National Institute of Economic and Social Research

National Institute UK Economic Outlook

Winter 2023

Series A. No. 9

National Institute UK Economic Outlook – Winter 2023
ISSN 2753-9350

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

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

Last week, the IMF published an update to its Autumn forecast that not only suggested world growth would continue to stay in the doldrums but also that the UK would be at the bottom of the pack and in a recession, over the course of 2023. On the same day, the Office for Budget Responsibility (OBR), published its annual assessment of its own forecast performance. The key take-away for many was that its forecasts had been too optimistic both on growth and on the path of public debt. The common theme to both messages is that the UK is underperforming relative to its historical experience and in comparison with its main trading partners. On that at least we can agree.

The day of those reports was also the third anniversary of the UK formally leaving the European Union, on 31 January 2020. And over the period since the referendum of 2016 the productive capacity of the economy seems to have been impaired. We can see this best in the fall in business investment relative to trend, and the slump in the rate of labour participation, with there now being as many vacancies as there are people unemployed. It is also increasingly clear that trade has been impaired, particularly for imports of capital and intermediate goods, and that may have contributed further to the lack of both capital and labour available for firms.

With Bank rate now up to 4 per cent from 0.1 per cent, just a little over a year ago, and inflation still awkwardly near to double digits, there is not a lot of joy around. The disaster of the mini-budget last Autumn not only injected further uncertainty into the mix, with the resulting political churn causing much consternation, but also led to a disconnect between bond prices and mortgage availability, which still persists to some extent and has acted to amplify the downward momentum in the economy. As a result, measures of confidence seem to be falling to a low ebb and that great barometer of British life, house prices, has started to fall.

So, what next for monetary and fiscal policy? First, our analysis of the current inflationary spiral, while predominantly the result of sharp increases in energy and food prices, cannot entirely absolve the Bank of England from some fault. While the loose monetary policies adopted after the financial crisis may have prevented a deeper and longer depression, the absence of a clear exit strategy when coupled with the response to Covid meant that the kindling had been laid for an increase in costs to fire up rapidly to a generalised inflation. In that sense, the Bank was slow to respond in 2021 to the gradually receding Covid cloud. And I am therefore worried that the Bank, having recognised this error, may feel a responsibility to act too aggressively to the jump in energy and food prices, which ultimately is a temporary inflation. The key here is to fix on a level for the policy rate that will bring inflation back to target over an 18 month or so horizon without inducing a protracted recession. If we can then keep that rate at around 3-4 per cent we would have done well to engineer some form of normalisation at last.

On fiscal policy, it is to be welcome that we have an earlier timetable for the Budget, which lies some 5 or so weeks away and that it has been established beyond reproach that the OBR should be allowed to report on any Chancellor's fiscal plans publicly. Expert economic institutions allow us to trust the judgements made on our behalf by politicians or, preferably, hand over the analysis of alternate choices to more capable hands. The Chancellors' speech on 27 January on his vision for the Tech future was compelling but lacked a specific plan for bringing about structural change and any way of measuring progress against these objectives. When we miss our debt or inflation targets, we know. Who will know when we are or are not meeting our targets for enterprise, education, employment and everywhere? And if we are not, what specifically are we going to do? Without a plan against which to monitor progress, that is seen to tie the hands of successive politicians, the focus of getting elected will lead predominantly to an absence of long-term improvements in our economic prospects.

Jagjit S. Chadha, Director, NIESR
February 2023

National Institute UK Economic Outlook – Winter 2023

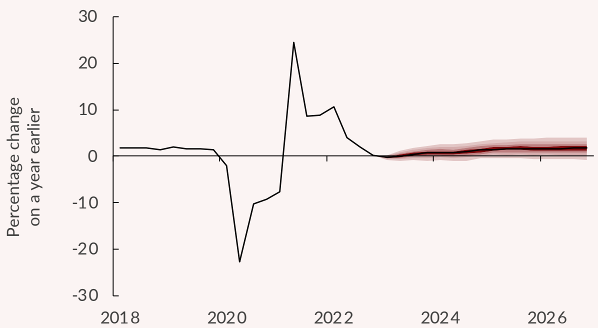
- The UK is likely to avoid a 'technical recession' in 2023. Though, with GDP growth set to remain close to zero in 2023 and real personal disposable income having contracted for four consecutive quarters, it will certainly feel like a recession for many. This makes clear the need to analyse a broader range of indicators – beyond GDP – that capture what we think matters from the point of view of households.
- The labour market remains strong; however, because of anaemic growth, we forecast a slow rise in unemployment in the coming year, peaking at around 4.7 per cent in the third quarter of 2024.
- Our view remains that the participation rate for the working-age population will return to its pre-Covid level over the course of the next few years as workers in the 50-64 age group return to the labour force, as they find their savings run down, and fewer workers retire early.
- Higher interest rates mean higher costs on lending for businesses, increasing the risk of lower business investment. This may affect the longer-term growth and productivity prospects for the United Kingdom.
- The current monetary policy tightening cycle has been aggressive in terms of the pace and magnitude of rate hikes and, given the lags in monetary policy transmission, will likely bear down on output and growth in 2024. But the annual inflation rates we've seen throughout the course of 2022 have made this a necessity.
- Given the MPC received criticism for not tightening quickly enough, it is possible that they will loosen too quickly to avoid the converse criticism. Equally, if the MPC errs on the side of caution with the pace of its loosening, and in doing so, aggravates recessionary risks by more than is warranted they may also face criticism. Once the MPC starts loosening, we expect the interest rate to return to a more 'normal' (ie, pre-Financial Crisis) level. This is dependent on the rate at which inflation, and core inflation, fall.
- The freezes in income tax thresholds will lower personal disposable income and the corporation tax rises will likely reduce investment in the economy. However, the Chancellor has laid a path to be able to meet his fiscal targets with headroom to spare. As it stands, the Chancellor will get borrowing under 3 per cent of GDP and underlying debt falling as a percentage of GDP in five years' time with £18.6 billion and £9.2 billion to spare, respectively.
- That said, public finances remain vulnerable to interest rate rises as well as further shocks to the economy. Indeed, the medium-term outlook for public finances has deteriorated since our Autumn Outlook due to a worsening outlook for GDP and higher inflation persistence. Having said that, a downward shift in the yield curve and the debt-devaluing effects of inflation will have contributed positively to the outlook for government finances.
- Although the political and economic turmoil of the autumn may have served as a warning to policymakers of the perils of reckless policy experimentation, we hope that this did not dilute the political will to conduct a necessary reform of this country's fiscal framework, as NIESR has continuously recommended.

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

	2019	2020	2021	2022	2023	2024	2025	2026	2027
GDP	1.6	-11.0	7.6	4.1	0.2	1.0	1.6	1.7	1.9
Per capita GDP	1.1	-11.4	7.2	3.7	-0.1	0.6	1.2	1.4	1.6
CPI Inflation	1.8	0.8	2.6	9.1	8.3	4.2	2.0	2.0	2.3
RPIX Inflation	2.5	1.7	4.2	11.3	8.8	4.6	2.6	2.7	3.0
RPDI	2.1	-1.3	1.3	-2.3	0.2	1.5	1.7	1.0	0.7
Unemployment, %	3.8	4.6	4.5	3.7	4.4	4.6	4.6	4.5	4.5
Bank Rate, %	0.8	0.2	0.1	1.5	4.3	3.7	3.3	3.3	3.3
Long Rates, %	0.9	0.3	0.8	2.4	3.5	3.3	3.3	3.3	3.3
Effective exchange rate	-0.5	0.5	4.7	-2.0	-2.4	-0.2	0.0	0.1	0.0
Current account as % of GDP	-2.9	-3.1	-1.5	-6.6	-8.5	-4.9	-3.0	-2.3	-1.8
Net borrowing as % of GDP	2.6	15.0	5.8	4.8	5.0	3.2	2.9	2.8	2.7
Net debt as % of GDP	80.8	100.7	98.5	96.2	95.1	94.4	91.6	89.6	87.7

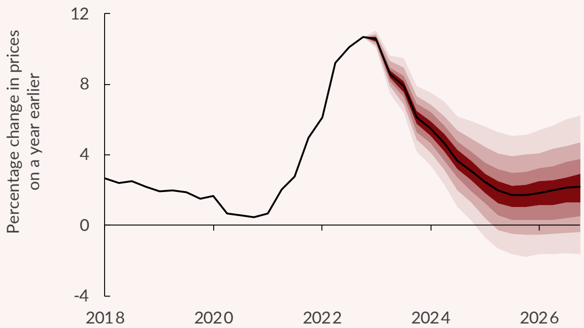
Note: Numbers reported are yearly averages except for net borrowing, which is reported for the full fiscal year, and net debt, which is reported for the end of the fiscal year.

Annual GDP



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.
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 Bank of England's CPI inflation target is 2 per cent per annum.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

1. The macroeconomic outlook for the United Kingdom

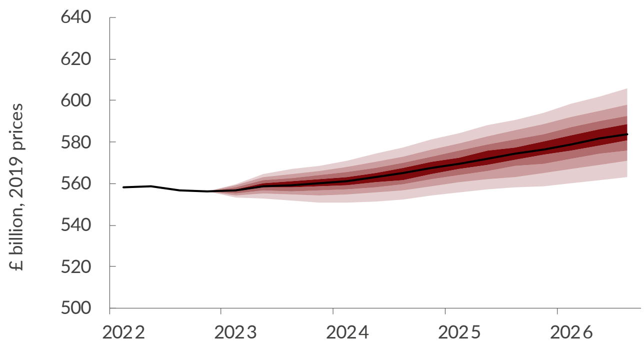
By Paula Bejarano Carbo, Hailey Low, Leaza McSorley, Stephen Millard, Urvish Patel and Kemar Whyte[1]

Economic background and forecast summary

In the period between our autumn and winter forecasts the UK economic outlook has somewhat stabilised. This is in part due a return to economic orthodoxy. Chancellor Hunt delivered an Autumn Statement on 17 November based, as convention, on Office for Budget Responsibility (OBR) forecasts and His Majesty's Treasury (HMT) financial costings. A demonstration that the UK Government is once again willing to work with, rather than rally against, our economic institutions.

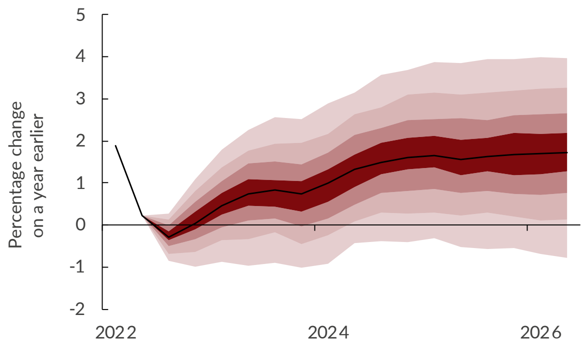
Compared to recent economic turmoil the intervening few months have appeared calm, with a better than forecast outturn in monthly GDP suggesting that the economy will grow in the fourth quarter of 2022, keeping the United Kingdom out of a 'technical recession', record low unemployment, and the Bank of England moderating slightly on its pessimistic November forecast. As noted in our recent GDP Tracker (Bejarano Carbo and Nowinska 2022) we now expect GDP to grow by 0.1 per cent in the fourth quarter of 2022 relative to the third quarter. However, is this apparent period of calm a lull before another economic storm?

Figure 1.1 GDP



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

Figure 1.2 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.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

Our central case forecast for 2023 is cautiously optimistic in so far as the GDP outlook remains relatively favourable, with the United Kingdom avoiding a 'technical recession' (Figures 1.1 and 1.2). Nonetheless we are only expecting anaemic growth in GDP (0.2 per cent in 2023 relative to 2022) and, given that, the continuing 'cost-of-living' crisis, and the possibility of rising unemployment, households will likely feel that they are 'experiencing' a recession. Indeed, we are currently forecasting GDP in the first quarter of 2023 to be lower than it was in the first quarter of 2022. This suggests it may be more useful to think in terms of a broader definition of recessions along the lines suggested by, eg, the National Bureau of Economic Research (NBER) Business Cycle Dating Committee and the UK Business Cycle Dating Committee (Broadberry et al., 2022), who define a recession as a significant decline in economic activity spread across the economy, lasting more than a few months.

1 The authors are grateful to Bart van Ark, Barry Naisbitt and Jagjit Chadha for helpful comments, and to Joanna Nowinska for preparing the charts and the database underlying the forecast. The forecast was completed on 23 January 2023 and is based on financial markets data up to and including 19 January; more recent data is incorporated in the text. Unless otherwise specified, the source of all data reported in tables and figures is the NiGEM database and NIESR forecast baseline. All questions and comments related to the forecast and its underlying assumptions should be addressed to Kemar Whyte (enquiries@niesr.ac.uk).

Over and above the anaemic growth we are expecting in GDP, the downside risks are building with the main threats to the UK outlook being the tightening of households' disposable income bearing down further on consumption and increasing borrowing costs for business leading to weak business investment.

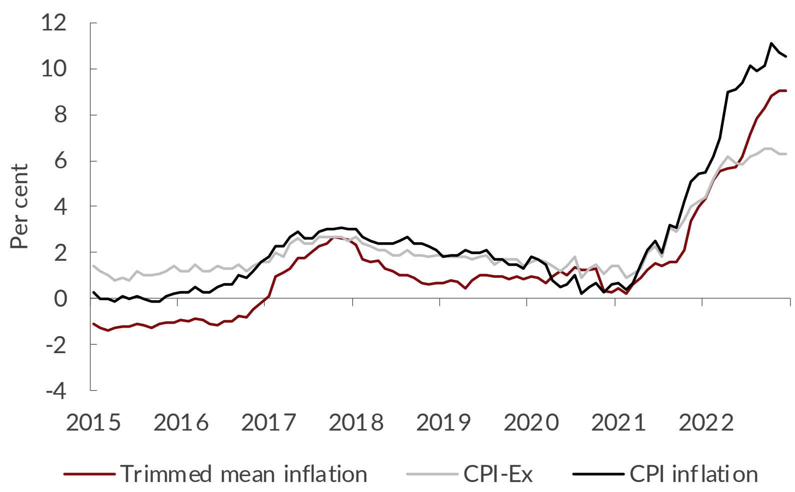
Real personal disposable income contracted for the fourth consecutive quarter, despite government transfers to help with high energy costs and higher nominal pay rises, raising the question of how long consumption and living standards can be maintained before many more households reach crisis point? Our forecast shows improvements to disposable income in the coming year. However, this is contingent on how quickly inflation slows and the degree to which government transfers to businesses and households are gradually withdrawn, rather than suddenly stopped. The timing of reductions in support to household and business to help with the cost-of-living crisis is key to maintaining consumption and growth in the UK economy.

The second main risk to the forecast is that businesses are facing rising borrowing costs, which poses a risk to already under par UK business investment. This may hamper efforts to boost UK productivity, posing a downside risk to long term potential output.

Overall, although the United Kingdom is likely to avoid a 'technical recession' there are early warning signs of a softening on the demand side (consumption and investment) and on the supply side (productivity growth), indicating a potential shift to a lower equilibrium level of output. Thus, as the United Kingdom emerges from a particularly politically and economically volatile Autumn, we should turn our attention to the underlying economic risks going into Winter and the rest of 2023. But questions remain to be answered as to how the UK moves from stabilisation to growth and prosperity.

Twelve-month Consumer Price Index (CPI) inflation fell to 10.5 per cent in December from 10.7 per cent in November. Despite two months of welcome falls in the headline rate, annual inflation remains among the highest in four decades and markedly above the Bank of England's inflation target of 2 per cent, the seventeenth consecutive month inflation has been above target. As shown in Figure 1.3, though the external inflationary shock to food and energy prices caused by the Russian invasion of Ukraine steepened the path of inflation over the course of 2022, there are signs that inflation has become more persistent and broad-based than previously thought. In December, CPI inflation excluding food, alcoholic beverages and tobacco and our trimmed-mean measure of CPI inflation remained at 6.3 per cent and 9.0 per cent, respectively, for the second month in a row. As discussed in our January 2023 CPI Tracker (Bejarano Carbo, 2023), these measures of 'core' or underlying inflation suggest that, despite falls in the headline figure, inflationary pressures may not yet have cooled in the UK economy.

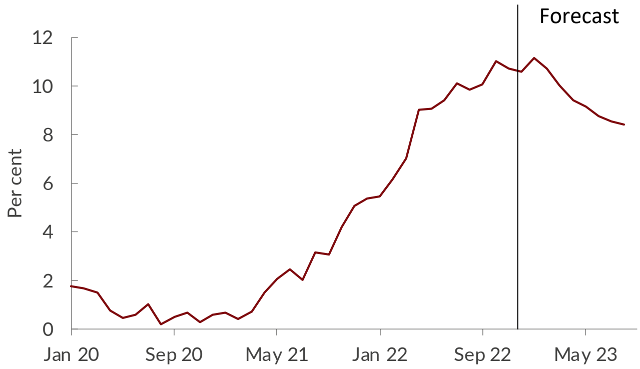
Figure 1.3 Annual CPI inflation and measures of core inflation



Source: ONS, NIESR calculations.
Note: CPI-Ex refers to CPI inflation excluding energy, food, alcoholic beverages, and tobacco. Trimmed mean inflation is measured by excluding 5 per cent of the highest and lowest price changes in the CPI calculation.

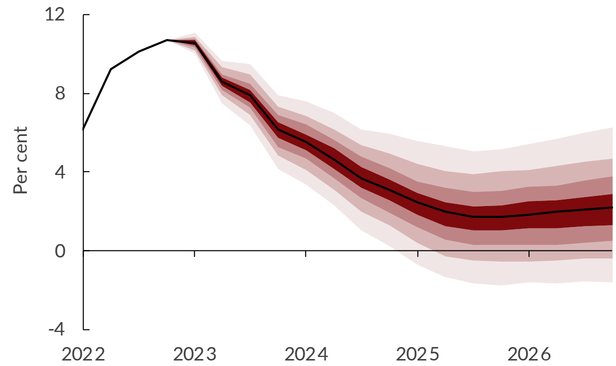
As a result of the high and persistent core inflation, and the likely higher wage inflation resulting, in part, from the current wave of industrial unrest, we continue to expect inflation to remain persistently above target. Specifically, we expect CPI inflation to fall only to 5.3 per cent by the end of 2023 and not reach the Bank of England's target of 2 per cent until the third quarter of 2025 (Figures 1.4 and 1.5). Although interest rate hikes may almost have finished, if core inflation remains high, interest rates may have to remain at their peak for a longer period than we and the markets currently anticipate with implications for government debt interest costs and the debt to GDP ratio.

Figure 1.4 Annual CPI inflation



Source: ONS, NIESR forecast.

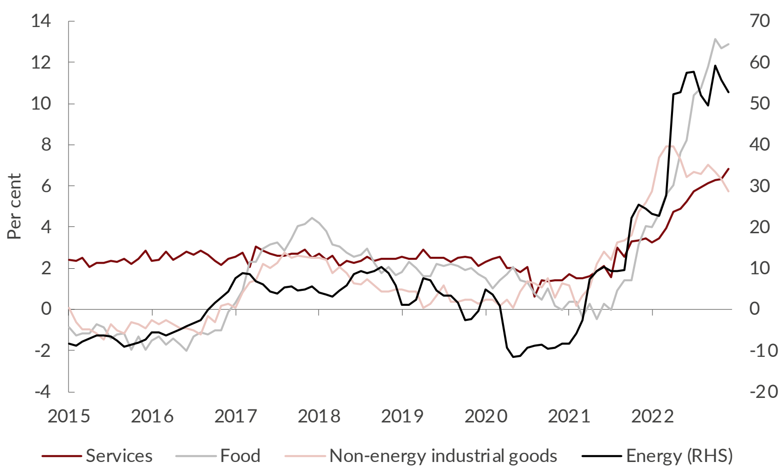
Figure 1.5 CPI inflation



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 Bank of England's CPI inflation target is 2 per cent per annum.
Source: NiGEM database, NIESR forecast and NiGEM stochastic simulations.

The extraordinary inflation we've experienced in the last year has left, and will continue to leave, lasting damage on UK households. Given that lower-income households spend a greater proportion of their disposable incomes on food and energy – which have seen the greatest price rises within the CPI basket (Figure 1.6) – relative to other income groups, they have experienced a concerning decrease to their standard of living over the last year. The threat of persistent inflation embedding itself in the economy is thus one that adds concern to the 2023 outlook, both for the macroeconomy and households.

Figure 1.6 Annual inflation rate for elements of the consumer price index



Source: ONS.

Policy

Fiscal policy

On 17 November, the UK witnessed yet another fiscal event as the Chancellor of the Exchequer gave his Autumn Statement. In our response to this (Bejarano Carbo et al. 2022b), we noted that rather than setting fiscal targets, which put arbitrary self-imposed limits on the Chancellor's ability to loosen fiscal policy, the Chancellor ought to have provided more support to households – particularly low-income households not on welfare – to ensure that fiscal policy can meet the basic societal demand of maintaining an adequate standard of living for all (Chahda, Hande & Pabst 2021). Especially since they were experiencing the largest fall in their real incomes since records began in 1956. That said, many of the changes proposed in the Statement represented steps in the right direction – most importantly, a marked return to credible fiscal policymaking in the aftermath of the 'mini-budget'.

The Chancellor's Autumn Statement represented a significant departure from the previous government's fiscal stance: the UK government pivoted from an unfunded fiscal loosening to tightening fiscal policy by £60 billion such that it will see a falling debt-to-GDP ratio within five years. In short, the Autumn Statement announced around £30 billion in tax rises and another £30 billion in spending cuts. In terms of major tax rises, the Chancellor froze personal income tax thresholds for a further two years (which is an effective tax rise for all working people), lowered the top rate of income tax threshold, decreased the capital gains and dividend tax reliefs, extended and amplified the windfall tax on energy profits, and froze the NICs Secondary and VAT registration thresholds. On the spending side, the Chancellor maintained overseas aid at 0.5 per cent, maintained departmental spending at previous levels (translating into a real fall) and promised annual departmental increases of only 1 per cent until 2027-2028, increased spending for the NHS and schools, and extended a more targeted version of the energy price guarantee from April onwards. Altogether, the OBR estimates these measures will meet the Chancellor's new fiscal targets; the gains will be seen over the course of the Chancellor's five-year plan, raising £19.3 billion in 2024-25, rising to £61.7 billion in 2027-28.

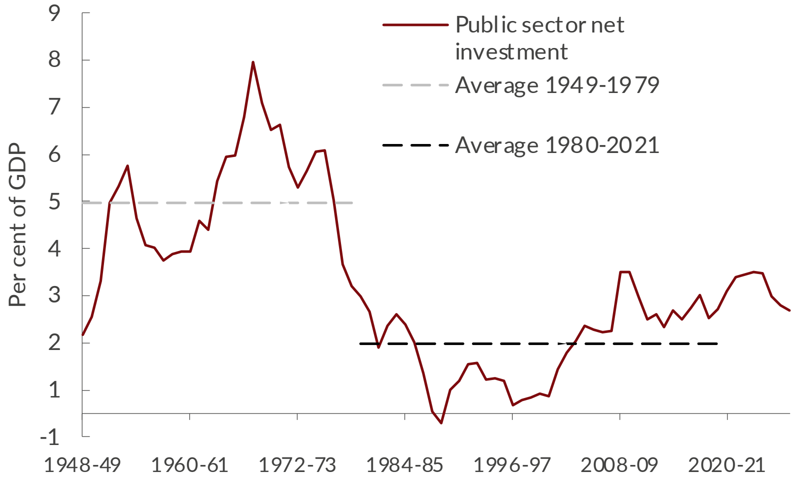
November's fiscal event altered the path of our forecast, which in Autumn reflected the (already largely undone) Truss government's growth plan. However, the fiscal changes in our forecast take place in a context of updated data and a materially worse economic outlook; as such it is difficult to judge the extent to which the Autumn Statement's measures impact each variable relative to the Autumn UK Economic Outlook (Bejarano Carbo et al., 2022a). Broadly speaking, short-term borrowing to finance additional government support, alongside such measures as increasing the living wage and providing more targeted energy support from April onwards, will go some way to reducing the fall in output expected over the coming year by cushioning real income falls. This will help moderate the fall in consumption that is set to weigh on GDP growth throughout 2023. Further, the extension of the energy price guarantee lowers our forecast for inflation from April onwards. This spending will also push up the debt-to-GDP ratio (and delay the planned budget surplus), until the tightening effects and economic recovery will cause it to fall from 2026 onwards. On the other hand, the freezes in income tax thresholds will lower personal income and the corporation tax rises will likely reduce investment in the economy.

Public sector net borrowing as a percentage of GDP for the financial year 2021-22 was 5.3 per cent, a fall of 9.7 per cent compared with the previous financial year (affected significantly by the pandemic), but above the post World War Two average of 2.8 per cent. Relative to its March 2022 forecast, the OBR's November 2022 forecast recorded increases in public sector net borrowing of £64.2 billion in 2022-23 and £39.8 billion in 2023-24 – accounted for by increases in debt interest and public spending (announced across three different governments) including the September energy package and the energy price guarantee. In December alone, public sector net borrowing was £27.4 billion – the highest in the month since comparable records began in 1993 – due to a record debt interest payable of £17.3 billion as well as inflation-related welfare support schemes like the energy price guarantee and energy bill relief schemes, which jointly contributed around £9 billion. That said, central government receipts will be rising over the coming months to partially offset these expenditures; December data already recorded an increase in tax revenue of £3.4 billion relative to December 2021 resulting from the Chancellor's latest measures.

The government has laid a path to be able to meet its fiscal targets with headroom to spare: as it stands, the Chancellor will get borrowing under 3 per cent of GDP and underlying debt falling as a percentage of GDP in five years' time with £18.6 billion and £9.2 billion to spare, respectively. Thus, the Chancellor has some fiscal space to respond to economic shocks, or to increase borrowing at some point in the next five years, either within this Parliament or the next.

One area where we think the government should be increasing spending is that of investment. Public sector net investment as a percentage of GDP was 2.9 per cent in 2021-22, below the average from 1949 to 1979 of 4.5 per cent, though above the more recent average between 1980 and 2021 of 1.5 per cent (Figure 1.7). Though the Chancellor raised levels of public investment in 2023-24 in his Autumn Statement, it is set to fall from 2024 onwards; the OBR expects public sector net investment as a percentage of GDP to be 2.2 per cent by the fiscal year 2027-28. NIESR have argued for some time now that a lack of public-sector investment has deepened, and will continue to deepen, the low growth and low productivity traps countrywide as well as exacerbate regional inequalities (Productivity Commission 2023).

Figure 1.7 Public-sector net investment



Source: OBR, ONS, NIESR calculations.

