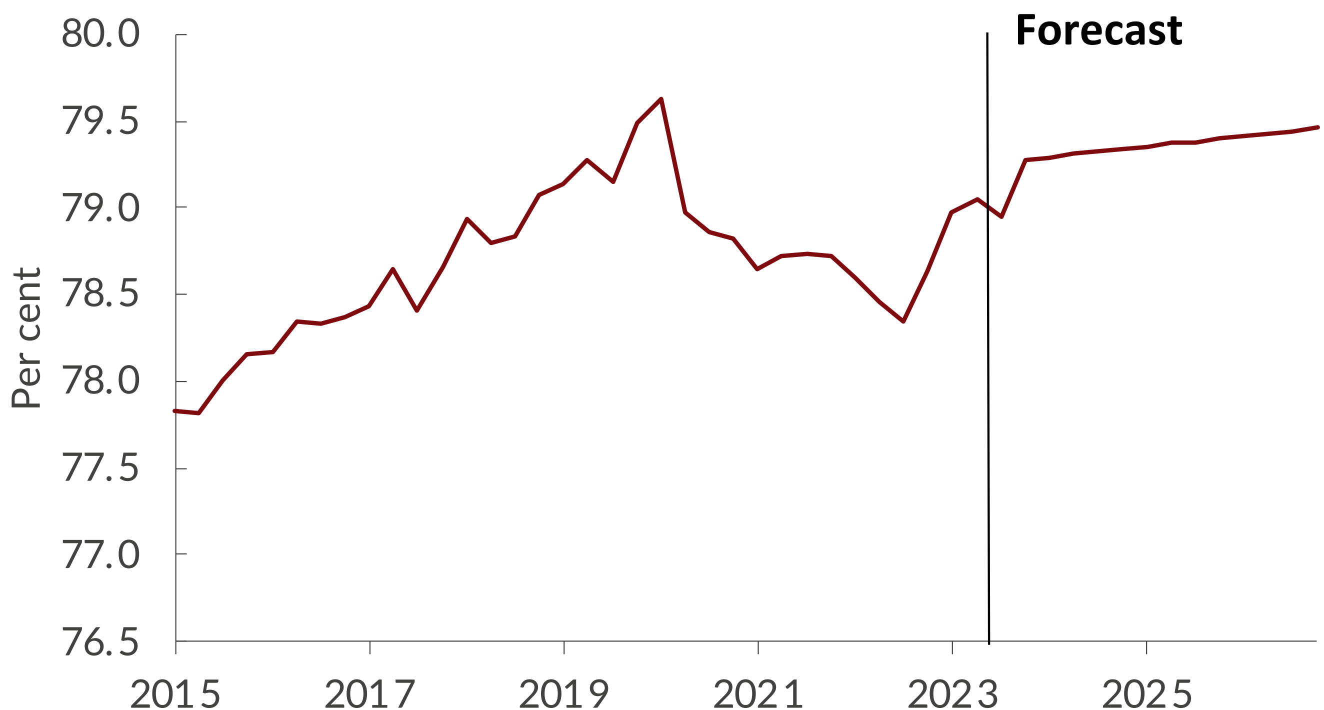
Conditioning Assumptions

In line with the evolving nature of the whole forecasting process, the approaches used for setting the underlying assumptions are continually reviewed. Our current projections are conditioned on:

- The path for ***short-term policy interest rates*** shown in figure 1.7. We believe that interest rates have peaked at 5.25 per cent and will fall slowly from late 2024 onwards. Given our view that the equilibrium real interest rate is around 1.25 per cent, we expect nominal rates to level off at around 3.25 per cent.
- A path for the ***sterling effective exchange rate*** index that is roughly 2 per cent lower on average than in our Summer Economic Outlook forecast. However, in the medium term, exchange rates are assumed to converge in line with the uncovered-interest parity condition based on interest rate differentials relative to the United States.

- ***Fiscal policy*** evolving in line with announced government policies to date, adjusted for news in the data. Since our Summer Economic Outlook, we've seen public sector net borrowing (PSNB) coming in £19.8 billion (19.5 per cent) below the OBR's March 2023 forecast profile for 2023-24. This was driven by high government receipts, which were £14.7 billion (3.3 per cent) above the March profile while spending was £0.6 billion (0.1 per cent) above. Net debt was 98.7 per cent of GDP in September, 5.3 per cent of GDP below the monthly profile consistent with the OBR's last forecast. The extent of borrowing was revised down by £0.2 billion for 2022-2023, making it £24.1 billion lower than estimated in March 2023.
- ***Oil prices*** following the path assumed by the US Energy Information Administration (EIA), published in October 2023, and updated with daily spot price data available up to 13 October 2023. The EIA uses information from forward markets as well as an evaluation of supply conditions. Oil prices, in US dollar terms, have increased since our last forecast in July by about 10 per cent, with the expectation for the oil price at the end of 2023 being around 8 per cent higher than three months ago.
- ***The labour force participation rate*** (shown in figure 1.8) returning to its pre-Covid level over the course of the next few years – though not reaching it until the middle of 2028 – as the 'high-inactivity' cohort of 50-64-year-olds at the time of the pandemic are gradually replaced by a younger population with a higher participation rate.

Figure 1.8 Labour force participation rate



Source: NiGEM database and NIESR forecast.

Demand and Output

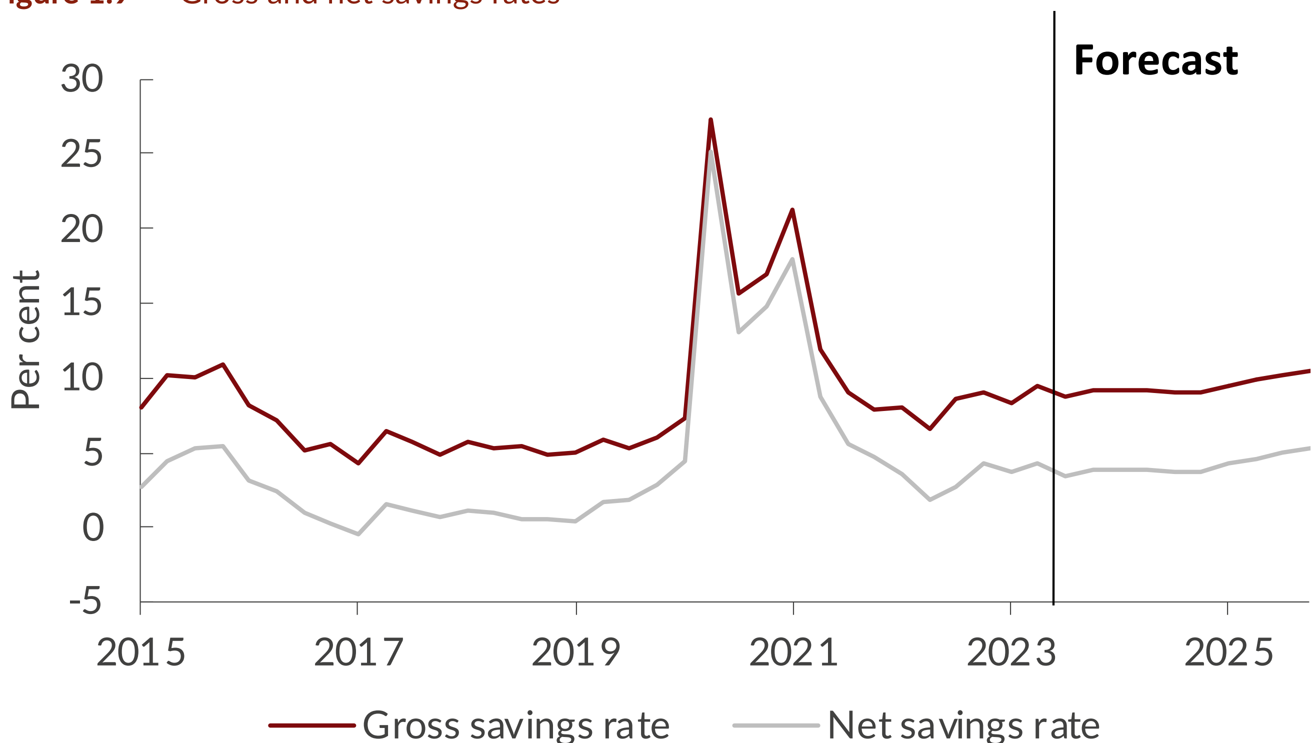
As shown in figure 1.1, we expect sluggish GDP growth to persist into the medium term. With GDP expected to have contracted in the third quarter of 2023 and expected to grow by 0.2 per cent in the fourth quarter of 2023, we now expect GDP growth of 0.6 per cent in 2023 relative to 2022. We expect slightly slower growth of 0.5 per cent in 2024 as the monetary policy

tightening seen over the past couple of years together with tight fiscal policy continue to bear down on demand. Looking further forward, we expect growth of 1.0 and 1.3 per cent in 2025 and 2026, respectively.

Higher interest rates affect inflation by reducing demand growth relative to the growth of potential supply. With demand growing by less than potential supply, firms are incentivised to reduce their mark-ups by raising prices less quickly and cut back on production. In turn, this leads to a rise in unemployment, which acts to limit wage increases, in turn reducing the rate of growth of firms' costs and, hence, prices. Higher interest rates affect private consumption by encouraging savings and discouraging borrowing and private investment by raising the cost of capital.

Figure 1.9 shows the net and gross savings rate. As interest rates have risen, so have the net and gross savings rates. Between the second quarter of 2022 and the second quarter of this year, the net savings rate rose from 1.9 per cent to 4.3 per cent and the gross savings rate from 6.6 per cent to 9.5 per cent. With interest rates having peaked, we expect the net and gross savings rates to remain around these levels until early 2025. The result of higher savings rates has been sluggish consumption growth (figure 1.10). We expect consumption to grow by 0.4 per cent in 2023 relative to 2022 and by only 0.1 per cent in 2024 relative to 2023.

Figure 1.9 Gross and net savings rates



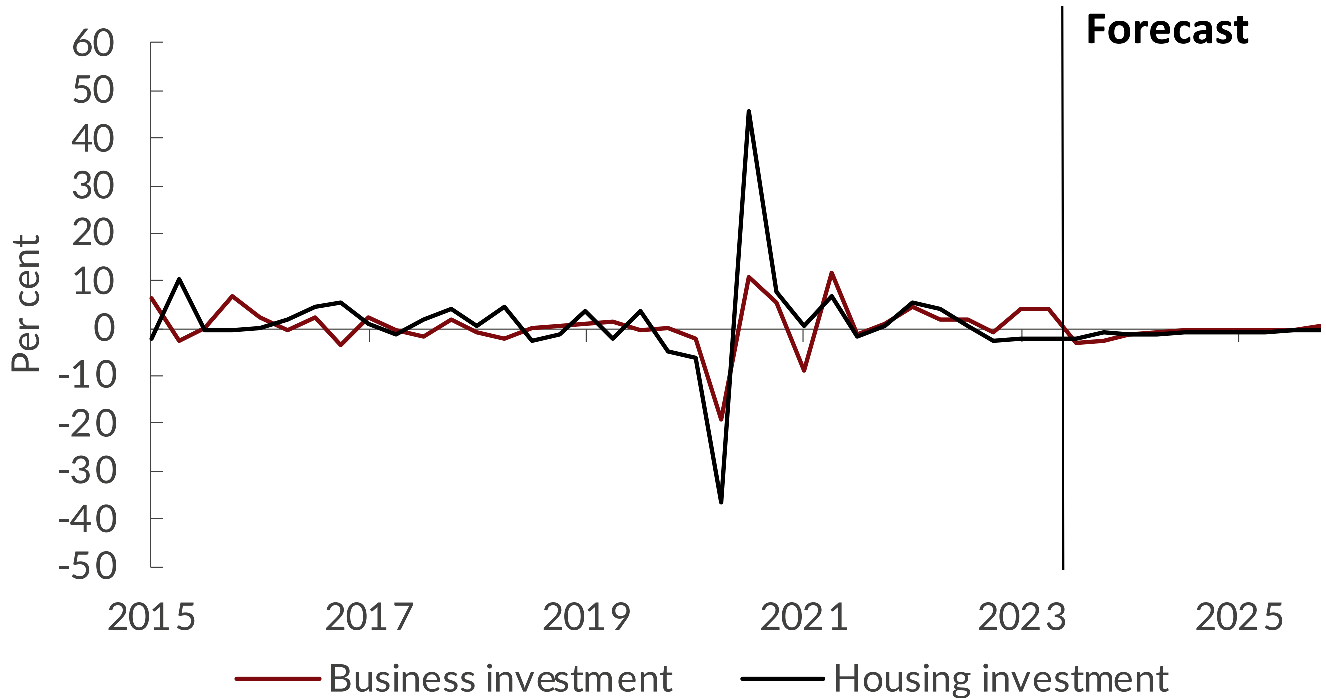
Notes: The net savings rate is defined simply as 1 – real consumption/real personal disposable income. The gross savings rate accounts for revaluation effects in household financial wealth (ie, the change in the value of net equity in pension funds held by the household sector).
Source: NiGEM database and NIESR forecast.

Figure 1.10 Annual consumption growth

Source: NiGEM database and NIESR forecast.

The monetary policy tightening we have seen since February of last year has raised the costs of capital and born down on both business and housing investment. Business investment rose in the first two quarters of 2023 but given the monetary tightening that we have already seen, we now expect falls in business investment of 2.9 per cent and 2.4 per cent, respectively, in the final two quarters of 2023 and a further fall of 4.1 per cent in 2024 (figure 1.11). NIESR has consistently said that to increase productivity growth in the United Kingdom, we need to raise business investment as a proportion of GDP. This view was also voiced in much of the evidence presented to the Productivity Commission (established by NIESR) and written up in its evidence review (NIESR, 2022). Earlier this year, the Productivity Commission took evidence on the underperformance of business investment and this evidence is summarised in NIESR (2023b). Housing investment has been contracting since the final quarter of 2022 and we expect this to continue with falls of 5.9 per cent in 2023 and 5.0 per cent in 2024 (figure 1.11).

Figure 1.11 Quarterly business and housing investment growth



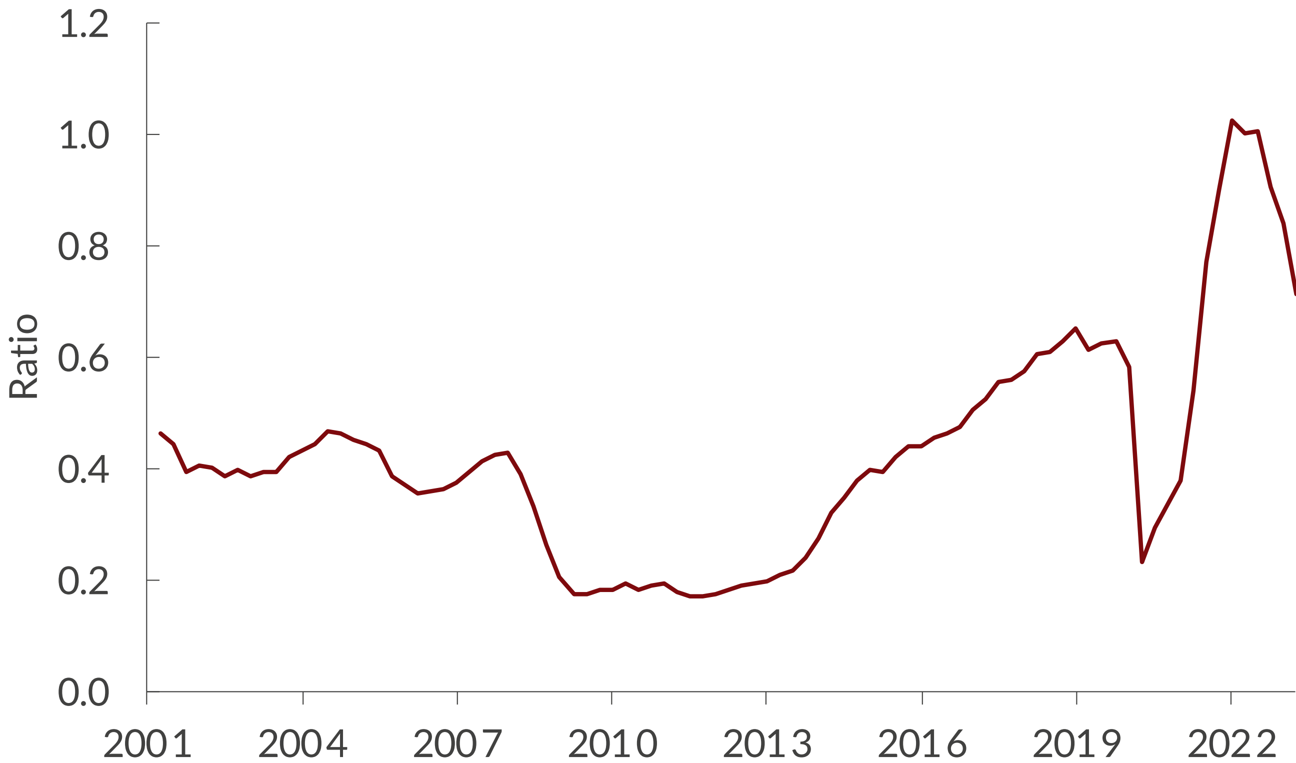
Source: NiGEM database and NIESR forecast.

Supply and Costs

The key question for labour supply remains the extent to which the marked increase in economic inactivity since the Covid-19 pandemic will persist. Our view remains that the participation rate will return to its pre-Covid level over the course of the next few years as the cohort of the population aged 50-64 at the time of the pandemic is replaced by a younger population with a higher participation rate (figure 1.9). In addition, we expect an increase in the number of workers aged 65-and-over staying in the labour force, reflecting the need to replace the savings that have been spent in response to the cost-of-living crisis. Overall, we expect the participation rate among the whole population aged above 16 to remain at around 63.5 per cent throughout the forecast period. Looking further into the future, the increase in longevity will lead to a rise in the proportion of the population aged over 65 and, hence, lower the labour force participation rate. As argued in, eg, Goodhart and Pradhan (2020), this trend has serious implications for both monetary and fiscal policy.

The UK labour market remains tight, with a vacancy to unemployment ratio of 0.72 in the second quarter of 2023, well above the average value of 0.42 in the period since the second quarter of 2001 (figure 1.12). That said, as discussed in our recent Wage Tracker (Bejarano Carbo, 2023c), there are signs the labour market is loosening. Vacancies fell by 43,000 in the third quarter of 2023 relative to the second quarter and the new 'experimental estimates' suggest that the unemployment rate rose from 4.0 per cent in the second quarter of 2023 to 4.2 per cent in the third quarter. Looking forward, we expect anaemic output growth over our forecast to lead to a slow rise in the unemployment rate, which reaches its 'natural rate' of around 5 per cent in the third quarter of 2025 (figure 1.13).

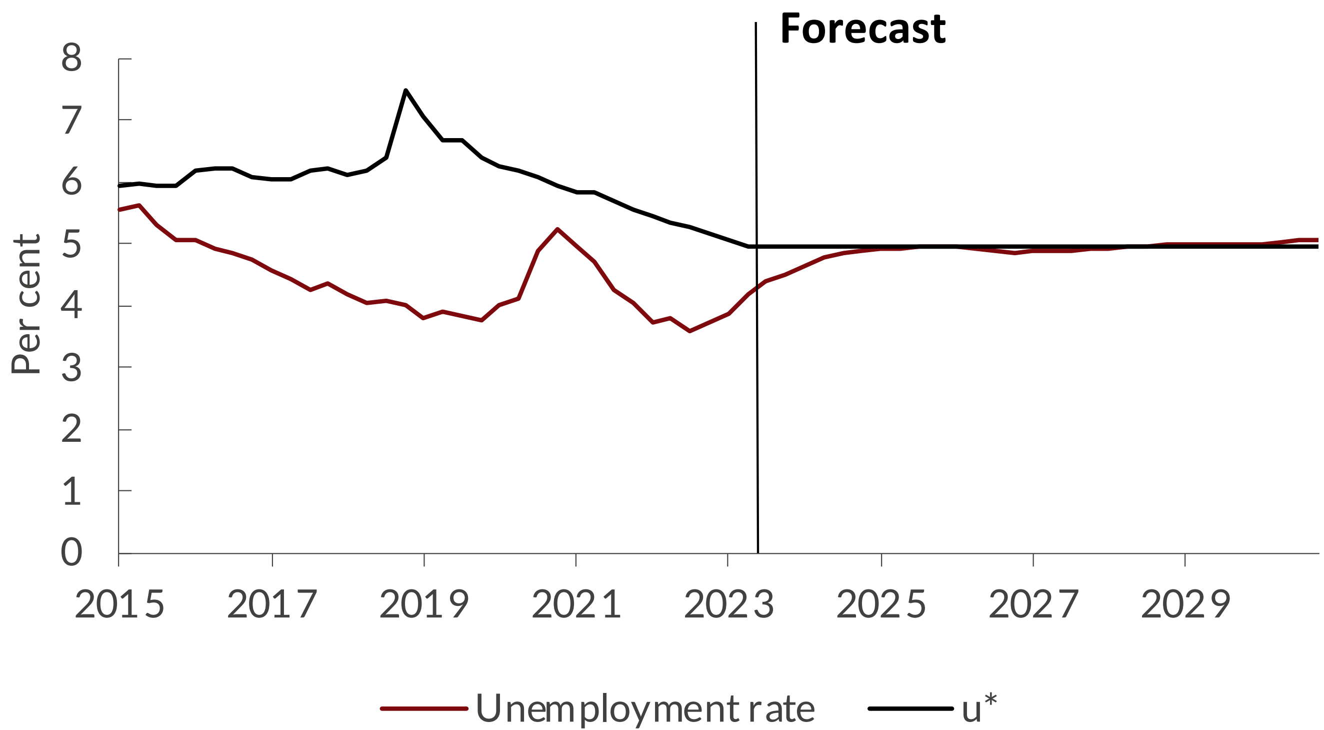
Figure 1.12 Vacancy to unemployment ratio



Source: ONS.

Turning to labour costs, we estimated in our October Wage Tracker (Bejarano Carbo, 2023c) that total and regular average weekly earnings will have grown at 7.2 and 7.6 per cent, respectively, in the year to the third quarter of 2023. Given the tight labour market, we expect nominal wage growth to remain high throughout 2023 and 2024, with earnings growing at around seven per cent (figure 1.14). This high wage growth is driven by workers attempting to bring their real wages back to where they were before the cost-of-living crisis hit. We forecast that it will not be until the first quarter of 2025 that real wages have recovered to their pre-Covid (ie, first quarter of 2020) level. But we do not expect high wage growth to feed into higher price inflation as firms have space to absorb these increases by lowering margins, given the increase in margins seen over the past two years (figure 1.15).

Figure 1.13 Unemployment rate and the natural rate of unemployment, u*



Source: NiGEM database and NIESR forecast.

Figure 1.14 Nominal and real wage growth

Source: NiGEM database and NIESR forecast.

Figure 1.15 Profit share

Source: NiGEM database and NIESR forecast.

Key Risks

The outlook for UK GDP remains subject to uncertainty and there are many factors that could impact the growth trajectory. We judge the risks around our projection for UK GDP growth to be roughly balanced as reflected in our GDP fan chart (figure 1.1).

The main near-term risk on the downside for output growth is that the monetary policy tightening we have seen has a larger effect on demand than we are expecting. There are also downside risks from a further tightening in global financial conditions, which would limit credit supply. Tighter credit conditions would intensify the pressures already facing businesses and households. The impact on growth would be amplified if there were to be contagion to the UK financial sector. The interconnections between the wider financial system and real economy could result in a feedback loop, which amplifies macroeconomic stress. One such example is a housing market correction. Finally, there are the geopolitical risks of an escalation of Russia's war against Ukraine or a widening of the conflict in Israel and Gaza negatively impacting commodity markets, with adverse spillovers to global asset markets and economic activity, further affecting financial and macroeconomic conditions in the UK.

On the upside for GDP, there is the risk that inflation could fall faster than expected on account of the effects of lagged monetary tightening feeding through quicker than expected. In such an event, Bank Rate is likely to fall faster and possibly further, and real wages grow faster, both providing tailwinds to growth. A related upside risk is that the MPC may start cutting interest rates earlier than we expect, perhaps in order to get ahead of the curve given it was seen to be behind the curve in raising rates.

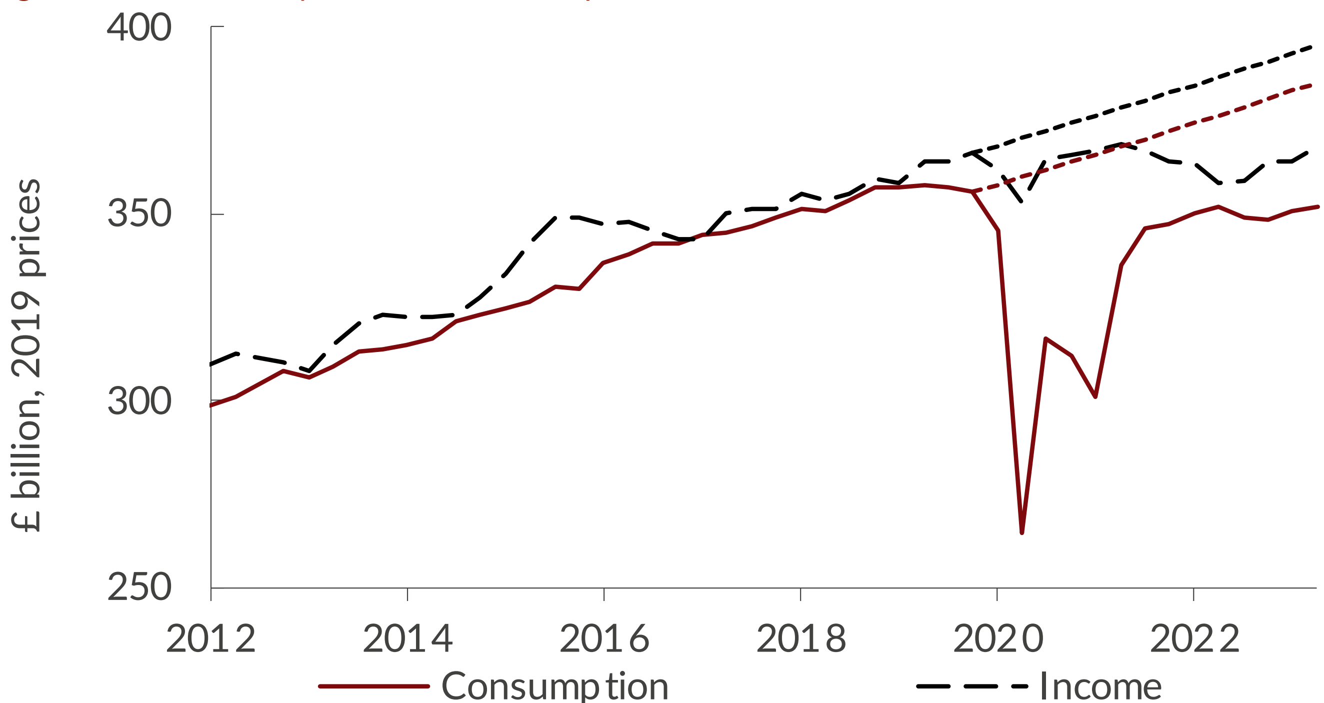
On the outlook for inflation, we judge the risks to be balanced, as reflected in our inflation fan chart (figure 1.3). The primary upside risk to the inflation outlook is that the high wage inflation we expect to see in 2023 and 2024 is passed through to price inflation by firms rather than absorbed in their margins. There is also the risk of renewed increases in wholesale energy prices should there be an escalation of the war in Ukraine or a widening of the conflict in Israel and Gaza. On the downside, there is the risk that inflation falls more rapidly than we are expecting over the coming months as last year's rises in energy prices drop out of the index and are not replaced by new inflation. Additionally, if the effect of lagged monetary tightening starts feeding through sooner, or more strongly, than we anticipate then inflation will fall faster than we are expecting.

Current Economic Conditions

Demand and Output

Household consumption increased slightly in the second quarter of 2023 reflecting an increase in household income. The aggregate increase in household income is in contrast to the worsening in aggregate household income we saw in the first quarter of 2023. Both household consumption and income remain below their pre-pandemic trend (figure 1.16).

Figure 1.16 Quarterly household consumption and income



Source: NiGEM database, NIESR calculations.

Real disposable personal income (RPDI) increased in the second quarter of 2023. This was mainly due to an increase in real earnings as the rate of inflation fell. Despite this improvement in RPDI households have experienced a notable and continuous reduction in their disposable income since the first quarter of 2020 at the onset of the covid pandemic. It would take several quarters of sustained increases in disposable income for household disposable income to catch-up from recent shocks. This may prove challenging in the current inflationary environment with improvement more likely to come via falling household costs, notably for fuel and food.

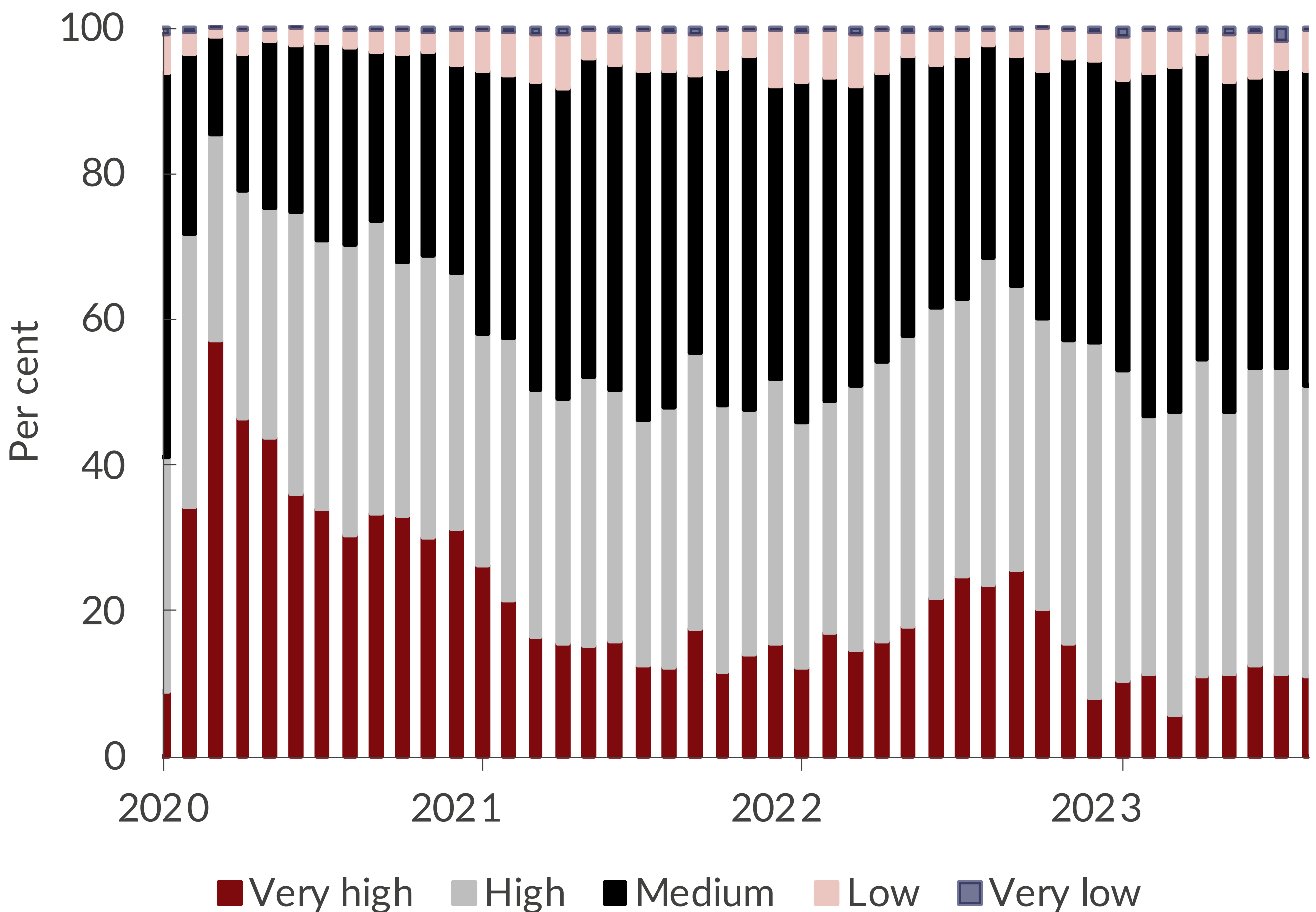
Savings ratio increases in response to higher interest rates

The gross savings ratio increased to 9.1 per cent in the second quarter of 2023 up notably from 7.9 per cent (figure 1.9). This increase is probably a combination of the expected response to higher interest rates and an increase in precautionary savings.

Business Confidence

The Bank of England's Decision Makers Panel (DMP), which surveys small, medium and large UK companies operating in a representative range of industries, shows a marked improvement in business sentiment. In September 2023 50.8 per cent of firms reported very high or high uncertainty. This is a reduction in the level of uncertainty relative to that reported by businesses in August 2023, which saw very high or high uncertainty reaching 53.2 per cent. The three-month average was 52.4 per cent. As shown in figure 1.17 business uncertainty has fallen to levels comparable to the first quarter of 2022, before the war in Ukraine started. However, recent geo-economic issues may result in increased uncertainty coming through in survey data in coming months.

Figure 1.17 Overall uncertainty: Respondents that would rate the overall level of uncertainty facing them at the moment as very high, high, medium, low or very low



Source: Bank of England Decision Maker Panel.

The ONS Business Conditions and Insights Survey finds that 27 per cent of businesses reported higher prices for goods or services that they have bought in September 2023 compared to August 2023. This is comparable with the previous month's data, indicating a stabilisation of input price inflation over recent months. Regarding price expectations, 52 per cent of businesses reported that they were not considering increasing their prices in the coming months. This is the highest percentage of businesses who said they do not expect to increase prices since April 2022. This reflects falling inflationary pressures, with 22 per cent businesses stating this was directly due to the reduction in energy prices.

Business Conditions

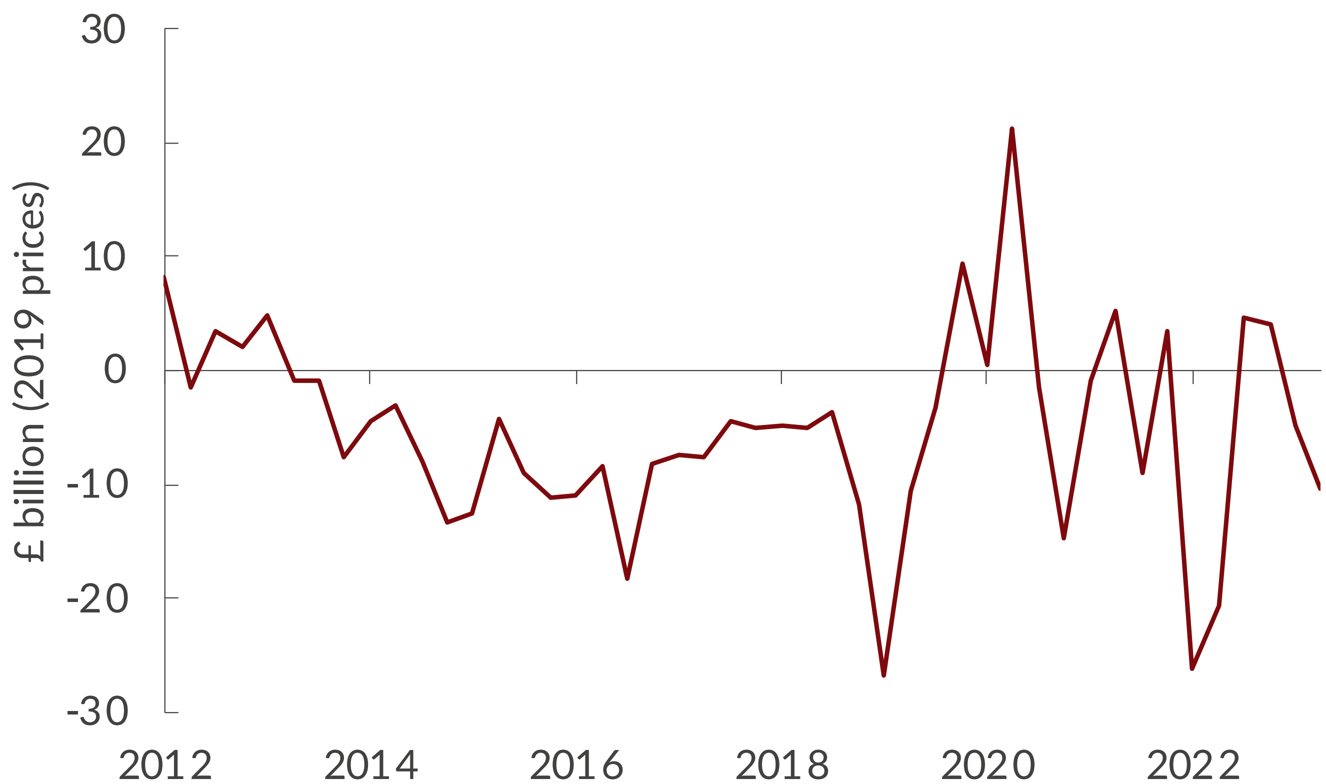
Business confidence is likely supported by the fact that the profit share in GDP has continued to increase (figure 1.15). This should be caveated by acknowledging that some firms in some sectors have seen their profits increase whilst others have not. Nonetheless, the rise in profits has been noted by the Bank of England and other central banks, and whilst not a primary cause of inflation, the profit margins of some companies in some sectors have directly been boosted as a result of the economic turbulence. The rate of pass through of the slowing rate of inflation in the economy will depend on the price elasticities of demand within specific sectors and for specific good and services.

Questions remain as to whether this upturn in profit share will translate into increased GDP growth, which is dependent on increased investment and productivity levels. Attendees at NIESR's Business Conditions Forum reported higher borrowing costs and economic uncertainty as the main reasons for continuing to see businesses delay new and large-scale investment projects.

Trade

The UK balance of trade improved in the second quarter of 2023 (figure 1.18). The trade deficit narrowed in the three months to August 2023. This was because imports fell by more than exports. The trade in goods deficit decreased by £5.9 billion to £47.9 billion in the three months to August 2023, while the trade surplus in services reduced by £2.5billion to £37.5 billion.

Figure 1.18 UK balance of trade



Source: ONS.

Supply and Costs

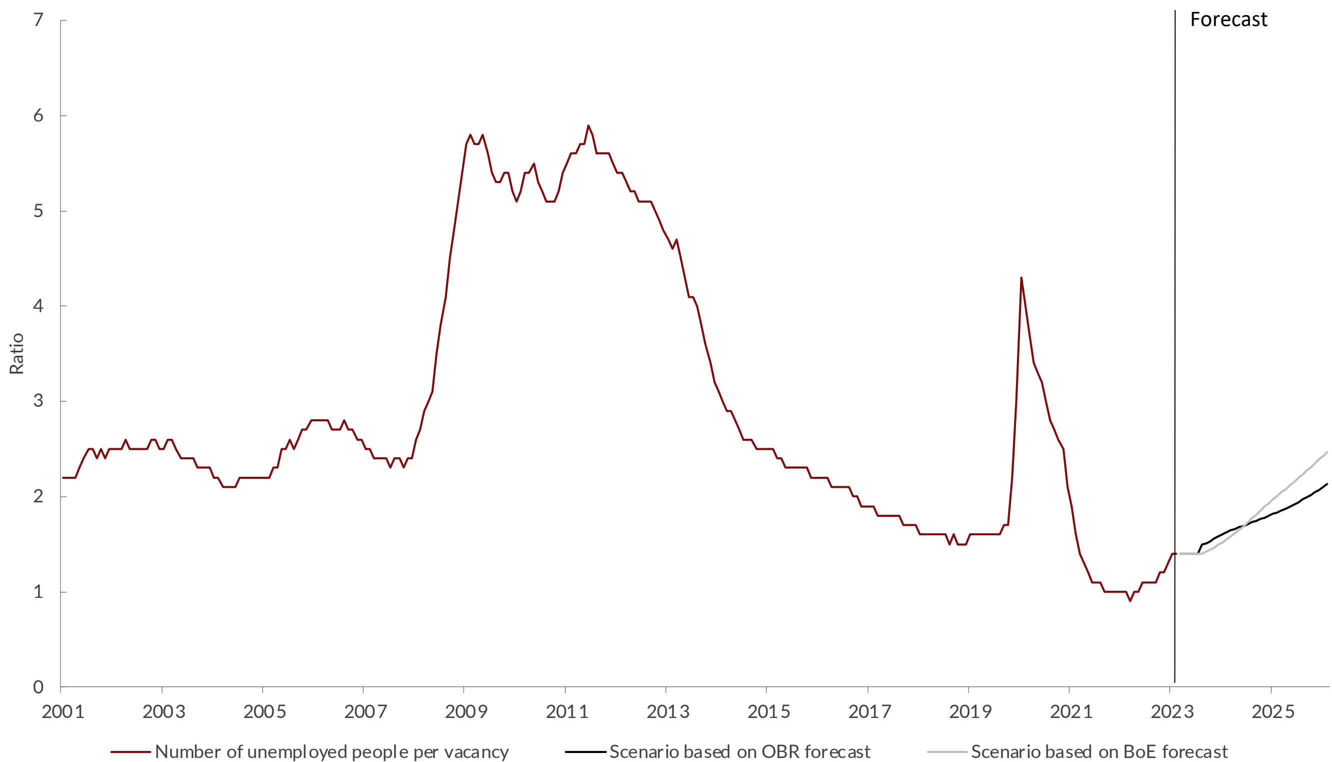
The labour market continues to loosen…

The labour market has been softening from a historically tight position. There were 0.9 unemployed job seekers per vacancy in the summer of 2022, which has now risen to 1.4, reflecting both rising unemployment and a fall in vacancies. The employment website Indeed expects this trend to continue based on unemployment projections from the Bank of England and the OBR (figure 1.19), indicating a slow easing in the ability to hire. Given we project the unemployment rate to peak at 5.0 per cent and rise at a faster rate than forecast by the Bank of England or OBR (who forecast peaks of 4.8 per cent and 4.4 per cent, respectively), we can broadly expect the labour market to loosen at a faster rate than shown in figure 1.19.

…driven by a fall in vacancies…

The total number of vacancies has continued to fall since the summer of 2022, standing now at under a million for the first time since July 2021. The fall in vacancies is consistent across most sectors and firm sizes, falling in 14 of the 18 industry sectors, reflecting a labour-market trend towards looser conditions rather than sector specific developments. The total number of workforce jobs fell slightly for the second straight quarter, from 36.8 million to 36.7 million.

Figure 1.19 Number of unemployed people per vacancy



Source: Indeed.

In NIESR's Spring UK Economic Outlook (Bejarano Carbo et al., 2023), we suggested that the previous rise in temporary hires resulted from the high amount of economic instability. But the latest KPMG-REC UK report on jobs suggests that permanent placement growth has hit a record high, suggesting that there may have been a reversal in businesses' view of economic instability, in line with the evidence presented in figure 1.17.

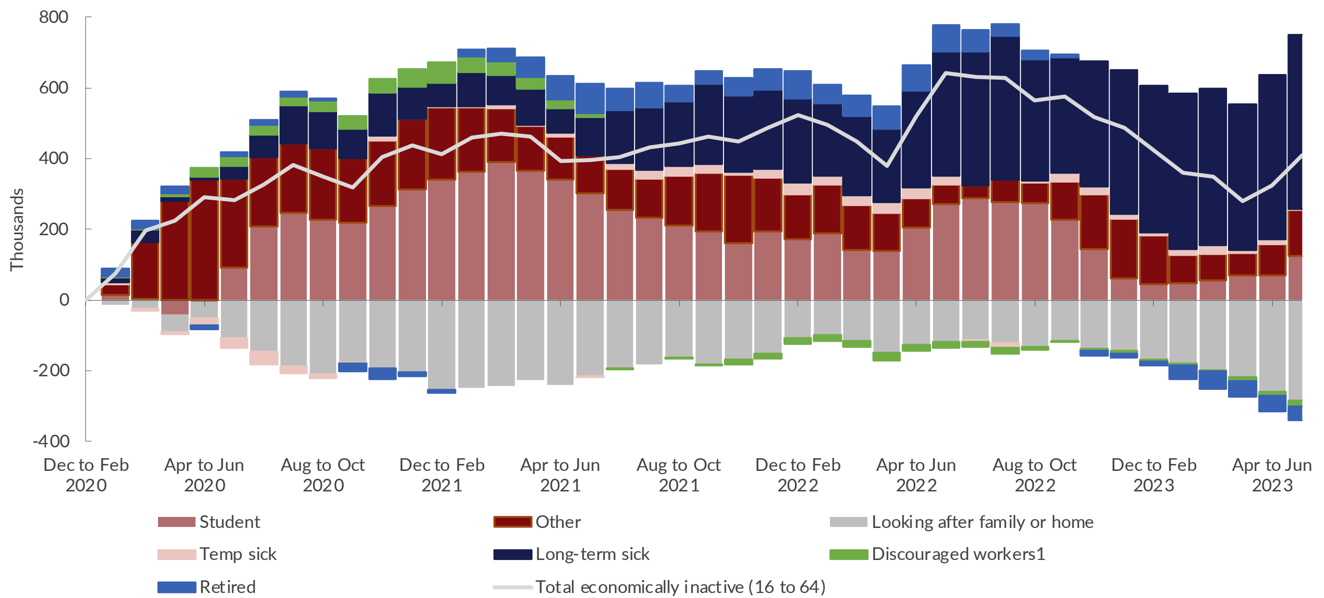
… and a rise in unemployment

The number of unemployed people rose slightly from 1.44 million in the three months to June to 1.46 million in the three months to July. The rise was driven mostly by a rise in those unemployed for less than 6 months. The unemployment rate shows a clear upward trajectory, rising from a historic low of 3.5 per cent in the summer of 2022 to 4.3 per cent in August of 2023.

Rising inactivity driven mostly by further increases in long-term sickness

Inactivity had been falling consistently, from its peak of 20.0 million between June and August 2022 to 19.6 million between March and May 2023. Since then, there has been a steady increase, of around 167,000 people. Because of the issues around the Labour Force Survey, it is only possible to obtain data on inactivity by reason up to July 2023. These figures show that the bulk of inactivity currently can be explained by a rise in long-term sickness. No single health condition can be attributed to this rise in inactivity due to ill-health. Each health condition reported by those inactive due to ill-health has risen equally since the pandemic. Depression and anxiety has been, and continues to be, the most prevalent health condition reported by those inactive due to long-term sickness, accounting for 1.35 million people in 2023, which represents 53 per cent of those inactive due to ill-health.

Figure 1.20 Change in economic inactivity by category since December 2019 – February 2020



Source: ONS.

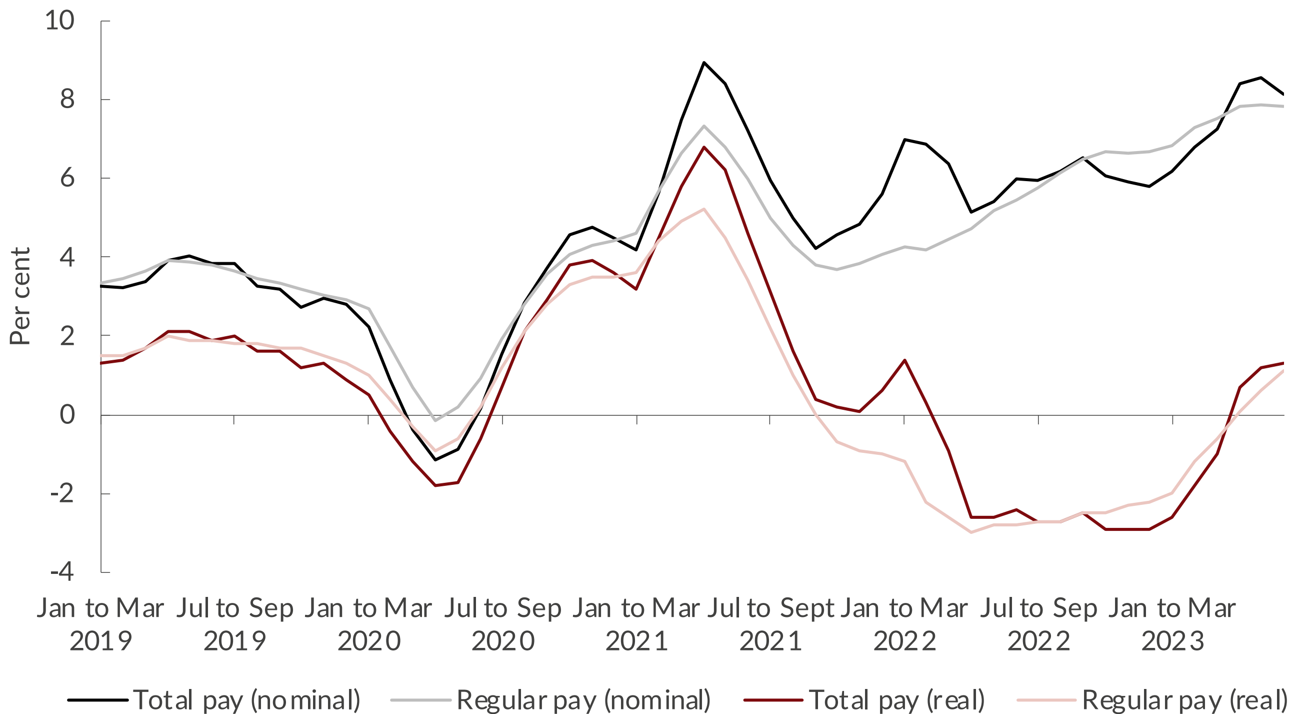
Wage growth remains strong ...

As noted in our recent 'Wage Tracker' (Bejarano Carbo, 2023c), wage growth is currently around 8 per cent for both total and regular pay (figure 1.21). With nominal earnings growing faster than prices since April of this year, real earnings are now rising. Total real earnings rose by 1.3 per cent and regular real earnings by 1.1 per cent over the year to the three months between June and August 2023 (figure 1.21). Further, shrinking labour supply from a rise in inactivity, and the generally tight labour market, has led to upward pressure on starting pay. The salaries of new permanent staff increased by their fastest rate according to the latest KPMG-REC UK report on jobs, suggesting that although the labour market is softening, we can expect wage growth to remain high in the short term.

...but looks set to cool over the next year

Looking beneath headline wage growth, evidence suggests that the increase in wages has been driven by wage drift rather than higher wage settlements. XpertHR data suggest that the median pay award held at 5 per cent over the three months to August, down from a peak of 6 per cent for median pay awards over the first half of 2023. This evidence suggests workers have shown more wage restraint than expected in the face of strong falls in real wages, suggesting that wage growth could remain high as real wages 'catch up'.

Figure 1.21 Average weekly earnings annual growth rates in Great Britain, seasonally adjusted



Source: ONS.

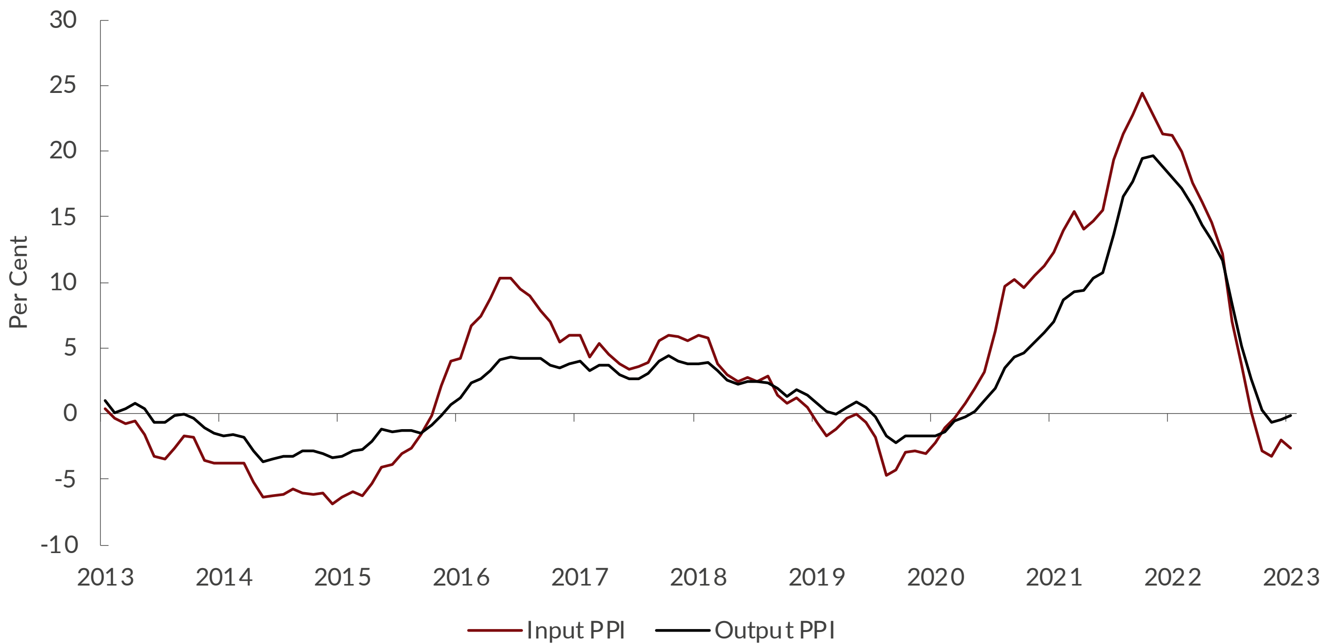
Both input and output costs have begun falling...

Input costs stopped rising in June 2023, reducing cost pressures on firms. These costs fell by 2.6 per cent in the year to September 2023, up from 2 per cent in the year to August 2023 (figure 1.22). On a monthly basis, they increased slightly by 0.4 per cent between August and September. The fall in the annual measure therefore reflects the strong fall in input costs in May and June of this year, rather than recent developments in costs. Overall, input costs have stopped rising which will come as good news for firms themselves and for future inflation. Output costs have risen faster than input costs recently, but also fell on an annual basis in September, by 0.1 per cent (figure 1.22).