That said, public finances remain vulnerable to interest rate rises as well as further shocks to the economy. Indeed, the medium-term outlook for public finances has deteriorated since our last publication due to the worsened outlook for output and higher inflation persistence. Still, it is important to remember that a downward shift in the yield curve since our last publication and the debt-devaluing effects of inflation will have contributed positively to the outlook for government finances.

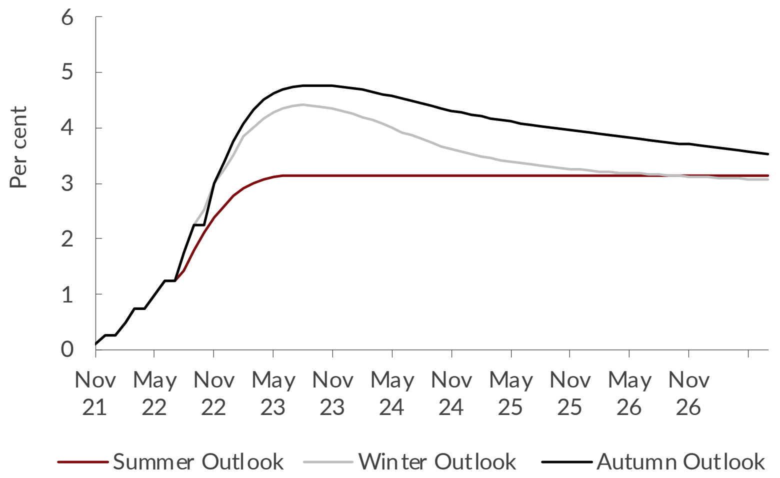
In the aftermath of the Truss government's fiscal event, all eyes were on British fiscal policy; as a result, Chancellor Hunt was required to deliver a measured, orthodox, and sound Autumn Statement to calm market fears. That series of events warned present and future policymakers of the perils of reckless policy experimentation. We hope, however, that the aversion of fiscal disaster did not dilute the political will to conduct a necessary reform of this country's fiscal framework. For some time now, we have been arguing in favour of a new fiscal framework that can provide enough flexibility to respond to economic shocks while ensuring credibility is maintained and risk premia, in turn, remain low. Broadly, such a framework, as laid out in Chadha, Hande & Pabst (2021), would: improve fiscal communication by requiring the Chancellor to follow a structured timetable for fiscal events and deliver more comprehensive Budget speeches; increase transparency and accountability by requiring the OBR to publish pre-fiscal event reports and the Chancellor to produce economic risk assessment reports; maintain at all times a high standard of policymaking and policy evaluation via the creation of a new body of independent economic experts; and guarantee a fiscal strategy that works for all by bringing distributional concerns, productivity, well-being, ecological sustainability, and consistency across the UK regions to the forefront.

In the shorter term, fiscal policy needs to learn from the successes and shortcomings of the Autumn Statement. The Chancellor rightly saw now as a time to support vulnerable households; in uprating pensions and benefits in line with inflation, for instance, he took steps in the right direction to prevent more households from falling into destitution (a classification under which around 1.2 million UK households currently fall). That said, the Chancellor tightened fiscal policy at a time when it should have been loosened to provide a cushion for households facing the biggest blow to living standards in recent history. Indeed, the OBR's November forecast expects real household disposable income to drop nearly to 2013-14 levels in 2024-25, declaring a decade of lost growth. An important issue for forecasters at the start of 2023 will be whether the UK will enter a technical recession – that is, two consecutive quarters of contracting GDP growth. While that is not an unimportant issue, perhaps a focus on the economic crisis faced by most of the British population would better motivate the need for the Chancellor to loosen fiscal policy in his Spring Budget, rather than letting himself be governed by self-set fiscal targets.

Monetary policy

Against a backdrop of high inflation, the Monetary Policy Committee (MPC) raised interest rates for a ninth consecutive time in December (by 50 basis points), bringing interest rates to 3.50 per cent. The tenth consecutive hike followed in February, also by 50 basis points. In its Monetary Policy Summary, the MPC highlighted how the intensification of domestic price and wage pressures have increased risks of inflationary persistence, warranting the rise and possibly further tightening. This is in line with the argument we made in our last CPI tracker, given the data on underlying inflation.

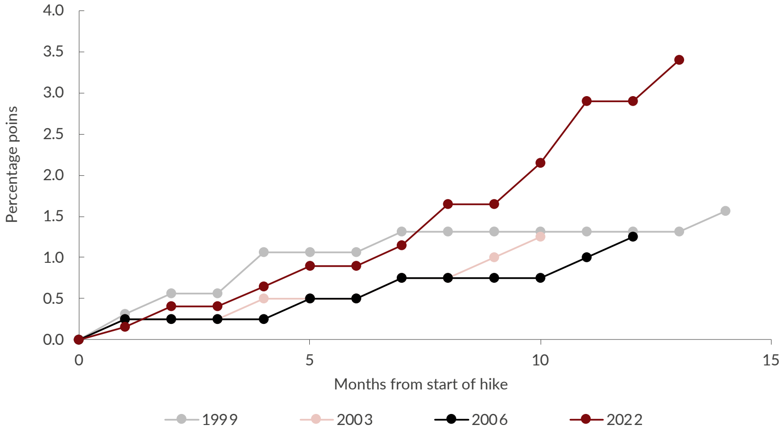
Figure 1.8 Bank Rate forecasts



Source: Bank of England and NIESR forecast.

Figure 1.8 shows our forecast for Bank rate and compares it with our previous UK Economic Outlooks published in summer and autumn.. The autumn and winter forecasts followed the market expectations of movements in the Bank rate as implied by the Overnight Index Swaps (OIS) curve at the time the forecast was closed. Markets are placing roughly equal probability on the bank rate peaking at either 4.25 or 4.50 per cent in May, followed by a gradual unwinding until policy rate normalisation in 2025. We consider the issues of tightening and re-normalisation separately. As shown in Figure 1.9, since the Bank of England gained independence in 1997, the current tightening cycle is the most aggressive in terms of pace and magnitude of rate hikes. But the annual inflation rates we have seen throughout the course of 2022 are by far the highest we have seen during this period so the implied movement in real rates has been smaller. In addition, one of the reasons for the speed of the rises is that the MPC were 'behind the curve' in that they started the tightening cycle after inflation had already become set in. However, with rates rising by as much and as quickly as we have experienced in this past year, vulnerabilities in financial markets – particularly widespread illiquidity – will have been exposed. Further, given that the effects of monetary tightening are lagged, the tightening is likely to bear down on output in 2024.

Figure 1.9 Bank Rate during historical tightening cycles



Source: Bank of Enland

While we think that the peak in rates is high enough to bring inflation back to target around the middle of 2025, we note that a key question will be how long the MPC should maintain the Bank Rate at its peak level, and at what pace should they loosen. Given the extent to which the Bank has received criticism for not tightening quickly enough when there were signs of the economy overheating in the post-pandemic recovery, it is possible that monetary policymakers will loosen too quickly to avoid the converse criticism. Equally, if the Bank errs on the side of caution with the pace of its loosening, and in doing so, aggravates recessionary risks by more than is warranted, it will reignite familiar critiques. There is no question about how difficult a path lies ahead for the MPC, though, as discussed in Box A, there have been many times in the last 70 years when UK monetary policy makers have faced similar difficulties. The key to dealing with potential criticism will be increased communication and transparency on the part of the MPC, regardless of the path chosen. Finally, once the MPC starts loosening, we (and the financial markets) expect the policy rate to return to a 'normal' (pre-Financial Crisis) level. The return of interest rates to familiar territory may be a welcome development for some, as one hypothesis is that it will enable a more productive use of capital.

The forecast in detail

Financial markets

Since the extreme turbulence in the UK financial markets of September and October 2022, resulting from the large swings in fiscal policy associated with changes in Prime Minister and Chancellor, the UK financial markets have become much more settled. Ten-year benchmark bond yields have fluctuated within a relatively small band between 3.01 per cent and 3.67 per cent. UK equity prices (as measured by the FTSE 100 share index) have risen over the past few months from a 2022 low of 6826 on 12 October 2022 to 7763 on 20 January 2023 and we expect this rise to continue over our forecast period. At the same time sterling appreciated from $1.11 to $1.24. Given the near impossibility of forecasting exchange rate movements, we project sterling to remain at around this rate through the forecast period (Figure 1.10).

Box A: Monetary policy and inflation in the second Elizabethan age

By Hailey Low and Paul Mortimer-Lee

2022 was a year to be remembered in the United Kingdom, as we emerged out of the pandemic but also experienced a mix of political and economic upheavals. Perhaps, though, it is the passing of Queen Elizabeth II that remains the most poignant. The United Kingdom that we know now is barely recognisable from the one that greeted Queen Elizabeth II when she came to the throne in 1952. The last seven decades have seen extraordinary changes socially, technologically, economically, and culturally.

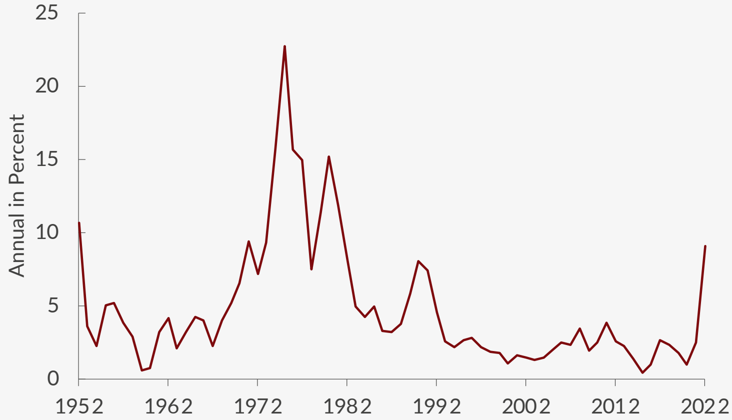
In this box, we look back on the evolution of inflation and monetary policy – whose evolution has clearly been related to the ups and downs of inflation – over this time. We start, however, by noting that there is a striking parallel between the start of the second Elizabethan era and now: high inflation and a cost-of-living crisis. Indeed, we can think of monetary policy over this period as being characterised by the search for a nominal anchor that would enable this high inflation to be banished once and for all. Unfortunately, as we reached the end of the second Elizabethan age it seemed as if the search had been in vain.

1950s and 1960s: Post World War II recovery

When Queen Elizabeth came to the throne in 1952, inflation was as high as it is now, hovering at around 10 per cent (Figure A1). High inflation in the early 1950s was attributed to the sky rocketing prices of commodities due to an inventory build-up in preparation for the Korean War while the economy was still recovering from the impact of World War II. In short, it appears that the problems of the 1950s are not so different to today. The end of the Korean War in 1953 ushered in a period of low inflation rates and stable commodity prices, which lasted up till the early 1970s.

In 1946, the Bank of England was nationalised. With large distortions between economic sectors due to World War II, the interest rate was seen as too blunt an instrument to direct scarce resources to where the government wanted. Moreover, low interest rates in the 1930s had not proved effective in lowering savings or stimulating investment (Patel, 2009) so directing credit was the preferred form of monetary control. The Bank was effectively a government department that played second fiddle to the Treasury (Capie et al., 1994).

Figure A1 Inflation Rate



Source: ONS and NiGEM.

Note: 2022 figure it that for October 2022.

In 1959, the Report of the Committee on the Working of the Monetary System (the Radcliffe Report) was published. Comprising mostly Keynesian economists, the writers of the Radcliffe Report assigned little weight to controlling domestic monetary aggregates, doubting the Bank of England's ability to do so and the effectiveness of the policy (Needham, 2014). Policymakers believed that the Phillips curve (an empirical inverse relationship between the unemployment rate and inflation) provided them with a menu of policy choices (Haldane and Quah, 1999). Fiscal policy and quantitative credit controls were seen as the main means of controlling unemployment and therefore inflation. An important factor for interest rates, which grew in influence as capital controls weakened, was the need to keep sterling pegged to the US dollar under the Bretton Woods international monetary system. Effectively, the dollar peg limited the freedom of the UK government to manage domestic demand and had a central influence on monetary policy. In 1967, a burgeoning UK current account deficit forced a devaluation of sterling from $2.80 to the pound to $2.40 (Bennett, 2017).

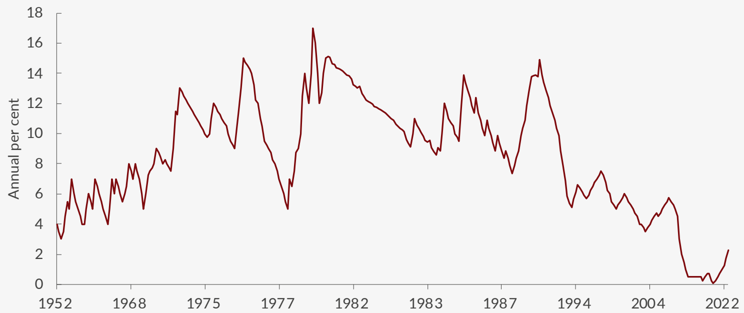
1970–80: The Great Inflation and Winter of Discontent

The quantitative control of lending resulted in disintermediation of the banks (Capie et al., 1994). In response, 1971 saw the introduction of Competition and Credit Control (Goodhart, 2014) which replaced guidance on bank lending and encouraged competition between the previously cartelized banks. The Bank aimed to control the evolution of credit through interest rates, open market operations, and movements in reserve ratios, including calls for Special Deposits. However, monetary growth accelerated to 72 per cent, with the policy abandoned in December 1973 (Needham, 2014). The United States suspended the convertibility of the dollar into gold in August 1971, effectively cutting the external anchor for price stability that many countries had relied upon and ending the Bretton Woods system (Bordo, 2017). The large rise in inflation began in 1973 when OPEC raised the price of a barrel of oil in retaliation for the West's support for Israel in the Yom Kippur War. After this shock, Britain's inflation rate rose to over 20 per cent, peaking at 25 per cent in 1975 (Figure A1), triggering a rampant wage-price spiral which fuelled inflation. The government resorted to incomes policies rather than monetary restrictions to try to contain it. But this led to the 'Winter of Discontent' in 1978/79 when both private and public-sector workers went on strike for higher wages to keep up with the high cost of living, with powerful unions backing them.

1980s: The Thatcher Era

The experience of high inflation in the 1970s, and Britain's humiliating resort to an IMF programme in 1976, led to deep dissatisfaction with previous macro-economic management and the formal adoption of monetary aggregate targets. Rising inflation expectations meant that the Phillips curve broke down and the belief took hold that monetary policy's main role was to control inflation. The second oil shock in 1979 stimulated a still greater concentration on inflation as the object of monetary policy. With the advent of the 'Monetarist-inspired' Thatcher government in 1979, monetary aggregate control ascended to a more prominent role under the Medium-Term Financial Strategy (MTFS). The Monetarists interpreted the inflation of the 1970s as having been caused by earlier monetary growth, and the MTFS reflected this by stressing the importance of controlling the monetary aggregates. More generally, the MTFS represented a paradigm change in the monetary approach, encompassing changes in which instruments were used and how they were used, as well as in policy priorities (Hall, 1993). There was a distrust of discretionary policy and a desire to move to a more rules-based framework, encapsulated in monetary targeting. However, monetary targeting proved problematic due to the instability of the demand for money..

Figure A2 Bank of England's Bank Rate



Source: Bank of England.

The Thatcher government unleashed a series of interest rates hike and public spending cuts. At that time, the interest rate (which was still set by ministers) rose to 17 per cent in November from 12 per cent in April, in a bid to control inflation (Figure A2). The soaring interest rate meant higher borrowing costs which pushed the United Kingdom into recession, causing unemployment to rise beyond 3 million for the first time since the 1930s, while inflation remained high and monetary growth remained rapid. Eventually, the policies did bring down inflation from its peak of 20 per cent in 1980 to less than 10 per cent 2 years later, before stabilising to around 4 per cent in 1987 (Figure A1). However, after that experience money supply targets took a back seat, with interest rates cut to address the recession despite still-rapid monetary growth.

In 1987, the exchange rate assumed a more prominent role, as the authorities tried to avoid a strengthening in sterling stifling the recovery. Exchange rate targeting became the keystone of monetary policy, echoing Bretton Woods, when the United Kingdom entered the European Exchange Rate Mechanism (ERM) in 1990. With fiscal policy in the newly unified Germany being expansionary as the economy absorbed East Germany, the Bundesbank (Buba) instituted a restrictive monetary policy. Less robust UK activity than Germany and the sensitivity of the UK mortgage market to short-term interest rates meant that the United Kingdom could hardly have picked a worse time to join the ERM. Rates that were apt for Germany were too high for the United Kingdom, and on 'Black Wednesday', 16 September 1992, the United Kingdom had to withdraw ignominiously from the exchange rate mechanism (Eichengreen, 2022).

1990s – 2000s: Inflation targeting and Bank of England independence

Monetary policy needed a new nominal anchor, so the United Kingdom switched to inflation targeting, which had been implemented successfully in New Zealand. In 1997, the new Labour government, to boost its credibility and to combat perceptions that in the 1960s and 1970s its policies had resulted in excess inflation, gave the Bank of England operational independence over monetary policy, setting it a 2.5 per cent target for inflation as measured by the retail price index excluding mortgage interest payments (RPIX); the target has since been replaced with one of 2 per cent for consumer price index (CPI) inflation. The inflation rate remained relatively low from 1993 onwards. It hovered around an average of 2 per cent into the early 2000s, though rose to about 4 per cent ahead of the Great Recession.

2008 – now: The zero lower bound bites

For much of the period since the Great Financial Crisis of 2008, monetary policy attempted to get the economy back to full employment. With Advanced Economies beset for years by too low inflation, monetary policy has been mostly aimed at stimulating growth, which remained consistent with the inflation target due to global disinflationary pressures. Central banks came to believe in a flat Phillips curve and exploited that by pushing economies to historically very low unemployment rates. Central bank balance sheets became the tool of preference once interest rates had bottomed near zero, with a massive expansion by the Bank of England, including a doubling of the Bank's holding of gilts in response to Covid-19. While external price shocks due to Covid-19 and the Ukraine-Russia war provided the spark to set inflation going, ex-Bank of England Governor Lord Mervyn King and others blame excessively lax monetary policy for the UK returning to double-digit inflation (Elliott 2021; Horan, 2022). Thus, as in the past, a crisis over UK inflation sets the stage for a reassessment of the institutional and operational arrangements of monetary policy, an examination of how economists and officials think about the causes of inflation, and a rethinking of the importance of the Phillips curve. As the country settles down under its new King, we shall see where this reassessment takes us.

References

Bennett, G. (2017, November 17). What's the Context? 18 November 1967: Devaluation of Sterling - History of government. https://history.blog.gov.uk/2017/11/17/whats-the-context-18-november-1967-devaluation-of-sterling/

Bordo, M. (2017, April 23). The operation and demise of the Bretton Woods system: 1958 to 1971. CEPR. https://cepr.org/voxeu/columns/operation-and-demise-bretton-woods-system-1958-1971

Capie, F., Fischer, S., Goodhart, C., & Schnadt, N. (1994). The future of central banking: The tercentenary symposium of the Bank of England. Cambridge University Press.

Eichengreen, B. (2022, September 13). Black Wednesday cast a shadow that culminated in Brexit. The Guardian. https://www.theguardian.com/business/2022/sep/13/black-wednesday-brexit-sterling-crisis

Elliott, L. (2021, November 23). Central banks have 'King Canute' theory of inflation, says former governor. The Guardian. https://www.theguardian.com/business/2021/nov/23/central-banks-have-king-canute-theory-of-inflation-says-former-governor

Goodhart, C. A. E. (2014). Competition and credit control. Financial Markets Group, The London School of Economics and Political Science.

Haldane, A., & Quah, D. (1999). UK Phillips curves and monetary policy. Journal of Monetary Economics, 44(2), 259–278.

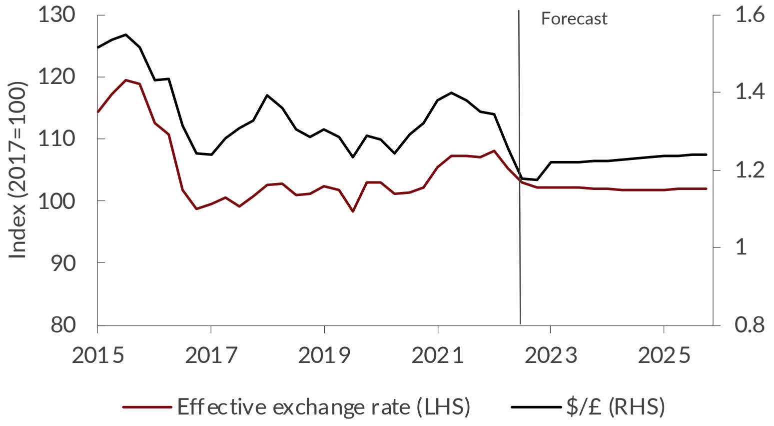
Hall, P. A. (1993). Policy paradigms, social learning, and the state: The case of economic policymaking in Britain. Comparative Politics, 275–296.

Horan, P. (2022, May 26). What's Causing Today's Inflation? Discourse. https://www.discoursemagazine.com/economics/2022/05/26/whats-causing-todays-inflation/

Needham, D. (2014). UK monetary policy from devaluation to Thatcher, 1967-82. Springer.

Patel, S. (2009). Accounting for policy change through multi-level analysis: The reform of the Bank of England in the post-war era. Policy Studies, 30(3), 333–346. https://doi.org/10.1080/01442870902863919

Figure 1.10 Sterling effective exchange rate and US dollar/sterling exchange rate



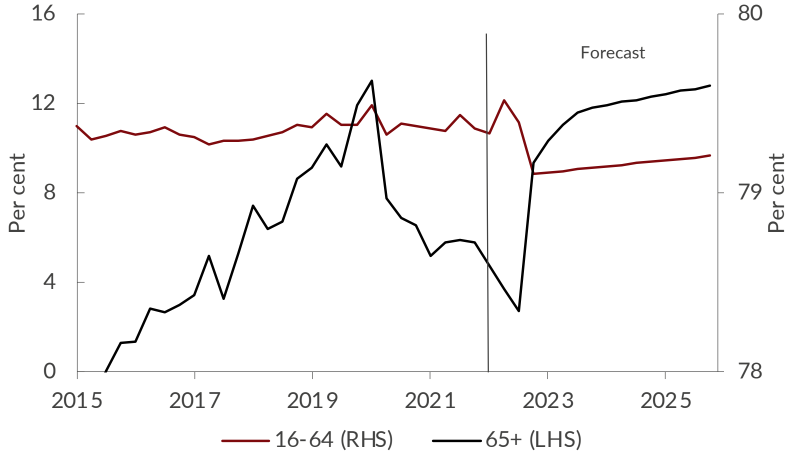
Source: NiGEM Database; NIESR Forecast.

The labour market

Recent UK labour market data has been characterised by two features: a marked increase in economic inactivity since the Covid-19 pandemic, and a rise in the vacancy to unemployment ratio, the measure of labour market tightness most clearly associated with wage pressure in many 'search and matching' models of the labour market (Mortensen and Pissarides (1994); Trigari (2009)). Although, the structural and regional reasons for high vacancy rates, which are a distinct feature of the UK economy cannot be ignored (McCann 2021). The key questions for our forecast are (a) whether or not these 'newly-inactive' workers might return to the labour force as the cost-of-living crisis continues to bite and their savings are run down; (b) how quickly and by how much the unemployment rate might rise given the extremely weak prospects for GDP; and (c) to what extent expectations of high inflation become embedded in wage growth, particularly given the current industrial unrest.

Looking at the participation rate for the working-age population, our view remains that it will return to its pre-Covid level over the course of the next few years as workers in the 50-64 age group return to the labour force as they find their savings run down and fewer workers retire early (Figure 1.11). In addition, we expect a gentle increase in the number of workers aged 65 and over staying in the labour force, again reflecting the need to replace the savings they have burnt through 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 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.

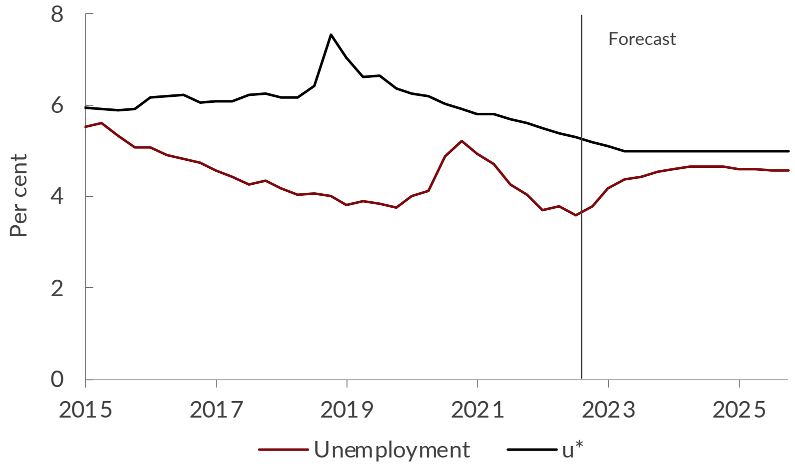
Figure 1.11 Disaggregated participation rates



Source: NiGEM database and NIESR forecast.

Turning to the evolution of unemployment, we expect anaemic output growth over our forecast to lead to a rise in the unemployment rate. Given the currently high vacancy rate, we expect companies to adjust first by withdrawing vacancies and then by laying-off workers. As a result, the unemployment rate takes time to increase, reaching a peak of around 4.7 per cent in the third quarter of 2024 (Figure 1.12). At that point, the actual unemployment rate will be close to our estimate of the 'natural rate' of unemployment, u*; until then, we expect the labour market to remain tight in the sense of contributing positively to wage inflation.

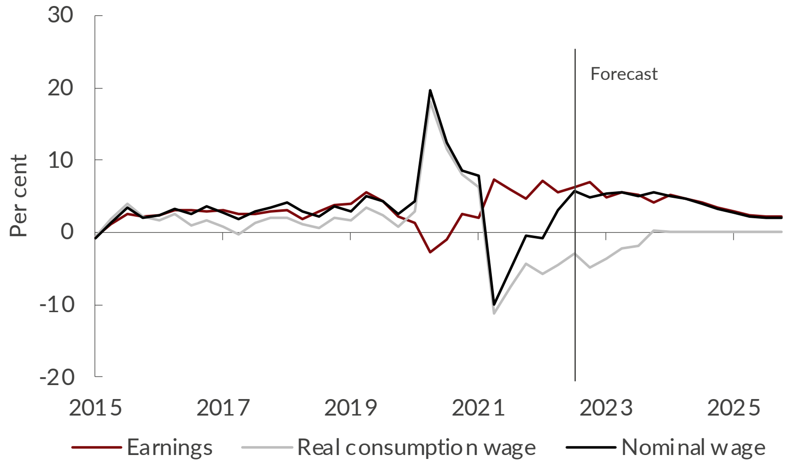
Figure 1.12 Unemployment rate and u*



Source: NiGEM database and NIESR forecast.