...driven by a fall in oil prices and raw materials

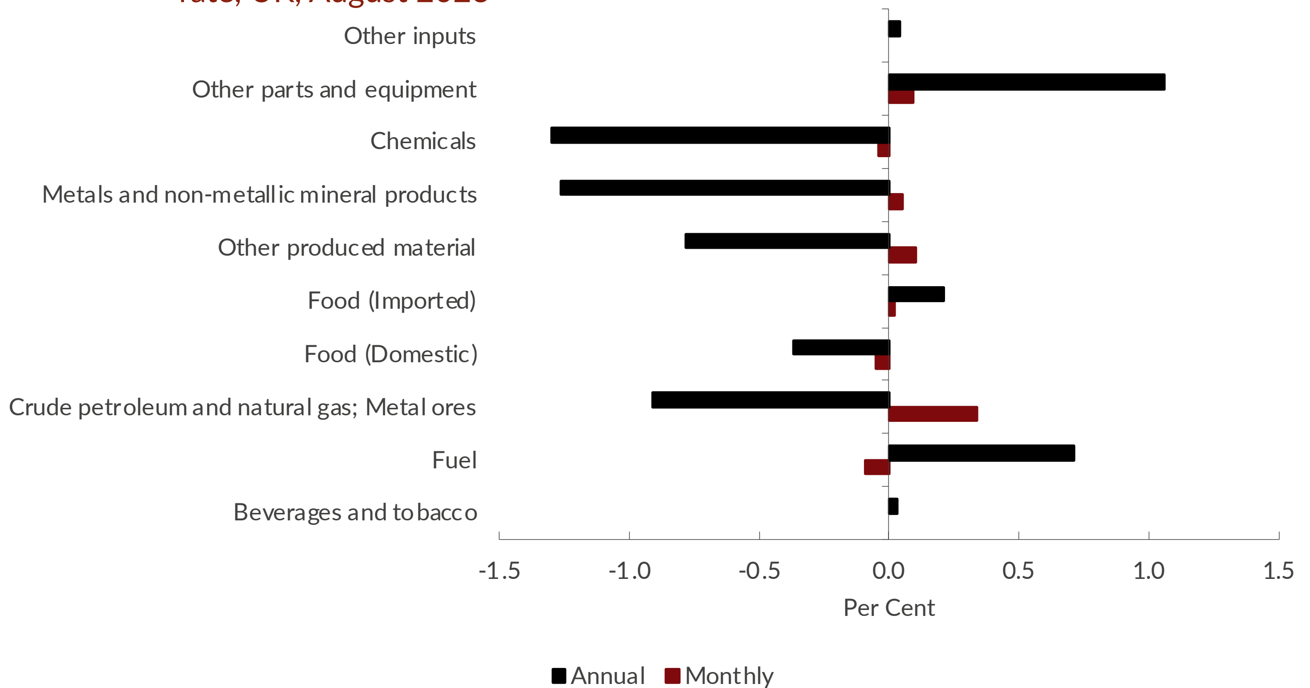
The annual fall in input prices has been driven mostly by a fall in chemicals and raw materials, likely driven by an overall fall in oil prices (figure 1.23). Changes in input prices in recent months can be attributed mostly to falls in in fuel costs. Evidence from the Bank of England DMP survey highlights that firms expect price growth to match cost growth, with minimal effects on margins.

Figure 1.22 Input and output Producer Price Index (PPI) annual inflation rates, UK, 2013 to August 2023



Source: ONS.

Figure 1.23 Input Producer Price Index (PPI), contribution to monthly and annual inflation rate, UK, August 2023



Source: ONS.

References

Allen, W (2022), 'Quantitative easing, government debt management and debt interest'. NIESR UK Economic Outlook, Autumn 2022, Box A.

Allen, W, Chadha, J S and Turner, P (2022), 'From QE to QT: The policy framework', NIESR Topical Briefing, Available at https://www.niesr.ac.uk/wp-content/uploads/2022/08/From-QE-to-QT.pdf.

Bejarano Carbo, P, Bhattacharjee, A, Cohen, N, Gomes, P, Low, H, McSorley, L, Millard, S, Mortimer-Lee, P, Mosley, M, Pabst, A, Patel, U, Samiri, I, Szendrei, T and Whyte, K (2023), 'UK economy beset by sluggish growth and high inflation', NIESR UK Economic Outlook, Spring 2023, Available at https://www.niesr.ac.uk/wp-content/uploads/2023/05/Spring-2023-UK-Economic-Outlook.pdf.

Bejarano Carbo, P (2023a), 'Latest forecast sees contraction in Q3 but no recession in 2023', NIESR GDP Tracker, October 2023, Available at https://www.niesr.ac.uk/wp-content/uploads/2023/10/GDP-Tracker-October-2023.pdf.

Bejarano Carbo, P (2023b), 'UK gilt yields one year on from the mini-budget', NIESR Term Premia Tracker, September 2023, Available at https://www.niesr.ac.uk/wp-content/uploads/2023/09/Term-Premia-Tracker-September-2023.pdf?ver=299pVDP5dwiqd0u76ug5.

Bejarano Carbo, P (2023c), 'Early Forecast Sees Total AWE Growing At 6.7 per cent in Q4', NIESR Wage Tracker, October 2023, Available at https://www.niesr.ac.uk/wp-content/uploads/2023/10/NIESR-Wage-Tracker-October-2023.pdf.

Chadha, J., Hande, K. & Pabst, A. (2021), 'Designing a New Fiscal Framework: Understanding and Confronting Uncertainty', National Institute of Economic and Social Research Occasional Paper LXI, Available at https://www.niesr.ac.uk/publications/designingnew-fiscal-framework?type=occasional-papers

Chadha, J. (2023a), 'The missing link: Modelling potential output at the OBR', Available at https://www.niesr.ac.uk/wp-content/uploads/2023/03/The-Missing-Link-Modelling-Potential-Output-at-the-OBR.pdf.

Chadha, J. (2023b), 'An open letter to Andrew Bailey', Available at https://www.niesr.ac.uk/news/open-letter-andrew-bailey.

Dixon, H (2023), 'CPI inflation holds steady at 6.7 per cent in September and set to fall to 5 per cent in October', Available at https://www.niesr.ac.uk/blog/cpi-inflation-holds-steady-6-7-cent-september-and-set-fall-5-cent-october.

Dixon, H, Low, H and Patel, U (2022), 'Inflation and public finances', UK Economic Outlook Autumn 2022, Box B, Available at https://www.niesr.ac.uk/publications/inflation-and-public-finances?type=uk-economic-outlook-box-analysis

Goodhart, C. and Pradhan, M. (2020). The Great Demographic Reversal: Ageing Societies, Waning Inequality, and an Inflation Revival, Palgrave Macmillan: London.

Morris, J.H. and Collins, H. (2023). (Mis)managing Macroprudential Expectations: How Central Banks Govern Financial and Climate Tail Risks. Elgar.

NIESR (2022). Productivity in the UK: Evidence Review. Available at https://www.niesr.ac.uk/wp-content/uploads/2022/06/Productivity-in-the-UK-Evidence-Review.pdf.

NIESR (2023). Summary of the evidence session on the underperformance of business investment. Available at Summary-of-Productivity-Evidence-Session-on-Underinvestment-in-the-Business-Sector-1.pdf (niesr.ac.uk).

OBR 2023. Fiscal Risks and Sustainability: July 2023. Available at https://obr.uk/docs/dlm_uploads/Fiscal_risks_and_sustainability_report_July_2023.pdf.

Strauss, D. (2023). UK government faces £150bn bill to cover Bank of England's QE losses, Financial Times. Available at https://www.ft.com/content/ee8e33ee-e16e-459b-af32-5709db6874de?shareType=nongift

OECD (2001). 'Measuring Productivity – OECD Manual'. Available at: Measuring Productivity - OECD Manual : Measurement of Aggregate and Industry-level Productivity Growth | OECD iLibrary (oecd-ilibrary.org)

ONS (2016). 'Productivity handbook'. Available at: Productivity Handbook - Office for National Statistics (ons.gov.uk)

Rodrigues, G. and Bridgett, S. (2023). 'Capital losses: The role of London in the UK's productivity puzzle'. Centre for Cities. Available at: London-productivity-March-2023.pdf (centreforcities.org)

Rotman, D. (2018). 'The productivity paradox: Why brilliant AI technologies are not leading to widespread growth and prosperity'. MIT Technology Review. Available at: The productivity paradox | MIT Technology Review

Swami, N. (2018). 'The grim cycle of homelessness and unemployment'. Australian and New Zealand Mental Health Association. Available at: The grim cycle of homelessness and unemployment (anzmh.asn.au)

WEF (2020). 'The Global Social Mobility Report 2020: Equality, Opportunity and a New Economic Imperative'. Available at: Global Social Mobility Index 2020 | World Economic Forum (weforum.org)

Yousef, A. (2023). 'Housing affordability and public-sector recruitment in London'. Greater London Authority Economics, Housing Affordability and Public-Sector Recruitment in London | London City Hall

2. Outlook for UK Households, the Devolved Nations and the English Regions

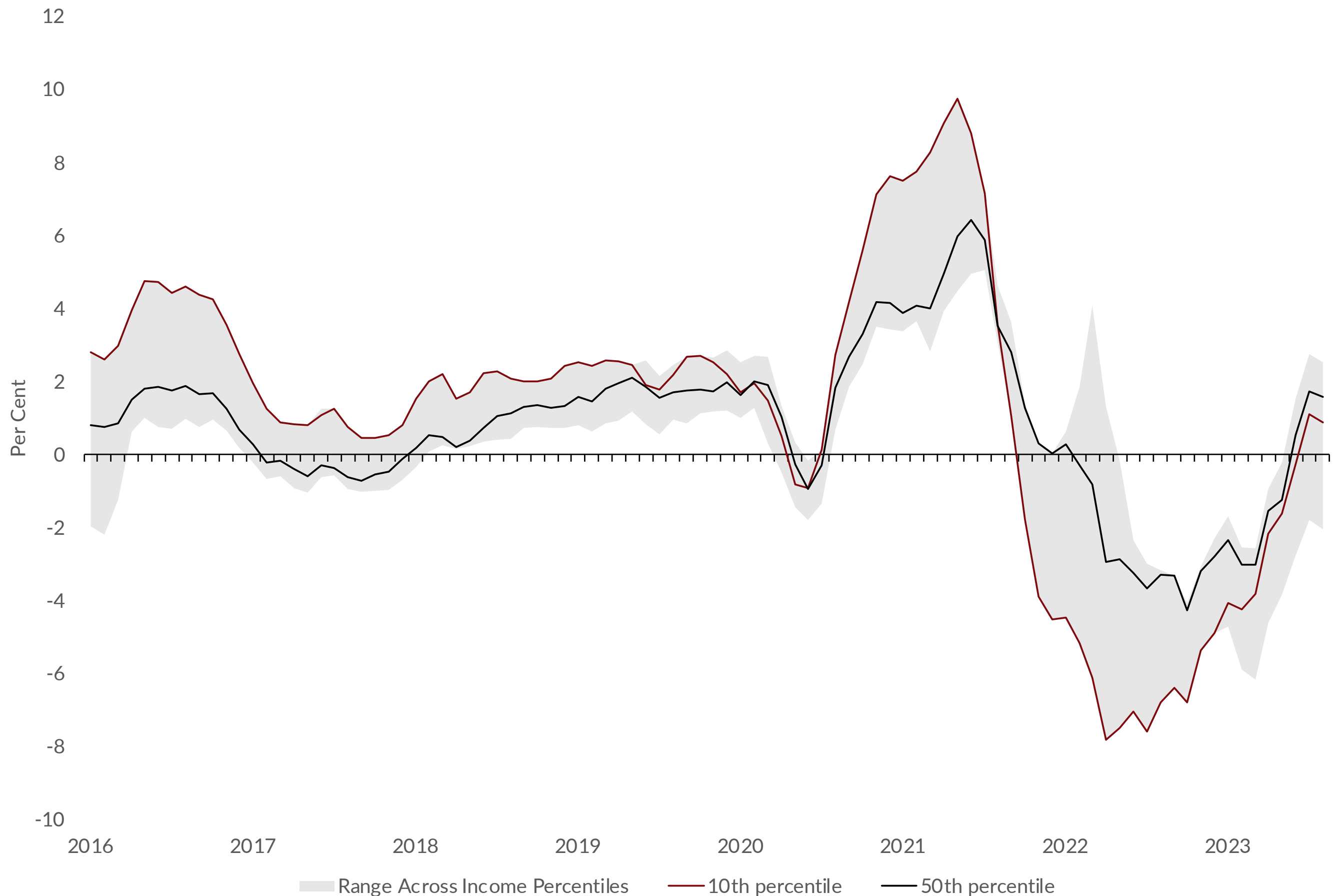
By Arnab Bhattacharjee, Max Mosley, Adrian Pabst, Robyn Smith and Tibor Szendrei

- **We project that the living standards for people in income deciles 2-5 will not return to pre-pandemic levels until the end of 2026:** real household incomes are growing more strongly in 2023 but real wages fell the most for the poorest in 2022.
- **There are significant economic benefits from the 2023 increase in the National Minimum Wage and the National Living Wage:** we find that households in the bottom income decile will see a 5-6 per cent rise in their consumption in 2023-24; higher wages will also encourage some poor people into work, with projected falls in both inactivity and unemployment by about 2 percentage points in the second bottom decile.
- **The number of destitute people will fall to around 1.1 million by the end of 2024, of whom approximately 300,000 are children, with the highest concentration in London (around 250,000):** the fall from 1.5 million in 2022-23 is largely the result of an increase in real wages in 2023-24.
- **We project house prices to fall by around 6.5 per cent between now and the second quarter of 2025, taking some 50,000 additional households into negative equity:** the total number of homeowners whose property is worth less than the value of their remaining mortgage will reach approximately 166,000.
- **The three devolved nations and almost all English regions have returned to pre-pandemic levels of economic output as measured by Gross Value Added (GVA):** only parts of the South-East and the West Midlands are below the level in the fourth quarter of 2019.
- **Addressing London's productivity paradox – highest level in the United Kingdom but slowest growth rate except the South-West – requires an overarching strategy:** much better coordination across multiple tiers of governments (central government, the Greater London Authority and London boroughs) is needed to design targeted investment and deliver more affordable housing, better access to more affordable transport, higher R&D spending and greater business investment (Box B).

Ahead of the Autumn Statement

Despite some positive developments since the previous Outlook (Bhattacharjee et al., 2023c), the overall distributional picture across UK households continues to be of concern as does the prospect for sustained regional regeneration. While wages are growing faster than prices for the first time in two years, living standards are still significantly below 2021 levels for households in the bottom income decile (about 2.8 million people; figure 2.1) but also for around 5 million across income deciles 2-5. Meanwhile the gap between the top performing areas of the United Kingdom and the worst performing ones shows no signs of narrowing.

Figure 2.1 Year on Year Real Earnings Growth for the Poorest and Median Earners



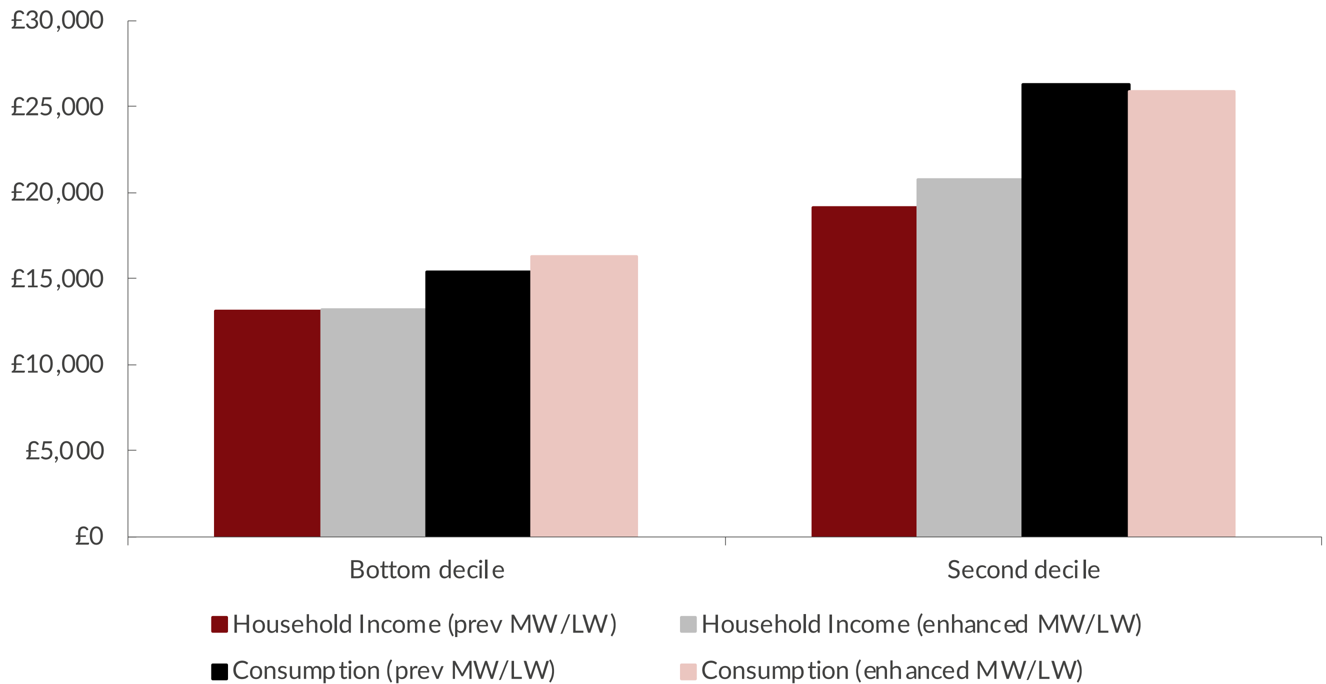
Notes: the fall reflected in the range in the last quarter of 2023 is only for the top 99th percentile, all other percentiles see a real wage increase.
Source: NIESR Analysis of ONS PAYE Real Time Information (October 2023).

We project that living standards for households in income deciles 2-5 will not return to 2019 levels until the end of 2026 at the earliest, with significant risks on the downside enhanced by uncertain domestic and international political situations. Sluggish growth and low public investment are holding back the "Levelling Up" process, and our projections suggest that areas such as the East Midlands and parts of the North-East will fall further behind London and the metropolitan parts of the South East in terms of economic output and productivity.

With significantly higher prices for energy, food and housing and the savings accumulated during the Covid-19 pandemic largely depleted, the poorest households and those in income deciles 2-5 have taken a disproportionately large hit. Building on our previous projections of destitution (e.g. Bhattacharjee and Lisauskaite, 2020), we estimate that by the end of 2024 the number of

destitute people – those going without the essentials everyone needs to eat, stay warm and dry, and keep clean (Fitzpatrick et al., 2023) – will fall from around 1.5 million to approximately 1.1 million, 300,000 of whom are children. The highest projected number is in London, with approximately 250,000 persons in destitution. Real wage growth is helping, not least the rise in the National Minimum Wage and the National Living Wage (figure 2.2), but compared with 2021 levels, the disposable incomes of households in the bottom half of the income distribution will be lower by some 5 per cent over 2023-24.

Figure 2.2 Impact of rising national minimum wage on poor household finances



Source: LINDA.

Persistent regional inequalities will not dissipate either. With the notable exception of the furlough scheme, the temporary Universal Credit uplift and a general subsidy of energy costs, successive prime ministers and their chancellors have claimed that there is no alternative to the fiscal framework with its debt and deficit targets, which has had the effect of limiting capital spending (Chadha, 2023b and c). This has further reduced public investment and severely constrained the resources devoted to "levelling up" the areas that were hit hardest by deindustrialisation in the 1980s and the recession following the 2008 financial crash (Rodríguez-Pose, 2017; Stansbury et al., 2023). The severe shortfall in public investment has undermined the provision and maintenance of infrastructure, public goods and services. Together, the persistent downscaling of funding to local government has placed vital institutions in severe financial stress, as with Birmingham City Council (Shaw, 2023).

Since the Levelling Up White Paper was published some 18 months ago (DLUHC, 2022), the government has focused on cities and technology clusters, linked to investment zones. In October, the Prime Minister announced a Towns Fund (HMG, 2023) to rebalance output and productivity growth and spread opportunities to those urban areas of the country that are less integrated into the global economy than London and other metropolitan parts such as Greater Manchester. Yet measured against the 12 missions outlined in the Levelling Up White Paper, little progress has been achieved. While all the devolved nations and almost all English regions have now returned to pre-pandemic levels of output as measured by Gross Valued Added (GVA),

there are few indications that the disparities of wealth and health and power between the richest and the poorest parts of the country are narrowing. We project that the divergence between and within regions will continue to increase. Whither "levelling up"?

UK Distributional Analysis

What are the distributional implications of our UK macroeconomic outlook? As wage inflation outpaces price inflation, real incomes have finally begun to rise for the first time in two years. This will bring some relief to working families, especially in the bottom half of the income distribution. Yet they face not only substantially higher energy, food and housing bills but also persistent inflation and significantly higher interest rates than during the preceding 15 years.

In recent months real wage growth has picked up strongly, with average earnings growth at over 7 per cent outstripping price inflation, but besides regional variations there are also important sectoral variations: people working in internationally traded service sectors (who are predominantly in the top half of the income distribution) are seeing their wages grow much more strongly than those working in domestic non-traded sectors. This, combined with higher debt and lower savings, means that households in income deciles 2-5 are still struggling to get by having faced a succession of shocks from Brexit to Covid-19 and the cost-of-living crisis. We project that that their living standards will not return to pre-pandemic levels before the end of 2026 and will not even return to pre-2022 levels (prior to Russia's invasion of Ukraine) before mid-2025.

Wages: the rise in the National Minimum Wage and the National Living Wage

In our Summer 2023 Outlook for UK Households (Bhattacharjee et al., 2023c), we analysed the impact of low real wage growth on working families and projected median real wages to fall by up to 6 per cent between the first quarter of 2022 and the first quarter of 2024. The same decrease does not apply to households in the bottom income decile who will see their median real wages only fall by about 2 per cent as a result of stronger increases in the National Minimum Wage (NMW) and the National Living Wage (NLW).

Based on our forecast that the UK economy will avoid a recession in 2023 and 2024 but that it will follow a path of anaemic growth, we find that a higher NMW and NLW will not have an adverse impact on the labour market. Our judgement builds on previous research by NIESR, which suggests that minimum wage rises have increased the incomes of low-paid workers without significant adverse effects on employment and firm productivity (Riley and Bondibene, 2015; Aitken et al., 2019). This insight should continue to hold true in the current labour market. Despite persistent price inflation and our projection that the rate of inflation will not revert to the target of 2 per cent until late 2025, our view is that the UK economy is able to accommodate strong wage growth (of about 6-7 per cent) in 2024 without generating a wage-price spiral that would keep inflation above 2 per cent in 2025 and thereafter.

With regard to the distributional impact of the April 2023 rises in the NMW and NLW (table 2.1), we can make projections about household finances and labour supply based on NIESR's microsimulation model LINDA (NIESR, 2016).

Table 2.1 Increase in the National Minimum Wage and the National Living Wage

Date	NMW rate	Annual increase (£)	Annual increase (per cent)
National Living Wage (23+)	£10.42	0.92	9.7
21-22 Year Old Rate	£10.18	1	10.9
18-20 Year Old Rate	£7.49	0.66	9.7
16-17 Year Old Rate	£5.28	0.47	9.7
Apprentice Rate	£5.28	0.47	9.7
Accommodation Offset	*£9.10*	*0.4*	*4.6*

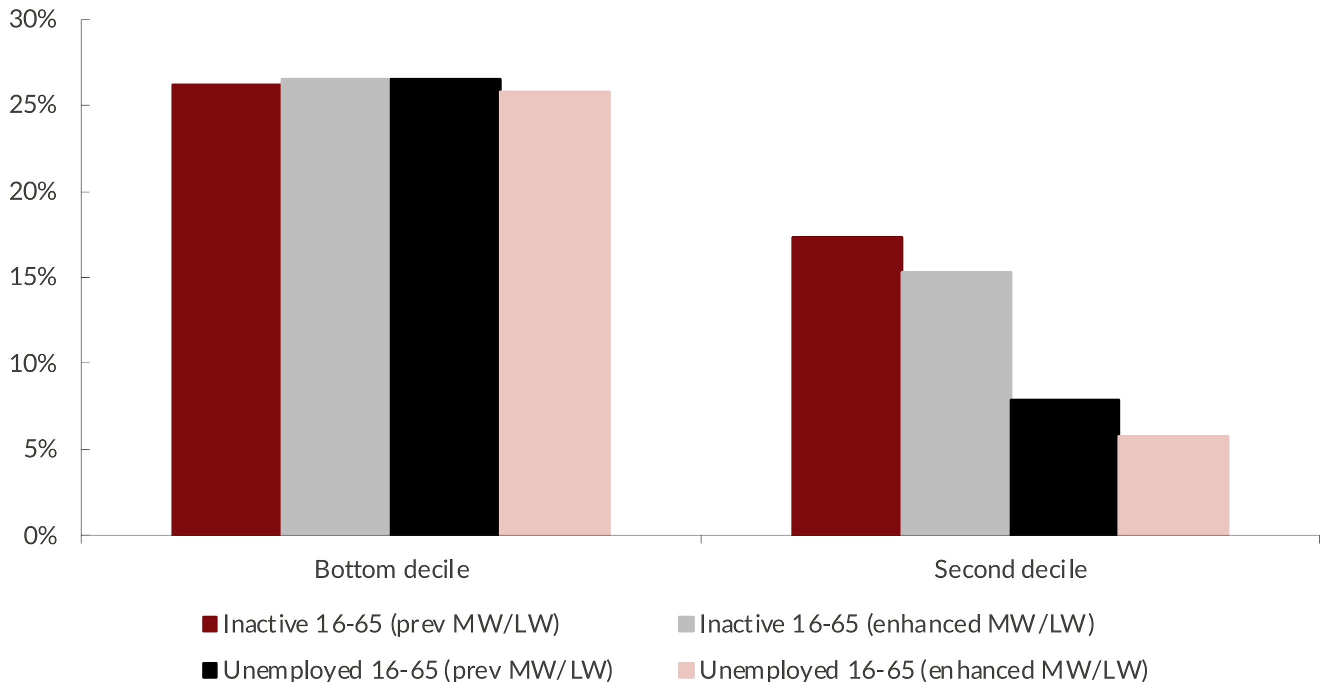
Source: LPC (2023).

Effectively, we move wages at the lowest end of the distribution to the floor given by the uprated wage rates and observe its impact on household level choices as to: (a) how much to spend on consumption and what to save for a future rainy day; and (b) how many hours of labour to offer in gainful employment and therefore how many hours to spend in leisure.