Given the tight labour market, and persistent inflation, we expect nominal wage growth to remain high over the duration of our forecast. For 2023, we see the current wave of industrial unrest leading to higher pay growth in the public sector, ensuring that aggregate earnings growth remains around 5 per cent throughout 2023 and the first half of 2024 (Figure 1.13). However, given how high we think CPI inflation is likely to be in 2023, this still implies that nominal wage growth fails to keep up with price inflation; in other words, real wages continue to fall throughout 2023 (Figure 1.13).

Figure 1.13 Growth in real and nominal hourly wages and in earnings

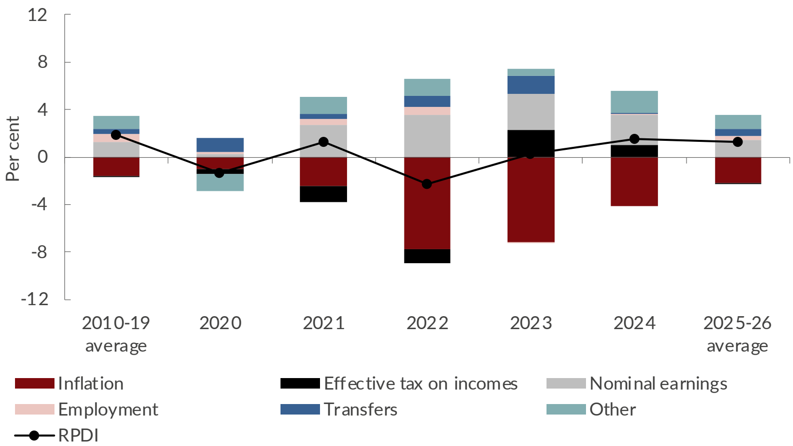


Notes: Nominal and real wages are 'per hour'; earnings are 'per head'.
Source: NiGEM database and NIESR forecast.

The household sector

The fall in real wages has led to a cost-of-living squeeze and falling real disposable income with real personal disposable income falling by 2.3 per cent in 2022. However, we now expect real personal disposable incomes to start rising in 2023, albeit slowly (Figure 1.14). This is mainly due to a slowing inflation rate, increase in nominal earnings and government transfers in response to the cost-of-living crisis. Over the medium term, as price inflation comes down below nominal wage growth, real incomes grow by around 1 per cent (Figure 1.14).

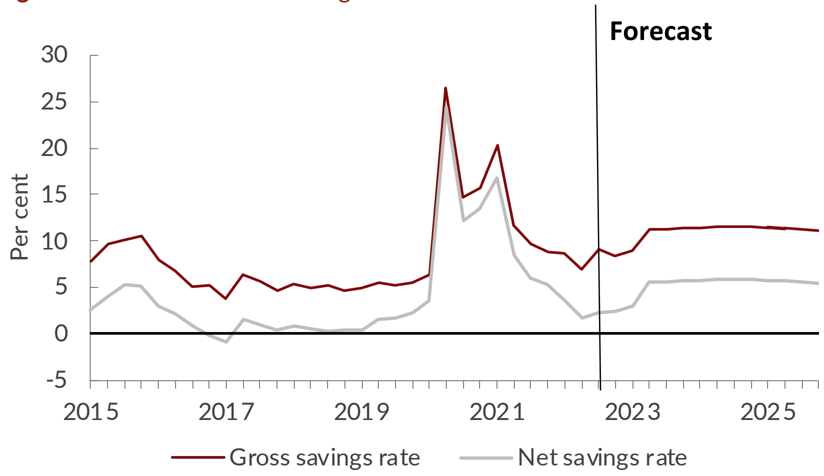
Figure 1.14 Contributions to growth in real personal disposable income



Source: NiGEM database and NIESR forecast.

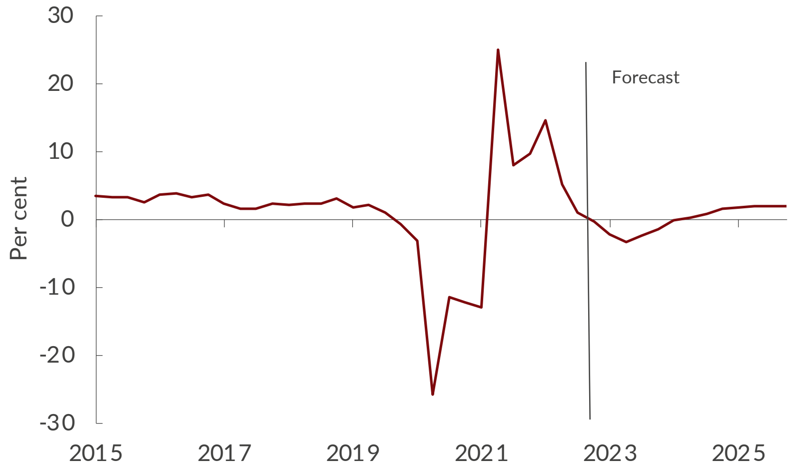
As we have stated in previous Outlooks, the Covid-19 lockdowns led households to build up their savings, to the tune of around £200 billion in aggregate. Since the pandemic, households have been drawing down their savings to maintain their consumption in the face of the cost-of-living crisis. But, with savings becoming depleted and the prospect of a rise in unemployment leading to a rise in precautionary saving, we now expect the net savings rate to rise over 2023 towards its pre-referendum level of 6 per cent and stay there or thereabouts in the medium term (Figure 1.15). We expect this rise in the savings rate to be associated with a fall in aggregate consumption of 2.3 per cent between 2022 and 2023 before it then rises at an annual rate of around 0.6 per cent in 2024 and around 1.9 per cent in 2025 (Figure 1.16). The gloomy picture for households is completed by the outlook for house prices, where we are expecting a fall in house prices between the third quarter of 2022 and the third quarter of 2025 of around 10 per cent.

Figure 1.15 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 1.16 Annual consumption growth

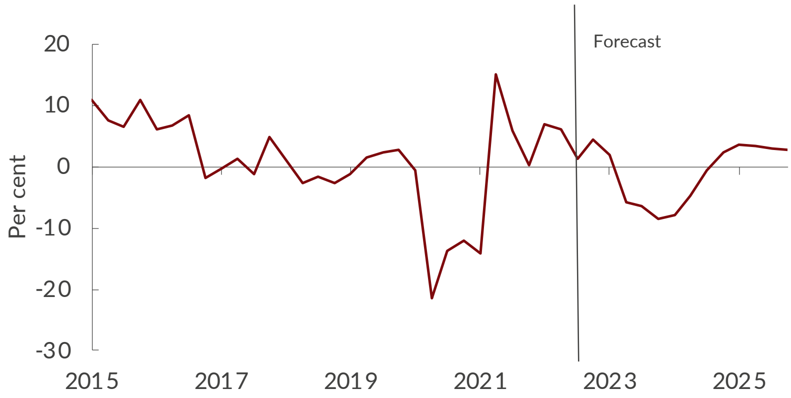


Source: NiGEM database and NIESR forecast.

The corporate sector

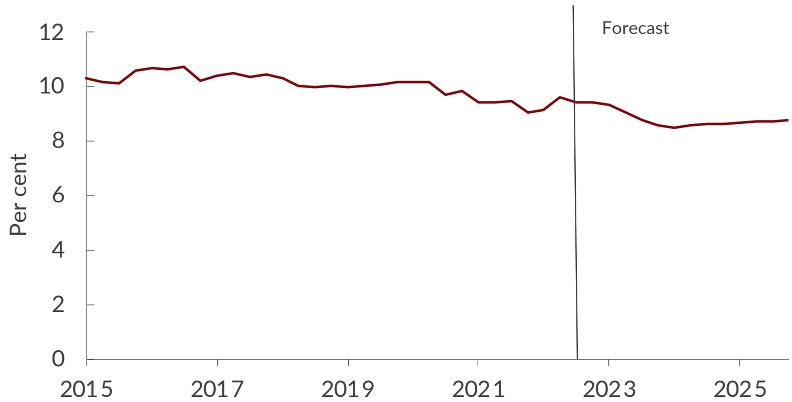
We think that the financial market stability we saw in the fourth quarter of 2022 led to a rise in business investment of 0.2 per cent on the quarter. But, given the bleak outlook for GDP and general uncertainty, as well as the withdrawal of much of the energy price support for firms coming in April, we expect falls in business investment of 4.8 per cent in 2023 relative to 2022 and 2.9 per cent in 2024 relative to 2023 (Figure 1.17). As a result, the business investment to GDP ratio falls from 9.4 per cent to around 8.5 per cent (Figure 1.18). 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 (set up by NIESR) and written up in its evidence review (Productivity Commission, 2022). The Productivity Commission has made understanding the causes of low business (and public) investment its main priority for 2023 (Productivity Commission, 2023). We think labour productivity itself fell in the fourth quarter of 2022, but we expect it to grow in 2023 and 2024 by 0.66 and 0.77 per cent, respectively.

Figure 1.17 Annual business investment growth



Source: NiGEM database and NIESR forecast.

Figure 1.18 Business investment to GDP ratio

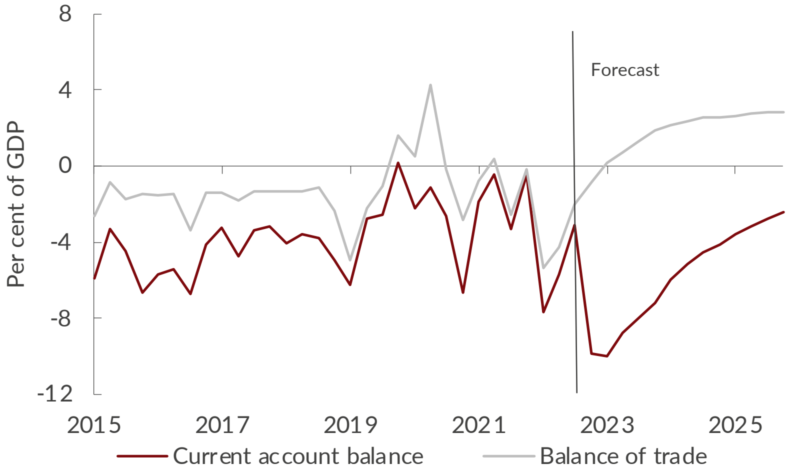


Source: NiGEM database and NIESR forecast.

Trade

The depreciation of sterling through 2022, both in effective terms and against the dollar, is likely to help increase exports and reduce imports into 2023. In addition, anaemic GDP growth is also likely to reduce imports in 2023 and the boost to demand in Asia resulting from the reopening of China as the Chinese Government abandon the 'Zero Covid' policy may help to push up on exports in 2023. Given all this, we expect an improvement in the balance of trade, which we expect to move into surplus in 2023 (Figure 1.19). However, we still expect to see a worsening of our current account balance in 2023 as interest, profit, and dividend (IPD) flows out of the United Kingdom rise relative to IPD inflows. Our forecast is for the current account deficit to narrow over the forecast period (Figure 1.19).

Figure 1.19 Balance of trade and current account balance



Source: NiGEM database and NIESR forecast.

Risks to the forecast

In this Outlook, we are publishing our forecast for the UK economy against a background of high inflation and potential recession. Since our previous forecast, some semblance of normality has been restored to the political and economic arenas in the United Kingdom and this has been reflected in more settled financial markets. Nonetheless, there is still much uncertainty in the economy particularly around the evolution of inflation and whether or not the UK economy is likely to fall into recession in 2023.

Starting with inflation, we now believe that headline inflation has peaked. But the ongoing war in Ukraine, as well as the current wave of industrial action, make the path of inflation over the next year or two particularly uncertain. Core inflation is high and has not clearly peaked yet. There is a risk that core inflation could rise further and/or remain much higher than the MPC's 2 per cent inflation target. Similarly, if the current wave of industrial action results in faster wage growth in the private-sector, then there is a risk of firms passing these wage rises into higher prices, a 'wage-price spiral'. And, finally, there is the ongoing risk of an escalation in the war in Ukraine leading to a return to higher energy prices. If any of these risks were to transpire, then we would expect to see headline CPI inflation remaining above target for even longer than is currently the case in our forecast.

On the downside, there is the risk that inflation falls faster than we are expecting because of the large falls we have recently seen in energy prices. This effect could be magnified when the Office for National Statistics (ONS) reweights the CPI basket in line with the 2022 expenditure shares since the share of household income spent on energy rose dramatically in 2022. With the falls in energy prices being given a higher weight in the calculation of CPI inflation, then we would expect to see headline inflation falling faster than would have been expected otherwise.

A separate risk to inflation on both the upside and downside is posed by the evolution of monetary policy. On the downside, it may be – as suggested by the MPC and the OBR in their most recent forecasts – that if the MPC raises interest rates in line with the current market curve that this may increase the likelihood of recession leading to a faster fall in inflation. Indeed, the OBR's November forecast for inflation suggested that there was a risk headline CPI inflation could go negative. Against that, there is the possibility that the MPC start loosening policy too soon as they are worried about the perception of being 'behind the curve' in loosening policy as they were seen to be behind the curve in tightening. If this were to happen, then it could result in higher inflation becoming embedded in inflation expectations and a much more persistent period of high inflation. Thus, the timing and responsiveness of MPC decisions in such a dynamic set of circumstances will be key to minimising risks.

Overall, we believe the risks to inflation are symmetric.

In terms of GDP growth, we think the risks here are symmetric as well. Our central forecast is for anaemic growth in GDP over 2023 but, on the upside, we were positively surprised by growing GDP at the back end of 2022. It is possible this could continue into the first half of 2023 as households continue to use up the savings they accumulated over the Covid period to maintain consumption in the face of the cost-of-living crisis. Against that, there is the risk that gloomy consumer and business confidence lead to a deep and/or protracted recession over 2023, in line with the MPC forecast.

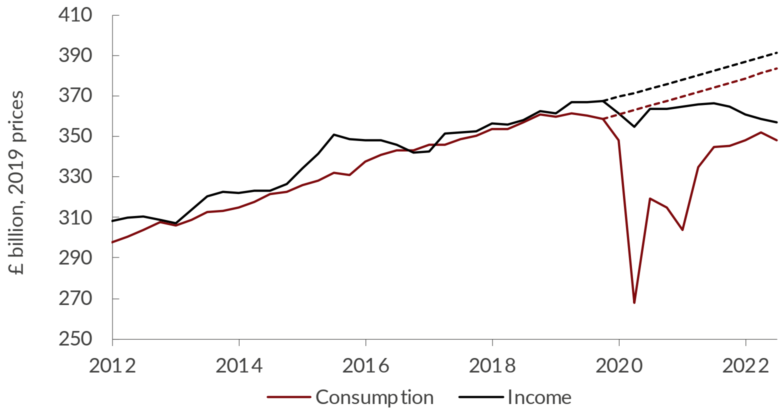
Thus, on balance the UK economy remains resilient albeit at low levels of growth. But, the risks are building.

Current economic conditions

Demand and output

Consumption declines faster as incomes continue to fall
Household consumption decreased sharply in the third quarter of 2022. This follows a continued decline in household income. Both household consumption and income remain well below their pre-Covid trends (Figure 1.20).

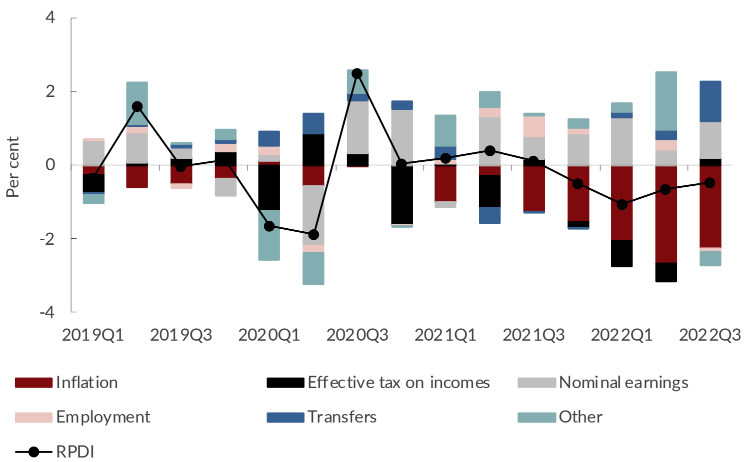
Figure 1.20 Quarterly household consumption and income 2012-2022



Source: NiGEM database, NIESR calculations.

Real personal disposable income (RPDI) decreased in the third quarter of 2022. However, the rate of decline slowed considerably, mainly due to government transfers to support households with energy costs. Figure 1.21 shows transfers combined with a slight reduction in inflation and improved earnings helped to offset the severe squeeze on real disposable income. Nonetheless, RPDI has contracted for four consecutive quarters, and as we can see from Figure 1.20 household income remains below trend and is continuing in the wrong direction.

Figure 1.21 Components of quarterly growth in real personal disposable income

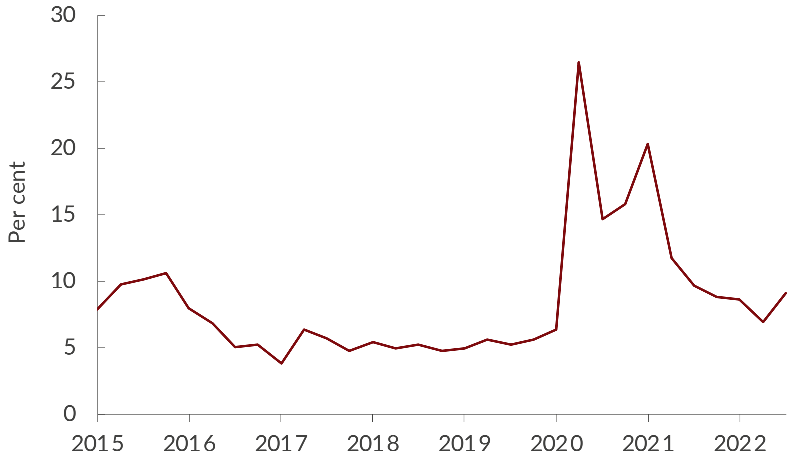


Source: NiGEM database.

Precautionary Savings Increase

As NIESR correctly forecast in our Autumn UK Economic Outlook (Bejarano Carbo et al., 2022a) households have increased their savings in response to continuing inflationary pressures and economic uncertainty. The rise in the savings rate is congruent with the observed reduction in consumption and may indicate households are anticipating ongoing pressure on their disposable income (Figure 1.22). At an aggregate level increased precautionary savings and reduced consumption are likely to feed through to economic growth rates in subsequent quarters increasing the likelihood of recession.

Figure 1.22 Gross savings **rate**



Source: NiGEM database.

Consumer confidence

The GfK Consumer confidence survey indicates a slight upturn in consumer confidence over the past quarter. This may seem surprising given the ongoing squeeze on household disposable income. However, the slight upturn over the past three months is relative to a record low of -49 in September: the lowest consumer confidence since 1974. The improved stability in the UK political sphere and households receiving government transfers to help with energy bills may have contributed to the slight upturn in consumer confidence with the GFK Consumer Confidence Survey, reporting -42 in December.

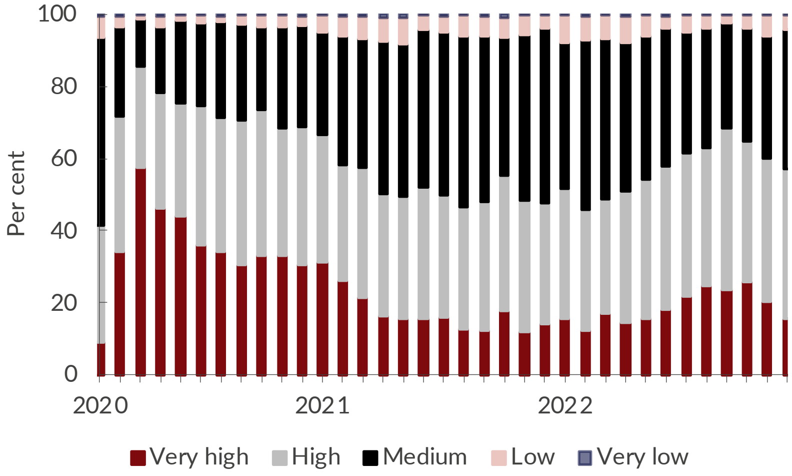
The same survey asked consumers about their forward-looking expectations for the next 12 months with regards to their personal financial situation and there was no change in outlook compared to the last period. However, their expectations for the general economy have improved slightly. This slight improvement in consumer sentiment is also captured in the latest YouGov/Cebr consumer confidence survey, which was up by one point in December. In normal times such small upturns may not be remarkable but given the collapse in consumer sentiment in the previous quarter this may be a sign of less consternation among UK consumers.

Business Confidence

The Bank of England's Decision Makers Panel, which surveys UK companies operating in a representative range of industries, shows an improvement in UK business sentiment, in so much as fewer firms are facing 'very high' levels of uncertainty, albeit they are still facing 'high' uncertainty.

During the political turmoil in the United Kingdom in September 2022, with the Truss Government's mini-budget, 23.7 per cent of businesses responding reported that they faced very high uncertainty. In October this proportion peaked at 25.7 per cent, reflecting that this was at the time of the change of Prime Minister in the United Kingdom. Uncertainty has fallen in recent months but, with 41.8 per cent of businesses now reporting high uncertainty and 38.5 per cent reporting medium uncertainty, British businesses remain vigilant (Figure 1.23).

Figure 1.23 Overall Uncertainty: Percentage of 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.

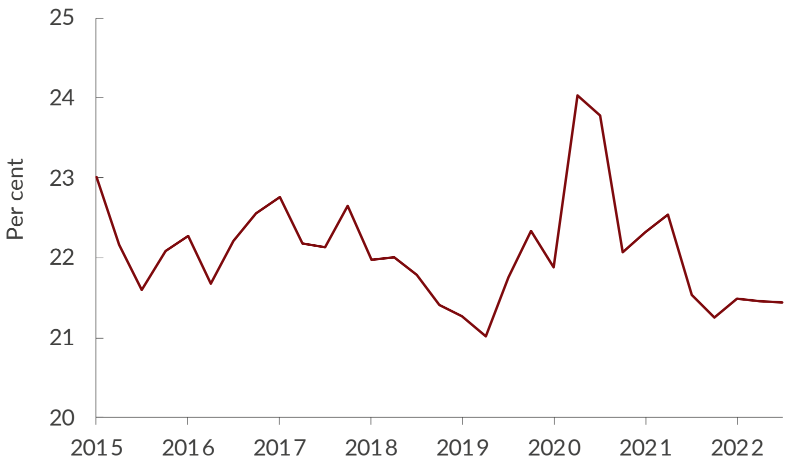
The ONS Business Insights and Conditions Survey reported that in December 2022 industrial action affected almost one in six businesses (16 per cent) resulting in 23 per cent of businesses reporting that they were unable to operate fully, and 28 per cent of businesses responding that they were unable to obtain goods necessary for their business. Whether this passes through to actual business activity is not yet apparent.

Looking ahead to the next few months businesses reported that their main concerns were energy prices (20 per cent), inflation of goods and services (16 per cent) and falling demand for goods and services (14 per cent).

Business Conditions

The share of profits in GDP has remained relatively stable over the past three quarters, despite inflationary pressure on input costs (Figure 1.24). Reported business pessimism has not yet translated into a decline in the aggregate profit share in GDP as of the third quarter of 2022. However, the overall profit share does not tell us the sectoral breakdown of profits; some sectors will be more exposed than others going into a contractionary period. As discussed in Box B, one sector that was doing better than expected in 2020-21 but has since been particularly weak is the UK manufacturing sector. We might expect this sector to be particularly exposed to weakness in global activity, as we are forecasting in our Winter 2023 Global Economic Outlook.

Figure 1.24 Profit share in GDP



Source: ONS, NIESR calculations.

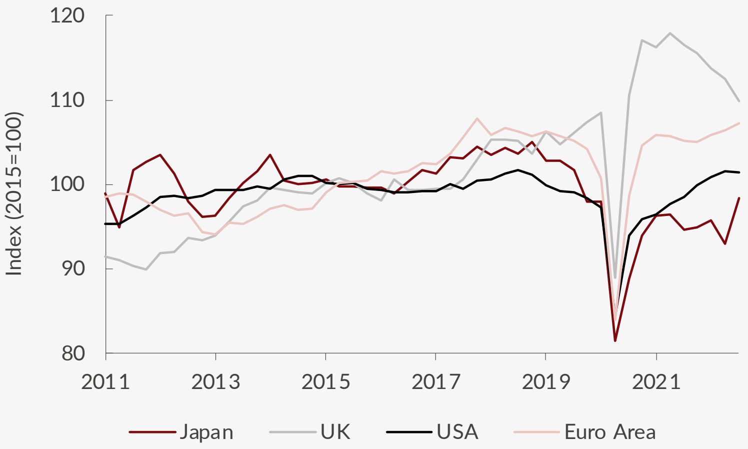
Box B: UK manufacturing post Brexit and Covid-19

By Paul Mortimer-Lee

The trajectory of UK manufacturing output since 2019 has been both dramatic and puzzling. The sector contracted sharply in 2020, partly due to Covid-19, but many commentators attributed the weakness to Brexit, which had been widely expected to reduce manufacturing exports and curtail output. The data suggest strongly that the swings in manufacturing output have resulted from Brexit-related timing distortions. However, comparing trade data for the non-EU with data for the EU countries does not suggest a significant persistent worsening in the trade balance due to Brexit. Instead, it appears that the excess of domestic demand over turgid supply in the United Kingdom is behind a bigger real net trade deficit compared with 2019.

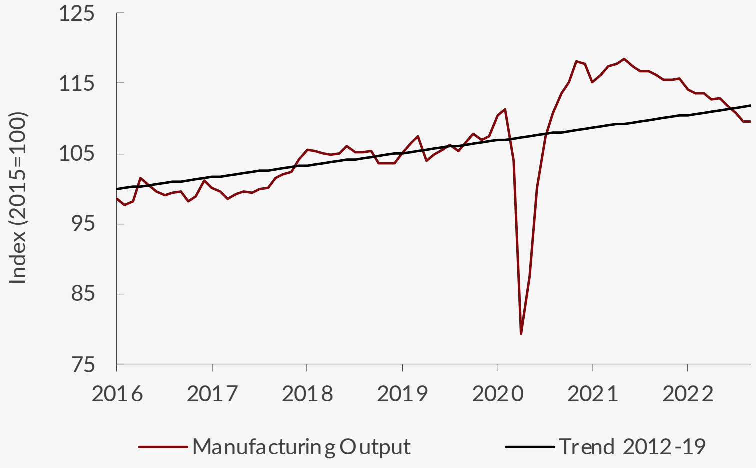
Following the dive in manufacturing output at the onset of Covid-19, and following Brexit, the bounce-back was dramatic, with a surge in manufacturing output in the United Kingdom, mostly in the second half of 2020, far beyond what was observed in the euro area, the United States and Japan (Figure B1). The gains in production were sustained in early 2021 but started to fade later that year, with a full reversal of the earlier gains by the middle of 2022. Over recent quarters, manufacturing has been weak, with declines in output in the United Kingdom, compared with gains elsewhere, though the level of UK output compared with that pre-pandemic is still relatively high (Figure B1). UK manufacturing output has fallen in each of the last five quarters, to register a year-on-year slump of almost seven per cent, taking output back to slightly below its 2012 to 2019 trend (Figure B2).

Figure B1 Manufacturing production



Source: FRED, OECD.

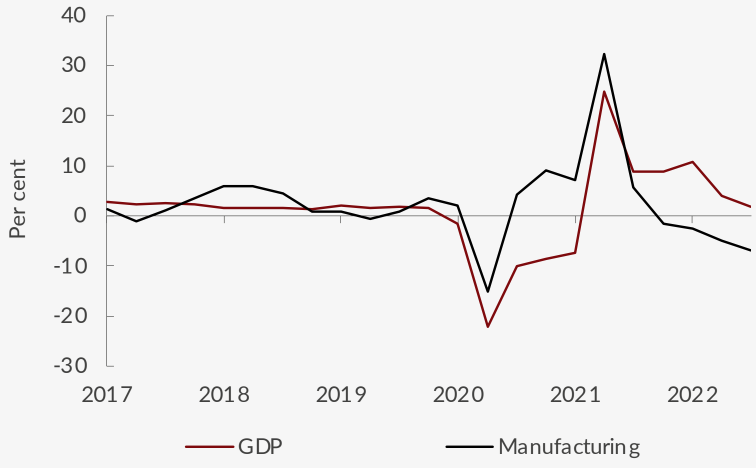
Figure B2 Manufacturing output and trend



Source: FRED, OECD.

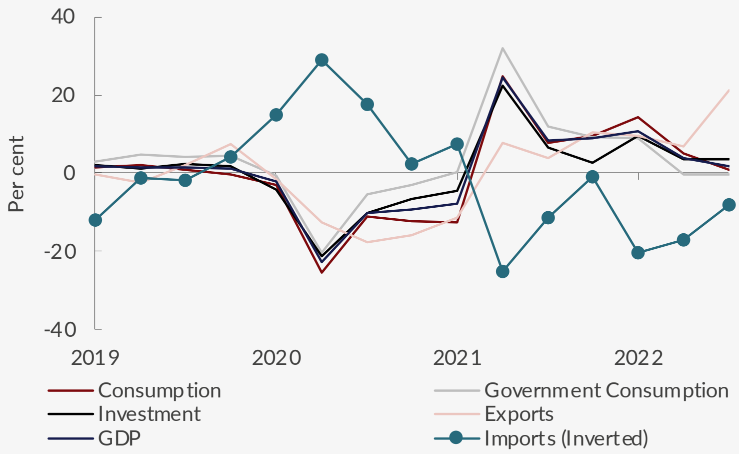
The puzzle is why manufacturing in the United Kingdom was so strong and why it has contracted over the last year and a half or so. Part of the story is that the economy has slowed. Since manufacturing is more volatile than GDP (the standard deviation of its growth rate is about double that of GDP growth), when GDP slows, manufacturing slows by significantly more. This helps to explain manufacturing's strong year-on-year growth in late 2020 and 2021. However, manufacturing has subsequently slowed far more than its past relationship with GDP would have suggested (Figure B3), raising the question as to whether Brexit is involved.

Figure B3 Annual manufacturing and GDP growth rates



Source: ONS.

Figure B4 Annual growth in GDP and its expenditure components

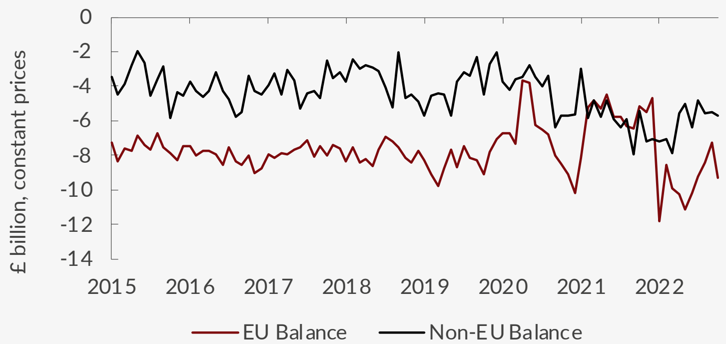


Source: ONS.

Figure B4 illustrates that trade flows are indeed important in explaining why manufacturing experienced a sharp rise in output in 2020 and why weakness set in late in 2021 and in 2022. In the second quarter of 2020, all expenditure components fell sharply. Imports plummeted by 24 per cent, but exports by only half as much. The manufacturing share of imports is, according to input-output tables, about 50 per cent, with the share in exports about ten percentage points lower. Thus, the sharper fall in imports than exports in the second quarter of 2020, together with imports' greater manufacturing intensity, largely explains why UK manufacturing saw a huge boost in output. Brexit was probably behind this, not only because new procedures may have caused issues at the border but also because many firms had built up stocks of imports before Brexit as a precaution against disruptions. This anticipatory stockbuilding brought imports forward into 2019 that otherwise would have entered the United Kingdom in 2020, resulting in much weaker imports than exports in 2020. Greater disruptions to supply chains for imports than exports (China is the United Kingdom's most important source of imports) also played a role, both directly and, indirectly, by limiting the availability of auto imports from Europe.

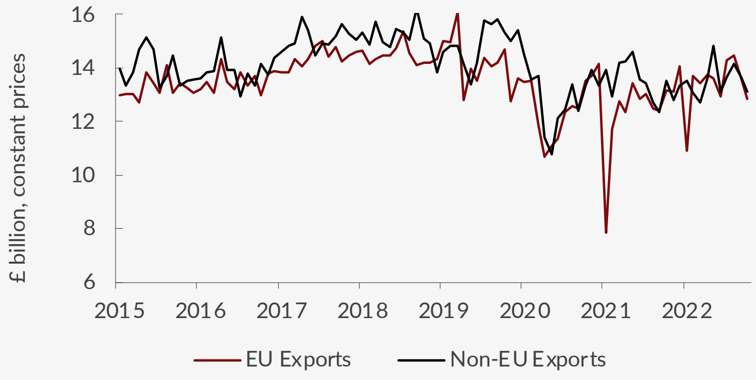
The great weakness in imports in early 2020 was mirrored in a bounce-back later in the year. By the second quarter of 2021, imports were up 25 per cent year-on-year, as against a rise in exports of only 7.7 per cent. Net trade therefore weighed on GDP and on manufacturing production, resulting in the falls in output we see in Figures B1 and B2. How much of the more recent weakness is due to the short-run effects of Brexit in distorting the timing of trade flows and how much is due to damage that will persist over time? At this stage, it is too early to tell, but a guide to the possible long-run effects of Brexit can be gleaned from looking at trade flows with the European Union and those with non-EU countries (Figures B5, B6, and B7).

Figure B5 Goods trade balances



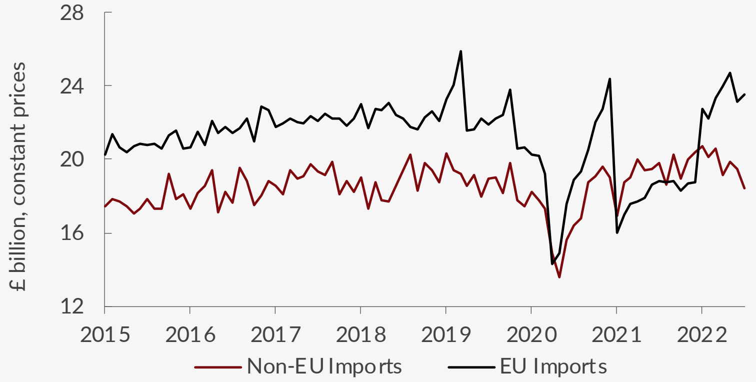
Source: ONS.

Figure B6 Goods exports



Source: ONS.

Figure B7 Goods imports



Source: ONS.

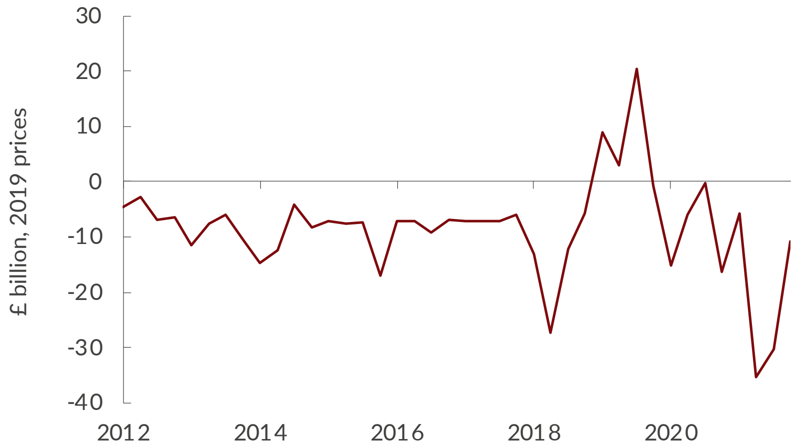
The balance of real net goods trade (excluding precious stones) with both EU and non-EU countries has deteriorated significantly since 2021, with the pattern against the European Union being far more erratic than against non-EU countries, reflecting Brexit distortions. The deterioration has largely been due to higher imports, but weak exports have also been an issue, especially with non-EU countries. The strength of imports ahead of Brexit on 31 January 2020, and the subsequent bounce-back, has been mentioned above. There were distortions ahead of and after the UK-EU Trade and Cooperation Agreement came into effect on 1 January 2021, Trade with the European Union on both sides of the account dropped precipitously after the agreement came into effect. Exports staged a stronger bounce-back later in 2021. Recently, imports from the European Union have been noticeably stronger than from outside the European Union, suggesting no strong Brexit effect, which would have delivered weak EU imports and stronger non-EU imports. Compared with the last six months of 2019, imports from the European Union are higher by 4.3 per cent in the last six months, as against a rise of 3.9 per cent in imports from non-EU countries. This close similarity is not suggestive of a significant Brexit effect dampening imports from the EU

It is noteworthy that exports in the latest six months to non-EU countries are down by 11.3 per cent compared with last six months of 2019, whereas the decline for exports to the European Union is only 2.3 per cent. If Brexit were having a seriously damaging effect on UK export volumes to the European Union, the decline in exports to the European Union would be expected to be greater than the decline in exports to non-EU countries; the data show the reverse.

Given that the United Kingdom is the only major country whose GDP is still below its level at the end of 2019, higher imports and lower exports to destinations inside and outside the European Union are suggestive of serious issues on the UK supply side, a picture that is reinforced by the presence of significant upward pressure on domestic prices, including wages. The United Kingdom's problems of slow growth and a secular decline in manufacturing output and employment as a share of the economy extend long before Brexit. However, the shorter-run swings in UK manufacturing output since 2020 owe a great deal to import swings associated with Brexit, but also with Covid-19. The jury is still out on the longer-term impact of Brexit on manufacturing trade and output, but thus far the evidence for a large negative effect is lacking because compared with last six months of 2019, data for the latest six months show larger deteriorations in the real net trade balance with non-EU countries than with those in the European Union. However, the trade figures with the EU have been very erratic since late 2019, so any conclusions are tentative.

Trade

Figure 1.25 UK balance of trade



Source: ONS.

The UK Balance of Trade improved markedly in the third quarter of 2022 (Figure 1.25). The United Kingdom may have benefited from the fall in Sterling and improvements in supply chain bottle necks. The fall in global shipping costs is also beneficial to trade.

Supply and costs

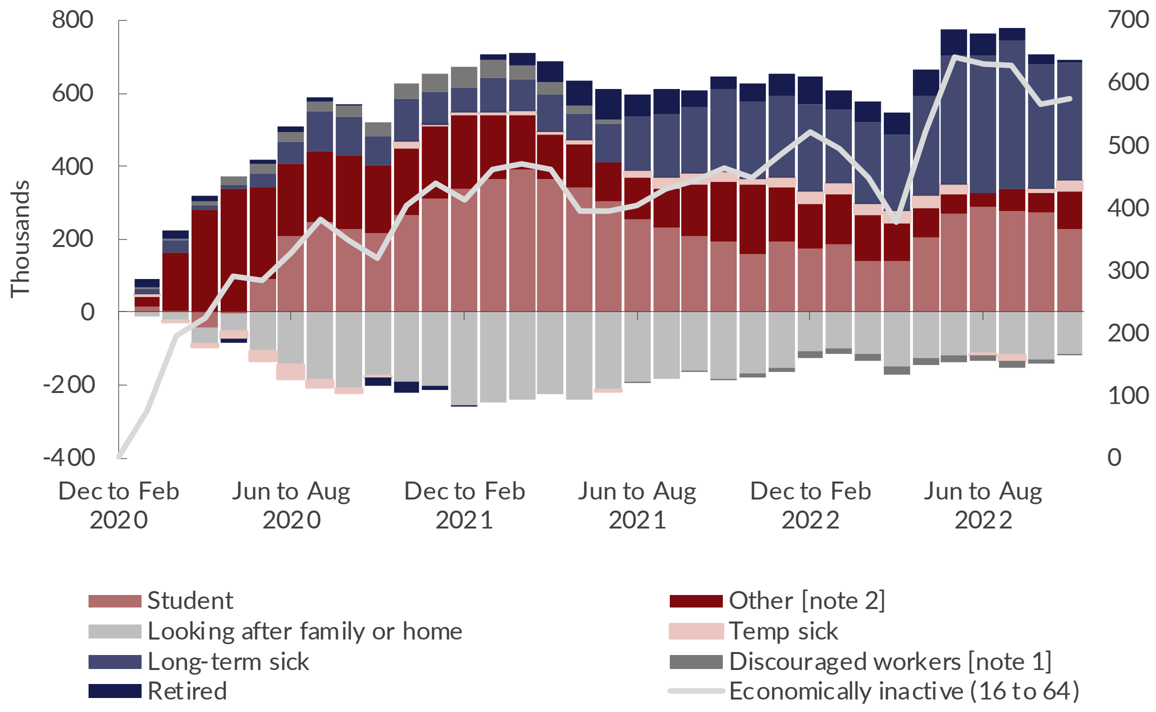
Labour market at a crossroads: Unchanged employment while unemployment rises

According to the latest figures from the ONS, the employment rate in the three months to November 2022 remained unchanged from the preceding three-month period at 75.6 per cent. The unemployment rate increased by 0.2 percentage points to 3.7 per cent, but it remains close to record lows and below pre-pandemic levels. The increase was mainly concentrated among younger workers; the number of unemployed between 16 and 24 years old increased while no other age groups have seen a rise. Interestingly, redundancies have also risen by 1.1 per cent as compared with the three months to October 2022 and this increase looks to be mainly males. Looking at redundancies by industry, those industries which tend to employ a greater proportion of men than women – Finance, Real Estate, Construction and Manufacturing – have higher redundancies and, coincidentally, these sectors are also the ones that saw the highest year-on-year growth.

Economic inactivity rate falling but still at record high

Over the course of the past 100 years, the economic inactivity rate has been broadly falling, except for the marked increase during the pandemic. In the latest September to November 2022 period, the economic inactivity rate fell by 0.1 percentage points to 21.5 per cent from the previous three months to October 2022, the decrease was driven by those aged 16 – 24 and 50 – 64. In terms of reason for inactivity, the quarterly decrease was driven by students, long-term sick and retired. This might suggest that the older workers who have left the labour market since the start of the pandemic have started to look for work and students are finding it hard to cope with living expenses as the cost-of-living crisis bites. Nevertheless, a large number of people, which form part of the economic inactivity group, are in the long-term sick category (Figure 1.26). While there are plans to encourage the over-50s and those who are on long-term sick to re-enter the workforce, it will be even more important to manage the NHS crisis, which may be preventing people in the long-term sick category from getting access to proper and timely healthcare. Our view remains that the participation rate for the working-age population will return to its pre-Covid level over the course of the next few years as workers in the 50-64 age group return to the labour force as they find their savings run down and fewer workers retire early.

Figure 1.26 Change in economic inactivity by category since the three months to February 2020 (to be formatted)



Source: ONS.

Fall in vacancies: Is a softening in the job market coming soon?
The number of job vacancies has fallen for the seventh consecutive month to 1.16 million in the three months to December 2022, signalling that global economic uncertainty and economic pressure is holding back recruitment activity. This sentiment is echoed in January's job market report by KPMG and REC where the demand for workers grew at the slowest rate since February 2021 during November. However, the labour market remains tight as measured by the number of unemployed people per vacancy, which was 1.0 in the three months to November 2022. It is notable that the fall in vacancies seems to be coming from the private sector although the rise in vacancies in public-sector industries (public administration, defence and social services) has also slowed.

NIESR's Business Conditions Forum attendees noted that hiring sentiment remains strong in large and very large firms with some experiencing ongoing labour shortages and recruitment difficulties, whereas there appear to be early indications of some softening in vacancies and hiring intentions for smaller firms. As credit conditions worsen for business the squeeze on smaller firms may become more acute.

Decreasing hours worked amidst a tight labour market does not bode well for economy
Between September to November 2022, total weekly hours worked decreased by 10 million to 1.04 billion hours and remains 16.3 million hours below pre-pandemic levels. The decrease was driven by men, whose hours remain 19.1 million hours below pre-covid levels, while women's hours are 2.8 million hours marginally above their pre-pandemic level. A total of 467,000 working days were lost due to public sector disputes in November 2022 and that figure is likely to rise given the extensive walkouts we saw in December. The role of the Pay Review Bodies (PRBs) in all of this is discussed in Box C.

Nominal wage growth remains strong but outstripped by inflation
The growth rate for both total pay (including bonuses) and regular pay (excluding bonuses) was 6.4 per cent in the three months to November 2022 relative to the same three months a year ago (Figure 1.27). But, this strong growth in nominal pay provides little to no relief for workers whose paychecks are being eroded by high inflation. In real terms, both total and regular pay fell by 2.6 per cent in the three months to November 2022 relative to the same three months a year ago (Figure 1.27). While this is slightly lower than the record fall of 3.0 per cent for real regular pay we saw in the three months to June 2022, it remains among the largest declines on record.

Box C: Are the Pay Review Bodies fit for purpose in 2023?

By Peter Dolton

At the start of 2023, the UK Economy is caught up in a period of widespread and damaging industrial unrest with teachers, nurses, ambulance workers, and many others in the middle of disruptive strikes over wage demands. This crisis has been brought about by the huge hike in oil and gas prices and their knock-on effects on all costs induced by the Russia-Ukraine War. With the Cost-of-Living (CoL) rising at over 10 per cent per annum for much of 2022 the Government steadfastly wants to limit wage rises of public-sector workers to around 4 per cent. What are the arguments in this debate? Why is the Government trying to limit these pay rises? What is the role of the Pay Review Bodies (PRB) in this process and how might they be appraised? In the light of the CoL crisis, is there a case for reviewing what the PRBs do and how the government uses them? This box reviews brief answers to these questions.

What are the PRBs and how well have they worked up to 2021?

There are seven core PRBs (for School Teachers, Nurses and other Health professions, Doctors and Dentists, the Prison Service, the Police, the Armed Forces and Senior Salaries plus two other similar bodies which cover the National Crime Agency and the Independent Parliamentary Standards Authority which determines MPs pay). The PRBs cover 2.5 million workers out of the over 5 million employed in the public sector or central and local government. The main function of these independent Review Bodies is to advise the government about appropriate pay awards taking into account the particular circumstances of the remit group and reflecting the different conditions across disparate labour markets. Most of the PRBs are required in their remit to make recommendations on pay giving consideration to relative pay comparisons, cost of living changes, the relative position of recruitment into and retention within the occupation and finally the fiscal affordability position of the government. This means inter alia that the PRBs explicitly take into account information about wastage from the profession, the demographic age profile of the profession as well as any difficulties of recruitment into the profession. The PRBs are evidence-based bodies that do not have constituent statutory members from either employers or the unions but do take evidence from all such bodies on board in making their recommendations. Appointees to the PRBs are independent experts appointed to make objective judgements and the pay determination process should be strongly influenced by these independent bodies. This is in sharp contrast to the other public-sector occupations (like civil servants and Local Government employees) whose pay is determined by a collective bargaining arrangement between the unions and the employers. (It is also worth emphasizing that the current disputes involving transport workers and other groups are not covered by the PRBs and not considered in the present discussion.)

Recent econometric evidence suggests that these PRBs have played an important role in keeping wage inflation under control and have also been central to limiting harmful industrial disputes and damaging lengthy strikes. For the most part, up to 2021, these PRBs have broadly enjoyed the confidence of the trade unions and kept the Government out of protracted conflictual disputes. Unfortunately, the traumatic events of 2022 have brought this steady equilibrium into a new sharp focus. What has changed is that we have experienced a profound exogenous shock to the CoL with the Russia-Ukraine war.

There is no doubt that for the government the PRBs act as convenient objective bodies which consider public-sector pay awards. This means that the individual government departments are not involved directly with public-sector unions in disputes over potential pay rises.

What have the PRBs most recently recommended?

The most recent annual cycle of PRB deliberations culminated in their reports being published in July 2022. In 2022 the basic recommendations of pay rises for each group was: Prison officers 4 per cent, Nurses 4 per cent, Police 5 per cent, Judges 2.5 per cent, the Armed Forces 3.75 per cent, Doctors 4.5 per cent, and Teachers 5 per cent in 2022 and 5 per cent in 2023. Most of these recommendations have been accepted by the relevant government departments. But these recommended pay awards have not been acceptable to the unions involved as the events of the rest of 2022 unfolded.

A most critical factor this year has been that the PRB annual cycle of evidence means that these most recent recommendations relate to the evidence taken by the PRBs in late 2021 and very early in 2022 – before the Russia-Ukraine War. During this period the Retail and Consumer Price Indices were rising by around 4 per cent per annum. Hence the recommendations were broadly in line with the then rising CoL. The reality is, though, that by the time these recommendations were being accepted by the relevant government departments the rise in the CoL had shot up to around 10 per cent. In this heightened dispute it is not surprising that many unions have expressed dissatisfaction with the PRB review process and already said they will withdraw from future participation in the process.

Should the PRBs' remit be changed in be light of the Cost-of-Living crisis?

Since they were set up the PRBs have only ever had the remit of making recommendations about pay and working conditions and affordability in the different occupations. In practice the relevant Secretary of State is under no obligation to accept these recommendations (and sometimes chooses not to).

It would be a major change of their remit to ask them to play a different role in modern times. But arguably this may be justified. More specifically, suggestions have been made that they should be involved in making recommendations about the future supply of workers from abroad and that they should give consideration to improvements in public-sector productivity and tie wage increases to them.

For example, since Brexit we have not had the flow of health professionals from overseas that we need to staff our NHS. Should the NHS PRB have a role to play in making recommendations about recruitment requirements from overseas? The problem here is that this would impinge on what is the remit of the Migration Advisory Committee.

It could be argued that the CoL crisis is an exceptional situation due to the Russia-Ukraine war and the PRBs are not flexible enough to adjust quickly to adverse events if they have an annual cycle which uses evidence that may be 18 months old by the time it is being implemented. Maybe the PRBs should be asked to make interim recommendations in times of rapidly moving inflation?

It could also be argued that the PRBs should explicitly have productivity considerations built into their terms of reference. The research work on public-sector productivity is vital here. Recent work from the Productivity Commission (van Ark 2022) suggests that the ONS figure of 0.7 per cent productivity rises in much of the public sector has some credence. What is less clear though is how this productivity rise translates into a pay award for different occupational workers. It is also a separate question of how that might feed into PRB deliberations. Proposing that public-sector wage increases be linked to productivity would be a big change for the terms of reference of the PRBs and one which could not be implemented quickly.

What is the purpose of PRBs as an institutional device?

The purpose of the PRBs is to provide objective recommendations on pay and conditions. According to recent econometric evaluations (Dolton et al., 2014), they have been appraised as being very effective.

Politically they also serve a very useful function, for Government, which sits outside political processes. The Government can, and does repeatedly, say that PRB recommendations are objective. This has, in the past got the Government out of some very difficult conflictual situations by enabling them to say that an expert body has considered the evidence and made its recommendations, which they are following. In this regard is the PRBs are like other advisory bodies such as the Migration Advisory Committee, which makes recommendations on immigration policy, and the Low Pay Commission, which advises the Government on the National Living Wage and its recommended uplift. But PRBs only make recommendations and do not have teeth like the Monetary Policy Committee, which has the power to fix the base rate of interest.

In practice the Government can use the PRBs to absolve them from making difficult decisions. But the reality is that His Majesty's Treasury (HMT) only welcomes the advice of the PRBs if they give back the recommendations that HMT are happy to implement. When a PRB has not done this then the recommendations have often been rejected. So, in reality, it is questionable whether the PRBs actually have the political agency they should do.

Does the electorate understand the trade-off between public-sector wages and taxation?

The process by which higher wages in the public sector (which are not backed by productivity increases) could give rise to lower quality provision or higher taxation is seldom explicitly spelt out to the electorate. Often HMT will stipulate that public-sector wage rises need to be funded within the 'current government department spending envelope' but seldom is it acknowledged to the electorate that this may mean a lower level of public service provision. Research should clearly be done here on the extent to which the public understands this trade-off and may or may not wish to have a lower quality of service provided by, for example, the NHS and schools, if it meant lower taxes. Alternatively, by how much would they be prepared to see their taxes rise to fund the present NHS and teacher wage demands? Ultimately these questions may be decided at the ballot box in the next General Election.

The case for limiting public-sector wage increases

The Government's case for limiting the size of a public-sector pay uplift hinges on six major premises. We review these in the order that they have been most commonly invoked in recent weeks:

1. Official projections for inflation are that it will fall dramatically in 2023 and into 2024. It is widely suggested that inflation will fall to around 3 per cent in the next 12-18 months.
2. The country can't afford a public-sector pay uplift unless it were funded by increasing public taxation – and the electorate is not in favour of this.
3. Allowing higher public-sector pay will cause future wage inflation which will induce a wage-price spiral and lead to further inflationary pressures.
4. Public-sector workers are better paid than private-sector workers as they have more generous pension benefits.
5. Public-sector workers are in occupations which benefit from 'wage drift' induced by them getting occupational scale pay rises for years of service and seniority which many private-sector workers do not get.
6. Public-sector workers enjoy lower risks of redundancy, shorter working hours and longer holidays than their private sector counterparts.