Overall, there is some impact of recent changes in the NMW and the NLW on the behaviour of households and their finances (figure 2.2). As expected, these effects are more substantial at the lower end of the income distribution. However, effects for households in the bottom decile are more limited, potentially because the benefits of higher wages accrue mainly to the in-work poor and not to the on-benefits poor. That said, we estimate that bottom decile households would see a 5-6 per cent rise in their consumption in 2023-24, relative to the previous NMW/NLW rates. This is because they anticipate higher incomes in the future even if their current incomes do not rise substantially, perhaps offset against lower benefits. This is not true for households in the second decile who are shielded less from the inflationary pressures as they do not receive the full cost-of-living payment worth £900 and some of the other benefits. Our estimates indicate that second decile households would see a rise of about 8-9 per cent in their disposable income.

Perhaps even more importantly, there are significant impacts upon labour market choices and outcomes. Specifically, for households in the second bottom decile of the income distribution, the incentives to work and their ability to move into work are both affected positively (figure 2.3). Both the inactivity rate and the unemployment rate for these households drop by 2-3 percentage points. Note that this impact is evident only for households in the second decile, and the aggregate impact is therefore around 0.3 percentage points in either case. Also, before the wage increase was applied, inactivity and unemployment rates at the second decile were much higher than the UK average. Second decile households also experience some decrease in benefits income, but there is a lot of heterogeneity in their experiences and this shortfall is not statistically significant at conventional levels.

Figure 2.3 Impact of rising national minimum wage on poor household labour



Source: LINDA.

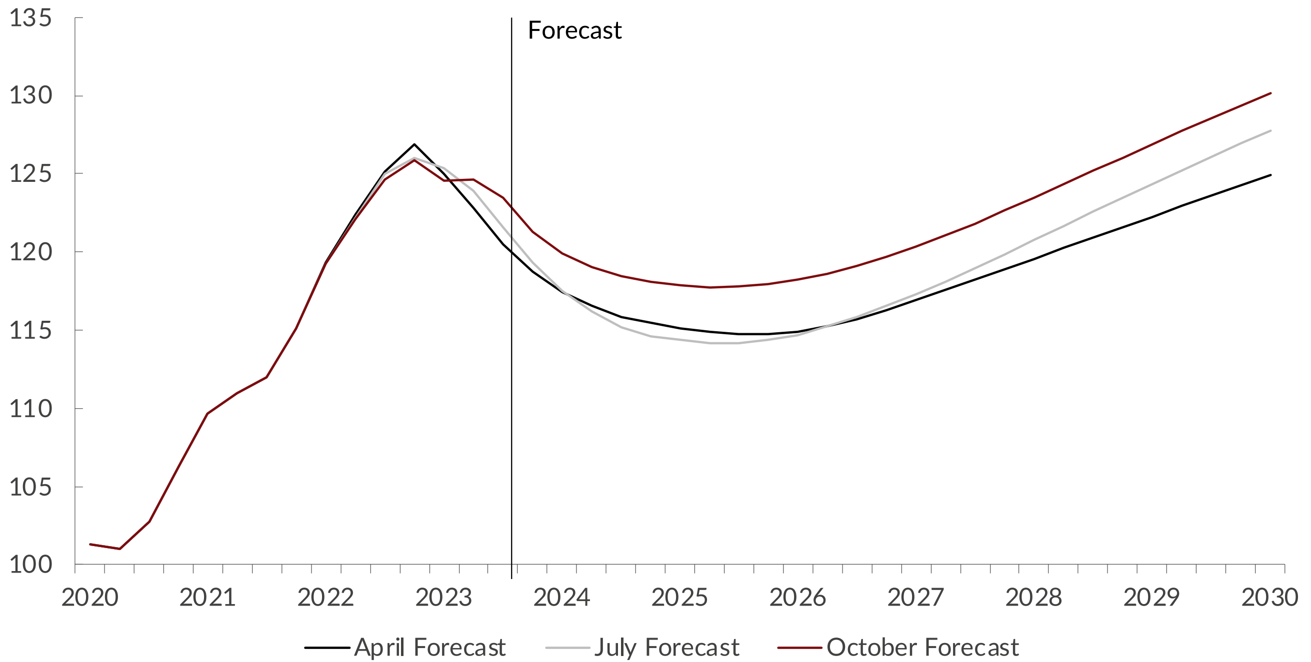
Thus, raising the NMW and the NLW has a positive effect on the consumption and labour supply choices of households in the bottom two income deciles. Based on this evidence, the Chancellor's announcement at the 2023 Conservative Party conference (Hunt, 2023) that the government would raise the NLW to at least £11 an hour from April 2024 onwards is a step in the right direction. Yet given substantially higher energy, food and housing costs as well as persistent inflation, we would recommend a higher increase of up to £11.43, in line with the recommendation from the Low Pay Commission in March 2023 (LPC, 2023) and our research for the LPC in October 2023.[1]

Housing

A combination of rising interest rates and falling real disposable personal income (RDPI) has driven lower demand for house purchases. Higher interest rates mean that buyers have a reduced capacity to borrow, as more of their loan will be spent on serving interest. This, in combination with a sharp fall in RPDI, has already reversed a near fifteen-year trend of rising house prices. We project that lower demand will continue to dampen house prices, with a steady fall in property value up until the second quarter of 2025 (figure 2.4). Our projections suggest around a 6.5 per cent fall in house prices from their peak in the fourth quarter of 2022.

1 NIESR presented our research on 5 October 2023 to the LPC and we submitted a write-up on 11 October 2023.

Figure 2.4 House Price Forecast



Source: NiGEM.

The fall in house prices can entail acute financial challenges to particular households, not least because it reduces household wealth, as the value of their most expensive asset decreases, but also because it reduces a household's ability to take out loans secured against their property. Falling house prices therefore translates into a reduced ability to borrow. Given the importance of borrowing throughout the cost-of-living crisis, this suggests a constrained ability to continue to do so in the short to medium term.

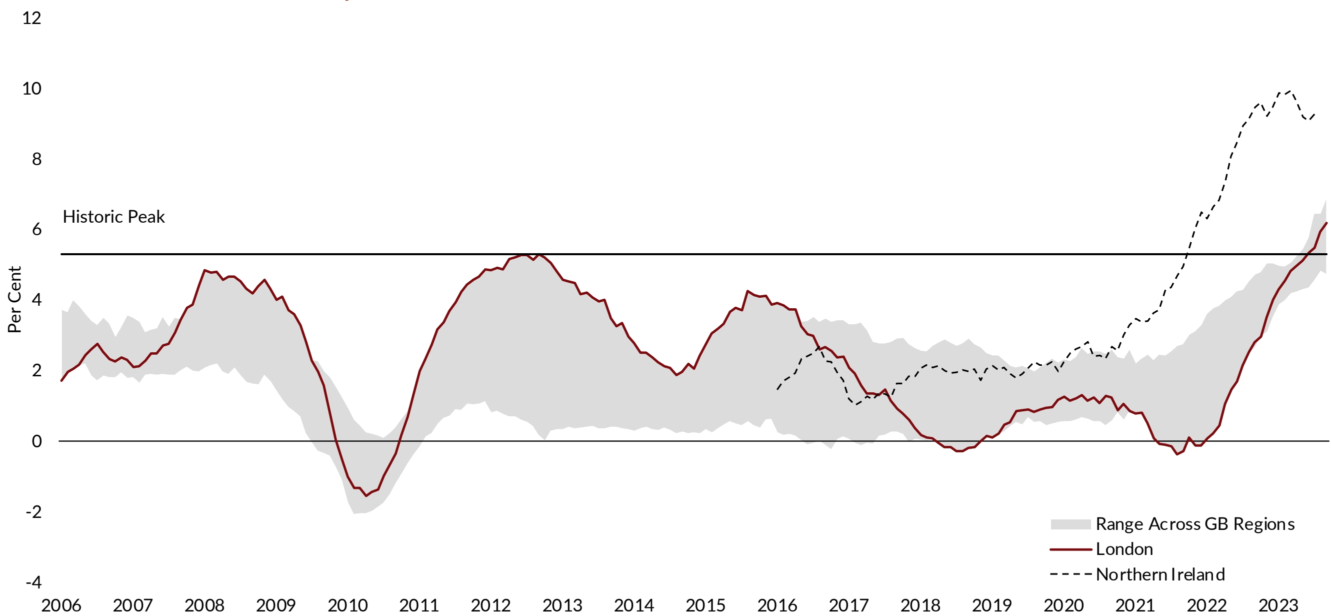
For many households who have large mortgages (such as those who bought their homes with a small deposit), the fall in property value will risk taking them into negative equity, where the value of the home is less than the remaining value of their mortgage. We project that an additional 50,000 households will face such a situation should property values fall by 6.5 per cent. The strongest concentration of such households will be in the West Midlands and in Wales (figure 2.5).

Figure 2.5 Regional Distribution of Additional Households with Negative Equity From a 5 per cent Fall in Property Values

Notes: we estimate that the total number of additional households with negative equity is around 50,000. The chart shows the regional distribution of this figure using the UK Wealth and Assets Survey.
Source: NIESR Analysis of UK Wealth and Assets Survey (2022).

On average, all UK regions saw annual rental costs increase by around 5.5 per cent, above the historic peak of 5.3 percent experienced by London in 2012 (figure 2.6). Northern Ireland remains a strong outlier, with rental costs around 10 per cent higher than they were last year. This, in combination with the falling real value of the Local Housing Allowance, will present acute challenges for the availability of affordable housing (Chowdhury and Mosley, 2023).

Figure 2.6 Annual percentage change in Rental Prices by countries and regions, January 2006 to September 2023.



Source: ONS.

Outlook for the Devolved Nations and English Regions

Since the NIESR Summer Outlook was published, the ONS has published its Blue Book 2023, which included a 'surprise' 2 per cent upward revision in UK output during the pandemic period (Ashworth, 2023). Most of this revision is due to higher inventories, previously not captured, both in intermediate goods and final products. Presumably, because of supply chain issues, firms were maintaining higher inventories of intermediate goods. Final goods producers were accumulating inventories because demand was weak, and consumption was down. This implies higher producer prices that firms were able to pass on to customers only much later – during the high inflation period in 2022-23. While this has little impact on aggregate projections in the medium to long run (Chapter 1), the revision does have some effect on our regional projections. The East Midlands, in particular, receives a boost in projected GVA mainly due to their share in trading and warehousing activities.

Notwithstanding this uptick, we project low economic growth for all devolved nations and English regions. While most regions have now returned to pre-Covid levels of economic output as measured by GVA, the Midlands will not revert to pre-pandemic levels until 2025. Employment growth is generally flatlining, but also there is substantial regional variation. While London powers ahead, the Midlands lag behind as well as Northern Ireland and Wales.

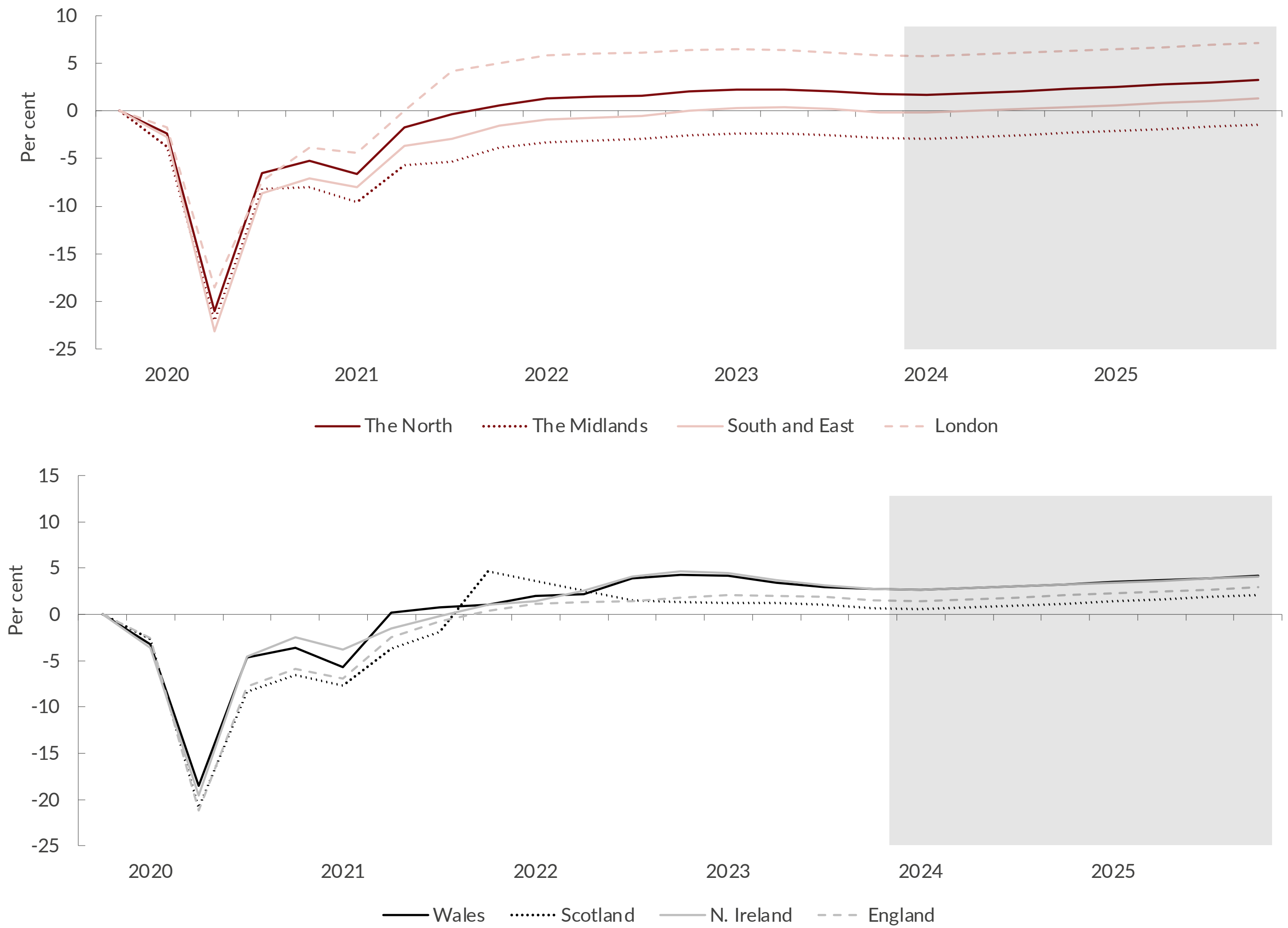
Real wage growth has picked up recently and, for the first time in two years, is now positive. At the same time, inflation is declining, and the two effects together mean that living standards are improving somewhat, even if they are still below pre-pandemic levels. We expect a slight fall in aggregate inactivity in 2023-24 while, as discussed above, inactivity and unemployment are expected to fall for the bottom two deciles of the income distribution, aided particularly by the rise in NMW/NLW. Together with productivity growth flatlining in most parts of the UK (except London, the metropolitan areas of the South-East and cities such as Manchester or Edinburgh), real incomes will not return to 2020-21 levels before late 2024/early 2025. Progress on the 12 missions as set out in the Levelling Up White Paper (DLUHC, 2022) is very limited, highlighting persistent local and regional inequalities.

For economic output, employment, inactivity and productivity, we find that:

Gross Value Added (GVA)

- With respect to economic output (as measured by GVA), all three devolved nations continue to be above pre-pandemic levels (figure 2.7).
- Output in the South and East is approaching its pre-pandemic level and projected to reach it by the first quarter of 2024 (figure 2.7).
- The Midlands continues to lag further behind the other English regions and is not predicted to reach its pre-pandemic level of output in the next two years (figure 2.7)

Figure 2.7 Regional GVA relative to the fourth quarter of 2019

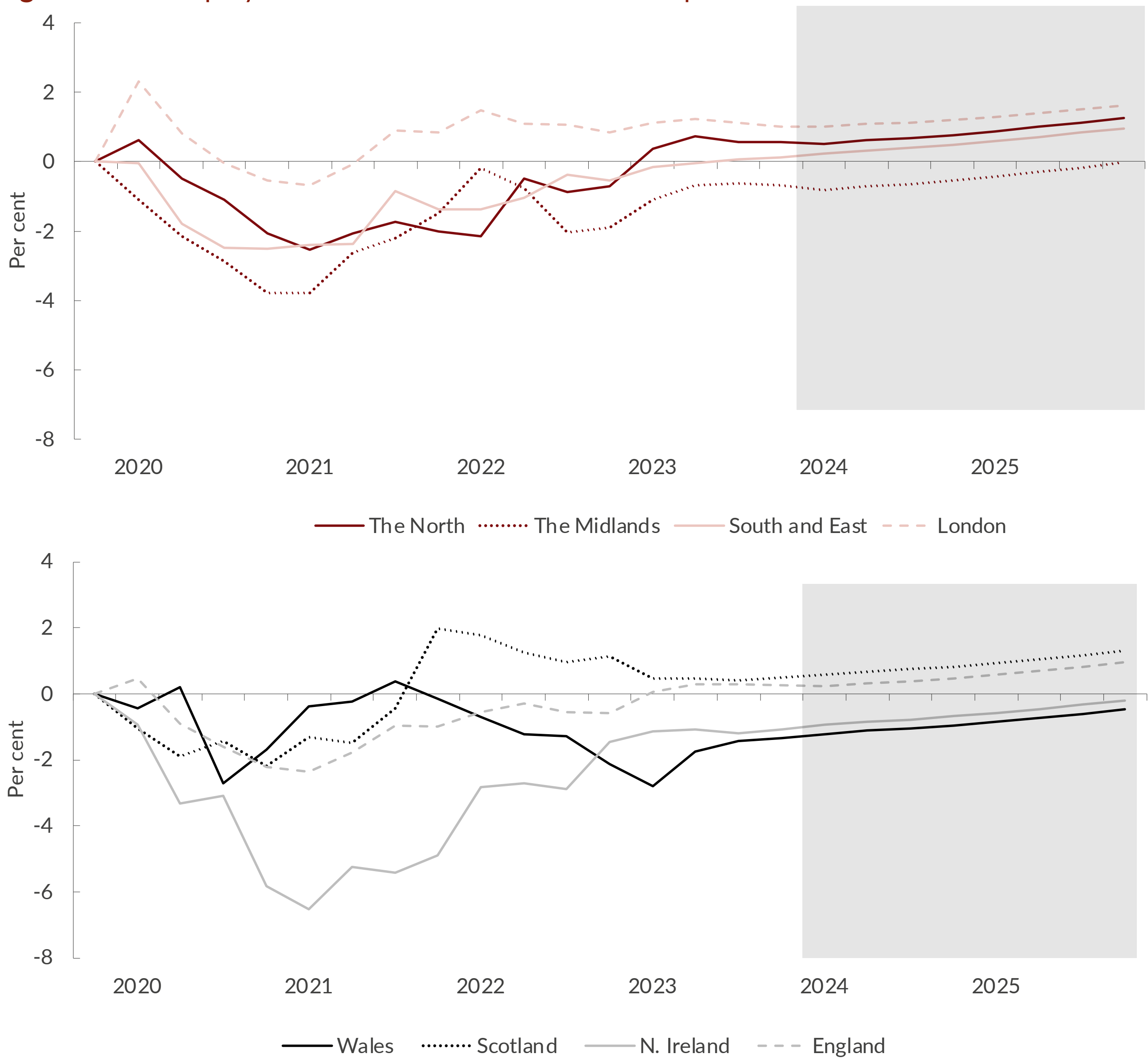


Source: NiReMS.

Employment

- This quarter the employment numbers show a more positive picture than in the previous quarter as the North and South and East regions join Scotland and London with employment numbers greater than pre-Covid levels (figure 2.8).
- The employment level in Wales shows a subdued upward trend after suffering a drop between 2021 and 2023 but is projected to reach its pre-pandemic level over the next few years (figure 2.8).
- Northern Ireland's employment is forecast to grow slowly over the next few years (figure 2.8).
- Employment in the Midlands is projected to follow a slow upward path and may potentially reach its pandemic level in late 2025 (figure 2.8).

Figure 2.8 Employment levels relative to the fourth quarter of 2019

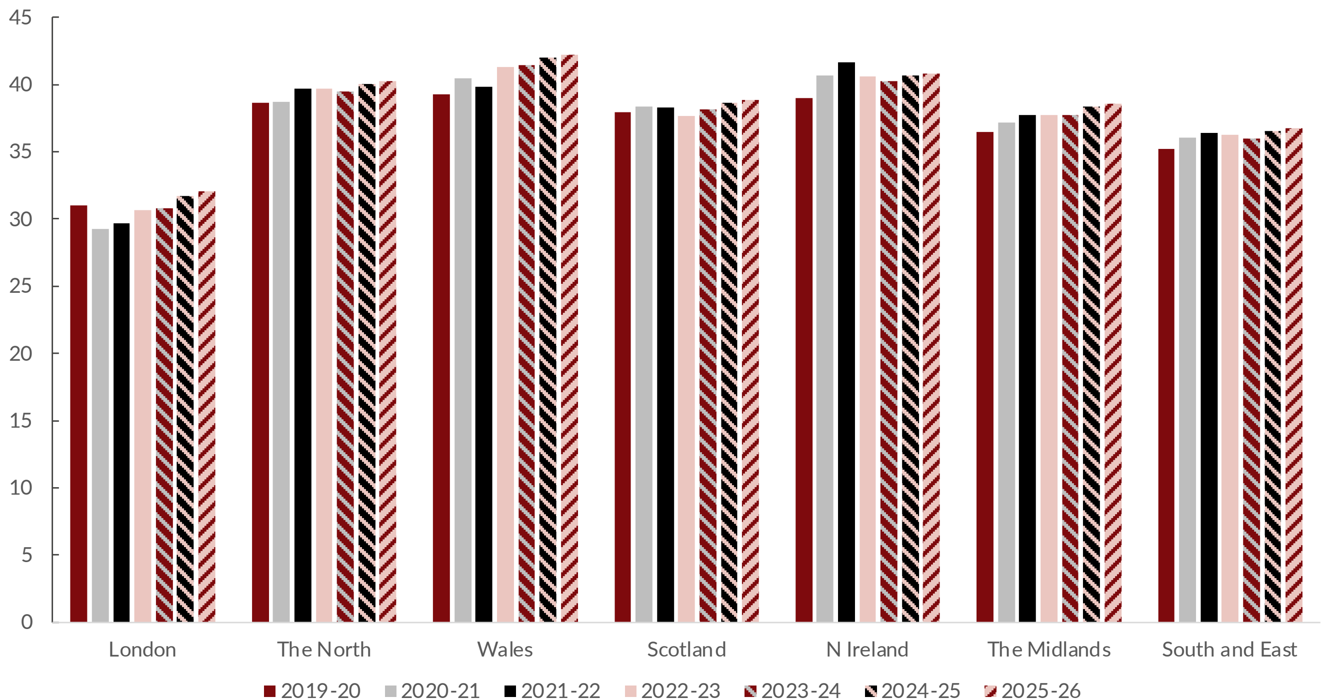


Source: NiReMS

Inactivity

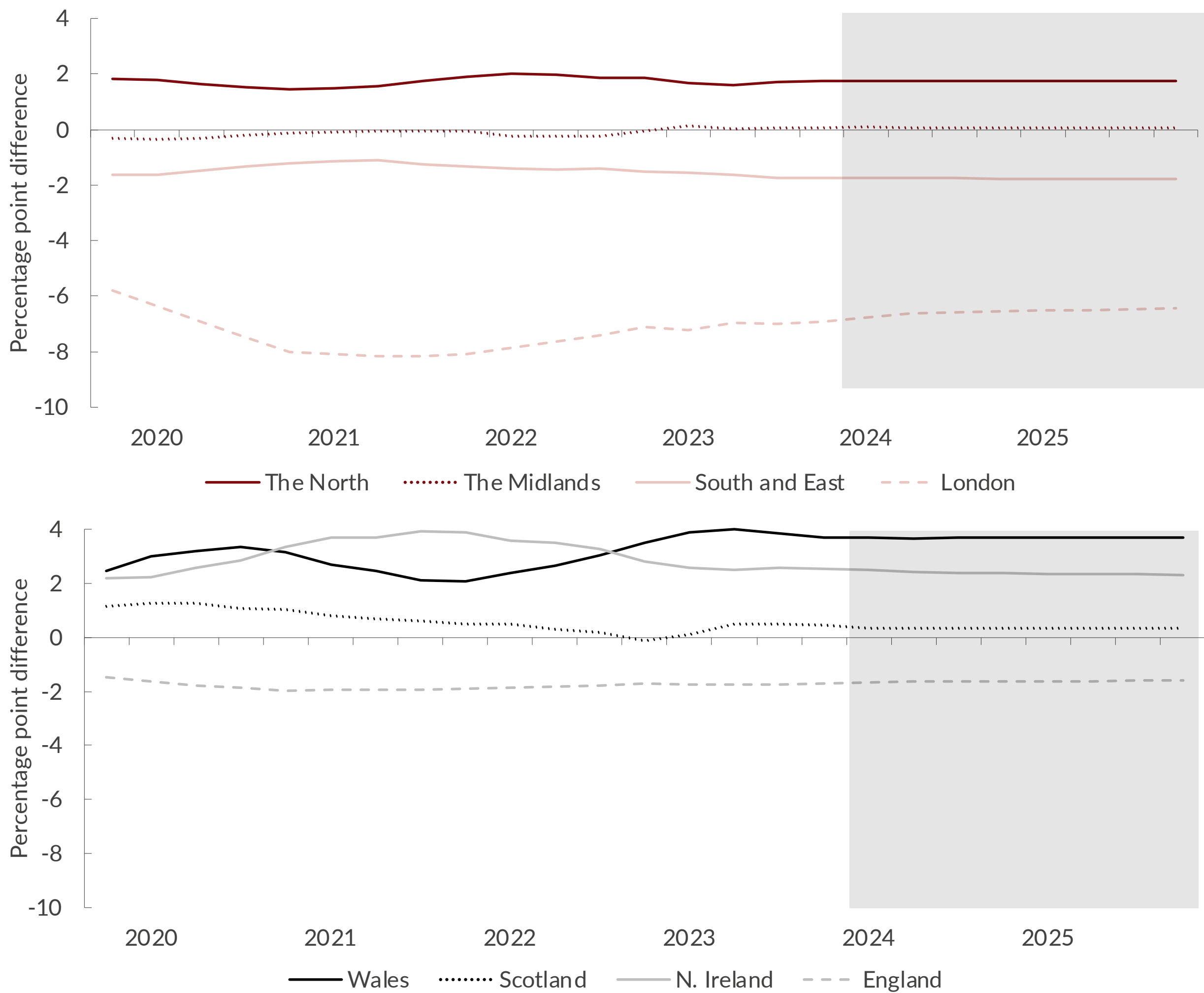
- London continues to have the lowest inactivity rate in 2023-24 compared to the other English regions and devolved nations whilst Wales continues to have the highest inactivity rate (figure 2.9). The North and Northern Ireland continue to have high inactivity rates relative to the UK average.
- The inactivity rate among the whole population aged over 16 is predicted to continue rising throughout 2024-25 across all regions (figure 2.9) as the proportion of retirees in the population increases.
- The rise in inactivity across all regions is expected to continue into 2025-26 although at a more subdued pace compared to 2024-25 (figure 2.10).

Figure 2.9 Devolved nation and English regional inactivity rates



Note: Inactivity rate defined as labour force/population aged over 16.
Source: NiReMS.

Figure 2.10 Regional inactivity rates relative to UK average

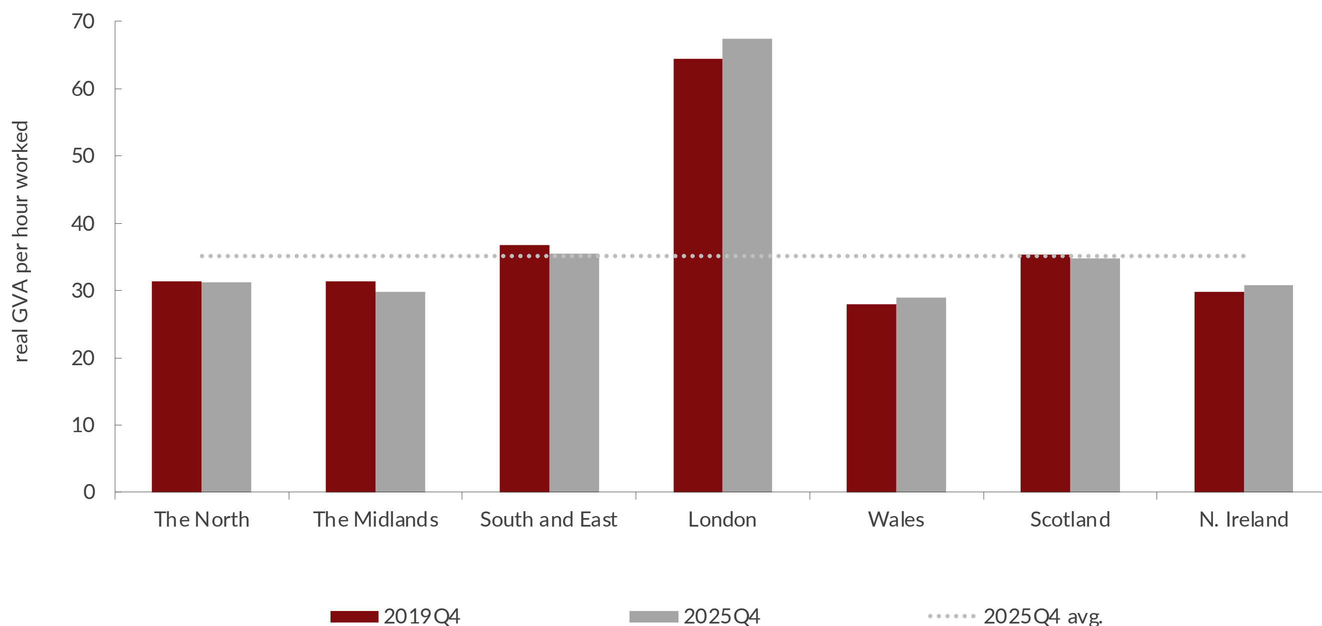


Note: Average Inactivity rate (as defined as labour force/population aged over 16) over the last four quarters, minus UK average inactivity rate.
Source: NiReMS.

Productivity

- The UK average for productivity as measured by real GVA per hour worked in the fourth quarter of 2025 is projected to be above the pre-pandemic average (fourth quarter of 2019) and above the average in the second quarter of 2023 (Chapter 1).
- However, regionally this a different story. London continues to pull ahead of the other regions in terms of productivity and is forecast to continue to surpass significantly its pre-pandemic level in the fourth quarter of 2025 (figure 2.11).
- The South and East is the only other region to be at the UK average. Our previous Outlook projected that Scotland was at the UK average (Bhattacharjee et al., 2023) but this is projected to change by the fourth quarter of 2025 where it falls just below the UK average (figure 2.11).
- The Midlands is forecast to experience the most significant drop in productivity compared to its pre-pandemic levels, whereas Wales and Northern Ireland are forecast to surpass their pre-pandemic levels in the fourth quarter of 2025 (Figure 2.11).
- Overall, the productivity differentials between the more prosperous and the poorer region of the United Kingdom continue to persist (Figure 2.11).

Figure 2.11 Devolved nation and English regional productivity



Source: NiReMS.

Scotland Economic Outlook

In our Summer 2023 Outlook, we reported robust inward FDI and promising new initiatives to enhance private investment and business creation, particularly recent plans to expand the energy sector – both traditional oil and gas and green energy – supported by the UK government (Bhattacharjee et al., 2023). Similar developments continue with the finance sector now expecting a big push aided by a new financial strategy backed by both the Scottish and UK governments (Edgar, 2023). Finance and high-end technology driven services are currently the biggest contributor to Scottish GVA, at about £15 billion, while also contributing more than 125,000 in employment. With the planned expansion of green and sustainable finance, and services supported by emerging technologies like Artificial Intelligence it is anticipated that another £7 billion in GVA will be unlocked by 2028.

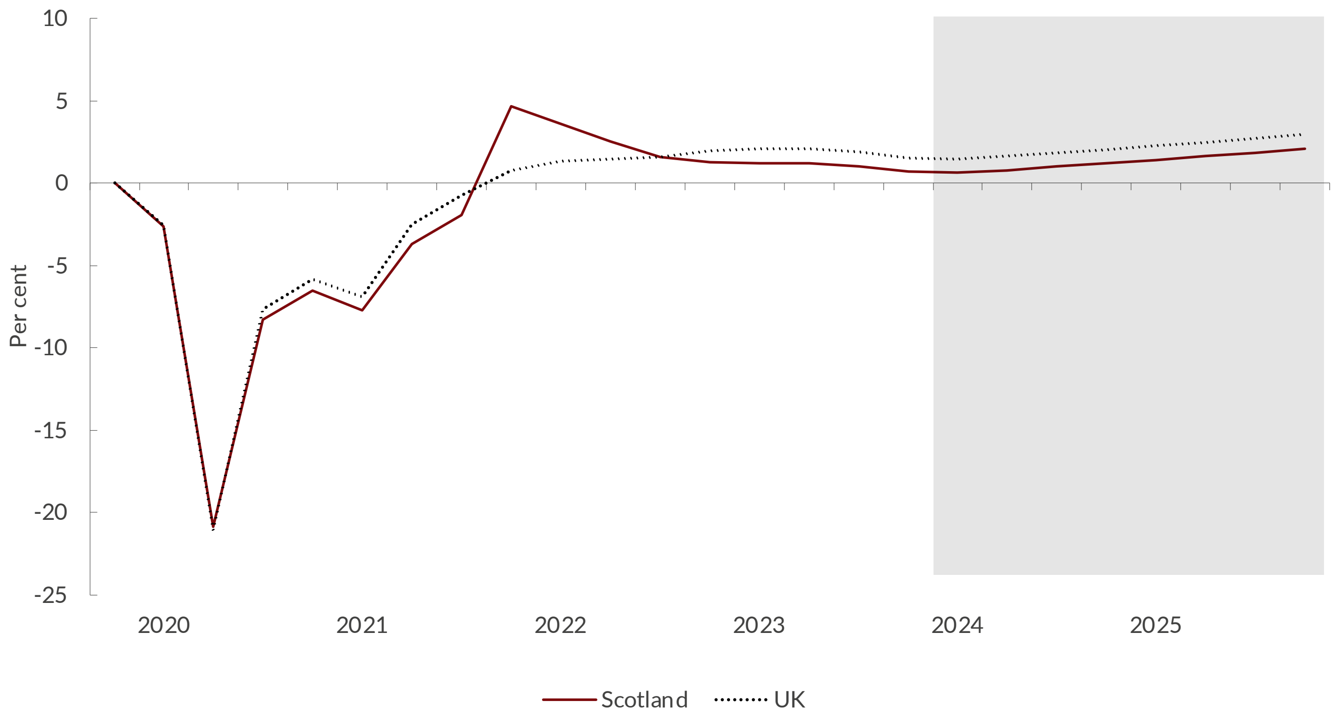
Unlocking such potential requires ensuring that industry has the skilled workforce it requires. However, currently there are challenges in locating skilled labour and consequent falls in permanent hirings (Burnside, 2023). The problem is particularly acute amongst the youth, with participation in apprenticeships falling for over a decade now, reflecting systemic "[s]kills and labour shortages" (Williams, 2023). While proactive policy is welcome, the jury is out regarding how the economy and society manage these competing challenges and harness growth opportunities.

We find that

- Scotland's Gross Value Added (GVA) continues to be above its pre-pandemic levels (figure 2.12). Scotland's GVA growth since 2019 is projected to remain marginally below the UK average.
- Employment in Scotland continues to be strong relative to the UK average (figure 2.13) and is forecast to continue to follow a trajectory above the UK average.
- Reversing a small drop in 2022-23, Scotland's inactivity rate is predicted to continue to rise marginally over the next two years (figure 2.9).
- With growth in Scottish GVA stuttering in 2022 but employment remaining robust, Scotland's productivity is falling and is projected to remain below its pre-pandemic levels and below the UK average in the second quarter of 2025 (figure 2.14).

GVA

Figure 2.12 GVA in Scotland relative to the fourth quarter of 2019



Source: NiReMS.

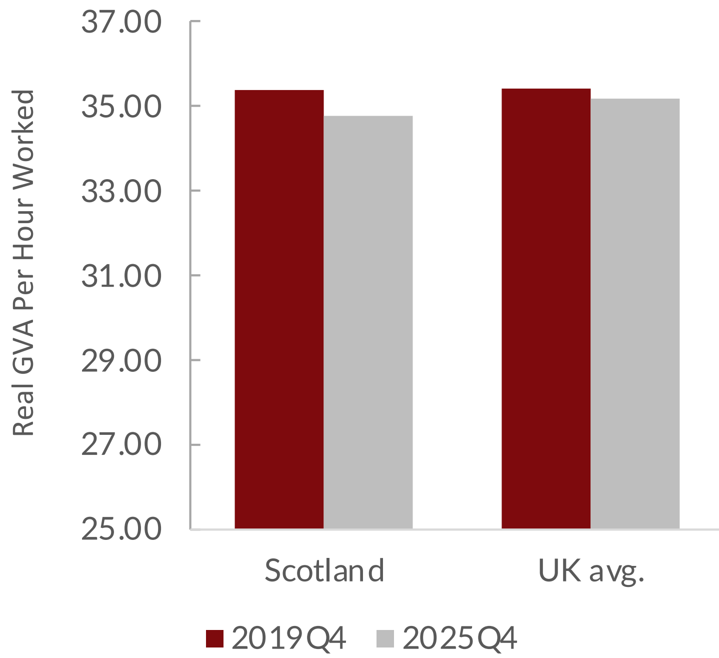
Employment

Figure 2.13 Employment in Scotland relative to the fourth quarter of 2019

Source: NiReMS.

Productivity

Figure 2.14 Productivity in Scotland



Source: NiReMS.

Wales Economic Outlook

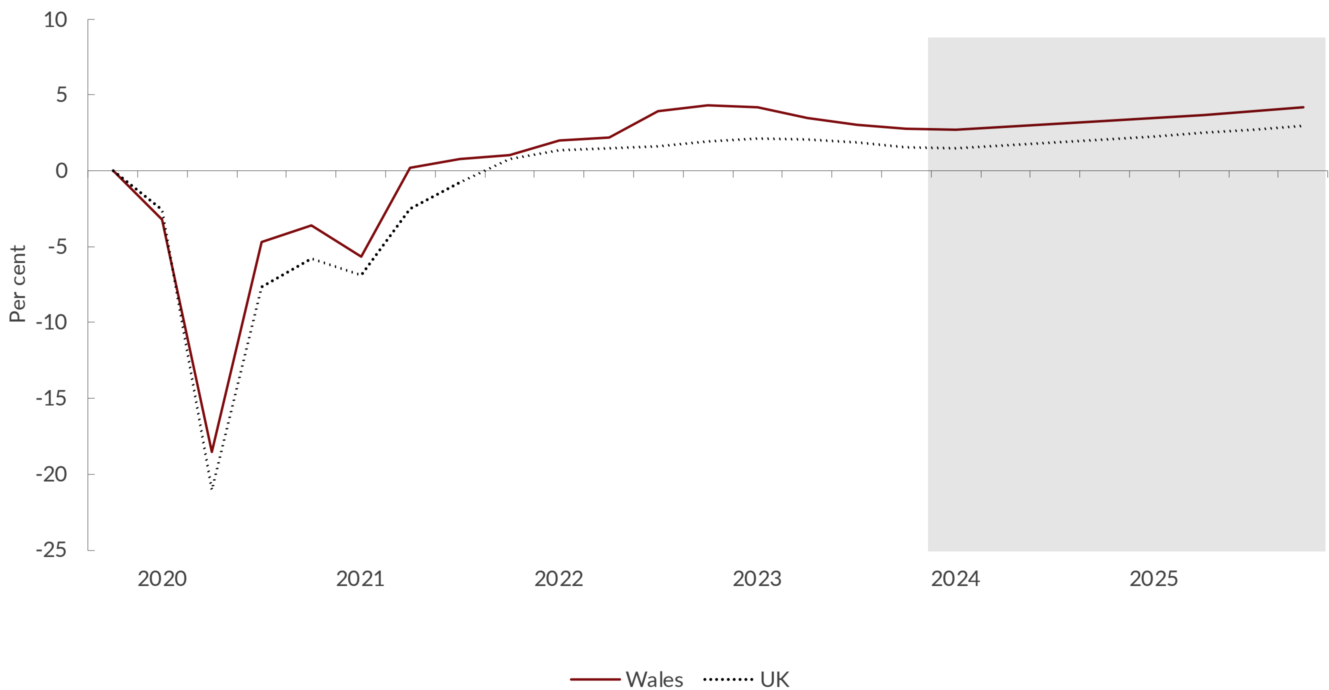
The Welsh Government apprenticeship scheme and the Restart programme aiming to move people from long-term unemployment into work, both highly successful during the pandemic recovery, have ceased to be effective. Notwithstanding this, since the start of 2023, employment has started picking up. The positive momentum created by announcement of two freeports and cautious optimism, as seen in recent CBI surveys (Price, 2023), offer some hope for "levelling up". Will policy and politics step up with proactive and coordinated local and central planning? While the jury is out, the 2021 Net Zero Wales programme of the Welsh government and the additional funding for Personal Learning Accounts carry positive notes.

We find that

- Gross Value added (GVA) for Wales remains above the UK average and above its pre-pandemic levels. This is projected to continue over the next few years (figure 2.15).
- Employment in Wales has experienced a change in direction following data revisions and it is now projected that Welsh employment will be on the rise over the next few years. However, Wales will still be lagging significantly behind the UK average and its pre-pandemic levels (figure 2.16).
- Welsh inactivity rates continue to be above the UK average and are projected to follow a relatively stagnant trajectory over the next two years (figure 2.9).
- Productivity in Wales is forecast to grow significantly by the fourth quarter of 2025 relative to its pre-pandemic levels but remain below the UK average (Figure 2.17).

GVA

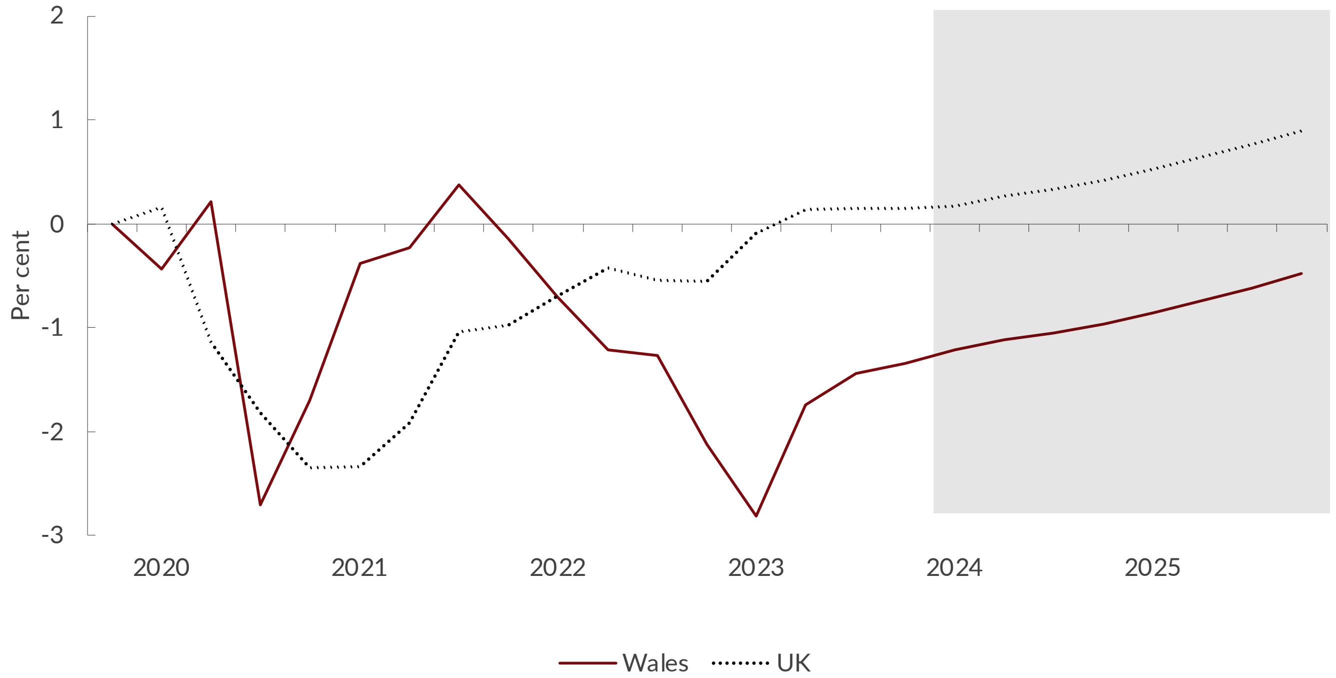
Figure 2.15 GVA in Wales relative to the fourth quarter of 2019



Source: NiReMS.

Employment

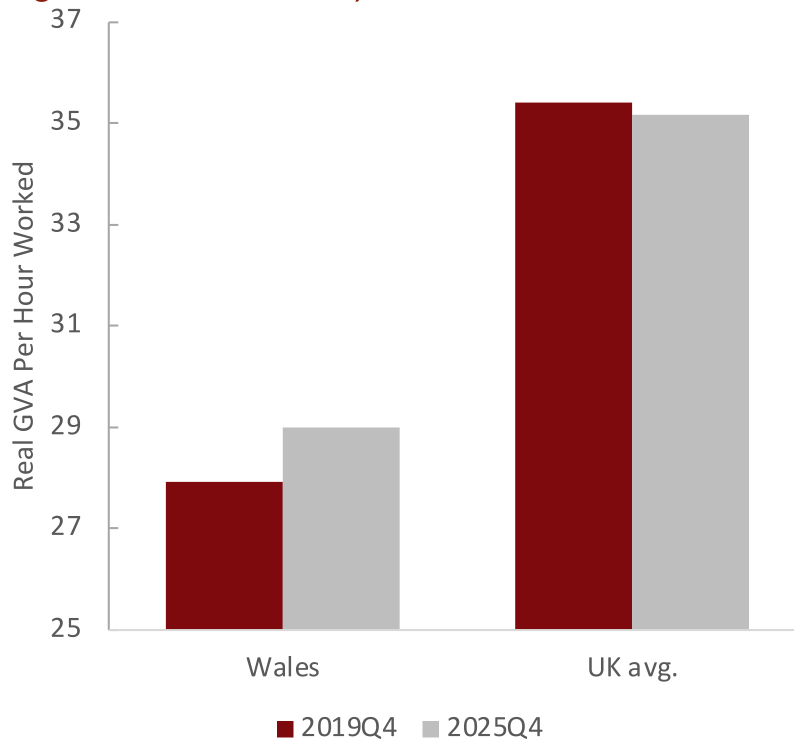
Figure 2.16 Employment in Wales relative to the fourth quarter of 2019



Source: NiReMS.

Productivity

Figure 2.17 Productivity in Wales



Source: NiReMS.

Northern Ireland Economic Outlook

Two years plus and counting, the Northern Ireland Assembly has not resumed its legislative and operational functions, even as the Windsor Framework has begun to stabilise trade with the European Union. As emphasized in Bhattacharjee et al. (2022) and Hayward and McStravick (2023), the limited resilience shown by the Northern Irish economy throughout the cost-of-living crisis, perhaps aided to some extent by the Northern Ireland Protocol and the Windsor Agreement, can only be temporary unless proactive policy and politics are joined up. Unfortunately, such hopes remain unfulfilled, and we are yet to see either Stormont returning to action or any announcement of fresh elections.

Not surprisingly, the current business and economic outlook is not very positive (Rice, 2023). A critical part of the problem concerns labour markets, where employment has shrunk over the period the fourth quarter of 2019 to the second quarter of 2023. In this context, current efforts to diversify job creation beyond the technology sector is highly welcome (Webber, 2023).

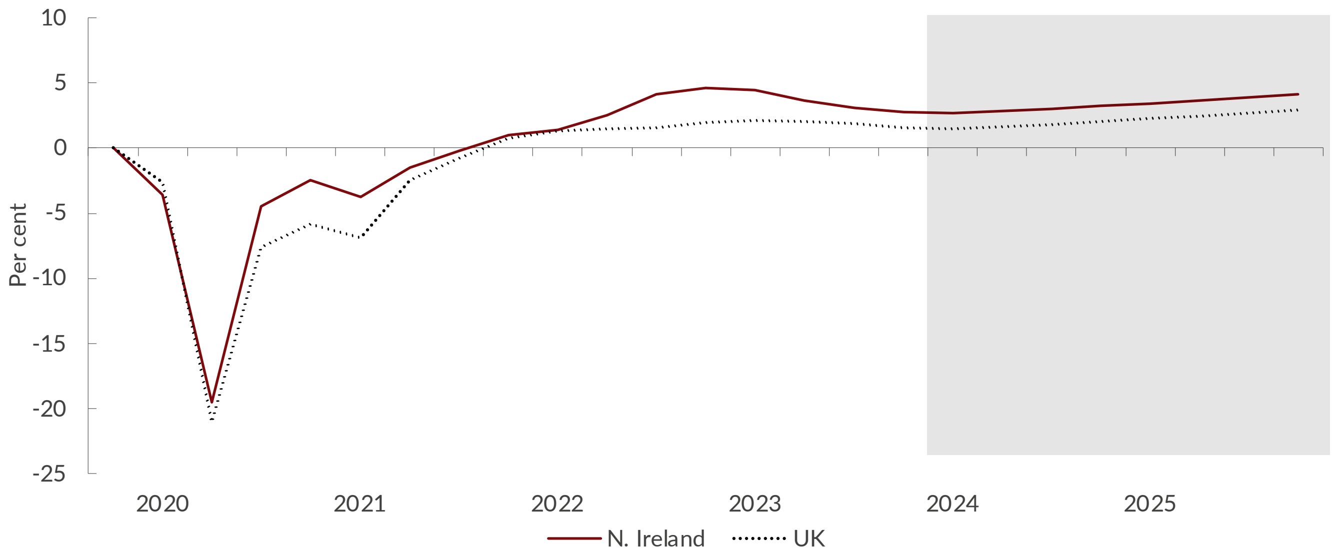
Taken together, historically low labour force participation is a major problem in the devolved nation, and economic inactivity is particularly high and alarming among the young (16-24 year olds). While participation has increased somewhat from pre-pandemic levels, the inactivity rate is still among the highest in the United Kingdom. Recent research confirms age, gender, education and marital status as important proximate factors, but crucially also "[w]idespread frustration at the labour market inequalities" and "inflexible" labour market and benefit systems (Devlin et al., 2023). It is possible that the UK government's Restart programme, successful elsewhere in Wales, can help move some discouraged workers into job-seeking and work (Carberry, 2023).

We find that

- Northern Irish economic output as measured by GVA is above UK levels and exceeds pre-Covid levels (figure 2.18).
- The latest employment figures put Northern Ireland around the trajectory NIESR projected in our most recent Outlook (Bhattacharjee et al., 2023c). The overall Employment outlook is much better in the region than a year ago, but it still remains below the UK average and below its pre-pandemic levels (figure 2.19).
- Given the output and employment dynamics, Northern Ireland's productivity growth remains strong. Nevertheless, overall productivity is still below the UK average (figure 2.20).

GVA

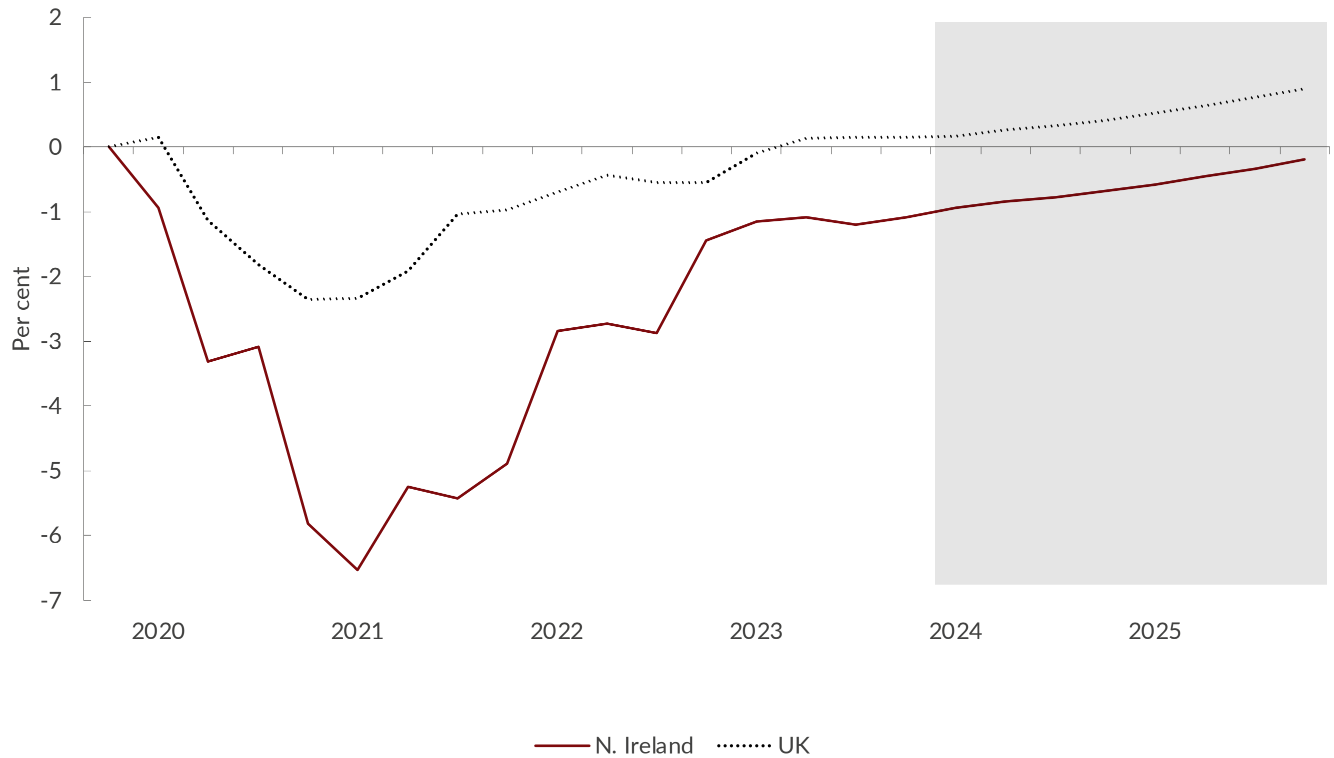
Figure 2.18 GVA in Northern Ireland relative to the fourth quarter of 2019



Source: NiReMS.