The counter arguments to these points are, respectively:

- The wage rises due in 2022/23 should be at a level to compensate workers for the changing CoL over this period – hence it is irrelevant what may happen in 2023/4 – and this should be taken care of next year.
- Most people may now prefer to pay higher taxes to fund pay rises for nurses (and others) – they may only be asked to express this preference at the next General Election.
- Recent research evidence suggests that it is the private sector which 'leads' in terms of the wage spiral.
- Public-sector workers (for the most part) no longer enjoy Defined Benefit – so called 'Gold-plated' pensions – and most are in pension schemes which are no more generous than private-sector schemes.
- The perk of 'wage drift' is now common in many private-sector occupational wage structures.
- Private-sector workers are, for the most part compensated for the higher risk of unemployment by pay bonuses which have no role to play in the public sector.

The case for public verses private-sector wage enhancements has a large literature which merits closer scrutiny, particularly regarding the value of the 'Total Reward' package, in each occupation, which takes all of the above factors (pensions, wage drift, bonuses, hours of work, and unemployment risk) into account. The leading studies of this have suggested broadly that the perceived public sector Total Reward advantage has fallen over time and been overstated in recent times by policy commentators. Given that, the current case for limiting public-sector pay increases seems weak at best.

Conclusion

The PRBs are an effective way of handling public sector wage rises, which has in the past worked admirably well. The present situation is a very abnormal one due to the timing of the huge hike in the CoL coming just after the PRBs had reported in 2021/22. The Government needs to rethink its current stance or the PRBs risk losing their credibility.

References

van Ark, B. (2022), Making public sector productivity practical, The Productivity Institute and Capita, Manchester.

Dolton, P., Makepeace, G. and O. Marcenaro (2015), 'Public sector pay in the UK: Quantifying the impact of the review bodies', Manchester School, Vol. 83, pages 701-24.

Figure 1.27 Average weekly earnings growth

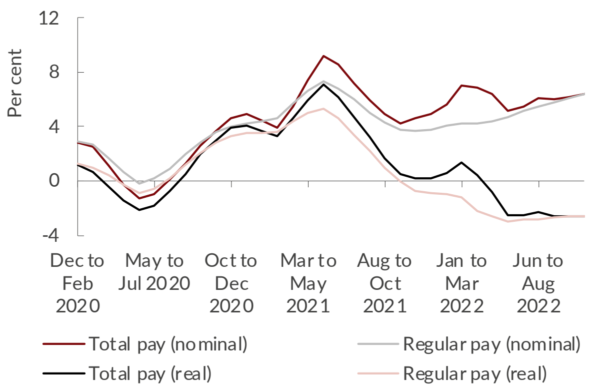
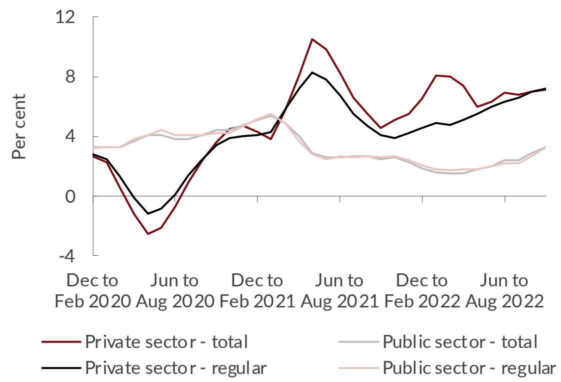


Figure 1.28 Average weekly earnings growth by sector

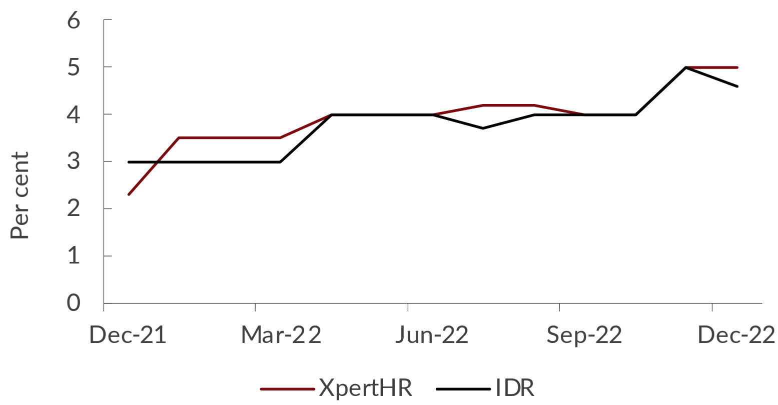


Source: ONS.

Differences between Private and Public Sector likely to persist

The disparity between the private and public sectors continues with private-sector wage growth at a strong 7.2 per cent, well ahead of the meagre 3.3 per cent growth in public-sector earnings in the three months to November 2022 (Figure 1.28). While the gap is closing, the difference remains among the largest outside of the pandemic period. This ever-persistent gap is likely to add to the discontent among public-sector workers, as we have seen from the wave of industrial action over the past six months and through the Winter. Income Data Research (IDR) found that the median pay award for the whole economy was 4.6 per cent in the three months to December 2022 while XpertHR reported 5.0 per cent in the same period (Figure 1.29).

Figure 1.29 Median pay settlements



Source: XpertHR, IDR.

UK Productivity lags behind G7

In the latest publication released by the ONS on “International comparisons of UK productivity”, it was reported that UK output per hour was lower than France, Germany and the United States but higher than Canada and Japan and 10 per cent below the G7 average. The significantly smaller than pre-pandemic workforce coupled with a tight labour market, candidate shortages and intense labour disputes that do not seem to be subsiding anytime soon, will undoubtedly weigh heavily on the productivity of the workforce in the medium term.

References

Bank of England (2022) Monetary Policy Report, November 2022, https://www.bankofengland.co.uk/monetary-policy-report/2022/november-2022.

Bejarano Carbo, P. & Nowinska, J. (2022) 'One last hurrah before belts are tightened?', NIESR GDP Tracker, January 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/01/January-GDP-Tracker-FINAL.pdf.

Bejarano Carbo, P. (2023) 'Core inflation remains elevated, threatening persistence', NIESR CPI Tracker, January 2023, https://www.niesr.ac.uk/wp-content/uploads/2023/01/CPI-Tracker-January-2023.pdf.

Bejarano Carbo, P., Bhattacharjee, A., Chadha, J.S., Low, H., McSorley, L., Millard, S.P., Mosley, M., Pabst, A., Patel, U. & Whyte, K. (2022a) 'Filling the fiscal gap may extend the low-growth trap', NIESR UK Economic Outlook, Autumn 2022, https://www.niesr.ac.uk/publications/filling-fiscal-gap-may-extend-low-growth-trap?type=uk-economic-outlook.

Bejarano Carbo, P., Cornforth, E., Low, H., Millard, S.P., Mosley, M., Pabst, A. & Whyte, K. (2022b) 'NIESR's response to the Autumn Statement', https://www.niesr.ac.uk/wp-content/uploads/2022/11/2022-NIESRs-Autumn-Statement-Response-FINAL.pdf.

Broadberry, S., Chadha, J. S., Lennard, J. and Thomas, R. (2022) 'Dating business cycles in the United Kingdom', Economic Statistics Centre Of Excellence Discussion Paper No. 2022-16.

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. https://www.niesr.ac.uk/publications/designing-new-fiscal-framework?type=occasional-papers

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

McCann, P. (2021) 'The Fiscal Implications of 'Levelling Up' and UK Governance Devolution'. Productivity Insights Paper No. 008, The Productivity Institute.

Mortensen, D. T. & Pissarides, C. A. (1994) 'Job creation and job destruction in the theory of unemployment', Review of Economic Studies, 61, 397-415.

Productivity Commission (2022) 'Productivity in the UK: Evidence review', https://www.niesr.ac.uk/wp-content/uploads/2022/06/Productivity-in-the-UK-Evidence-Review.pdf.

Productivity Commission (2023) 'Priorities for 2023', https://www.niesr.ac.uk/wp-content/uploads/2023/01/Productivity-Commission-Policy-Priorities.pdf.

Trigari, A. (2009) 'Equilibrium Unemployment, Job Flows, and Inflation Dynamics', Journal of Money, Credit and Banking, 41, 1-33.

2 Outlook for UK households, the devolved nations and the English regions

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

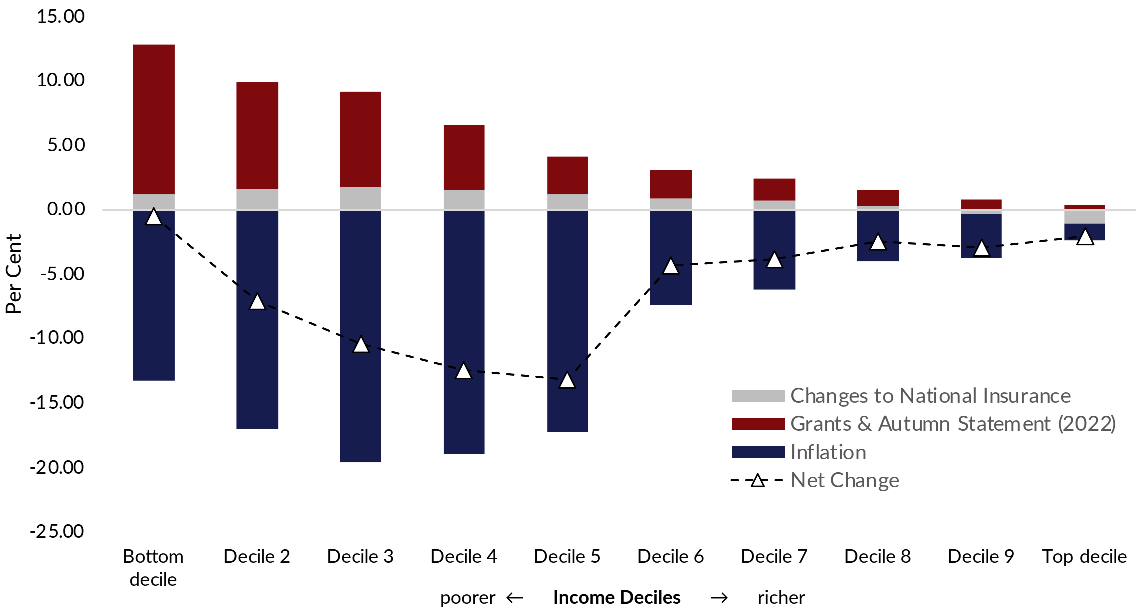
- **Successive policy packages have helped to cushion the impact of inflation for the poorest households but have left those on low to middle incomes exposed:** the combined negative effects of high inflation and changes to taxes and benefits account for 0.5 per cent of the disposable income in 2022-23 for households in the bottom decile, whereas for deciles 2-5 the effects are between 7 per cent and 13 per cent (up to £4,000 a year).
- **7 million UK households (1 in 4) will face energy and food bills that exceed their disposable income in 2023-24**, up from around 1 in 5 in 2022-23. Household disposable incomes have fallen sharply since the beginning of the pandemic, between 18 per cent for the lowest quintile and 9 per cent for the top quintile.
- **Northern Ireland and the North East will see significant destitution by the end of 2024:** 32 percent of households in Northern Ireland and 30 per cent of households in the North East where the climate is particularly challenging will face extreme poverty.
- **Combining a Social Tariff and a Variable Price Cap present the most effective tools to tackle high energy bills:** discounting energy bills for the poorest households and a revenue-neutral system where the price of energy rises with usage will lower the energy bills for the poorest (who use the least amount of energy) while incentivising efficient energy consumption for the more affluent.
- **Regional disparities are widening:** the regions that are falling further behind London and the metropolitan parts of the South East include the North East, the Midlands and Northern Ireland. By the end of 2024, output in London is projected to be 9 per cent above its pre-pandemic level, compared with a 1 per cent drop in the Midlands; while productivity per hour worked in London is forecast to rise from 64 to 68, in the West Midlands, it is projected to fall from 32 to 30.
- **Levelling-Up can create meaningful change but requires reform:** to deliver on the promises of Levelling Up, the fragmented funding streams need to be unified and applications by local authorities need to be radically simplified.
- **A National Development Bank should be created to support investment projects across regions:** persistently low public and business investment requires fundamental institutional reform; we continue to argue for the creation of a UK-wide National Development Bank endowed with around £50bn worth of finance to support investment projects across regions and sectors.

The return of the 'squeezed middle'

Ahead of the Budget on 15 March, this chapter takes stock of the distributional impact on households and regions arising from the cost-of-living shock of rising energy and food prices exacerbated by the war in Ukraine. Which households across the income distribution have been hit hardest, which regions are worst affected and what would a fiscal response that reduces inequalities look like?

Since February 2022, NIESR's outlook for UK households, devolved nations and regions has tracked the distributional impact of the energy price shock and also rising food and housing costs (Bhattacharjee et al., 2022a, c). We have also analysed the effect of various policy interventions, including the Energy Price Guarantee (EPG) and other support measures by the government (Bhattacharjee et al., 2022b, d). We present in Figure 2.1 the cumulative effects of these shocks and the subsequent policy interventions across the income distribution.

Figure 2.1 Cumulative impact of price shocks and policy interventions across the income distribution



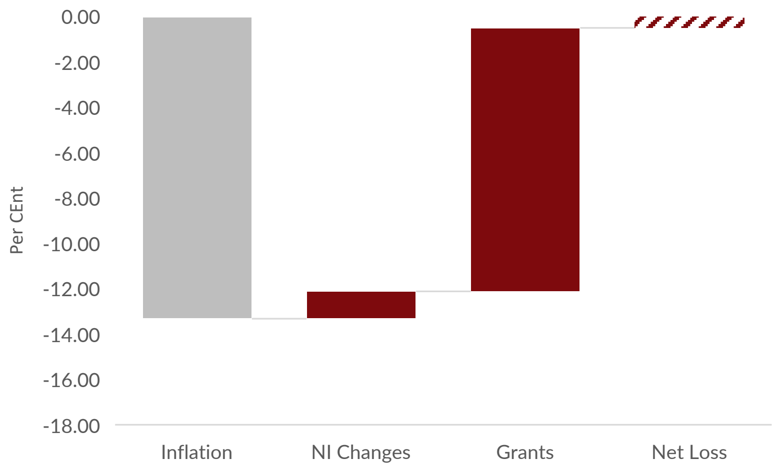
Source: LINDA.

Overall, all UK households were made poorer in 2022 as a consequence of rising inflation. Successive policy interventions, in particular the grants announced in May 2022 and the Autumn Statement of 17 November have produced mixed results in alleviating the effects of inflation. Due to the bulk of the support being targeted through Universal Credit, such as the latest £900 cash payments, the poorest households have now seen less of a fall in their real incomes when compared to middle incomes (Figure 2.2).

We highlight the above analysis for the lowest income households in Figure 2.2, which shows the effect of the grants offsetting the majority of inflation, producing a small 0.5 per cent net loss.

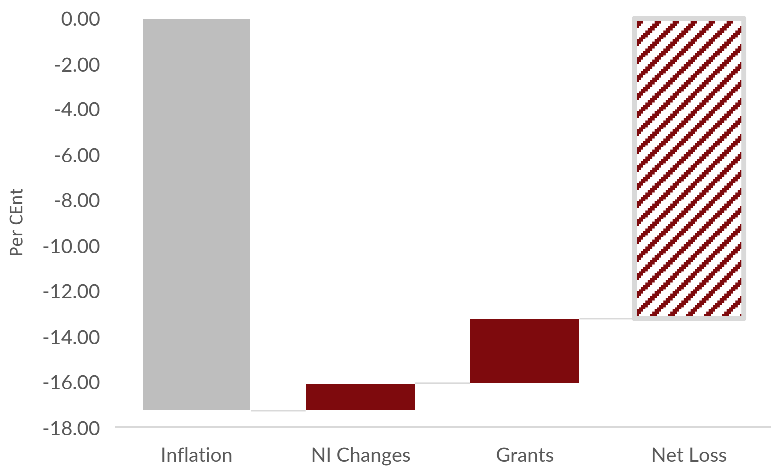
We see a different story when we compare this to low- and middle-income households in Figure 2.3. Here, due to the lack of households that qualify for Universal Credit, they do not receive most of the grants available. The consequence is a significant net loss to real incomes of around 13 per cent, worth nearly £4,000 per year. Together, these charts illustrate the return of the phenomenon of the 'squeezed middle', because the bulk of financial support is targeted through Universal Credit at some of the poorest households.

Figure 2.2 The Cumulative Effect of Inflation and Policy Intervention for the Poorest Households



Source: LINDA.

Figure 2.3 The Cumulative Effect of Inflation and Policy Intervention for Middle-Income Households



Source: LINDA.

It would not be fair to characterise this effect as the consequence of oversight. We have previously highlighted the policy trade-off between universal and wasteful, and targeted but exclusive support measures (Bhattacharjee, Mosley and Pabst, 2022a). Prior interventions before the Autumn Statement could be criticised for being too close to the former, because of a lack of support for those on Universal Credit. However, the Autumn Statement provided an uplift to Universal Credit in line with inflation, along with providing additional cash grants to poorer households. Our analysis illustrates the need for policy intervention to cover not only the poorest households in receipt of benefits but also to help low to middle-income households. This must be of key consideration for the Budget on 15 March.

Winter of want

As inflation begins to decelerate this year (see Chapter 1), we can now begin to take stock of the impact of successive shocks and how effective the subsequent policy interventions have been. This is an especially valuable task ahead of the March Budget, as policymakers will need to have a precise understanding of who the hardest hit households are and in which part of the country they live.

Our findings show that the worsening economic and social conditions for millions of households and most regions across the UK demand further policy intervention. Twelve months of the cost-of-living crisis have left 11 million households with significantly lower disposable incomes and many regions falling further behind London and the South East (Bhattacharjee et al., 2022a, b, c and d). Despite support packages from central government (HMT 2022a and b), the distributional impact of the triple shock from higher energy, food and housing costs is significant. We now find that 1 in 4 UK households – 7 million in total – face energy and food bills that exceed their disposable income, up from about 1 in 5 households in 2022. This leaves them either to choose between radically reducing eating and heating, or to accumulate further debt against higher interest rates.

A combination of wages failing to keep pace with prices and low economic growth means that households need to run down their savings or rely more on debt to make ends meet. According to Open Access Government, "due to soaring bills and costs in shops, the average adult's personal debt – discounting mortgages – in the UK has risen from £25,879 to £34,566 (£8,687) in 2022, with four in five adults revealing they have started 2023 in debt, up from three to five in 2021" (OAG, 2023). This is particularly concentrated among 25-34 year olds, 46 per cent of whom have taken out an additional loan or credit card since the start of the cost-of-living crisis.

Our forecast is that in the absence of higher wages or further policy interventions, almost 1 in 4 households across the country will run out of savings by April 2024. As we warned in mid-2020 (Bhattacharjee and Lisauskaite, 2020), over 1.3 million people are already destitute, defined as lacking sufficient income to pay for essential necessities such as food, clothing and shelter (JRF, 2016, 2020). Without targeted assistance, the number of cases where people die prematurely from the effects of not sufficiently eating or heating will continue to rise. There is destitution and then there is also energy (and in some cases housing costs) that risks bringing about extreme poverty.

We consistently find that a number of regions are falling further behind London and the metropolitan parts of the South East, especially areas of Wales, Scotland, Northern Ireland, the Midlands and the North East (Bhattacharjee et al., 2022, a, b, c and d). Poor households are not only concentrated in some of the most economically and socially deprived parts of the country but are also disproportionately affected by the state of local government finance. As the *Financial Times'* Jennifer Williams (2023) reported in January,

> *Local government in England has been reshaped by a protracted funding squeeze that withdrew £15bn from their budgets between 2010 and 2020. As budgets shrank, a larger proportion had to be devoted to statutory social care provision — an average of about three-quarters, according to the LGA, compared with two-thirds previously. The result is that less and less remained for everything else. A third of libraries closed and 14 per cent of the bus network vanished […] with those losses greatest in the poorest places.*

Many councils are being forced to cut back key public services (Atkins and Hoddinott, 2022; Ogden et al., 2022). For example, Barnsley council lost half of its core budget after 2010 and now needs to find another £21 million (approximately 8 per cent of its revenue budget) until 2026 as result of the impact of inflation (Williams, 2023).

Indeed, double-digit inflation has eroded local authority budgets in real terms. For example, as Bloomberg recently reported, "In Liverpool, which has some of the most deprived areas in the UK in terms of income, employment and health, the cost of a major regeneration effort in the city — which was allocated £10 million of levelling up funding from the government in 2021 — has increased by more than a third. Factors such as rising energy costs linked to Russia's war in Ukraine have been blamed for the hike from £11.1 million to £15 million" (Mayes, 2023).

The March Budget represents an opportunity to use fiscal policy to reduce the deepening disparities at both household and regional levels (Chapter 1 suggests that the fiscal headroom approximately amounts to £9.2 billion as long as the Chancellor meets his fiscal rules on the deficit). In order to raise the low levels of growth and productivity, Levelling Up needs to involve much more devolution of both power and resources to lower levels but also concrete action on how to build up capacity so that people and places can design and deliver their own strategies for sustained regeneration. This will require bringing together all the fragmented funding streams into a unified system of funding that is easier to access for local authorities (Pabst, 2022), as well as sustained investment via a UK Development Bank (Pabst, 2021; Chadha, 2022). We set out these ideas in the section on Policy Options below.

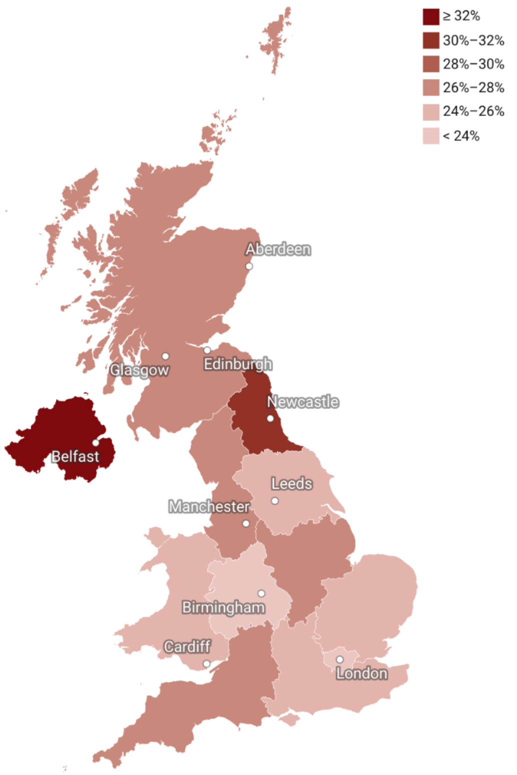
About 1 in 4 households across the country – approximately 7 million – face energy and food bills that exceed their disposable incomes. This impact falls disproportionately upon households in parts of the country that are poorer and face challenging climate conditions – the worst being Northern Ireland (32 per cent of NI households) and the North East (30 per cent of NE households). Somewhat surprisingly, the East and South East do not buck the trend, even if West Midlands (19 per cent) and London (20 per cent) do somewhat better. But it is fair to say that the impact of the cost-of-living crisis is pervasive, and the scarring effects will persist – especially a drop in living standards and a slide into destitution for many (Table 2.1).

Table 2.1 Destitution and Deep destitution

Regions	Hardest Hit Households	Additional housing burden
North East	30.0% [350,000]	2.2% [26,000]
North West	26.2% [840,000]	1.8% [59,000]
Yorkshire and the Humber	25.2% [600,000]	1.4% [34,000]
East Midlands	26.8% [550,000]	1.2% [26,000]
West Midlands	18.5% [460,000]	3.5% [87,000]
East	25.2% [660,000]	2.1% [56,000]
London	19.9% [720,000]	1.7% [61,000]
South East	25.1% [950,000]	2.9% [108,000]
South West	26.3% [640,000]	2.0% [50,000]
Wales	24.3% [330,000]	1.9% [26,000]
Scotland	26.2% [660,000]	0.8% [19,000]
N Ireland	32.3% [240,000]	0.8% [6,000]
UK aggregate	**24.5% [6.95mn]**	**2.0% [560,000]**

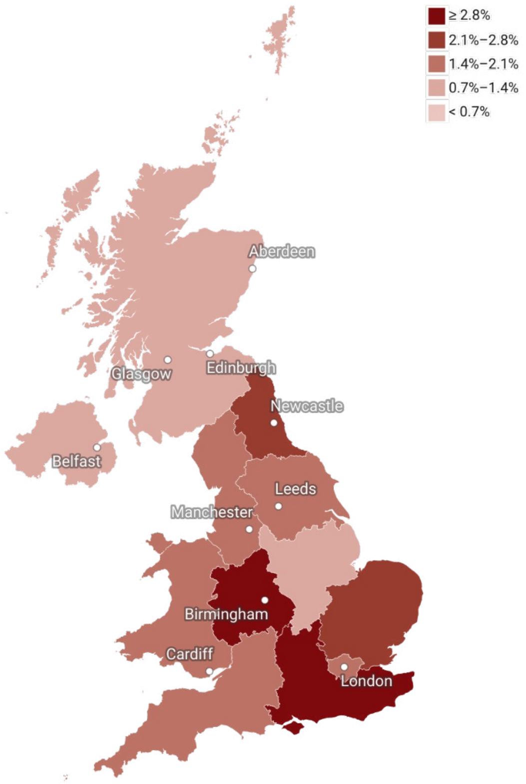
Note: Hardest Hit Households are defined as those whose disposable incomes do not cover food and energy costs, so that they need to make a choice between eating and heating. Part of the excess costs can be borne by drawing down upon savings or borrowing. An additional proportion of households are pushed into destitution because of increased housing costs such as higher rents or mortgage repayments (Additional housing burden).
Source: LINDA.

Figure 2.4 Geographical distribution of destitute (hardest hit) households as result of food and energy price hikes



Source: LINDA.

Figure 2.5 Geographical distribution of destitute households as a result of higher housing costs (mortgage repayments or rents)



Source: LINDA.

Overall outlook for the devolved nations and English regions

If the United Kingdom avoids a recession and inflation continues to decelerate, economic conditions for the country as a whole will improve compared with 2022 (see Chapter 1). However, anaemic growth and poor productivity outside London, the metropolitan parts of the South East and larger cities mean that household finances and business conditions will remain significantly strained in most parts of the United Kingdom.

Households are affected by wage increases below the inflation rate, and lower-income households are particularly hard hit by higher energy and food prices as they spend a disproportionately high share of their income on these essential items (Bhattacharjee et al., 2022a). Businesses continue to struggle in a tight labour market characterised by skill shortages in a wide array of sectors – from construction via engineering to health and social care. And Brexit has had a negative effect on trading sectors, especially in the Midlands but also certain sectors in Northern Ireland, including those that imports goods and services from Great Britain, such as food, now subject to strict controls under the terms of the Northern Ireland Protocol.

Falls in real wages and cost-of-living struggles together with economic and political uncertainty have exacerbated discontent. Labour market participation is down, with about 565,000 people dropping out of the labour market since the onset of Covid-19 (ONS numbers reported in House of Lords, 2022). Widespread industrial action in many sectors has put strain on the economy and shines a light on the inability of the political system to broker a negotiated settlement. Importantly, this places even greater importance upon an economic recovery that is being held back by low job satisfaction and poor productivity. Despite the negative outlook, there are some positive signs, including a strong labour market with record levels of low unemployment and very good prospects for young people who graduated during or after the pandemic (Ray-Chaudhuri and Xu, 2023).

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

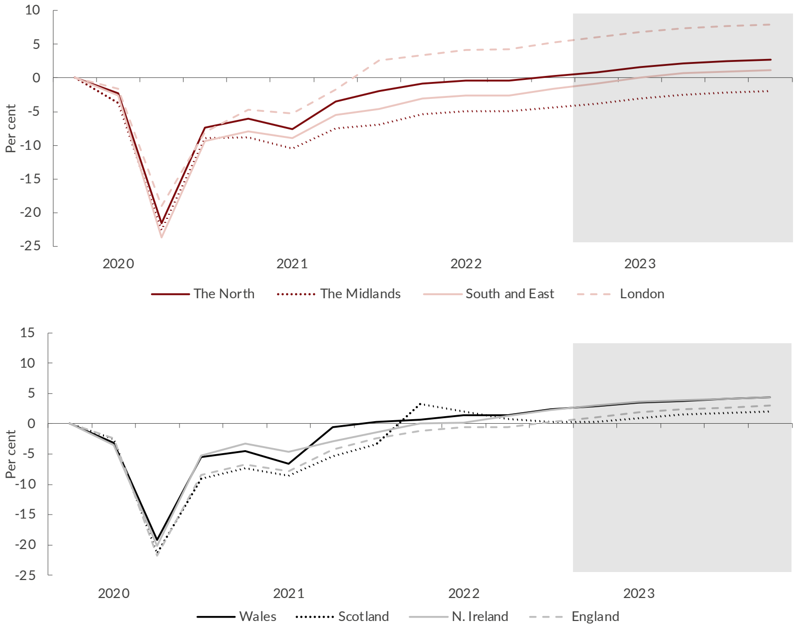
- In terms of economic output as measured by Gross Value Added (GVA), all three devolved nations have returned to pre-Covid levels (Figure 2.6).

- In relation to the English regions, London and the North West have also reached pre-Covid levels, with the non-metropolitan parts of the South and East expected to reach pre-Covid levels in the first or the second quarter of 2023 (Figure 2.6)
- The Midlands is not expected to revert to pre-Covid levels in the near future, highlighting regional divergence in part as a result of the impact of Brexit on trading sectors (Figure 2.6).
- Employment numbers have been revised downwards and unemployment numbers upwards across all regions (Figure 2.7).
- But the extent of lower employment numbers is not equal across regions, with the worst affected areas being parts of the Midlands and Wales (Figure 2.7).
- Post-pandemic we saw inactivity rates increase across all regions, except London, and this increase is expected to taper off and start to decline across all regions; but it is important to note that regional disparities in activity rates persist (Figure 2.8).

Gross Value Added (GVA)

Low economic growth in almost all areas of the United Kingdom – except for London, the metropolitan parts of the South East and the larger cities – has led to persistent regional disparities (Figure 2.6). There is no evidence of substantial catching up at the levels of regions (Bhattacharjee et al., 2022a, b, c and d; Mayes, 2023), which underscores the importance of a Levelling Up strategy that delivers not only for cities but also for towns as well as rural and coastal areas (see section on Policy Options).

Figure 2.6 Regional GVA relative to the fourth quarter of 2019



Source: NiReMS.

Employment

Employment levels continue to be robust in London and the metropolitan parts of the South East as well as the United Kingdom's larger cities, but are weak in many other parts of the country (Figure 2.7). As a result of weaker than expected economic growth, persistently high inflation and continual political uncertainty, we have revised downwards our forecast for the pace of catch-up with pre-pandemic levels for the North, the Midlands and the non-metropolitan parts of the South and the East.

Figure 2.7 Employment levels relative to the fourth quarter of 2019

Source: NiReMS.

Inactivity

Persistently high rates of inactivity in numerous parts of the UK except London are a major policy challenge. As the Chancellor of the Exchequer Jeremy Hunt said in his speech on 27 January 2023, "the pandemic has exposed weaknesses in our model. Total employment is nearly 300,000 people lower than pre-pandemic with around one fifth of working-age adults economically inactive" (HMT, 2023). This puts additional strain on a labour market with acute shortages due to Covid-induced disruptions and the ongoing impact of Brexit (see also House of Lords, 2022).

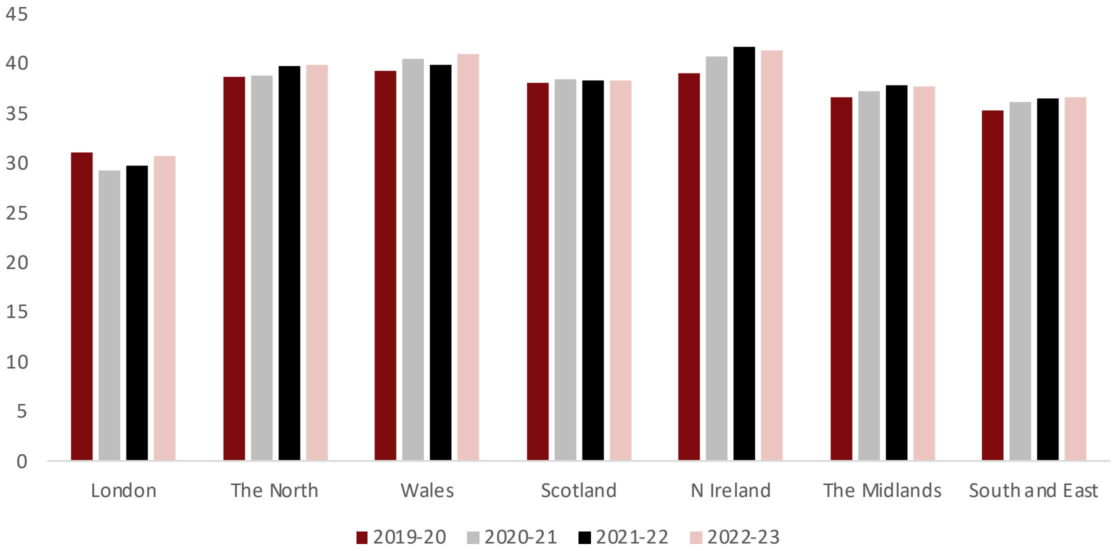
There is a debate among researchers and policymakers about whether older workers have been leaving the UK workforce because of ill health or because they choose to retire early. According to researchers at the Institute for Employment Studies and The Health Foundation, worsening health is a key driver of the rise in the UK's inactivity rate (IES, 2022; Tinson et al., 2022). This seems to have been echoed by the Bank of England's Jonathan Haskel who said in October 2022 that "changes in [labour market] participation are emerging as the key economic legacy of Covid in the UK" (Haskel, 2022).

While ill health related to 'long Covid' is certainly an important factor, Britain is characterised by higher levels of chronic illness than most other OECD countries, which is exacerbated by the parlous state of the NHS, including the overlap between the 330,00 people waiting for hospital treatment for more than a year and 310,000 who have dropped out of the labour force due to long-term sickness.

But beyond ill health and the crisis of the NHS, early retirement has also been a key driver of inactivity. As Bee Boileau and Jonathan Cribb of the IFS have found, the increase in health-related inactivity applies to those who left the labour force some time ago, and we are seeing movements directly out of employment and into forms of inactivity such as retirement (Boileau and Cribb, 2022a and b). NIESR research demonstrates the numerous difficulties faced by over-50s to secure employment (Runge et al., 2021; Stockland et al., 2022).

Whether we should be worried about a lower activity rate among younger workers is not entirely clear. The cost-of-living crisis affects young adults with no savings, creating a strong incentive to join the labour force as soon as possible. But if individuals do not finish (or do not even start) higher or further education or technical training but instead are forced to find paid employment aged 16 or 18, then their lower inactivity rate runs counter to the Government's aims of "levelling up" through the acquisition of skills.

Figure 2.8 Devolved nation and regional inactivity rates



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

Scotland Economic Outlook

- The COP26 impact on Scottish Gross Value Added (GVA) numbers has now subsided (Figure 2.9); we project the Scottish economy to grow at similar rates compared with the UK average in 2023 and 2024.
- While the downward revision in employment has tapered our projection for jobs growth in Scotland, employment levels in Scotland relative to the fourth quarter of 2019 remain the strongest among the three devolved nations (Figure 2.10).
- Scotland's inactivity rate is lower than in the other two devolved nations but is projected to persist at the current level (Figure 2.8).
- We forecast that Scottish productivity will be higher by the end of 2024 than the pre-pandemic level, and will be just below the UK average (Figure 2.11).
- One key issue is how uncertainty over the independence referendum and the protracted tensions between the UK government and the Scottish executive will affect growth and investment.

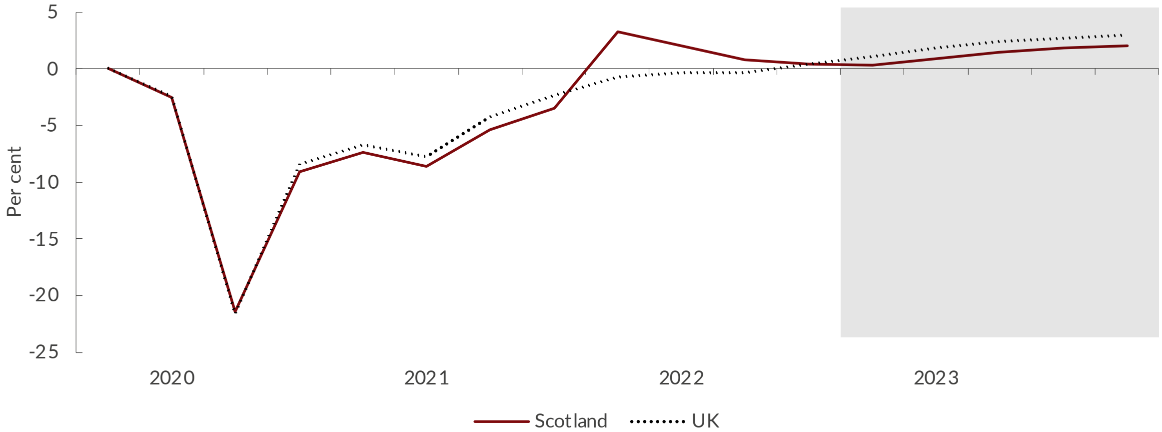
We forecast that after a significant slowdown in the second half of 2022, economic output in Scotland will rise this year and in 2024 – even though a shallow recession cannot be ruled out. Growth is projected to be lower than the UK average, which is a particular problem for the structurally weaker parts of Scotland. The boost to employment from COP26 is fading as Scotland returns to a trend growth rate that is projected to be stable and above the UK average.

The Scottish Government has been planning a potential independence referendum in October 2023. This is leading to the publication of a number of reports on the economics of independence. While the recent Supreme Court verdict has taken some momentum out of this process, the questions of what the appropriate degree of devolution is and the spatial level at which these devolved powers should lie are becoming increasingly urgent (Paun, 2022).

Meanwhile, academic research raises fundamental questions about post-independence currency (MacDonald, 2022), trade (Figus et al., 2022), debt (Bell et al., 2022) and border control – especially given the Scottish Government's intention to apply for EU membership (Hayward et al., 2022). As Muscatelli et al. (2022) have argued, there will likely be a tension within the independence movement between those who accept or welcome the persistence of shared culture and institutions with the rest of the UK and those who want not only Scottish control but for that control to generate radical change.

GVA

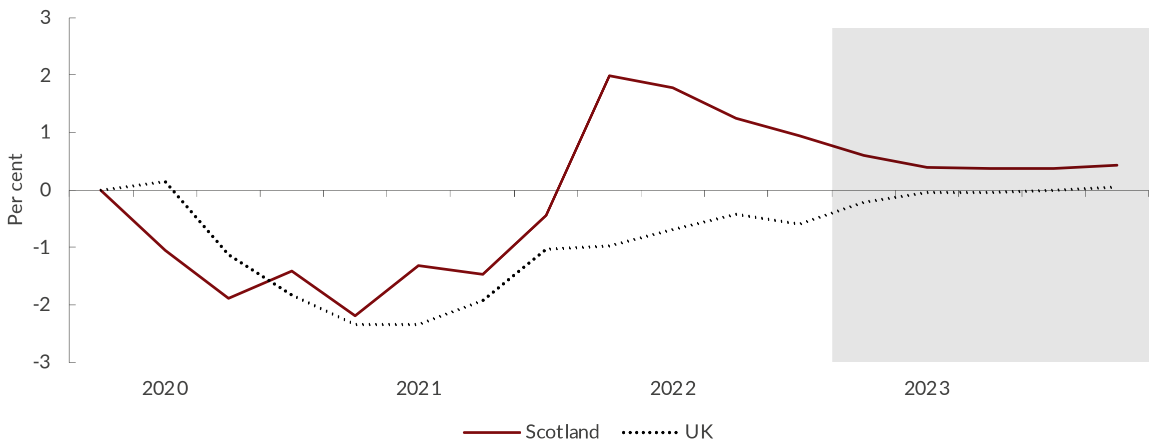
Figure 2.9 GVA in Scotland relative to the fourth quarter of 2019



Source: NiReMS.

Employment and inactivity

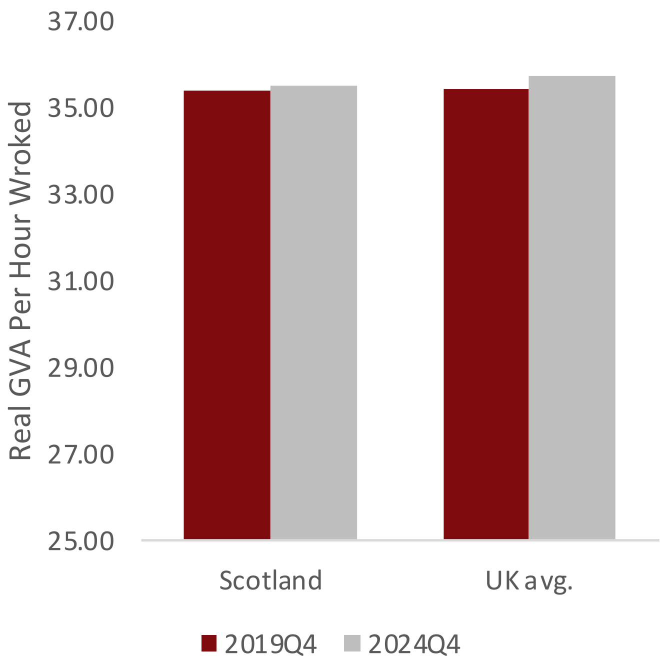
Figure 2.10 Employment in Scotland relative to the fourth quarter of 2019



Source: NiReMS.

Productivity

Figure 2.11 Productivity in Scotland



Source: NiReMS.

Wales Economic Outlook

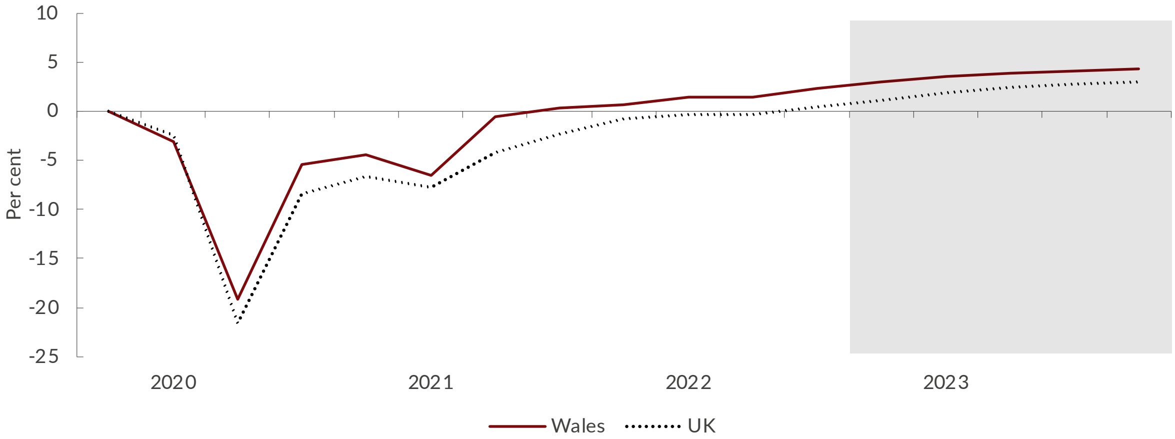
- Welsh output relative to the fourth quarter of 2019 remains above the UK average and above pre-pandemic levels (Figure 2.12).
- In the Autumn UK Economic Outlook, we expected Welsh employment numbers to rebound but the latest numbers show that this was not the case (Figure 2.13); we do not expect this lower employment trajectory to be a long-term trend and project Welsh employment to pick up.
- Inactivity levels are persistent and second only to levels in Northern Ireland (Figure 2.8).
- The output and employment outlooks imply that Welsh productivity will rise at a faster rate than the UK average. Nevertheless, Welsh productivity will still be behind UK average (Figure 2.14).

While the rest of the United Kingdom slowly returns to pre-pandemic levels of output, Welsh GVA relative to the fourth quarter of 2019 continues to outperform the country average (Figure 2.12). Despite signs of positive output, Brexit will continue to dampen the long-run economic prospects for the region due to a disproportionately high concentration of firms affected by new trading arrangements. In particular, agricultural and industrial firms are more represented in Wales than in the United Kingdom as a whole. As these sectors are more impaired by Brexit, we expect to see negative outcomes from Brexit for Wales more than the UK average.

Employment in Wales continues to recover to pre-pandemic levels, with some noticeable volatility in the trajectory of the recovery (Figure 2.13). We do not project a return to pre-pandemic levels within the timeframe of our forecast; however, by early to mid-2023 we expect to see the level to be close, much like the rest of the United Kingdom. Welsh productivity remains far behind the UK average, which is a similar story to that of the other devolved regions (Figure 2.14). Although projections for the fourth quarter of 2024 suggest this level is set to grow, it does not suggest that this is likely to take Wales closer to the UK average.

GVA

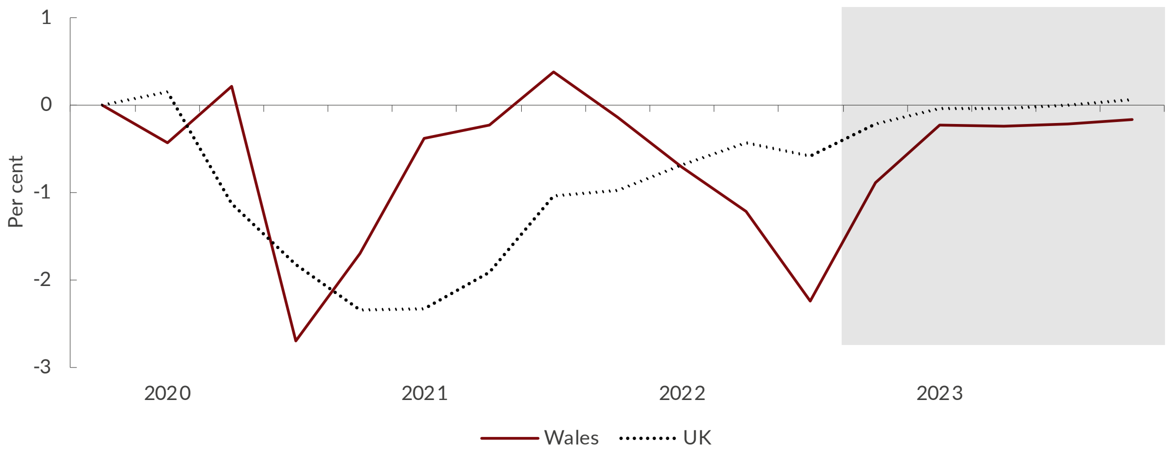
Figure 2.12 GVA in Wales relative to the fourth quarter of 2019



Source: NiReMS.

Employment and inactivity

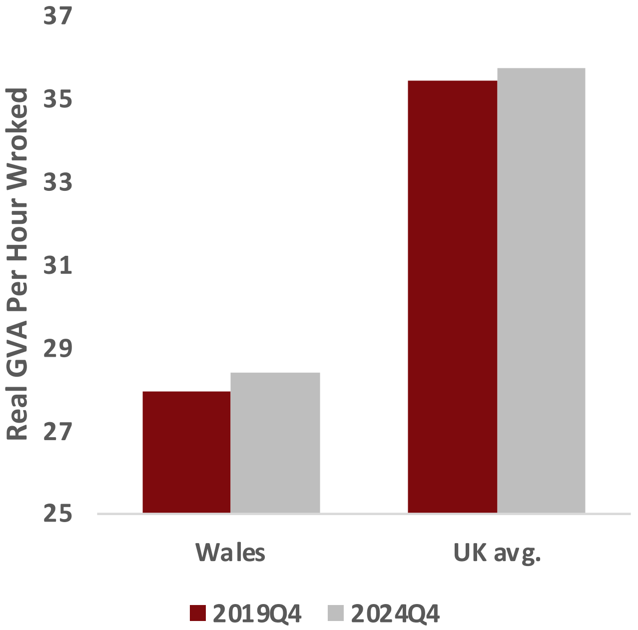
Figure 2.13 Employment in Wales relative to the fourth quarter of 2019



Source: NiReMS.

Productivity

Figure 2.14 Productivity in Wales



Source: NiReMS.

Northern Ireland Economic Outlook

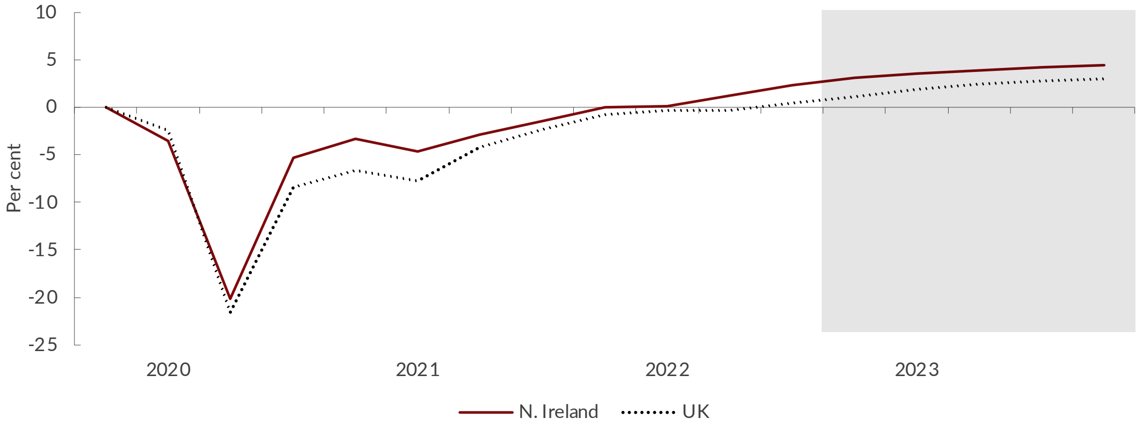
- Northern Irish economic output relative to the fourth quarter of 2019 remains the strongest among the three devolved nations (Figure 2.15), but employment is the weakest (Figure 2.16).
- Strong output growth and weak employment numbers mean that we forecast Northern Ireland's productivity to rise by the largest margin among all regions studied by the end of 2024 (Figure 2.17).
- The question is whether this uptick in productivity can be maintained in the long run was discussed in Box F of the Autumn UK Economic Outlook (Bhattacharjee, Pabst and Szendrei, 2022).
- Another question is about the impact of continual political uncertainty over the restoration of the Stormont government on economic growth and wider social well-being

Brownlow (2022) suggests that an extension of devolution should not be seen as a 'silver bullet' for Northern Ireland's relatively weak economic performance. It may be a complement to other policies, but it cannot be more than that. Those who focus on tax devolution should be more cautious in what they can expect it to achieve as it does not directly address the lack of investment in human and physical capital. This view is echoed by Jordan (2022) who analysed the structural weaknesses in Northern Ireland's productivity performance.

Indeed, the most recent data suggest that output across all sectors in Northern Ireland has started shrinking by the end of 2022 (Ulster Bank, 2023) except hospitality which experienced a temporary uptick during the Christmas period. Expected gains and losses from Brexit and the Northern Ireland Protocol are mixed (Gasiorek and Tamberi, 2021). Against this backdrop, our projections are cautiously optimistic, suggesting a modest recovery over the medium run as the adverse impacts of high inflation begin to dissipate. However, this is also subject to reduction in political uncertainty over Brexit and getting Stormont back to normal functioning.

GVA

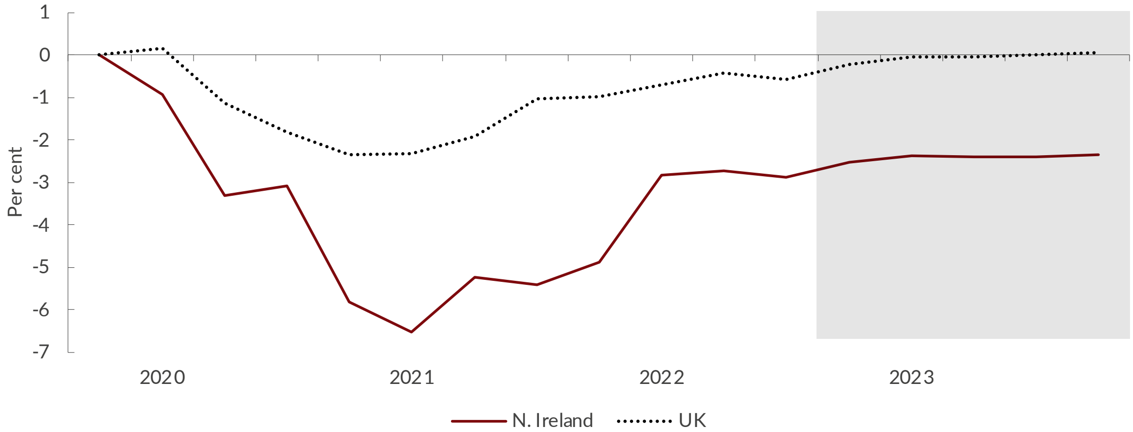
Figure 2.15 GVA in Northern Ireland relative to the fourth quarter of 2019



Source: NiReMS.