Employment

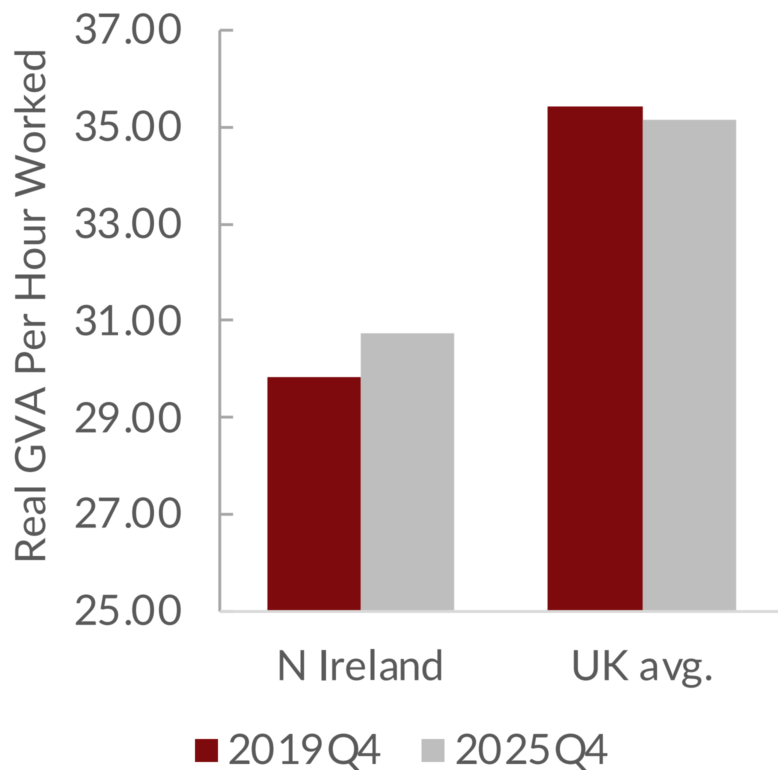
Figure 2.19 Employment in Northern Ireland relative to the fourth quarter of 2019



Source: NiReMS

Productivity

Figure 2.20 Productivity in Northern Ireland



Source: NiReMS.

Economic Outlook for England's Regions

Since our Summer Outlook (Bhattacharjee et al., 2023c), levelling up the English regions that are lagging behind London and the metropolitan parts of the South East has been affected by three developments. First, Birmingham City Council effectively declared bankruptcy. Second, the cancellation of the HS2 line beyond Birmingham and the decision to focus on transport connectivity between northern cities. Third, the Prime Minister's announcement of a new Towns Fund (HMG, 2023) to rebalance investment and opportunities to those urban areas of the country that are less integrated into the global economy than metropolitan areas. Each of them raises fundamental questions about how to bring about sustained regional regeneration.

The case of Birmingham City Council highlights the imbalance between the increasing demand for public services – above all acute pressures on essential services, such as social care, homelessness and special educational needs, on which many of the most vulnerable people depend – and the funding cuts to local government since 2010 (Shaw, 2023). HS2 is not just about the costs linked to project management but about the wider effects of connecting London and the Midlands to the North. And the creation of the Towns Fund relates to the focus on cities and technology clusters/investment zones based on agglomeration effects compared with building up more economic and social capacity in towns and adjacent areas.

Fundamentally, we need more evidence on the nature and evolution of inter- and intra-regional dynamics, notably the actual extent of positive and negative spillovers from cities and technology clusters/investment zones to other parts of the country. The creation of the Towns Fund is a step in the right direction, but it needs to be joined up with other initiatives and done at scale.

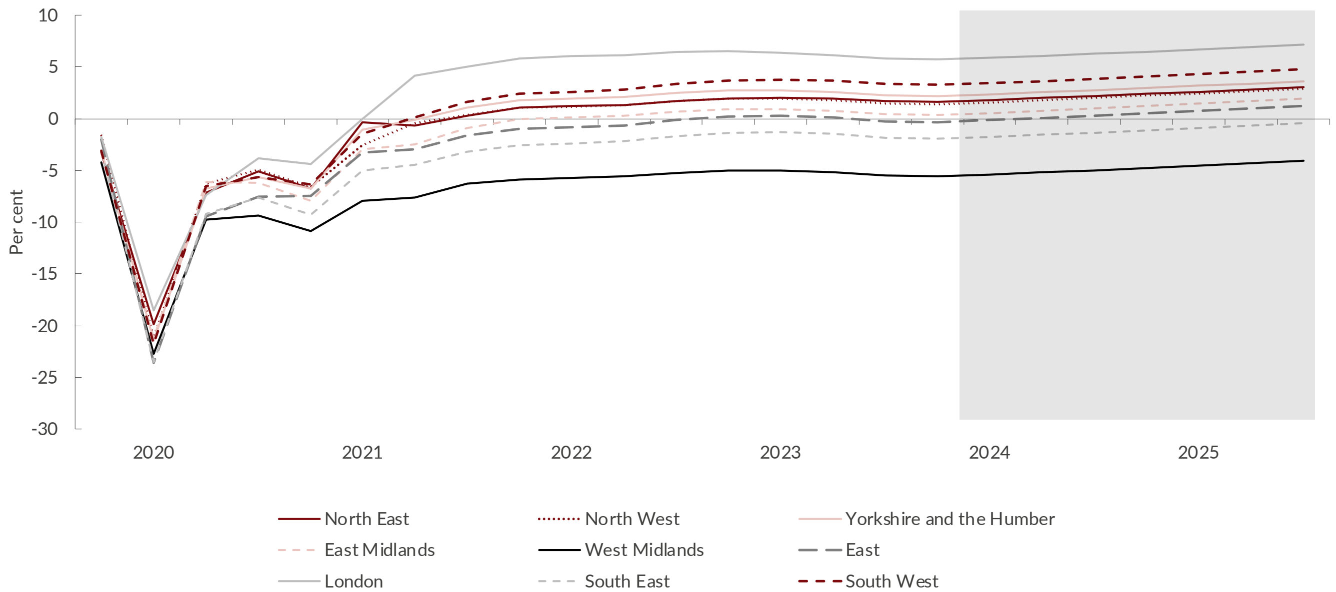
The consensus among researchers is that regional inequalities became increasingly entrenched after deindustrialisation in the 1980s and after the recession following the 2008 financial crash (Stansbury et al., 2023), which has been conceptualised in terms of a 'geography of discontent' (McCann, 2016, 2020) and 'the revenge of the places that don't matter' (Rodríguez-Pose, 2017). Our quarterly regional outlook has highlighted deep gaps in the skills base, local/regional capital markets and the institutional ecology. In large part, this is the outcome of a collective failure of Westminster and Whitehall and the limits of regional policy of successive governments over the past 40 years (Turner et al., 2023). Among the key reasons are an endless chopping and changing of strategy, ministerial churn, and a lack of credible commitment of resources at scale, combined with only limited devolution of decision-making powers to lower tiers of government.

Specifically, we find that

- With the updated ONS output numbers, the overall outlook of English regions is better than the last quarter. Nevertheless, this uptick did not yield a more equal recovery. In particular, the West Midlands remains a laggard compared to the other regions and remains well below its pre-pandemic level (figure 2.21).
- Only the West Midlands and the non-metropolitan parts of the South East are projected to have lower output at the end of 2024 than the end of 2019 (although the South East is projected to regain its pre-pandemic output by the end of 2025).
- Northern England's employment dynamics remain strong, driven by further upwards employment revisions in the North East and Yorkshire and Humber. In fact, the latest round of ONS revisions of Labour Force Survey (LFS) data places employment growth in these regions above that of London. Nevertheless, there remains inter-regional inequality in terms of the employment outlook, with the North West being among the worst performers (figure 2.22).

- Employment in every other region is around pre-Covid levels and is expected to be above pre-Covid levels in early 2024 (figure 2.22).
- London remains the strongest performer amongst the English regions for output and productivity (Figure 2.20 and 2.23).
- Given the uptick in employment dynamics in parts of the North, but output not seeing a similar uptick yet, we project productivity to remain unchanged in the North. Nevertheless, this forecast is tentative and may yet change with further revisions to regional data.

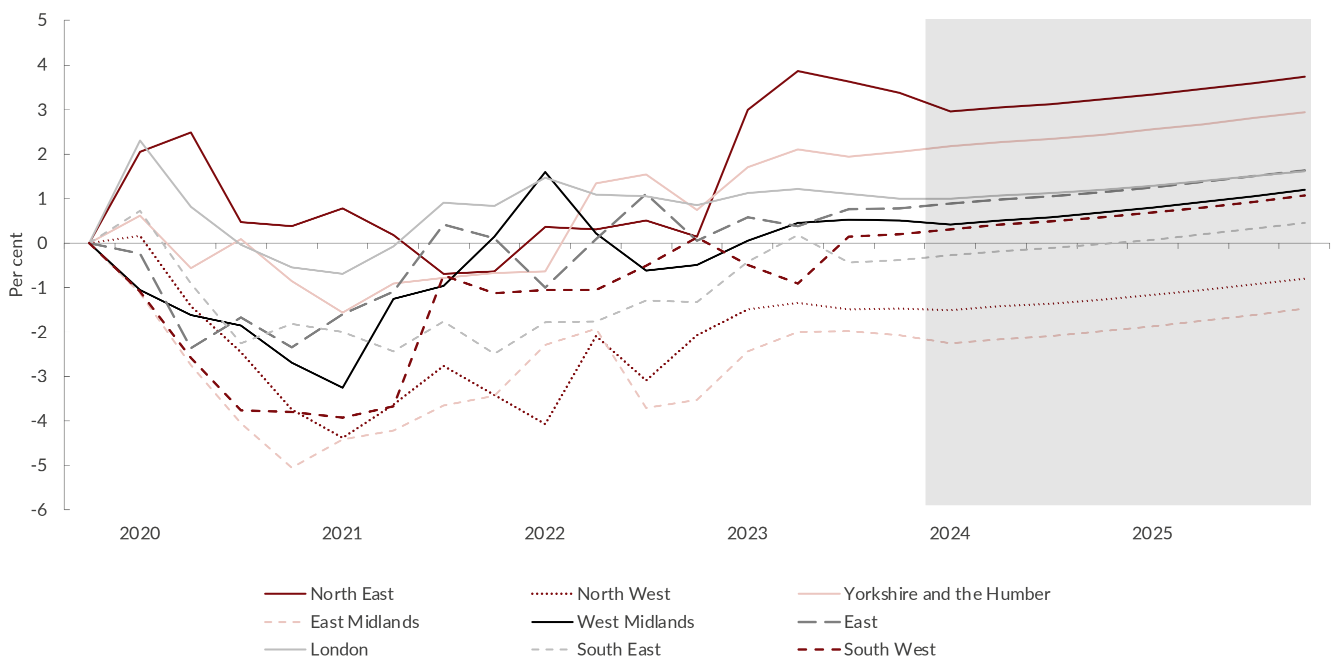
Figure 2.21 GVA in the English regions relative to the fourth quarter of 2019



Source: NiReMS.

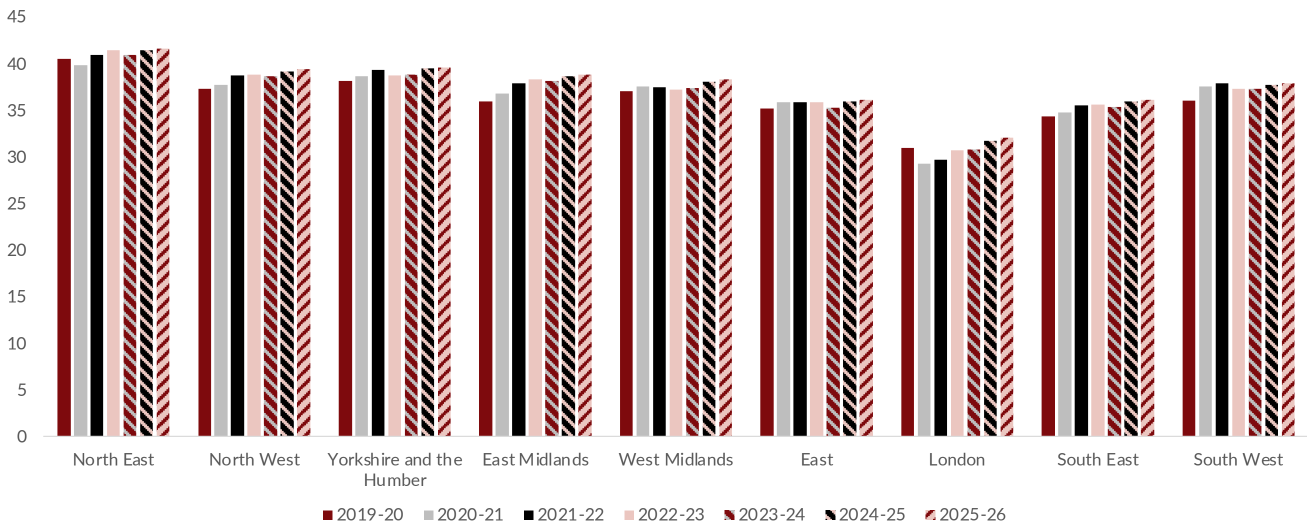
Employment

Figure 2.22 Employment in the English regions relative to the fourth quarter of 2019



Source: NiReMS.

Figure 2.23 Inactivity rates in the English regions



Source: NiReMS.

Productivity

Figure 2.24 Productivity in the English regions

Source: NiReMS.

Box B: Productivity Paradox: Challenges and Opportunities

By Adam Yousef

Back in 1987, the Nobel prize-winning economist Robert Solow observed that 'you can see the computer age everywhere but in the productivity statistics!' (quoted in Rotman, 2018). This dichotomy between limited productivity growth and rapid technological progress is now commonly described as the 'Solow or productivity paradox'.

At present, the term 'productivity paradox' increasingly refers to instances where productivity is either feeble or growing slowly. In the United Kingdom, there has been a slowdown in productivity growth since the Global Financial Crisis (GFC). The economic implications of this slowdown have been far-reaching for London and other regions (figure B1).

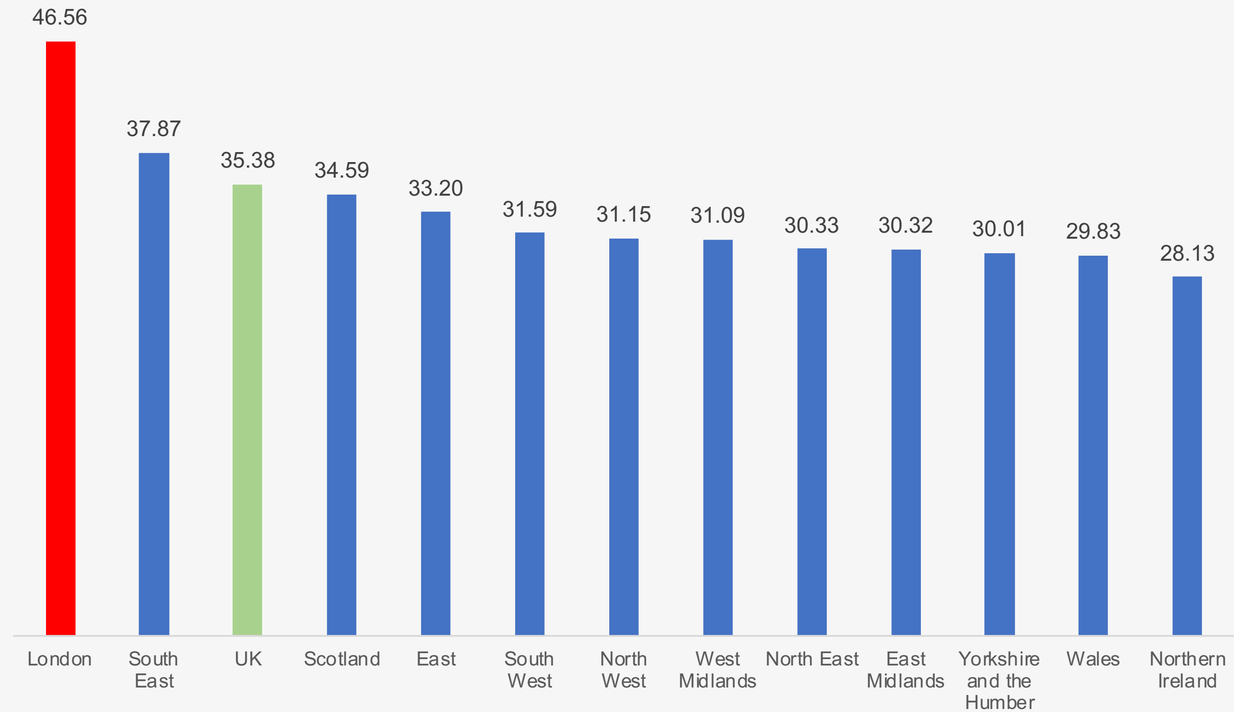
Figure B1 Year-on-year productivity growth in London and the United Kingdom

Source: Office for National Statistics.

London's productivity picture

How has London been performing? Data from the Office for National Statistics (ONS) reveals that the capital continues to outperform other UK regions: in 2019, London's output per hour across all industries was 23 per cent higher than that of the Southeast and about 32 per cent higher than the United Kingdom (figure B2).

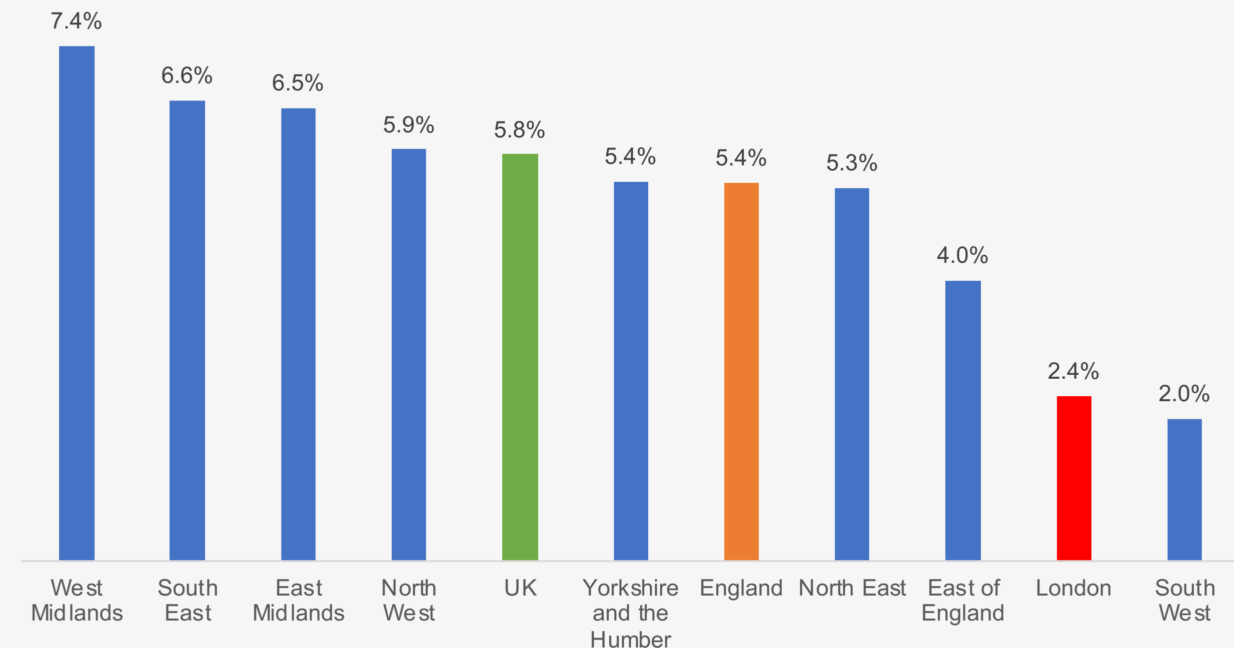
Figure B2 Output (chained volume measure) per hour by UK region (£ 2019)



Source: Office for National Statistics.

Nevertheless, the picture changes when looking at productivity growth over time. For example, between 2010 and 2021, the capital's productivity increase lagged all UK regions except the Southwest (figure B3).

Figure B3 Growth of output per hour by UK region (2010 to 2021)



Source: Office for National Statistics.

In other words, despite being higher than in other UK regions, London's productivity has been growing much more slowly. This is undermining the city's global competitiveness. A 2023 study by the Centre for Cities ranks London's productivity growth (0.2 per cent) below that of New York (1.4 per cent), Paris (0.9 per cent) and Stockholm (0.7 per cent) between 2007 and 2019 (Rodrigues and Bridgett, 2023). The report attributes this drop to a slump in the financial performance of highly-productive firms in key sectors of London's economy (for example, the financial, information, and professional services sectors), the city's unaffordable housing market, rising commercial property costs and a relatively restrictive immigration policy (which in turn undermined London's ability to attract and retain global talent).

Another consequential aspect of London's productivity paradox is the unequal performance of its boroughs. Figure B4 illustrates this point. For each of the 32 boroughs (plus the City of London), the top number is an index that compares that borough's productivity performance to the United Kingdom's in 2021 (a number bigger than 100 means that borough's productivity was higher than the United Kingdom's and vice-versa). The bottom number is the percentage change in that borough's productivity from 2004 to 2021.

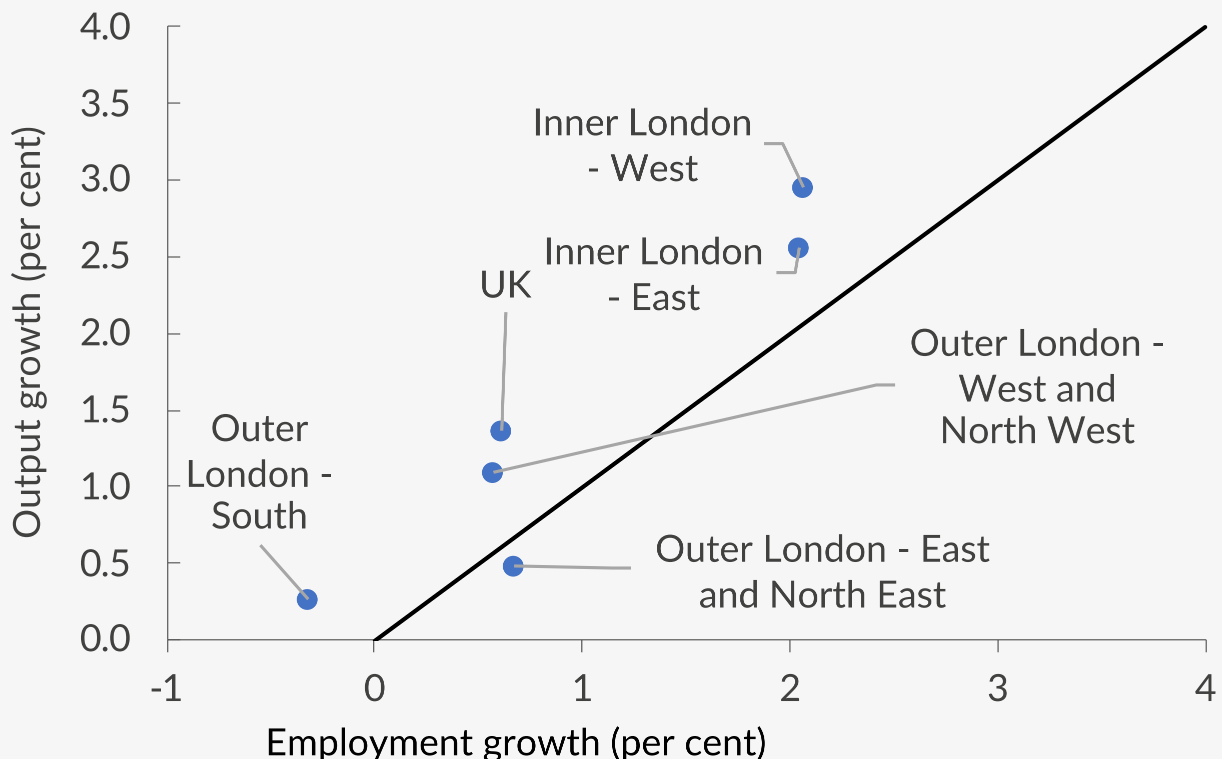
Figure B4 Productivity by London borough (2021)

Source: Office for National Statistics.

The map shows that all boroughs experienced an increase in labour productivity over the 17-year period, with central London boroughs like Hammersmith and Fulham (96 per cent) and Hackney (68 per cent) being among the best performers, and boroughs like Barking and Dagenham (7 per cent) and Sutton (11 per cent) being among the worst performers. Generally speaking, boroughs in the East and Northeast tended to have slower productivity growth since 2004 and lower productivity levels than their counterparts in the capital as well as the United Kingdom.

Finally, a look at London's labour productivity since 2004 reveals the unequal performance of Inner and Outer London. Figure B5 shows that from 2004 to 2021, Inner London boroughs outperformed both the United Kingdom and Outer London boroughs. Not only that, but Eastern and North-eastern parts of Outer London experienced a decrease in productivity over that period, while the United Kingdom and other London regions saw growth.

Figure B5 Growth in hours vs. growth in output (2004-2021)



Source: Office for National Statistics.

To borrow from the great Victorian novelist himself, the data reveals 'a tale of two Londons': one that serves as an engine for the rest of the country, and another that lags not just the first London, but also the entire country. This tale also applies to recent years: for example, while the Covid-19 pandemic unsurprisingly reduced labour productivity across the United Kingdom (including London), Inner London proved resilient as its productivity dropped by much less than Outer London. In fact, Outer London experienced a sharper decline than the United Kingdom.

Demystifying the capital's productivity paradox

With the data revealing a slowdown and acute spatial inequality in London, what are some of the challenges underlying these trends? While the productivity paradox is complex, there are several factors to highlight.