Employment and inactivity

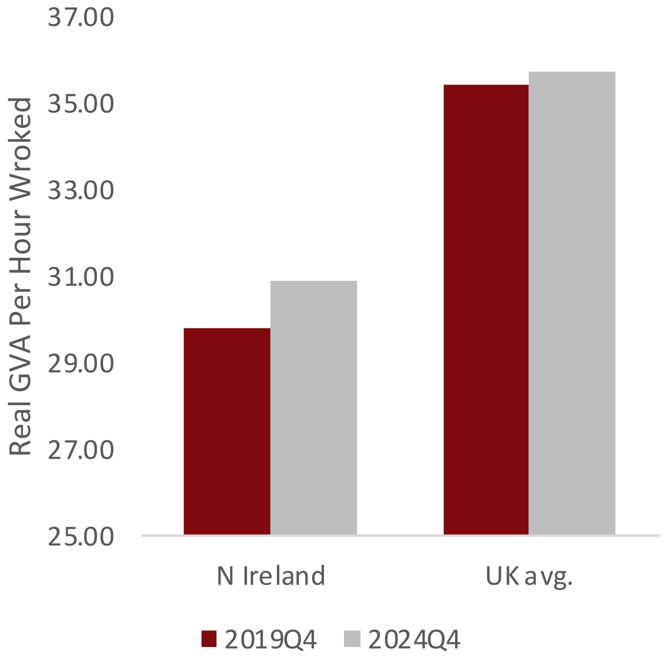
Figure 2.16 Employment in Northern Ireland relative to the fourth quarter of 2019



Source: NiReMS.

Productivity

Figure 2.17 Productivity in Northern Ireland



Source: NiReMS.

England's Regions

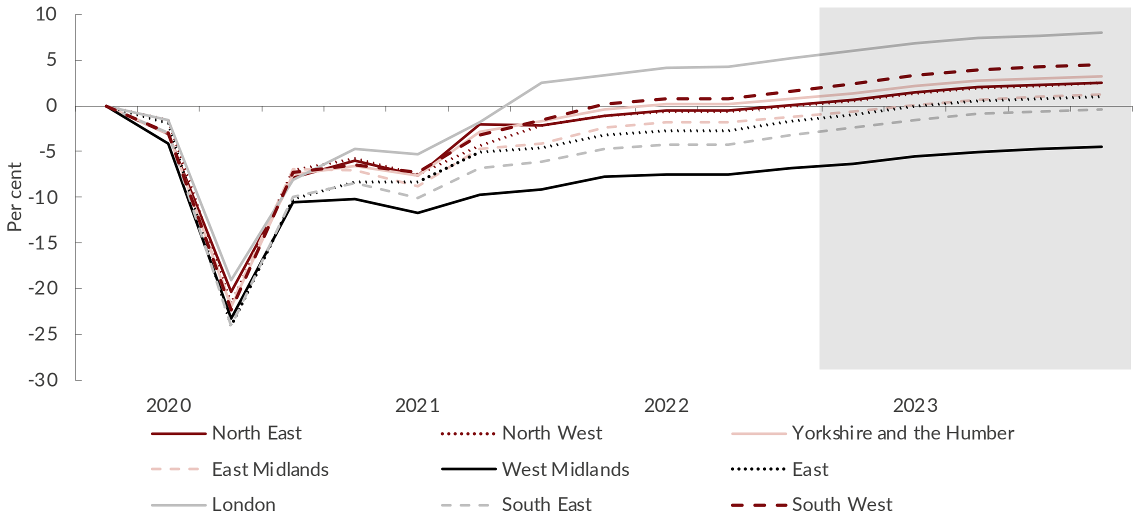
- In terms of GVA, the majority of the English regions have either returned to pre-pandemic levels or are projected to do so this year (Figure 2.18).
- The only regions that do not follow this are the West Midlands and the non-metropolitan parts of the South East.
- Employment trends have been revised downwards from the last UK Economic Outlook. Nevertheless, evidence for regional divergence remains (Figure 2.19).
- London remains the strongest performer amongst the English regions for output, employment, and productivity (Figure 2.18-2.21).
- Due to the revisions in employment numbers and output projections being better than previously expected, we see productivity numbers adjust upwards from the last outlook. Almost all regions are expected to have increased productivity since before the onset of Covid-19, except West Midlands and the South East (Figure 2.21).

Not only the United Kingdom as a whole, but the English regions in particular have some of the worst interregional productivity inequalities amongst the 38 OECD countries. As McCann and Yuan (2022) have shown, the United Kingdom's overly centralised and top-down governance has contributed to this. A combination of governance change and investment are required in a holistic rather than piecemeal manner, including wide-ranging fiscal decentralisation (McCann, 2022). However, so far the proposals and policies emerging from the Levelling Up agenda tend to be unclear and other proposed reforms are 'underwhelming'. The key policy areas required for increasing regional productivity – regional policy, industrial strategy and vocational education – have been subject to the greatest instability and churn (Westwood et al., 2022).

How will the central government resolve the continued discontent and confusion regarding allocation of levelling up funds? Are the funds themselves allocated optimally? Where is the evidence that the chosen approach will work, not least on the complex question of positive spill-over effects from growth and productivity in cities to adjacent areas and the wider rural and coastal areas, which have fallen furthest behind London and the South East?

GVA

Figure 2.18 GVA in the English regions relative to the fourth quarter of 2019



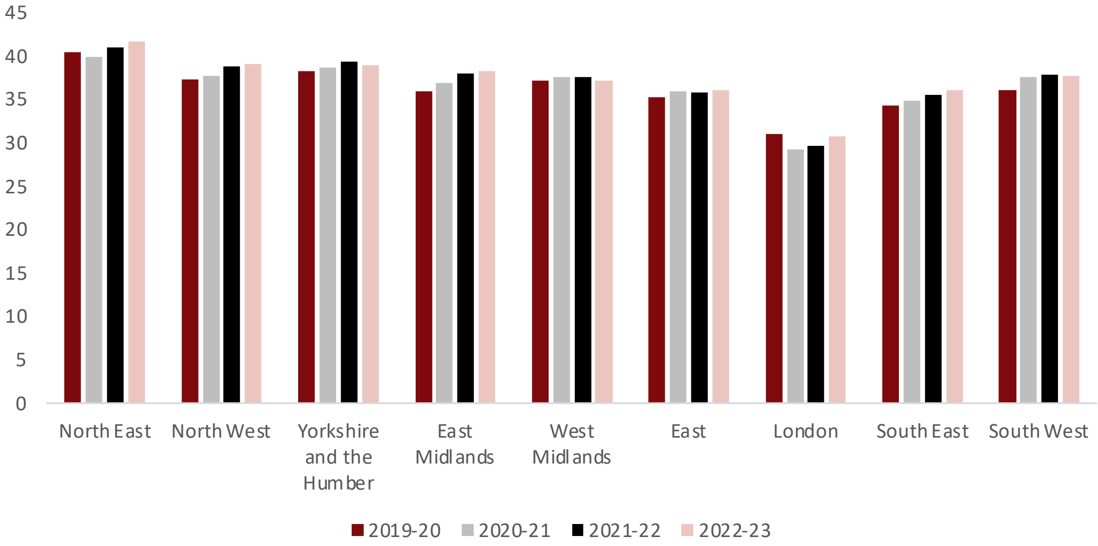
Source: NiReMS.

Employment and inactivity

Figure 2.19 Employment in the English regions relative to the fourth quarter of 2019

Source: NiReMS.

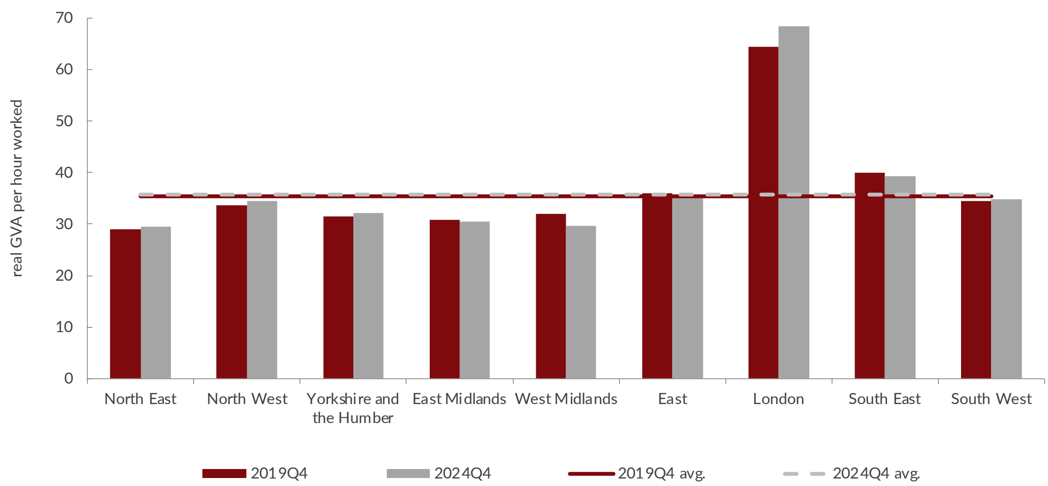
Figure 2.20 Inactivity rates in the English regions



Source: NiReMS.

Productivity

Figure 2.21 Productivity in the English regions



Source: NiReMS.

Policy options

In his speech on 27 January, the Chancellor Jeremy Hunt was right to say that "structural issues like poor productivity, skills gaps, low business investment and the over-concentration of wealth in the South East have led to uneven and lower growth. Real incomes have not risen by as much as they could as a result" (HMT, 2023). Indeed, as we stated in Chapter 1, real personal disposable income has contracted for four consecutive quarters highlighting the decline in living standards, especially for the bottom half of the income distribution. In its November Economic and Fiscal Outlook, the OBR said that they expect "rising prices [to] erode real wages and reduce living standards by 7 per cent in total over the two financial years to 2023-24 (wiping out the previous eight years' growth), despite over £100 billion of additional government support" (OBR, 2022, p. 5).

While driving down inflation and stabilising the public finances are important steps, they fall short of the overriding target to boost growth and productivity as well as reduce deepening disparities between and within regions and help the most vulnerable households (Pabst, 2023). In the run-up to the Budget on 15 March, the government should consider further targeted intervention to address four key priorities: (1) combining the proposed Social Tariff Disocunt with a variable price cap for energy; (2) reducing inactivity; (3) stream-lining Levelling Up funding streams; (4) boosting public and business investment.

Energy

On 23 November 2022, Chancellor Hunt announced to the Treasury Select Committee his plans to replace the Energy Price Guarantee (EPG) with a Social Tariff Discount by April 2024. This approach would move from the current system of general subsidy – which we have criticised for being wasteful, ineffective in helping the poorest households and lacking in incentives to reduce energy consumption (Bhattacharjee, Mosley and Pabst, 2022) – to a system of more targeted assistance. This new system would assist energy companies in identifying low-income, vulnerable households and provide the financial means to apply an automatic discount to those struggling households.

This approach is a step in the right direction as it provides a precise mechanism whereby the state and energy companies can identify the households that need support the most. Currently, energy companies do not hold this information, which is one of the reasons the EPG was the chosen solution to limit the rise in energy bills while more meaningful support was provided using social security systems. Combining DWP data of those on benefits and HMRC data of those on low incomes would offer a solution to the untargeted nature of the current approach, allowing energy companies automatically to enrol vulnerable and low-income customers onto a subsidised tariff. However, the administration of such a degree of data-sharing to make this process automatic appears to be, in part, overly ambitious. As the Chancellor described it: "That means a lot of complicated work to marry the information held by HMRC with the information held by DWP on benefits. That is a very big operational challenge" (TSC, 2022).

We recommend that the Social Tariff system be opt-in, rather than automatic, allowing customers to apply for a lower tariff after submitting evidence that they qualify. This means that there would be far less data-sharing needed and therefore such an approach could realistically be implemented this year, rather than in April 2024 as is presently planned. This would still provide more targeted support for the households who need it and can be implemented in the short-term. However, it is still an energy subsidy, meaning there is little incentive to reduce energy demand. Therefore, we recommend the introduction of a Variable Price Cap for the households that are not on the Social Tariff. This would raise the cost of energy with its usage, reducing energy bills for the low-income households who typically use less, and raising it for the high-income households who typically use more. This in combination with the Social Tariff would further avoid the issue of high energy usage low-income households (such as low-income disabled households) losing out.

Tackling inactivity

To reduce inactivity, two fundamental changes are required. First, a change in attitude and approach on the part of employers. As the Chartered Management Institute (CMI) – a professional association – found in a survey of more than 1,000 managers working in UK companies and public services in November 2022, just four out of 10 are ready "to a large or moderate extent" to hire people aged 50-64 years (CMI, 2022). As NIESR research has shown, most workers in their 50s and 60s who were surveyed thought that the way employers recruit new staff worked to the disadvantage of people aged 50 or above and that perceived age discrimination within the recruitment process largely operates covertly and out of direct sight of job applicants (Runge et al., 2021). Attempts to address age discrimination need to focus on all stages of the recruitment process – from job ads via applications to assessments and interviews. Moreover, employers need to reform existing workplace practices so that they can improve the pay and progression experiences of older workers, especially for women over 50 (Stockland et al., 2022).

The second change that is required relates to higher wages and working conditions to attract older workers back from retirement into the labour force. Taken together, employers have to combine accommodating the needs of an ageing workforce with government-provided targeted help aimed at those with chronic health conditions to remain in the labour force. Without urgent action, more people will exit the labour market early. As Alice Dawson and Andrew Phillips have shown, "the vast majority of 'Early Exiters' said they had left work against their own wishes, with some saying the decision had been taken out of their hands" (Dawson and Phillips, 2022).

Turning Levelling Up into reality

On Levelling Up, the Chancellor announced in his Autumn Statement on 17 November 2022 a second round of the Levelling Up Fund that will allocate at least £1.7 billion to a number of "priority local infrastructure projects", with bids agreed by the end of 2022. The other announcement relates to new devolution deals for mayors in Suffolk, Cornwall, Norfolk and an area in the North East as well as 'trailblazer' devolution deals with Greater Manchester and the West Midlands Combined Authorities, potentially decentralising powers in areas such as skills, housing and transport. In addition, funding for the three devolved nations based on the Barnett formula will amount to £1.5 billion for Scotland, £1.2 billion for Wales and £650 million for Northern Ireland.

While both announcements mean that capital spending for Levelling Up projects is not being cut, the fundamental problems with the government's Levelling Up strategy endure – fragmented funding, local authorities spending inordinate time and precious resources on competing with one another for small pots of money, and a lack of decision-making powers and fiscal firepower. Importantly, the evidence base for allocation is either lacking or not sufficiently transparent. Over the coming months, NIESR will build a real-time live dashboard bringing together both economic and social indicators at the lowest possible level to gain a more granular understanding of how places and households are evolving. By the end of 2023, we will publish a Regional Regeneration Index to track any progress on Levelling Up.

One way to improve the situation for local authorities is to unify the fragmented funding streams and radically to simplify the applications process for funds. At present the system of trying to access funding involves scare resources to bid for small pots money, with 80 per cent of time and other resources spent on unsuccessful bids (Warnock et al., 2023). Moreover, funds for successful projects are too small and too widely dispersed to make a significant difference as capital projects have to be downsized due to double-digit inflation. Andy Street, the Conservative Mayor for the West Midlands Combined Authority, described it as "another example as to why Whitehall's bidding and begging bowl culture is broken" (cited in Warnock et al., 2023).

All existing LU funds and related funds for local government should be brought together under a single umbrella and application criteria tightly focused on socio-economic need. More fundamentally, sustained regional regeneration requires devolving powers in areas such as skills, housing, transport and R&D, underpinned by greater local control over tax and spending decisions, all of which needs a sound evidence base in order to simulate the impact of policy interventions.

Boosting public and business investment

As the UK Productivity Commission hosted at NIESR has argued, Britain's economy is characterised by "chronic underinvestment in the public and business sectors. Public investment collapsed from a long-term average of 4.5 per cent of GDP between 1949 and 1979 to around 1.5 per cent after 1979. Similarly, the share of the UK's GDP dedicated to business investment has been trending downwards since the early 1960s [...] While investment goods are now much cheaper, the UK's capital to output ratio did not increase since the 1960s, meaning that the UK used lower capital prices to spend less of its GDP on investment instead of improving the economy's capital intensity as measured by the capital to GDP ratio" (UK Productivity Commission, 2023, p. 9).

Two institutional changes are necessary to create the conditions for higher public and business investment. One reform concerns the UK fiscal framework: a recognition of the point that the budget deficit and public debt are instruments of fiscal policy and not a target (Chadha et al., 2021). A better objective for fiscal policy making is to adopt a range of measures of well-being for households across all income brackets, based on economic growth, productivity and wages, but also health and life chances (Chadha, 2022). In turn, this requires a re-think by HMT together with the OBR on how to evaluate the returns to large-scale public investment (e.g. HS2), the number of jobs created and the overall impact of national assets. This includes not only the direct benefits where the investments are placed but also indirect benefits across the country through spill-overs. The United Kingdom needs to address the fundamental problem of short-termism, which has stopped decision and policy makers from credible commitments to long-term plans – whether on industrial policy in general (especially since the abolition of the Industrial Strategy Council in 2019) or infrastructure investment in particular.

One reform to consider is the creation of a National Development Bank. It would bring together the UK Infrastructure Bank (UKIB), the National Infrastructure Commission and a renewed Industrial Strategy Council. Such a bank could bring all public investment programmes under one institutional umbrella and be endowed with capital of about £50bn (compared with the UKIB's £22bn) but also bearing in mind that the UK has lost total annual investment of around €20bn provided by the €7bn lending from the European Investment Bank. That would enable the finance of large-scale housing and transport projects, help unlock private investment through export finance for SMEs, but increase in investment in renewable energy and re-industrialisation. Regenerating UK regions that have fallen behind for forty years is a generational task, and any chance of reducing regional inequalities requires a robust institutional ecology – of which something akin to a National Development Bank would be a key pillar. The UK Productivity Commission, hosted by NIESR, will focus in its work in 2023 on how to address low business and public investment, and more work will be done on the case for such a bank.

References

Atkins, S. and Hoddinott, S. (2022), Neighbourhood services under strain: How a decade of cuts and rising demand for social care affected local services, Institute for Government, 29 April, https://www.instituteforgovernment.org.uk/sites/default/files/publications/neighbourhood-services-under-strain.pdf

Bell, D., Eiser, D., & Phillips, D. (2022), 'Stress Testing the Fiscal Framework', National Institute Economic Review, 260, pp. 64-80, http://doi:10.1017/nie.2022.20

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., Mosley, M. and Pabst, A. (2022a), Box E: No quick respite from the cost-of-living crisis, National Institute UK Economic Outlook (Summer), https://www.niesr.ac.uk/wp-content/uploads/2022/08/No-Quick-Respite-Cost-Living-Crisis-BoxE.pdf

Bhattacharjee, A., Mosley, M. and Pabst, A. (2022b), 'A 'Variable Energy Price Cap' to Help Solve the Cost-of-Living Crisis', NIESR Policy Paper, https://www.niesr.ac.uk/wp-content/uploads/2022/09/A-Variable-Energy-Price-Cap.pdf

Bhattacharjee, A. Mosley, M., Pabst, A. and Szendrei, T. (2022a), 'UK Regional Outlook: Winter 2022 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, February 2022, https://www.niesr.ac.uk/wp-content/uploads/2022/02/UK-Economic-Outlook-Winter-2022.pdf

Bhattacharjee, A. Mosley, M., Pabst, A. and Szendrei, T. (2022b), 'UK Regional Outlook: Spring 2022 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, May 2022, https://www.niesr.ac.uk/wp-content/uploads/2022/05/UK-Economic-Outlook-Spring-2022.pdf

Bhattacharjee, A., Mosley, M., Pabst, A. and Szendrei, T. (2022c), 'UK Regional Outlook: Summer 2022 Chapter 2', in National Institute UK Economic Outlook – National Institute of Economic and Social Research, August 2022, https://www.niesr.ac.uk/wp-content/uploads/2022/08/NIESR-UK-Economic-Outlook-Summer-2022.pdf

Bhattacharjee, A., Mosley, M., Pabst, A. and Szendrei, T. (2022d), 'UK Regional Outlook: Summer 2022 Chapter 2', 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., Pabst, A., and Szendrei, T. (2022b), Box F: The Northern Ireland Protocol--Lost Opportunities for Northern Ireland?, National Institute UK Economic Outlook (Autumn), pp. 73-75.

Boileau, B. and Cribb, J. (2022a), The rise in economic inactivity among people in their 50s and 60s, IFS Briefing Note BN345, June, https://ifs.org.uk/sites/default/files/output_url_files/BN345-the-rise-of-economic-inactivity-in-people-50s-60s.pdf

Boileau, B. and Cribb, J. (2022b), 'Is worsening health leading to more older workers quitting work, driving up rates of economic inactivity?', IFS, 26 October, https://ifs.org.uk/articles/worsening-health-leading-more-older-workers-quitting-work-driving-rates-economic

Brownlow, G. (2022), 'Institutional Geography Once More? Devolution Economics Northern Ireland Style', National Institute Economic Review, 261, pp. 34-47, http://doi:10.1017/nie.2022.15

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

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

CMI (2022), The Everyone Economy: the CMI's 75th Anniversary report, https://www.managers.org.uk/wp-content/uploads/2022/06/The-Everyone-Economy-CMIs-75th-Anniversary-Report.pdf

Dawson, A. and Phillips, A. (2022), Understanding 'Early Exiters': The Case For a Healthy Ageing Workforce Strategy, Demos, 2 November, https://demos.co.uk/wp-content/uploads/2022/11/Understanding-Early-Exiters-Demos.pdf

Figus, G., McGregor, P., McIntyre, S., and Roy, G. (2022), 'Trade-offs: Understanding Future Trade Options for Scotland', National Institute Economic Review, 260, pp. 26-39, http://doi:10.1017/nie.2022.7

Gasiorek, M. and Tamberi, N. (2021). The impact on Northern Ireland arising from the UK's exit from the EU: Partial Equilibrium Modelling. Report commissioned by Department for the Economy (Northern Ireland). https://www.economy-ni.gov.uk/sites/default/files/publications/economy/Partial-equilibrium-modelling-of-NI.pdf

Haskel, J. (2022), Current monetary policy – opening remarks by Jonathan Haskel, 6 October, https://www.bankofengland.co.uk/speech/2022/october/current-monetary-policy-opening-remarks-by-jonathan-haskel

Hayward, K., McEwen, N., & Komarova, M. (2022), 'Managing Scotland's Borders after Independence and European Union Accession', National Institute Economic Review, 260, pp. 40-50, http://doi:10.1017/nie.2022.21

House of Lords (2022), 'Where have all the workers gone? Second Report of Session 2022-23', Economic Affairs Committee, House of Lords, 20 December 2022, https://publications.parliament.uk/pa/ld5803/ldselect/ldeconaf/115/115.pdf

HMT (2022a), Cost of Living Support, Policy Paper, 26 May, https://www.gov.uk/government/publications/cost-of-living-support

HMT (2022b), Energy bills support factsheet, HMT Policy Paper, updated on 1 November, https://www.gov.uk/government/publications/energy-bills-support/energy-bills-support-factsheet-8-september-2022

HMT (2023), Chancellor Jeremy Hunt's speech at Bloomberg, 27 January, https://www.gov.uk/government/speeches/chancellor-jeremy-hunts-speech-at-bloomberg

IES (2022), Labour Market Statistics, October 2022, Briefing on 11 October, https://www.employment-studies.co.uk/system/files/resources/files/IES%20briefing%20-%20Labour%20Market%20Statistics%20October%202022.pdf

Jordan, D. (2022), Box D: Northern Ireland's productivity problem, National Institute UK Economic Outlook, 3 August, https://www.niesr.ac.uk/wp-content/uploads/2022/08/Northern-Irelands-Productivity-Problem-BoxD.pdf

JRF (2016), Destitution in the UK, 27 April, https://www.jrf.org.uk/report/destitution-uk

JRF (2020), What is destitution? 9 December, https://www.jrf.org.uk/blog/what-destitution

Mayes, J. (2023), 'We Are Being Levelled Down': Why the UK's Wealth Gap Is Widening, Bloomberg, 29 January, https://www.bloomberg.com/graphics/uk-levelling-up/inflation-government-delays-why-wealth-gap-widens.html

McCann, P. (2022), The Fiscal Implications of 'Levelling Up' and UK Governance Devolution, NIESR Occasional Paper LXIII, July 2022, https://www.niesr.ac.uk/wp-content/uploads/2022/07/OP-63-The-Fiscal-Implications-of-Levelling-Up.pdf

McCann, P., & Yuan, P. (2022), 'The Productivity Performance of Different Tyes of UK Regions and the Challenges of Levelling Up', National Institute Economic Review, 261, pp. 79-98, http://doi:10.1017/nie.2022.24

MacDonald, R. (2022), 'The Currency Conundrum for an Independent Scotland', National Institute Economic Review, 260, pp. 7-25, http://doi:10.1017/nie.2022.22

Muscatelli, A., Roy, G., and Trew, A. (2022), 'Persistent States: Lessons for Scottish Devolution and Independence', National Institute Economic Review, 260, pp. 51-63, http://doi:10.1017/nie.2022.5

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

NIESR (2018), NiGEM: National institute global econometric model - global macroeconomic model for economic forecasting, scenario and simulation, https://nimodel.niesr.ac.uk/

OAG (2023), 'Monthly bills raise UK personal debt by a third', Open Access Government, 12 January, https://www.openaccessgovernment.org/monthly-bills-raise-uk-personal-debt-third/151197/

OBR (2022), Economic and fiscal outlook, 17 November, https://obr.uk/docs/dlm_uploads/CCS0822661240-002_SECURE_OBR_EFO_November_2022_WEB_ACCESSIBLE.pdf

Ogden, K., Phillips, D., Sibieta, L., Warner, M. and Zaranko, B. (2022), Public service cuts and disjointed funding systems for local services put 'Levelling Up' in danger. Institute for Fiscal Studies, 20 October, https://ifs.org.uk/news/public-service-cuts-and-disjointed-funding-systems-local-services-put-levelling-danger

Pabst, A. (2021), Postliberal Politics: the coming era of renewal (Cambridge: Polity Press).