Housing affordability

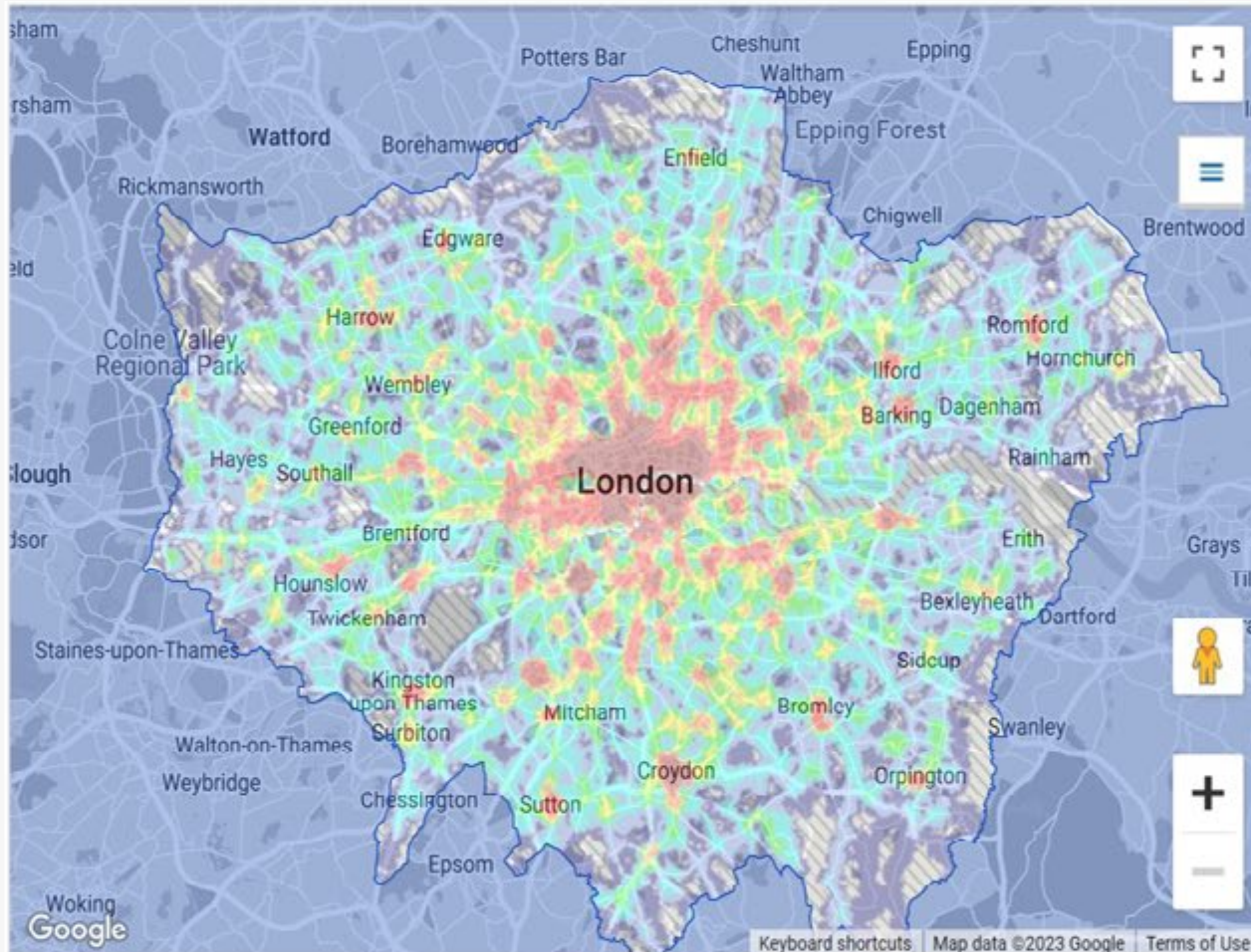
London's unaffordable housing market weighs heavily on its productivity. Unaffordable housing makes it less likely for workers to reside and work in London. Other things equal, this means a reduced quality and quantity of labour. Recent analysis by GLA Economics reveals that housing affordability has already begun to undermine public-sector recruitment and retention (Yousef, 2023).

Moreover, a shortage of affordable housing in central areas such as Inner London would limit workers' ability to move to productive places where high-wage jobs are concentrated. This erodes the benefits of efficient labour matching and agglomeration economies. It also means that people are less likely to afford and sustain housing costs: recent London Councils' research found that London has the equivalent of the population of Oxford living in temporary accommodation (Leppänen, 2023). Individuals with precarious housing are less likely to find and maintain employment (Swami, 2018), and are less likely to invest in their human capital.

Public transport accessibility

The United Kingdom under-invests in public transportation and infrastructure compared to G7 countries. For example, OECD data for 2021 shows that UK investment in infrastructure lags that of France, Germany, Japan, and the United States. Looking specifically at London, one observes inequality in public transport accessibility levels in Greater London, with Outer London having much lower accessibility than Inner London (figure 6).

Figure B6 Public Transport Accessibility Levels (PTALs) in Greater London



Source: Transport for London.
Note: PTAL rates locations by distance from frequent public transport services.

Greater transport accessibility could help people secure jobs, reduce unemployment and inactivity, facilitate access to public services, and allow economic agents to interact more efficiently.

Research and development (R&D) spending

The United Kingdom has been lagging most G7 economies in R&D spending over the past decade. According to the Institute for Public Policy Research, ‘the UK share of global research and development (R&D) investment has fallen by a fifth since 2014’ (Nanda et al., 2022). In addition, OECD data shows that in 2019, the United Kingdom ranked 11th out of OECD countries in terms of R&D investment as a percentage of GDP, with 2021 data showing that the United Kingdom (2.9 per cent) lagged the United States (3.5 per cent), Germany (3.1 per cent) and Japan (3.3 per cent).

As the UK Department for Business, Energy and Industrial Strategy noted, ‘Higher levels of R&D investment…could lead to growth in economic productivity and prosperity through the adoption of new products and services and the creation of new high-wage jobs, tackling

some of the big challenges of today and tomorrow's societies in improving health, the environment, and living standards overall' (BEIS/NIESR, 2021).

Business investment

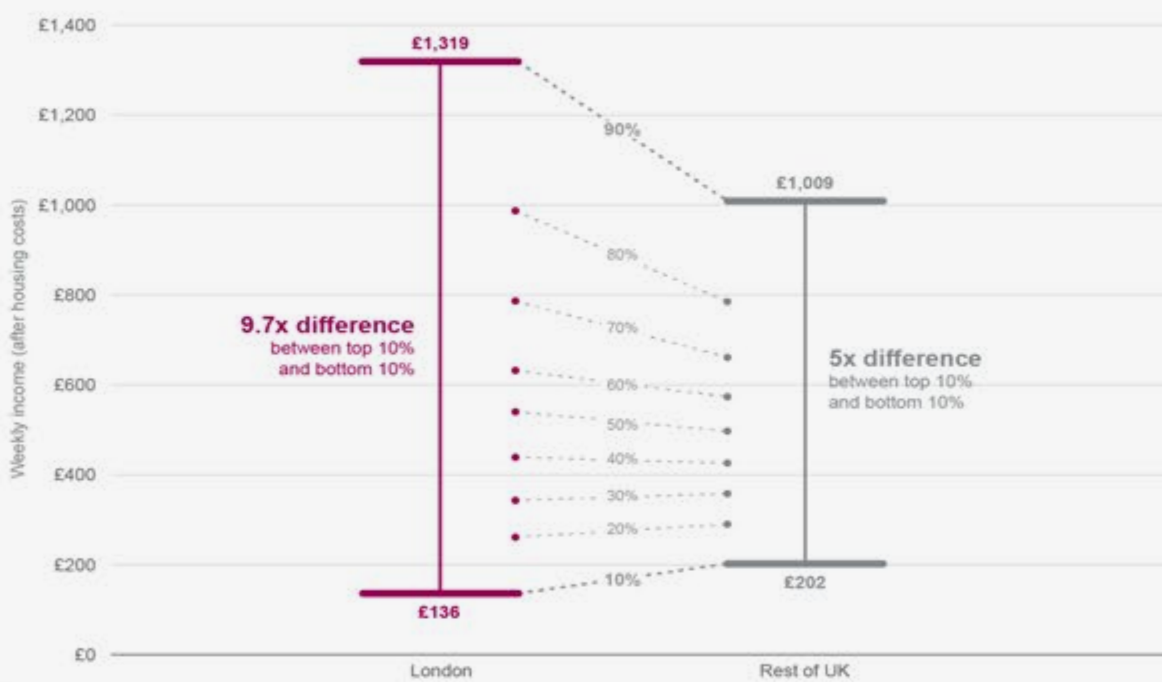
Both London and the United Kingdom have also been suffering from chronic business underinvestment. For example, OECD data reveals that the share of GDP dedicated to capital formation has been low in the United Kingdom compared to the United States, Japan, Germany and France in most years since 1980, and the gap has widened since the late 2000s.

Meanwhile, within the United Kingdom, ONS data shows that investment growth in London between 2008 and 2019 (41 per cent) was slower than all other UK regions except the Northwest (39 per cent) and Yorkshire and The Humber (27 per cent).

Income and wealth inequality

Another challenge is London's acute income inequality. Figure 7 shows that the gap between the top and bottom income deciles in London is nearly 10 times, compared to 5 times for the United Kingdom.

Figure B7 Income inequality, London and rest of the United Kingdom, 2019/20-2021/22



Source: Department for Work and Pensions and GLA.

More research is pointing out the positive role a more equal income distribution could have on economic growth. For example, the World Economic Forum's Social Mobility Report (2020) finds that increasing social mobility, a key driver of income equality, by 10 per cent would boost economic growth by nearly 5 per cent over the next decade. The same report

estimated that the United Kingdom's relatively low social mobility and high inequality will cost the country nearly US$130 billion (£102 billion) in additional GDP from 2020-2030 (WEF. 2020). Moreover, IMF research also shows that excessive inequality is associated with lower economic growth (IMF, 2017).

Could we solve this paradox?

As we have already seen, capturing and measuring productivity is notoriously difficult, and this continues to limit our ability to solve the problem. Nevertheless, there are several things we could point out:

1. Any solution would require a systemic approach that goes beyond partial measures such as rebalancing housing supply and demand and R&D investment. It is interesting to note that London's low productivity spell coincided with the period immediately after the 2008 GFC – around the time the Bank of England introduced its Quantitative Easing programme. Any solution would have to consider, for example, the effect of monetary policy on productivity and growth. It would also need to include major employers, universities, start-ups, local authorities, and central government.
2. Coordination across multiple tiers of governments (central, regional/combined authorities, and boroughs) is necessary to develop a harmonious strategy that aligns national objectives with local requirements. A Productivity Commission could be established that would coordinate action across government tiers and ensure synergy across multiple fronts. The example of Australia's Productivity Commission could serve as a reference (Australian Government, 2023).
3. Any solution would also require us to address existing data constraints and outstanding questions, such as quantifying the economic contribution that affordable housing could make to productivity and developing better ways to measure total factor productivity.

All to say that solving this paradox, while arduous, is not impossible. Bill Gates once quipped that most people overestimate what they can do in one year and underestimate what they can do in ten, and this may well apply to efforts to solve London's productivity paradox.

References

Australian Government (2023). 'Productivity Commission', Home - Productivity Commission (pc.gov.au)

Department for Business, Energy, and Industrial Strategy (2021). 'From ideas to growth: Understanding the drivers of innovation and productivity across firms, regions and industries in the UK'. BEIS Research Paper Number 2021/041, in association with NIESR, From ideas to growth: understanding the drivers of innovation and productivity in the UK (publishing.service.gov.uk)

GLA City Intelligence (2023). 'The State of London: A review of London's economy and society', State of London - London Datastore

IMF (October 2017). 'IMF Fiscal Monitor: Tackling Inequality', IMF Fiscal Monitor: Tackling Inequality, October 2017

Leppänen, A. (2023). 'One in 50 Londoners are now homeless and living in temporary accommodation'. London Councils, One in 50 Londoners are now homeless and living in temporary accommodation, August 2023 | London Councils

Nanda, S., Thomas, C., and Dibb, G. (2022). 'UK lags £62 billion behind in R&D as its global share of investment falls'. Institute for Public Policy Research, UK lags £62 billion behind in R&D as its global share of investment falls, IPPR reveals | IPPR

Concluding reflections ahead of the Autumn Statement

What can be done? The United Kingdom needs a convincing vision of national renewal, allied with a long-term programme of public investment in both physical and digital infrastructure as well as in human knowledge and skills and public services, notably housing and health plus social care. As the Chancellor of the Exchequer prepares to deliver the Autumn Statement on 22 November 2023, the yardstick we should apply to the government's plans is, first of all, whether policy reduces uncertainty and thereby helps boost business investment on which growth, productivity and living standards depend (Chadha and Samiri, 2022) and, second, whether there is a credible commitment to raise public investment not just to 2 per cent of GDP per annum but to 3 per cent, as we argued in our Summer 2023 Outlook (Bhattacharjee et al., 2023c). This will require a rethink of the fiscal framework (Chadha et al., 2021), complementing the targets for deficit and debt with a focus on public sector net worth and a target for public investment of 3 per cent of GDP per annum.

Specifically, NIESR's analysis of the Autumn Statement will ascertain whether the Government's key announcements help cushion the impact on the hardest hit households and the most economically and socially deprived regions. In the run-up to the next General Election, we will assess the Government's and the opposition parties' plans against the fundamental economic and social needs of the country in terms of investment, affordable housing, education, training, health and social care, energy security and a viable transition to net zero. Together with NIESR's macroeconomic, regional and household-level models, our Nuffield Trust funded regional dashboard and regeneration index will provide valuable data on the "levelling up" missions into the public domain and continuously track progress on these and other stated objectives.

The United Kingdom's economic woes of sluggish growth, flatlining productivity, low investment and falling living standards are by no means inevitable, and there are constructive alternatives. Who will have the courage to develop a programme of transformative policies? And how to create sustained, top-level political will and leadership that is necessary to challenge the old orthodoxy and bring about national renewal?

References

Aitken, A., Dolton, P. and Riley, R. (2019), 'The Impact of the Introduction of the National Living Wage on Employment, Hours and Wages', NIESR Discussion Paper No. 501, 21 February, https://www.niesr.ac.uk/wp-content/uploads/2021/10/DP501-4.pdf?ver=ULapet6N4iTqfF0ST1Js

Ashworth, L. (2023), 'Trying to make sense of the UK's sudden economic correction: Another run on the national statistics rollercoaster', The Financial Times, 1 September 2023, https://www.ft.com/content/7b95e3d9-c5a1-42d5-84a8-921c9088ca1c

Bhattacharjee, A. and Lisauskaite, E. (2020). Covid-19 impacts on destitution in the UK. National Institute Economic Review, 253 (August 2020), R77-R85.

Bhattacharjee, A., Pabst, A. and Szendrei, T. (2022), 'The Northern Ireland Protocol – Lost Opportunities for Northern Ireland', Box F, in National Institute UK Economic Outlook – National Institute of Economic and Social Research, November 2022, https://www.niesr.ac.uk/wp-content/uploads/2022/11/NIESR-UK-Economic-Outlook-Autumn-2022-final-1.pdf

Bhattacharjee, A., Mosley, M., Pabst, A. and Szendrei, T. (2023a), 'UK Regional Outlook: Winter 2023 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, February 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/02/NIESR-Outlook-Winter-2023-UK.pdf

Bhattacharjee, A., Mosley, M., Pabst, A. and Szendrei, T. (2023b), 'UK Regional Outlook: Spring 2023 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, May 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/05/Spring-2023-UK-Economic-Outlook.pdf

Bhattacharjee, A., Mosley, M., Pabst, A., Smith, R. and Szendrei, T. (2023c), 'UK Regional Outlook: Summer 2023 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, August 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/08/JC737-NIESR-Outlook-Summer-2023-UK-v10-AC.pdf

Burnside, S. (2023), 'Decline in permanent posts but starting salary inflation climbs to three month high, according to latest Scottish Labour Market Report', Scottish Business News, 11 October 2023, https://scottishbusinessnews.net/decline-in-permanent-posts-but-starting-salary-inflation-climbs-to-three-month-high-according-to-latest-scottish-labour-market-report/

Campbell, J. (2023), 'Northern Ireland economy growth faster than UK average, figures show', BBC News Northern Ireland, 29 June, https://www.bbc.co.uk/news/world-europe-66050860

Carberry, N. (2023), UK Report on Jobs: Permanent staff appointments fall at softer pace in September. KPMG and REC, 11 October 2023, https://prismrecruitment.co.uk/wp-content/uploads/2023/10/GB_Jobs_ENG_2310_PANEL-October-2023.pdf

Chadha, J.S. (2022), 'Fixing the Mix', National Institute Economic Review, 260, pp. 1-3, https://www.cambridge.org/core/journals/national-institute-economic-review/article/fixing-the-mix/7A1EE5AA034E89B9F13E3AD6AEDCC019

Chadha, J.S. (2023a), 'The Missing Link: Modelling Potential Output at the OBR', NIESR note, 14 March, https://www.niesr.ac.uk/wp-content/uploads/2023/03/The-Missing-Link-Modelling-Potential-Output-at-the-OBR.pdf

Chadha, J.S. (2023b), Ronald Tress Memorial Lecture: What Went Wrong with 21st-Century Economic Policy – A View from Westminster, 10 May 2023, https://www.niesr.ac.uk/events/ronald-tress-memorial-lecture-what-went-wrong-21st-century-economic-policy-view-westminster

Chadha, J.S. (2023c), 'Fixing the mix', Commentary Election '24, Academy of Social Sciences, October, https://acss.org.uk/fixing-the-mix/

Chadha, J.S. and Samiri, I. (2022), Macroeconomic Perspectives on Productivity, Working Paper 030, The Productivity Institute, https://www.productivity.ac.uk/wp-content/uploads/2022/12/WP030-Macroeconomic-Perspectives-FINAL-131222.pdf

Chadha, J.S., Küçük, H. and Pabst, A. (2021), Designing a New Fiscal Framework: Understanding and Confronting Uncertainty, NIESR Occasional Paper LXI, London: National Institute of Economic and Social Research, April, https://www.niesr.ac.uk/wp-content/uploads/2021/10/Designing-a-New-Fiscal-Framework-Full-Report-4.pdf

Chowdhury, R. and Mosley, M. (2023), Spotlight 1: The Impact of Rising Interest Rates on Housing Costs, NIESR Summer 2023 Outlook, https://www.niesr.ac.uk/wp-content/uploads/2023/08/JC737-NIESR-Outlook-Summer-2023-UK-v10-AC.pdf

Devlin, A., Hastings, T. and Shuttleworth, I. (2023), Economic Inactivity in Northern Ireland, Queen's University Belfast, October 2023, https://www.economy-ni.gov.uk/publications/economic-inactivity-northern-ireland

DLUHC (2022), Levelling Up the United Kingdom, Department for Levelling Up, Housing and Communities, 2 February, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1052064/Levelling_Up_White_Paper_HR.pdf

Edgar, M. (2023), Scots Financial Services Strategy to Push GVA to £21bn, Digit News, 27 October 2023, https://www.digit.fyi/scots-financial-services-strategy-to-push-gva-to-21bn/

Fitzpatrick, S., Bramley, G., Treanor, M., Blenkinsopp, J., McIntyre, J., Johnsen, S. and McMordie, L. (2023), Destitution in the UK 2023, Joseph Rowntree Foundation, 24 October 2023, https://www.jrf.org.uk/report/destitution-uk-2023

Giles, C. (2023), 'The UK's 'official' labour data is becoming a nonsense, The Financial Times, 25 October 2023, https://www.ft.com/content/d6bdfe59-af9a-427a-8d10-f8b58be60593

Hayward, K. and McStravick, J. (2023), 'The Windsor Framework: What it is and what it might do', Box B, in National Institute UK Economic Outlook – National Institute of Economic and Social Research, August 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/08/JC737-NIESR-Outlook-Summer-2023-UK-v10-AC.pdf

HMG (2023), Our Long-Term Plan for Towns, HMG and DLUHC, October, https://assets.publishing.service.gov.uk/media/651d637c6a6955000d78b2de/Long-Term_Plan_for_Towns.pdf

Hunt, J. (2023), Speech to the 2023 Conservative Party Conference, https://www.ukpol.co.uk/jeremy-hunt-2023-speech-to-conservative-party-conference/

Jones, E.-L. (2023). New study reveals the best cities in the UK for job opportunities. fe news, 2 February 2023, https://www.fenews.co.uk/work-leadership/new-study-reveals-the-best-cities-in-the-uk-for-job-opportunities/

Kennedy, J. (2023), September 2023 UK Labour Market Update: Real Wage Growth Brings Belated Good News for Workers, Hiring Lab Economic Research, Indeed, 26 September 2023, https://www.hiringlab.org/uk/blog/2023/09/26/september-2023-uk-labour-market-update/

LPC (2023), The National Minimum Wage in 2023 and forecast National Living Wage in 2024, Low Pay Commission, March, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147845/The_National_Minimum_Wage_in_2023.pdf

Magrini, E. and Adrjan, P. (2021). Where in the UK Is Job Posting Recovery Strongest?, Hiring Lab Economic Research, Indeed, 22 April 2021, https://www.hiringlab.org/uk/blog/2021/04/22/uk-job-posting-recovery-by-area/

Make UK/BDO (2023), 'UK Regions and Nations see manufacturing jobs boost – But Labour challenges remain with vacancies unfilled', Make UK/BDO Annual Manufacturing Outlook Report, 3 July, https://www.bdo.co.uk/en-gb/news/2023/uk-regions-and-nations-see-manufacturing-jobs-boost-make-uk-bdo-report

McCann, P. (2016), The UK Regional-National Economic Problem: Geography, Globalisation and Governance, London: Routledge.

McCann, P. (2020), 'Perceptions of regional inequality and the geography of discontent: insights from the UK', Regional Studies, Vol. 54, pp. 256-67.

NIESR (2016), LINDA: A dynamic microsimulation model for analysing policy effects on the evolving population cross-section.

Nye Cominetti (2023), Flying blind? The case of the missing employment data, October 17, Resolution Foundation, https://www.resolutionfondation.org/comment/flying-blind/

Recruitment and Employment Confederation (2023). Labour Market Tracker, 29 September 2023. https://www.rec.uk.com/our-view/research/labour-market-tracker

Rice, C. (2023), NI economy: About half of businesses see demand slow down, BBC Northern Ireland, 30 October 2023, https://www.bbc.co.uk/news/uk-northern-ireland-67219703

Riley, R. and Bondibene, C. R. (2015), 'Raising the standard: Minimum wages and firm productivity', NIESR Discussion Paper No. 449, May, https://www.niesr.ac.uk/wp-content/uploads/2021/10/Minimum-wages-and-firm-productivity-NIESR-DP-449-4.pdf?ver=DPwovJAfZi5MFWcIU07z

Rodríguez-Pose, A. (2017), 'The revenge of the places that don't matter (and what to do about it)', Cambridge Journal of Regions, Economy and Society, Vol. 11, no. 1, pp. 189-209.

Shaw, J. (2023), 'Councils are the victims not the cause of their poor finances: National government blames local mismanagement, but the problems in local authorities stem from years of underinvestment', The New Statesman, 11 October, https://www.newstatesman.com/spotlight/2023/10/councils-victims-not-cause-poor-finances

Stansbury, A., Turner, D. and Balls, E. (2023), 'Tackling the UK's regional economic inequality: Binding constraints and avenues for policy intervention', Mossavar-Rahmani Center for Business & Government, Harvard Kennedy School Associate Working Paper Series No. 198 (March), https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/files/198_AWP_final.pdf

Turner, D., Weinberg, N., Elsden, E. and Balls, E. (2023), 'Why Hasn't UK Regional Policy Worked? The Views Of Leading Practitioners', Mossavar-Rahmani Center for Business & Government and Harvard Kennedy School Associate Working Paper Series No. 216 (October), https://www.hks.harvard.edu/sites/default/files/centers/mrcbg/files/Final_AWP_216.pdf

Webber, J. (2023), 'Northern Ireland steps up its pitch for investment', The Financial Times, 24 October 2023, https://www.ft.com/content/6b2ae009-8b46-4a4b-b1b9-ba4ac18258ec

Williams, C. (2023), 'Scotland economy: Fall in young people starting apprenticeships', The Herald, 31 October 2023, https://www.heraldscotland.com/news/23890164.scotland-economy-fall-young-people-starting-apprenticeships/

Forecast tables:

Table A1 Exchange rates and interest rates

	UK exchange rates			FTSE All-share index	10-year gilts	World[a]	Bank Rate[b]
	Effective 2017=100	Dollar	Euro				
2018	101.9	1.34	1.13	2937	1.40	2.00	0.75
2019	101.4	1.28	1.14	2898	0.90	2.10	0.75
2020	101.9	1.28	1.13	2537	0.30	0.90	0.10
2021	106.7	1.38	1.16	2900	0.80	1.10	0.13
2022	104.4	1.24	1.17	2953	2.40	2.20	2.83
2023	*105.6*	*1.24*	*1.15*	*3011*	*4.10*	*5.10*	*5.25*
2024	*105.9*	*1.22*	*1.15*	*3278*	*4.20*	*5.90*	*5.10*
2025	*105.3*	*1.22*	*1.15*	*3740*	*3.80*	*5.00*	*4.48*
2026	*104.7*	*1.21*	*1.14*	*4082*	*3.60*	*4.20*	*3.87*
2027	*104.2*	*1.20*	*1.13*	*4321*	*3.40*	*3.80*	*3.25*
2028	104.2	1.20	1.13	4502	3.40	3.70	3.25
2023Q1	*102.7*	*1.22*	*1.13*	*3076*	*3.40*	*4.20*	*3.85*
2023Q2	*105.6*	*1.25*	*1.15*	*3040*	*4.00*	*4.80*	*4.45*
2023Q3	*107.8*	*1.27*	*1.16*	*2969*	*4.40*	*5.50*	*5.16*
2023Q4	*106.1*	*1.22*	*1.16*	*2958*	*4.50*	*6.10*	*5.25*
2024Q1	*106.1*	*1.22*	*1.16*	*3075*	*4.40*	*6.10*	*5.25*
2024Q2	*106.1*	*1.22*	*1.16*	*3224*	*4.30*	*6.00*	*5.25*
2024Q3	*105.9*	*1.22*	*1.15*	*3340*	*4.20*	*5.80*	*5.25*
2024Q4	*105.7*	*1.22*	*1.15*	*3473*	*4.00*	*5.60*	*5.10*
2025Q1	*105.5*	*1.22*	*1.15*	*3594*	*4.00*	*5.40*	*4.94*
2025Q2	*105.4*	*1.22*	*1.15*	*3695*	*3.90*	*5.20*	*4.79*
2025Q3	*105.2*	*1.22*	*1.15*	*3794*	*3.80*	*4.90*	*4.63*
2025Q4	*105.1*	*1.21*	*1.14*	*3878*	*3.70*	*4.70*	*4.48*
Percentage changes							
2018/2017	1.9	3.6	-1.0	0.3			
2019/2018	-0.5	-4.4	0.9	-1.3			
2020/2019	0.5	0.5	-1.3	-12.5			
2021/2020	4.7	7.2	3.3	14.3			
2022/2021	-2.2	-10.1	0.9	1.8			
2023/2022	*1.2*	*0.0*	*-2.0*	*1.9*			
2024/2023	*0.4*	*-1.6*	*0.4*	*8.9*			
2025/2024	*-0.6*	*-0.1*	*-0.7*	*14.1*			
2026/2025	*-0.6*	*-0.4*	*-0.6*	*9.2*			
2027/2026	*-0.4*	*-0.5*	*-0.5*	*5.9*			
2028/2027	*0.0*	*-0.1*	*-0.1*	*4.2*			
2023Q4/2022Q1	3.9	3.7	0.4	2.4			
2024Q4/2023Q1	*-0.3*	*0.0*	*-0.4*	*17.4*			
2025Q4/2024Q1	*-0.6*	*-0.2*	*-0.7*	*11.7*			

Notes: [a] Weighted average of central bank intervention rates in OECD economies. [b] End of period.

Table A2 Price indices (2019=100)

	Unit labour costs	Imports deflator	Exports deflator	World Oil Price ($)[a]	Consumption deflator	GDP deflator (market prices)	Consumer prices RPI[b]	Consumer prices CPI[c]	Consumer prices CPIH[d]
2018	97.4	98.6	98.2	70.4	98.5	97.9	97.5	98.2	98.3
2019	100.0	100.0	100.0	63.7	100.0	100.0	100.0	100.0	100.0
2020	113.0	98.5	99.6	43.0	100.6	105.3	101.5	100.8	101.0
2021	109.2	103.9	100.5	69.9	102.8	105.0	105.6	103.5	103.5
2022	112.3	120.4	115.3	97.2	110.9	110.4	117.8	112.8	111.7
2023	*120.3*	*118.2*	*117.2*	*83.1*	*119.5*	*119.4*	*131.5*	*121.4*	*120.4*
2024	*128.5*	*120.3*	*122.3*	*91.4*	*126.7*	*127.5*	*142.4*	*126.5*	*127.5*
2025	*133.3*	*121.7*	*124.8*	*91.2*	*130.3*	*131.4*	*147.4*	*129.5*	*131.1*
2026	*137.4*	*124.3*	*127.4*	*92.4*	*133.0*	*134.1*	*150.9*	*131.9*	*133.7*
2027	*141.3*	*127.5*	*130.3*	*93.7*	*135.9*	*136.8*	*154.5*	*134.5*	*136.7*
2028	*144.9*	*130.4*	*132.9*	*94.9*	*139.0*	*139.8*	*158.7*	*137.2*	*139.7*
Percentage changes									
2018/2017	2.8	2.4	2.2	30.5	2.1	1.9	3.3	2.4	2.3
2019/2018	2.7	1.4	1.8	-9.6	1.5	2.1	2.6	1.8	1.7
2020/2019	13.0	-1.5	-0.4	-32.5	0.6	5.3	1.5	0.8	1.0
2021/2020	-3.3	5.4	1.0	62.6	2.2	-0.3	4.1	2.6	2.5
2022/2021	2.8	16.0	14.7	39.0	7.9	5.1	11.6	9.1	7.9
2023/2022	*7.1*	*-1.8*	*1.7*	*-14.5*	*7.7*	*8.1*	*11.6*	*7.6*	*7.7*
2024/2023	*6.9*	*1.7*	*4.3*	*10.0*	*6.0*	*6.9*	*8.3*	*4.2*	*5.9*
2025/2024	*3.7*	*1.2*	*2.0*	*-0.2*	*2.8*	*3.0*	*3.5*	*2.4*	*2.8*
2026/2025	*3.1*	*2.2*	*2.1*	*1.3*	*2.1*	*2.0*	*2.4*	*1.8*	*2.1*
2027/2026	*2.8*	*2.6*	*2.3*	*1.3*	*2.2*	*2.1*	*2.4*	*2.0*	*2.2*
2028/2027	*2.6*	*2.2*	*2.0*	*1.3*	*2.3*	*2.2*	*2.7*	*2.0*	*2.2*
2023Q4/2022Q1	8.4	-3.7	1.9	0.8	7.3	9.2	10.0	5.1	7.4
2024Q4/2023Q1	*4.3*	*1.6*	*2.7*	*3.8*	*4.2*	*4.5*	*6.1*	*3.9*	*4.2*
2025Q4/2024Q1	*3.6*	*1.7*	*2.0*	*1.3*	*2.3*	*2.3*	*2.8*	*2.0*	*2.3*

Notes: [a] Per barrel, average of Dubai and Brent spot prices. [b] Retail price index. [c] Consumer price index. [d] Consumer prices index, including owner occupiers' housing costs.

Table A3 Gross domestic product and components of expenditure (£ billion, 2019 prices)

	Final consumption expenditure		Gross capital formation		Domestic demand	Total exports[c]	Total final expenditure	Total imports[c]	Net trade	GDP at market prices[d]
	H-Holds & NPISH[a]	General govt.	Gross fixed investment	Changes in inventories[b]						
2018	1413	410	398	4	2223	693	2916	718	-26	2198
2019	1428	427	406	4	2265	707	2972	738	-31	2234
2020	1239	393	363	2	1997	626	2622	620	6	2003
2021	1331	452	390	5	2178	657	2834	658	-1	2176
2022	1400	463	421	-2	2281	713	2994	751	-38	2271
2023	*1406*	*458*	*431*	*-10*	*2284*	*703*	*2986*	*734*	*-31*	*2284*
2024	*1407*	*442*	*417*	*0*	*2266*	*714*	*2980*	*716*	*-1*	*2295*
2025	*1418*	*430*	*413*	*0*	*2260*	*740*	*3000*	*713*	*27*	*2318*
2026	*1432*	*426*	*416*	*0*	*2274*	*764*	*3038*	*720*	*44*	*2349*
2027	*1448*	*426*	*422*	*0*	*2296*	*790*	*3086*	*732*	*58*	*2385*
2028	*1470*	*429*	*428*	*0*	*2327*	*815*	*3142*	*748*	*67*	*2425*
Percentage changes										
2018/2017	2.0	0.6	-0.5		1.4	3.1	1.8	3.1		1.4
2019/2018	1.1	4.0	2.2		1.9	2.0	1.9	2.7		1.6
2020/2019	-13.2	-7.9	-10.8		-11.9	-11.5	-11.8	-16.0		-10.4
2021/2020	7.4	14.9	7.4		9.1	4.9	8.1	6.1		8.7
2022/2021	5.2	2.5	7.9		4.7	8.6	5.6	14.1		4.3
2023/2022	*0.4*	*-1.1*	*2.4*		*0.1*	*-1.4*	*-0.2*	*-2.3*		*0.6*
2024/2023	*0.1*	*-3.5*	*-3.2*		*-0.8*	*1.7*	*-0.2*	*-2.5*		*0.5*
2025/2024	*0.7*	*-2.7*	*-1.0*		*-0.2*	*3.5*	*0.7*	*-0.4*		*1.0*
2026/2025	*1.0*	*-1.0*	*0.9*		*0.6*	*3.4*	*1.3*	*1.0*		*1.3*
2027/2026	*1.1*	*0.1*	*1.3*		*1.0*	*3.4*	*1.6*	*1.7*		*1.5*
2028/2027	*1.5*	*0.8*	*1.4*		*1.4*	*3.1*	*1.8*	*2.1*		*1.7*
Decomposition of growth in GDP (percentage points)										
2016	2.3	0.1	0.9	-0.3	2.3	0.7	3.1	-1.2	-0.4	1.9
2017	1.2	0.1	0.6	0.3	1.7	2.0	3.7	-1.0	1.0	2.7
2018	1.3	0.1	-0.1	-0.5	1.4	0.9	2.4	-0.9	0.0	1.4
2019	0.7	0.7	0.4	0.0	1.9	0.6	2.5	-0.9	-0.3	1.6
2020	-8.5	-1.5	-2.0	-0.1	-12.0	-3.6	-15.6	5.2	1.7	-10.4
2021	4.6	2.9	1.3	0.2	9.0	1.4	10.6	-1.8	-0.4	8.7
2022	3.2	0.5	1.4	-0.3	4.8	2.9	7.3	-4.6	-1.7	4.3
2023	*0.3*	*-0.2*	*0.4*	*-0.3*	*0.1*	*-0.8*	*-0.3*	*1.2*	*0.3*	*0.6*
2024	*0.1*	*-0.7*	*-0.6*	*0.0*	*-0.8*	*0.5*	*-0.3*	*0.8*	*1.3*	*0.5*
2025	*0.5*	*-0.5*	*-0.2*	*0.0*	*-0.2*	*1.1*	*0.9*	*0.1*	*1.2*	*1.0*
2026	*0.6*	*-0.2*	*0.2*	*0.0*	*0.6*	*1.1*	*1.7*	*-0.3*	*0.7*	*1.3*

Notes: [a] Non–profit institutions serving households. [b] Including acquisitions less disposals of valuables and quarterly alignment adjustment. [c] Includes Missing Trader Intra–Community Fraud. [d] Components may not add up to total GDP growth due to rounding and the statistical discrepancy included in GDP.

Table A4 External sector

	Exports of goods[a]	Imports of goods[a]	Net trade in goods[a]	Exports of services	Imports of services	Net trade in services	Export price competitiveness[c]	World trade[d]	Terms of trade[e]	Current balance
	£ billion, 2019 prices[b]						2019=100			% of GDP
2018	361	500	-140	332	218	114	101.2	95.7	99.6	-3.9
2019	368	513	-145	339	225	114	100.0	100.0	100.0	-2.7
2020	323	450	-127	303	170	132	99.6	92.5	101.1	-2.8
2021	327	476	-149	330	182	148	102.4	100.5	96.8	-0.5
2022	356	519	-163	357	232	125	104.8	107.6	95.8	-3.2
2023	*335*	*483*	*-148*	*367*	*251*	*117*	*102.1*	*108.7*	*99.2*	*-5.8*
2024	*363*	*490*	*-127*	*351*	*226*	*126*	*105.1*	*112.1*	*101.7*	*-6.9*
2025	*388*	*504*	*-116*	*352*	*209*	*143*	*104.9*	*116.7*	*102.5*	*-5.5*
2026	*406*	*521*	*-115*	*359*	*199*	*159*	*104.5*	*121.7*	*102.5*	*-3.8*
2027	*422*	*538*	*-116*	*368*	*194*	*174*	*104.3*	*126.5*	*102.1*	*-2.5*
2028	*436*	*555*	*-119*	*379*	*193*	*186*	*104.4*	*130.7*	*101.9*	*-2.0*
Percentage changes										
2018/2017	0.5	0.6		6.0	9.5		3.0	3.8	-0.1	
2019/2018	2.1	2.6		1.9	3.0		-1.2	4.5	0.4	
2020/2019	-12.3	-12.4		-10.6	-24.2		-0.4	-7.5	1.1	
2021/2020	1.1	5.8		9.0	7.1		2.8	8.7	-4.2	
2022/2021	9.0	9.1		8.2	27.3		2.3	7.0	-1.1	
2023/2022	*-5.8*	*-6.9*		*2.9*	*7.9*		*-2.5*	*1.0*	*3.5*	
2024/2023	*8.3*	*1.4*		*-4.4*	*-9.9*		*2.9*	*3.1*	*2.6*	
2025/2024	*6.7*	*2.8*		*0.2*	*-7.4*		*-0.1*	*4.1*	*0.8*	
2026/2025	*4.7*	*3.4*		*1.9*	*-4.6*		*-0.4*	*4.3*	*-0.1*	
2027/2026	*3.9*	*3.2*		*2.7*	*-2.5*		*-0.2*	*3.9*	*-0.3*	
2028/2027	*3.3*	*3.2*		*2.9*	*-0.8*		*0.1*	*3.3*	*-0.2*	

Notes: [a] Includes Missing Trader Intra–Community Fraud. [b] Balance of payments basis. [c] A rise denotes a loss in UK competitiveness. [d] Weighted by import shares in UK export markets. [e] Ratio of average value of exports to imports.

Table A5 Household sector

	Average[a] earnings	Employee compensation	Total personal income	Gross disposable income	Real disposable income[b]	Final consumption expenditure	Saving ratio[c]	House prices[d]	Net worth to income ratio[e]
	£ billion, current prices				£ billion, 2019 prices		% of GDP	2019=100	
2018	96.4	1042	1809	1402	1424	1413	5.3	99.1	6.8
2019	100.0	1088	1881	1453	1453	1428	5.5	100.0	7.0
2020	100.3	1095	1887	1454	1445	1239	16.8	102.8	7.5
2021	104.9	1156	1988	1508	1467	1331	12.5	111.9	7.7
2022	111.4	1241	2134	1603	1445	1400	8.1	123.0	6.7
2023	*119.5*	*1337*	*2309*	*1747*	*1462*	*1406*	*8.9*	*123.5*	*5.9*
2024	*128.0*	*1436*	*2444*	*1854*	*1463*	*1407*	*9.1*	*118.9*	*5.8*
2025	*133.5*	*1504*	*2556*	*1939*	*1489*	*1418*	*10.0*	*117.8*	*5.7*
2026	*138.6*	*1571*	*2672*	*2021*	*1520*	*1432*	*10.9*	*118.9*	*5.7*
2027	*144.1*	*1640*	*2794*	*2095*	*1541*	*1448*	*11.1*	*121.5*	*5.6*
2028	*149.6*	*1710*	*2917*	*2204*	*1586*	*1470*	*12.2*	*124.8*	*5.4*
Percentage changes									
2018/2017	2.6	4.3	4.1	4.1	2.0	2.0		3.3	
2019/2018	3.8	4.4	4.0	3.6	2.1	1.1		0.9	
2020/2019	0.3	0.7	0.3	0.1	-0.5	-13.2		2.8	
2021/2020	4.6	5.6	5.3	3.7	1.5	7.4		8.8	
2022/2021	6.2	7.4	7.4	6.3	-1.5	5.2		9.8	
2023/2022	*7.2*	*7.7*	*8.2*	*9.0*	*1.2*	*0.4*		*0.4*	
2024/2023	*7.1*	*7.4*	*5.8*	*6.2*	*0.1*	*0.1*		*-3.7*	
2025/2024	*4.3*	*4.7*	*4.6*	*4.6*	*1.7*	*0.7*		*-0.9*	
2026/2025	*3.9*	*4.5*	*4.5*	*4.2*	*2.1*	*1.0*		*0.9*	
2027/2026	*3.9*	*4.4*	*4.6*	*3.7*	*1.4*	*1.1*		*2.1*	
2028/2027	*3.9*	*4.3*	*4.4*	*5.2*	*2.9*	*1.5*		*2.7*	

Notes: [a] Average earnings equals total labour compensation divided by the number of employees. [b] Deflated by consumers' expenditure deflator. [c] Includes adjustment for change in net equity of households in pension funds. [d] Office for National Statistics, mix–adjusted. [e] Net worth is defined as housing wealth plus net financial assets.

Table A6 Fixed investment and capital (£ billion, 2019 prices)

	Gross Capital Formation				User cost of capital (%)	Corporate profit share of GDP (%)	Capital stock	
	Business investment	Private housing[a]	General government	Total			Private	Public[b]
2018	224	108	66	398	12.7	24.8	3730	755
2019	229	110	68	406	12.9	24.6	3785	773
2020	204	89	69	363	13.0	24.3	3793	793
2021	208	105	77	390	10.5	24.3	3815	817
2022	228	115	78	421	10.0	25.2	3865	846
2023	*241*	*108*	*81*	*431*	*14.4*	*26.7*	*3933*	*873*
2024	*231*	*103*	*83*	*417*	*14.9*	*27.1*	*3981*	*900*
2025	*229*	*100*	*84*	*413*	*14.8*	*27.0*	*4022*	*927*
2026	*233*	*99*	*85*	*416*	*14.5*	*26.7*	*4063*	*953*
2027	*237*	*98*	*87*	*422*	*14.2*	*26.6*	*4105*	*979*
2028	*242*	*98*	*88*	*428*	*14.0*	*26.7*	*4149*	*1004*
Percentage changes								
2018/2017	-1.6	6.0	-6.1	-0.5			1.5	2.2
2019/2018	2.1	1.5	3.2	2.2			1.5	2.4
2020/2019	-10.6	-18.8	1.8	-10.8			0.2	2.6
2021/2020	2.0	17.6	10.6	7.4			0.6	3.0
2022/2021	9.6	9.4	1.4	7.9			1.3	3.5
2023/2022	*5.7*	*-5.9*	*4.7*	*2.4*			*1.8*	*3.2*
2024/2023	*-4.1*	*-5.0*	*1.8*	*-3.2*			*1.2*	*3.1*
2025/2024	*-1.1*	*-2.9*	*1.9*	*-1.0*			*1.0*	*3.0*
2026/2025	*1.6*	*-1.2*	*1.4*	*0.9*			*1.0*	*2.8*
2027/2026	*2.0*	*-0.6*	*1.4*	*1.3*			*1.0*	*2.7*
2028/2027	*2.0*	*-0.2*	*1.5*	*1.4*			*1.1*	*2.6*

Notes: [a] Includes private sector transfer costs of non–produced assets. [b] Including public sector non–financial corporations.

Table A7 Productivity and the labour market (thousands unless otherwise stated)

	Employment		ILO unemployment	Labour force[b]	Population of working age[c]	Productivity (2019=100) per hour	ILO unemployment rate
	Employees	Total[a]					
2018	27494	32439	1380	33819	41260	99.6	4.1
2019	27652	32799	1306	34105	41344	100.0	3.8
2020	27752	32509	1551	34060	41362	100.6	4.6
2021	28023	32407	1525	33931	41392	102.3	4.5
2022	28324	32744	1262	34006	41532	102.8	3.7
2023	*28456*	*32946*	*1459*	*34406*	*41678*	*102.7*	*4.2*
2024	*28533*	*33032*	*1663*	*34695*	*41853*	*103.1*	*4.8*
2025	*28643*	*33168*	*1725*	*34893*	*41994*	*103.7*	*4.9*
2026	*28807*	*33355*	*1717*	*35072*	*42105*	*104.4*	*4.9*
2027	*28946*	*33516*	*1724*	*35240*	*42197*	*105.5*	*4.9*
2028	*29058*	*33650*	*1758*	*35409*	*42288*	*106.7*	*5.0*
Percentage changes							
2018/2017	1.6	1.2	-6.5	0.9	0.2	0.5	
2019/2018	0.6	1.1	-5.4	0.8	0.2	0.4	
2020/2019	0.4	-0.9	18.8	-0.1	0.0	0.6	
2021/2020	1.0	-0.3	-1.7	-0.4	0.1	1.7	
2022/2021	1.1	1.0	-17.2	0.2	0.3	0.4	
2023/2022	*0.5*	*0.6*	*15.7*	*1.2*	*0.4*	*-0.1*	
2024/2023	*0.3*	*0.3*	*13.9*	*0.8*	*0.4*	*0.4*	
2025/2024	*0.4*	*0.4*	*3.8*	*0.6*	*0.3*	*0.6*	
2026/2025	*0.6*	*0.6*	*-0.5*	*0.5*	*0.3*	*0.7*	
2027/2026	*0.5*	*0.5*	*0.4*	*0.5*	*0.2*	*1.0*	
2028/2027	*0.4*	*0.4*	*2.0*	*0.5*	*0.2*	*1.2*	

Notes: [a] Includes self–employed, government–supported trainees and unpaid family members. [b] Employment plus ILO unemployment. [c] Population projections are based on annual rates of growth from 2018–based population projections by the ONS.

Table A8 Public sector financial balance and borrowing requirement (£ billion, fiscal years)

		2019–20	2020–21	2021–22	2022–23	2023–24	2024–25	2025–26	2026–27
Current receipts:	Taxes on income	495.7	566.8	631.5	713.4	770.9	812.8	858.9	906.1
	Taxes on expenditure	144.8	260.4	318.8	323.9	304.9	314.7	324.7	336.0
	Other current receipts	153.1	91.3	70.5	78.1	108.2	107.4	110.5	116.9
	Total	793.6	918.5	1020.8	1115.4	1183.9	1234.9	1294.1	1359.0
	(as a % of GDP)	36.9	38.0	39.0	39.9	40.0	40.0	40.2	40.7
Current expenditure:	Goods and services	495.8	512.7	525.0	567.3	577.2	583.5	596.1	616.1
	Net social benefits paid	262.9	261.6	280.7	348.0	358.9	367.9	367.9	346.6
	Debt interest	42.3	77.2	129.8	138.8	146.7	153.4	157.7	159.8
	Other current expenditure	180.8	86.1	107.9	60.1	65.9	67.8	69.0	70.0
	Total	981.8	937.6	1043.4	1114.2	1148.7	1172.6	1190.7	1192.4
	(as a % of GDP)	35.4	47.1	39.8	40.8	40.0	38.8	38.2	37.5
Depreciation		53.7	55.1	60.2	63.1	67.1	69.5	71.9	74.6
Surplus on public sector current budget[a]		-241.9	-74.2	-82.8	-61.9	-31.8	-7.2	31.5	92.0
(as a % of GDP)		-11.8	-3.2	-3.2	-2.2	-1.1	-0.2	1.0	2.8
Gross investment		123.6	111.2	110.7	167.8	163.7	165.0	164.4	166.0
Net investment		69.9	56.0	50.5	104.7	96.7	95.4	92.4	91.4
(as a % of GDP)		1.7	3.4	2.4	2.0	3.8	3.3	3.1	2.9
Total managed expenditure		1105.4	1048.8	1154.1	1282.0	1312.5	1337.6	1355.1	1358.5
(as a % of GDP)		39.4	53.0	44.5	45.2	46.0	44.3	43.6	42.7
Public sector net borrowing		311.8	130.3	133.3	156.1	134.1	97.8	54.4	-24.1
(as a % of GDP)		2.5	14.9	5.5	5.2	5.6	4.5	3.2	1.7
Public sector net debt (% of GDP)		81.1	100.9	97.8	96.9	95.2	94.5	92.6	90.7
GDP deflator at market prices (2019=100)		106.2	105.4	112.4	121.9	128.7	132.1	134.7	137.6
Money GDP (£ billion)		2086	2355	2556	2786	2961	3070	3176	3294

Notes: These data are constructed from seasonally adjusted national accounts data. This results in differences between the figures here and unadjusted fiscal year data. Data exclude the impact of financial sector interventions, but include flows from the Asset Purchase Facility of the Bank of England. [a] Public sector current budget surplus is total current receipts less total current expenditure and depreciation.

Table A9 Accumulation (percentage of GDP)

	Households		Companies		General government		Whole economy		Finance from abroad[a]		Net national saving
	Saving	Investment	Saving	Investment	Saving	Investment	Saving	Investment	Total	Net factor income	
2018	3.6	4.8	9.3	10.8	1.3	2.6	14.3	18.2	3.9	1.3	-0.5
2019	3.7	4.7	10.8	11.0	1.1	2.7	15.7	18.4	2.7	0.0	0.8
2020	12.2	4.3	10.8	10.1	-8.4	3.1	14.7	17.5	2.8	2.1	-1.6
2021	8.7	4.4	12.5	10.5	-3.8	3.1	17.5	17.9	0.5	-0.5	2.1
2022	5.5	4.7	11.2	10.9	-1.2	3.0	15.4	18.6	3.2	-0.5	0.4
2023	6.0	4.6	8.1	10.3	-1.0	4.0	13.2	19.0	5.8	3.6	-1.9
2024	6.1	4.5	5.8	10.4	0.4	4.3	12.3	19.2	6.9	6.2	-2.7
2025	6.7	4.4	4.9	10.3	1.5	4.0	13.1	18.6	5.5	6.2	-1.9
2026	7.4	4.3	4.6	10.4	2.7	3.8	14.7	18.5	3.8	5.2	-0.3
2027	7.6	4.3	3.5	10.5	4.8	3.7	15.9	18.4	2.5	4.3	0.9
2028	8.4	4.2	4.3	10.6	3.6	3.6	16.3	18.3	2.0	4.0	1.3

Notes: Saving and investment data are gross of depreciation unless otherwise stated. [a] Negative sign indicates a surplus for the UK.

Table A10 Medium– and long–term projections (percentage change unless otherwise stated)

	2022	2023	2024	2025	2026	2027	2028	2029-2033
GDP (market prices)	4.3	0.6	0.5	1.0	1.3	1.5	1.7	1.8
Average earnings	6.2	7.2	7.1	4.3	3.9	3.9	3.9	3.6
GDP deflator (market prices)	5.1	8.1	6.9	3.0	2.0	2.1	2.2	2.0
Consumer Prices Index	9.1	7.6	4.2	2.4	1.8	2.0	2.0	1.8
Per capita GDP	3.4	0.0	0.0	0.6	1.0	1.2	1.3	1.5
Whole economy productivity[a]	0.4	-0.1	0.4	0.6	0.7	1.0	1.2	1.4
Labour input[b]	3.6	0.7	0.3	0.5	0.6	0.5	0.5	0.4
ILO Unemployment rate (%)	3.7	4.2	4.8	4.9	4.9	4.9	5.0	5.1
Current account (% of GDP)	-3.2	-5.8	-6.9	-5.5	-3.8	-2.5	-2.0	-2.0
Total managed expenditure (% of GDP)	44.5	45.2	46.0	44.3	43.6	42.7	41.2	42.6
Public sector net borrowing (% of GDP)	5.5	5.2	5.6	4.5	3.2	1.7	-0.7	2.8
Public sector net debt (% GDP)	97.8	96.9	95.2	94.5	92.6	90.7	86.9	82.2
Effective exchange rate (2011=100)	104.4	105.6	105.9	105.3	104.7	104.2	104.2	104.5
Bank Rate (%)	1.5	4.7	5.2	4.7	4.1	3.5	3.3	3.3
10 year interest rates (%)	2.4	4.1	4.2	3.8	3.6	3.4	3.4	3.3

Notes: [a] Per hour. [b] Total hours worked.

Table A11 Gross Value Added by sector percentage change

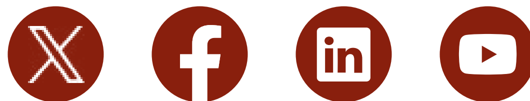
	2019	2020	2021	2022	2023	2024	2025	2026	2027
Utilities and agriculture	8.4	1.0	-14.4	-3.9	-0.7	1.0	2.1	3.0	2.5
Mining and quarrying	1.8	0.1	-23.4	-0.7	-12.8	-1.1	0.1	-0.1	-0.3
Manufacturing	0.5	2.2	1.6	-3.3	2.1	2.2	1.2	0.9	0.8
Construction	0.6	-12.6	9.8	6.5	2.3	-0.2	0.9	1.2	0.7
Public sector	2.1	-20.4	17.8	9.1	-0.4	-0.2	0.0	0.3	0.5
Private non-traded services	1.0	-17.4	15.3	5.0	-4.6	-3.7	1.5	1.5	1.5
Financial services	-2.7	-1.6	5.4	1.0	0.0	0.0	0.1	0.2	0.3
Imputed rent	1.4	0.3	1.4	1.1	0.8	0.3	0.5	0.6	0.6
Private traded services	4.0	-8.6	8.8	7.2	2.0	0.9	1.0	1.1	1.2
Total economy	1.8	-10	8.4	4.4	-0.2	-0.3	0.8	0.9	1

Notes: NiSEM database and forecast. Public sector is composed of Public administration and defence, compulsory social security (O), Education (P) and Human Health and Social Work activities (Q). Private non-traded services sector is composed of Wholesale and Retail Trade, Repair of Motor vehicles and Motorcycles (G), Accommodation and Food services (I), Arts, Entertainment and Recreation (S), Real Estate Activities excluding imputed rent (L-68.2IMP) and Activities of Households as Employers (T). Private traded sector is composed of Professional, Scientific and Technical Activities (M), Transport and Storage (H), Information and Communication (J) and Administrative and Support Services Activities (N).

Notes

Notes

Keep in touch with our range of blogs, events, policy and discussion papers



National Institute of Economic and Social Research
2 Dean Trench St
London SW1P 3HE
T: +44 (0)20 7222 7665
E: enquiries@niesr.ac.uk
W: niesr.ac.uk