Pabst, A. (2022), 'Doubling Down, not Levelling Up', The Critic, 7 February, https://thecritic.co.uk/doubling-down-not-levelling-up/

Pabst, A. (2023), 'Back to the Future: how Hunt's embrace of technology risks repeating Blair's folly, The Critic, 31 January, https://thecritic.co.uk/back-to-the-future-4/

Paun, A. (2022). Supreme Court's Scottish referendum verdict doesn't end Sunak's need for a union strategy. Institute for Government. 24 November 2022. https://www.instituteforgovernment.org.uk/comment/supreme-court-scottish-independence-referendum

Ray-Chaudhuri, S. and Xu, X. (2023), Are the kids alright? The early careers of education leavers since the COVID-19 pandemic, Institute for Fiscal Studies, 11 January, https://ifs.org.uk/publications/are-kids-alright-early-careers-education-leavers-covid-19-pandemic

Runge, J., Lasko-Skinner, R., Rolfe, H., & Carr, H. (2021), Understanding Individuals' Recruitment Experiences, Centre for Ageing Better, NIESR and Demos, https://ageing-better.org.uk/sites/default/files/2021-02/GROW-experiences-full-report.pdf

Stockland, K., Runge, J. and Rostron, J. (2022), Exploration of the pay and career progression experiences of women aged over 50 in Scotland, Work commissioned by the Fair Work Convention, June, https://www.niesr.ac.uk/wp-content/uploads/2021/12/Experiences-of-pay-and-progression-among-women-over-50-in-the-workplace-in-Scotland.pdf

Tinson, A., Major, A. and Finch, D. (2022), 'Is poor health driving a rise in economic inactivity?', The Health Foundation, 10 October, https://www.health.org.uk/news-and-comment/charts-and-infographics/is-poor-health-driving-a-rise-in-economic-inactivity

TSC (2022), Treasury Select Committee, Oral evidence, Autumn 2022 Fiscal Events, HC 740 Wednesday 23 November, https://committees.parliament.uk/oralevidence/11933/html

UK Productivity Commission (2023), Priorities for 2023, 19 January, https://www.niesr.ac.uk/wp-content/uploads/2023/01/Productivity-Commission-Policy-Priorities.pdf

Ulster Bank (2023). Sharpest decline in business activity since February 2021. Ulster Bank Northern Ireland PMI. 16 January 2023. https://ulstereconomix.com/wp-content/uploads/2023/01/NIre_PMI_2301.pdf

Williams, J. (2023), 'English councils: the budget cuts that are threatening 'levelling up'', Financial Times, 23 January, https://www.ft.com/content/562bdd76-f242-47e6-9deb-a3beeaebe732?shareType=nongift

Westwood, A., Sensier, M., and Pike, N. (2022), 'The Politics of Levelling Up: Devolution, Institutions and Productivity in England', National Institute Economic Review, 261, pp. 99-116, http://doi:10.1017/nie.2022.29

Appendix A:

Table AP1 Impact of Spring Statement, May Emergency Grant, Autumn Stmt. and Cost of living on household finances, by income decile.

2022-23	Sources/uses of income	Bottom decile	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Top decile
Income	Disposable Income	14,300	19,600	21,100	23,900	29,400	37,700	46,900	62,800	105,100	260,600
	Spring '22 + May + Autumn Stmt. Effect	**[12.8%]**	**[9.9%]**	**[9.1%]**	**[6.5%]**	**[4.1%]**	**[3.1%]**	**[2.4%]**	**[1.5%]**	**[0.4%]**	**[-0.7%]**
	- Changes to NI thresholds/rates	168	313	373	367	355	339	309	160	-373	-2827
	- May Grant + Autumn '22 Stmt.	1,662	1,619	1,556	1,196	848	823	805	807	818	906
	Net Income	16,100	21,500	23,000	25,400	30,600	38,900	48,000	63,800	105,500	258,700
Consumption	**Consumption**	25,000	34,300	38,500	45,300	53,700	52,300	65,500	78,400	106,300	135,400
	- Food	4,300	4,000	4,000	4,300	5,000	6,000	6,100	6,400	5,000	5,600
	- Fuel	2,750	2,950	3,350	3,400	3,450	3,550	3,600	3,750	4,000	5,000
	- Transport	1,600	1,600	1,700	1,900	2,400	3,000	3,500	4,100	4,300	7,100
	- Housing costs	13,000	15,000	16,500	17,500	21,000	21,000	22,500	25,000	28,500	35,500
	(excess inflation >5%)	**[-13.3%]**	**[-17.0%]**	**[-19.6%]**	**[-19.0%]**	**[-17.3%]**	**[-7.4%]**	**[-6.2%]**	**[-4.0%]**	**[-3.4%]**	**[-1.3%]**
	Spring Statement. + Inflation	**[-0.5%]**	**[-7.2%]**	**[-10.5%]**	**[-12.5%]**	**[-13.2%]**	**[-4.3%]**	**[-3.8%]**	**[-2.5%]**	**[-2.9%]**	**[-2.0%]**

Source: LINDA

Forecast tables:

Table A1 Exchange rates and interest rates

	UK exchange rates			FTSE All-share index			
	Effective 2017=100	Dollar	Euro		10-year gilts	World[a]	Bank Rate[b]
2017	100.0	1.29	1.14	2930	1.20	1.20	0.41
2018	101.9	1.34	1.13	2937	1.40	1.90	0.75
2019	101.6	1.28	1.14	2898	0.90	2.10	0.75
2020	102.1	1.28	1.13	2537	0.30	0.90	0.10
2021	106.9	1.38	1.16	2900	0.80	1.10	0.13
2022	104.9	1.23	1.17	2918	2.50	2.30	3.20
2023	*102.2*	*1.13*	*1.15*	*2822*	*4.10*	*4.20*	*4.76*
2024	*101.0*	*1.13*	*1.13*	*3065*	*3.80*	*4.00*	*4.31*
2025	*99.9*	*1.13*	*1.11*	*3281*	*3.60*	*3.80*	*3.96*
2026	*99.3*	*1.14*	*1.10*	*3436*	*3.50*	*3.70*	*3.70*
2027	98.9	1.14	1.09	3565	3.40	3.60	3.50
2022Q1	*108.6*	*1.34*	*1.20*	*3025*	*1.40*	*1.20*	*0.45*
2022Q2	*105.9*	*1.25*	*1.18*	*2986*	*2.00*	*1.70*	*0.95*
2022Q3	*103.0*	*1.18*	*1.17*	*2914*	*2.60*	*2.50*	*1.62*
2022Q4	*102.0*	*1.13*	*1.16*	*2747*	*4.20*	*3.60*	*3.20*
2023Q1	*102.3*	*1.13*	*1.16*	*2755*	*4.20*	*4.10*	*4.06*
2023Q2	*102.5*	*1.13*	*1.16*	*2802*	*4.10*	*4.20*	*4.61*
2023Q3	*102.2*	*1.13*	*1.15*	*2834*	*4.00*	*4.20*	*4.76*
2023Q4	*101.8*	*1.13*	*1.15*	*2895*	*4.00*	*4.20*	*4.76*
2024Q1	*101.5*	*1.13*	*1.14*	*2958*	*3.90*	*4.10*	*4.68*
2024Q2	*101.1*	*1.13*	*1.13*	*3044*	*3.80*	*4.00*	*4.57*
2024Q3	*100.8*	*1.13*	*1.13*	*3092*	*3.80*	*4.00*	*4.44*
2024Q4	*100.5*	*1.13*	*1.12*	*3167*	*3.70*	*3.90*	*4.31*
Percentage changes							
2017/2016	-5.6	-4.9	-6.7	14.2			
2018/2017	1.9	3.6	-1.0	0.3			
2019/2018	-0.3	-4.4	0.9	-1.3			
2020/2019	0.5	0.5	-1.3	-12.5			
2021/2020	4.8	7.2	3.3	14.3			
2022/2021	-2.0	-10.9	1.0	0.6			
2023/2022	*-2.5*	*-7.6*	*-1.7*	*-3.3*			
2024/2023	*-1.2*	*0.0*	*-1.9*	*8.6*			
2025/2024	*-1.0*	*0.1*	*-1.7*	*7.0*			
2026/2025	*-0.7*	*0.3*	*-1.3*	*4.7*			
2027/2026	*-0.4*	*0.4*	*-0.9*	*3.8*			
2022Q4/2021Q1	-5.1	-16.1	-1.8	-8.3			
2023Q4/2022Q1	*-0.1*	*0.2*	*-0.9*	*5.4*			
2024Q4/2023Q1	*-1.3*	*0.0*	*-2.0*	*9.4*			

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]
2017	94.5	96.7	94.6	54.0	96.7	96.3	94.3	95.9	96.1
2018	97.1	98.5	96.5	70.4	98.4	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	113.6	99.9	99.3	43.0	101.0	106.2	101.5	100.8	101.0
2021	111.1	105.3	102.0	69.9	103.6	106.3	105.6	103.5	103.5
2022	113.9	116.0	110.6	98.6	111.9	113.0	119.7	112.8	112.1
2023	*120.2*	*123.0*	*119.4*	*94.2*	*120.0*	*121.5*	*137.6*	*121.8*	*120.2*
2024	*124.4*	*128.3*	*124.8*	*96.5*	*124.7*	*126.3*	*144.8*	*126.6*	*124.9*
2025	*126.1*	*132.2*	*128.2*	*97.5*	*127.7*	*129.3*	*148.6*	*129.4*	*127.9*
2026	*127.5*	*135.7*	*131.3*	*99.0*	*130.8*	*132.4*	*152.5*	*132.3*	*131.0*
2027	*129.1*	*139.3*	*134.4*	*100.4*	*134.2*	*135.7*	*156.9*	*135.4*	*134.4*
Percentage changes									
2017/2016	1.4	5.6	3.7	25.8	1.7	1.8	3.6	2.7	2.6
2018/2017	2.7	1.9	2.0	30.5	1.7	1.7	3.3	2.4	2.3
2019/2018	3.0	1.5	3.6	-9.6	1.7	2.1	2.6	1.8	1.7
2020/2019	13.6	-0.1	-0.7	-32.5	1.0	6.2	1.5	0.8	1.0
2021/2020	-2.2	5.4	2.8	62.6	2.5	0.2	4.1	2.6	2.5
2022/2021	2.6	10.2	8.4	41.0	8.1	6.3	13.4	9.0	8.2
2023/2022	*5.5*	*6.0*	*8.0*	*-4.4*	*7.2*	*7.5*	*14.9*	*8.0*	*7.3*
2024/2023	*3.5*	*4.4*	*4.5*	*2.5*	*3.9*	*4.0*	*5.2*	*3.9*	*3.9*
2025/2024	*1.3*	*3.0*	*2.7*	*1.1*	*2.4*	*2.4*	*2.6*	*2.2*	*2.4*
2026/2025	*1.1*	*2.7*	*2.4*	*1.4*	*2.4*	*2.4*	*2.7*	*2.2*	*2.4*
2027/2026	*1.2*	*2.6*	*2.4*	*1.4*	*2.6*	*2.5*	*2.9*	*2.3*	*2.6*
2022Q4/2021Q1	5.3	9.4	12.1	17.0	10.3	9.7	18.6	10.6	10.2
2023Q4/2022Q1	*5.1*	*5.1*	*5.8*	*4.8*	*4.8*	*4.9*	*9.1*	*5.6*	*4.8*
2024Q4/2023Q1	*2.9*	*3.9*	*3.6*	*0.4*	*3.5*	*3.4*	*3.8*	*3.2*	*3.4*

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]						
2017	1391	407	397	13	2193	667	2860	694	-27	2166
2018	1425	409	396	4	2232	688	2920	717	-29	2203
2019	1440	426	403	6	2275	700	2974	736	-36	2238
2020	1250	395	361	-12	1994	615	2609	618	-3	1991
2021	1328	444	381	13	2166	613	2779	635	-22	2141
2022	1386	437	404	67	2294	642	2936	694	-52	2240
2023	*1406*	*414*	*421*	*0*	*2240*	*632*	*2872*	*614*	*19*	*2256*
2024	*1412*	*413*	*426*	*0*	*2251*	*643*	*2893*	*597*	*45*	*2294*
2025	*1416*	*417*	*429*	*0*	*2262*	*666*	*2927*	*595*	*71*	*2330*
2026	*1423*	*422*	*432*	*0*	*2276*	*692*	*2968*	*599*	*93*	*2367*
2027	*1432*	*429*	*436*	*0*	*2297*	*718*	*3016*	*608*	*110*	*2405*
Percentage changes										
2017/2016	1.9	0.4	3.5		1.5	6.8	2.7	3.3		2.4
2018/2017	2.5	0.3	-0.2		1.8	3.1	2.1	3.3		1.7
2019/2018	1.1	4.1	1.9		1.9	1.7	1.9	2.6		1.6
2020/2019	-13.2	-7.3	-10.5		-12.3	-12.1	-12.3	-16.0		-11.0
2021/2020	6.2	12.6	5.6		8.6	-0.3	6.5	2.8		7.5
2022/2021	4.4	-1.8	6.0		5.9	4.7	5.6	9.3		4.6
2023/2022	*1.4*	*-5.2*	*4.0*		*-2.4*	*-1.6*	*-2.2*	*-11.6*		*0.7*
2024/2023	*0.4*	*-0.1*	*1.2*		*0.5*	*1.7*	*0.7*	*-2.6*		*1.7*
2025/2024	*0.3*	*1.0*	*0.7*		*0.5*	*3.6*	*1.2*	*-0.4*		*1.6*
2026/2025	*0.5*	*1.1*	*0.8*		*0.7*	*3.9*	*1.4*	*0.7*		*1.6*
2027/2026	*0.7*	*1.7*	*0.9*		*0.9*	*3.8*	*1.6*	*1.5*		*1.6*
Decomposition of growth in GDP (percentage points)										
2016	2.3	0.2	0.9	-0.1	2.4	0.9	3.4	-1.2	-0.3	2.2
2017	1.2	0.1	0.6	0.2	1.5	2.0	3.5	-1.0	1.0	2.4
2018	1.6	0.1	0.0	-0.4	1.8	1.0	2.8	-1.1	-0.1	1.7
2019	0.7	0.8	0.3	0.0	1.9	0.5	2.5	-0.9	-0.3	1.6
2020	-8.5	-1.4	-1.9	-0.8	-12.5	-3.8	-16.3	5.3	1.5	-11.0
2021	3.9	2.5	1.1	1.3	8.9	-0.1	9.6	-1.2	-1.2	7.6
2022	*3.0*	*0.1*	*0.9*	*0.1*	*4.1*	*3.6*	*7.3*	*-4.2*	*-0.6*	*4.1*
2023	*-1.5*	*-0.7*	*-0.4*	*-0.7*	*-3.3*	*0.8*	*-2.5*	*2.7*	*3.5*	*0.2*
2024	*0.4*	*-0.3*	*-0.4*	*0.0*	*-0.4*	*-0.4*	*-0.8*	*1.7*	*1.4*	*1.0*
2025	*1.2*	*-0.1*	*0.1*	*0.0*	*1.2*	*0.5*	*1.7*	*-0.1*	*0.4*	*1.6*
2026	*1.1*	*0.0*	*0.2*	*0.0*	*1.2*	*1.1*	*2.3*	*-0.6*	*0.4*	*1.7*

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
2017	356	497	-141	311	197	114	96.3	91.8	97.8	-3.6
2018	357	499	-142	331	218	113	99.7	95.1	97.9	-4.1
2019	364	512	-148	336	224	112	100.0	100.0	100.0	-2.9
2020	316	449	-133	299	169	130	98.7	92.4	99.4	-3.1
2021	317	457	-141	297	178	119	103.4	99.1	97.0	-2.0
2022	321	504	-183	321	190	131	100.9	103.5	95.3	-7.3
2023	*319*	*444*	*-125*	*313*	*170*	*144*	*100.1*	*103.0*	*97.1*	*-8.5*
2024	*328*	*436*	*-108*	*315*	*162*	*153*	*100.1*	*105.8*	*97.3*	*-6.2*
2025	*343*	*437*	*-95*	*323*	*158*	*165*	*99.2*	*109.6*	*97.0*	*-4.5*
2026	*358*	*442*	*-84*	*334*	*157*	*177*	*98.8*	*113.8*	*96.7*	*-3.0*
2027	*373*	*451*	*-78*	*346*	*157*	*188*	*98.7*	*118.0*	*96.5*	*-2.0*
Percentage changes										
2017/2016	7.0	2.4		6.7	5.8		-3.4	5.0	-1.8	
2018/2017	0.2	0.3		6.4	10.8		3.6	3.6	0.1	
2019/2018	1.9	2.6		1.5	2.7		0.3	5.1	2.1	
2020/2019	-13.0	-12.3		-11.1	-24.7		-1.3	-7.6	-0.6	
2021/2020	0.1	1.9		-0.7	5.2		4.8	7.3	-2.4	
2022/2021	1.3	10.3		8.3	6.9		-2.5	4.4	-1.7	
2023/2022	*-0.5*	*-11.9*		*-2.6*	*-10.8*		*-0.7*	*-0.5*	*1.9*	
2024/2023	*2.7*	*-1.9*		*0.6*	*-4.7*		*-0.1*	*2.8*	*0.2*	
2025/2024	*4.5*	*0.3*		*2.7*	*-2.3*		*-0.8*	*3.6*	*-0.3*	
2026/2025	*4.5*	*1.2*		*3.3*	*-0.8*		*-0.4*	*3.8*	*-0.3*	
2027/2026	*4.1*	*1.9*		*3.4*	*0.4*		*-0.1*	*3.6*	*-0.3*	

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	
2017	93.5	997	1742	1353	1399	1391	5.1	95.9	7.2
2018	96.1	1042	1814	1409	1432	1425	5.1	99.1	6.8
2019	100.0	1090	1889	1462	1462	1440	5.3	100.0	6.9
2020	100.1	1095	1892	1458	1443	1250	15.8	102.8	7.5
2021	104.8	1158	1989	1512	1460	1328	12.5	112.3	7.6
2022	111.0	1243	2126	1596	1426	1386	8.1	120.0	6.8
2023	*117.3*	*1321*	*2240*	*1720*	*1433*	*1406*	*7.5*	*113.4*	*6.2*
2024	*122.4*	*1390*	*2345*	*1820*	*1460*	*1412*	*9.0*	*110.1*	*6.0*
2025	*125.1*	*1431*	*2430*	*1888*	*1478*	*1416*	*10.0*	*109.9*	*6.0*
2026	*127.7*	*1470*	*2510*	*1953*	*1493*	*1423*	*10.5*	*111.2*	*5.9*
2027	*130.8*	*1512*	*2596*	*2025*	*1508*	*1432*	*10.9*	*113.8*	*5.9*
Percentage changes									
2017/2016	2.8	3.9	3.3	2.8	1.0	1.9		4.5	
2018/2017	2.9	4.5	4.1	4.2	2.4	2.5		3.3	
2019/2018	4.0	4.6	4.1	3.8	2.1	1.1		0.9	
2020/2019	0.1	0.4	0.1	-0.3	-1.3	-13.2		2.8	
2021/2020	4.7	5.8	5.1	3.7	1.1	6.2		9.2	
2022/2021	5.9	7.4	6.9	5.5	-2.3	4.4		6.8	
2023/2022	*5.6*	*6.2*	*5.3*	*7.8*	*0.5*	*1.4*		*-5.5*	
2024/2023	*4.4*	*5.2*	*4.7*	*5.8*	*1.9*	*0.4*		*-2.9*	
2025/2024	*2.2*	*3.0*	*3.6*	*3.7*	*1.3*	*0.3*		*-0.2*	
2026/2025	*2.1*	*2.7*	*3.3*	*3.5*	*1.0*	*0.5*		*1.3*	
2027/2026	*2.4*	*2.9*	*3.4*	*3.6*	*1.0*	*0.7*		*2.3*	

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]
2017	226	104	67	397	12.8	25.5	3664	740
2018	222	110	64	396	12.7	24.8	3721	756
2019	225	112	66	403	12.8	24.5	3772	774
2020	198	94	69	361	12.9	24.4	3779	794
2021	198	109	74	381	10.3	24.1	3798	819
2022	205	116	84	404	9.8	24.2	3842	850
2023	*211*	*114*	*95*	*421*	*12.0*	*24.6*	*3889*	*891*
2024	*216*	*111*	*98*	*426*	*12.2*	*25.7*	*3936*	*932*
2025	*221*	*109*	*99*	*429*	*12.1*	*26.9*	*3982*	*970*
2026	*225*	*107*	*100*	*432*	*11.8*	*28.1*	*4029*	*1008*
2027	*229*	*106*	*101*	*436*	*11.6*	*29.4*	*4076*	*1044*
Percentage changes								
2017/2016	1.1	10.3	3.0	3.5			3.6	-6.2
2018/2017	-1.5	6.1	-5.4	-0.2			1.6	2.2
2019/2018	1.3	1.8	3.7	1.9			1.4	2.4
2020/2019	-11.9	-16.0	3.6	-10.5			0.2	2.6
2021/2020	-0.1	15.7	8.1	5.6			0.5	3.1
2022/2021	3.2	6.3	13.2	6.0			1.2	3.8
2023/2022	*3.4*	*-1.8*	*13.7*	*4.0*			*1.2*	*4.8*
2024/2023	*2.4*	*-2.1*	*2.6*	*1.2*			*1.2*	*4.5*
2025/2024	*2.0*	*-1.9*	*0.9*	*0.7*			*1.2*	*4.2*
2026/2025	*1.9*	*-1.6*	*1.0*	*0.8*			*1.2*	*3.9*
2027/2026	*1.8*	*-1.2*	*1.1*	*0.9*			*1.2*	*3.6*

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]					
2017	27065	32057	1476	33533	41169	98.9	4.4
2018	27494	32439	1380	33819	41260	99.7	4.1
2019	27652	32799	1306	34105	41344	100.0	3.8
2020	27752	32509	1551	34060	41362	99.9	4.6
2021	28023	32407	1525	33931	41392	101.0	4.5
2022	28409	32827	1271	34099	41535	101.1	3.7
2023	*28571*	*33033*	*1406*	*34439*	*41660*	*100.9*	*4.1*
2024	*28809*	*33296*	*1339*	*34635*	*41774*	*101.8*	*3.9*
2025	*29020*	*33529*	*1274*	*34802*	*41877*	*102.7*	*3.7*
2026	*29195*	*33723*	*1231*	*34955*	*41958*	*103.7*	*3.5*
2027	*29328*	*33875*	*1223*	*35098*	*42023*	*104.9*	*3.5*
Percentage changes							
2017/2016	1.1	1.0	-9.6	0.5	0.3	1.4	
2018/2017	1.6	1.2	-6.5	0.9	0.2	0.8	
2019/2018	0.6	1.1	-5.4	0.8	0.2	0.3	
2020/2019	0.4	-0.9	18.8	-0.1	0.0	-0.1	
2021/2020	1.0	-0.3	-1.7	-0.4	0.1	1.1	
2022/2021	1.4	1.3	-16.6	0.5	0.3	0.1	
2023/2022	*0.6*	*0.6*	*10.6*	*1.0*	*0.3*	*-0.3*	
2024/2023	*0.8*	*0.8*	*-4.8*	*0.6*	*0.3*	*0.9*	
2025/2024	*0.7*	*0.7*	*-4.9*	*0.5*	*0.2*	*0.9*	
2026/2025	*0.6*	*0.6*	*-3.3*	*0.4*	*0.2*	*1.0*	
2027/2026	*0.5*	*0.4*	*-0.6*	*0.4*	*0.2*	*1.1*	

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	483.9	495.8	559.7	618.4	*625.1*	*656.2*	*685.7*	*713.7*
	Taxes on expenditure	279.6	144.9	260.1	376.9	*406.2*	*421.1*	*432.2*	*445.5*
	Other current receipts	64.2	152.2	93.7	15.3	*16.4*	*17.3*	*17.9*	*18.7*
	Total	827.6	792.9	913.6	1010.6	*1047.7*	*1094.6*	*1135.9*	*1177.8*
	(as a % of GDP)	36.8	38.0	39.0	38.8	*37.3*	*37.6*	*37.9*	*38.1*
Current expenditure:	Goods and services	431.5	495.5	513.9	504.7	*521.1*	*545.6*	*568.3*	*593.6*
	Net social benefits paid	241.9	262.9	261.5	287.7	*280.8*	*288.0*	*299.2*	*308.7*
	Debt interest	52.9	42.0	75.2	124.4	*72.5*	*73.4*	*74.3*	*75.8*
	Other current expenditure	64.0	179.5	89.0	84.7	*83.2*	*87.4*	*90.6*	*93.9*
	Total	790.3	979.9	939.6	1001.6	*957.6*	*994.4*	*1032.4*	*1072.0*
	(as a % of GDP)	35.3	47.0	40.1	39.2	*37.1*	*35.8*	*35.7*	*35.9*
Depreciation		52.4	53.4	55.1	60.8	*65.5*	*68.8*	*71.5*	*74.4*
Surplus on public sector current budget[a]		-15.1	-240.3	-81.1	-51.8	*24.6*	*31.3*	*32.0*	*31.4*
(as a % of GDP)		-0.7	-11.7	-3.5	-2.0	*0.9*	*1.1*	*1.1*	*1.0*
Gross investment		98.0	127.9	117.0	104.3	*121.6*	*127.2*	*132.2*	*137.4*
Net investment		45.6	74.5	61.9	43.5	*56.1*	*58.3*	*60.7*	*63.0*
(as a % of GDP)		1.7	3.4	2.3	2.5	*2.9*	*2.8*	*2.8*	*2.7*
Total managed expenditure		888.3	1107.7	1056.6	1105.9	*1079.2*	*1121.6*	*1164.6*	*1209.4*
(as a % of GDP)		39.4	53.0	44.7	43.9	*42.2*	*40.8*	*40.8*	*40.9*
Public sector net borrowing		60.6	314.8	143.0	95.3	*31.5*	*27.0*	*28.7*	*31.5*
(as a % of GDP)		2.6	15.0	5.8	4.8	*5.0*	*3.2*	*2.9*	*2.8*
Public sector net debt (% of GDP)		80.8	100.7	98.5	96.2	*95.1*	*94.4*	*91.6*	*89.6*
GDP deflator at market prices (2019=100)		100.9	107.4	106.9	115.6	*122.8*	*127.2*	*130.0*	*133.2*
Money GDP (£ billion)		2247	2090	2347	2587	*2787*	*2930*	*3043*	*3166*

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	
2017	3.5	4.8	10.2	11.0	1.0	2.5	14.8	18.4	3.6	1.0	-0.1
2018	3.5	4.8	9.3	10.8	1.3	2.6	14.0	18.1	4.1	1.3	-1.0
2019	3.6	4.6	10.7	11.0	1.1	2.7	15.4	18.3	2.9	0.0	0.4
2020	11.5	4.3	10.8	9.8	-8.3	3.1	14.0	17.2	3.1	2.2	-2.4
2021	8.7	4.2	11.5	10.8	-4.1	3.0	16.1	18.1	2.0	0.5	0.5
2022	5.4	4.5	9.3	13.4	-0.7	3.3	13.9	21.2	7.3	3.1	-1.2
2023	*5.0*	*4.4*	*2.7*	*10.1*	*2.0*	*3.7*	*9.8*	*18.2*	*8.5*	*7.4*	*-5.3*
2024	*6.0*	*4.2*	*2.9*	*10.2*	*3.0*	*3.7*	*11.9*	*18.1*	*6.2*	*6.3*	*-3.2*
2025	*6.6*	*4.1*	*4.0*	*10.2*	*3.0*	*3.7*	*13.6*	*18.0*	*4.5*	*5.6*	*-1.5*
2026	*7.0*	*4.0*	*5.1*	*10.3*	*2.9*	*3.7*	*15.0*	*18.0*	*3.0*	*4.9*	*-0.1*
2027	*7.2*	*3.9*	*6.0*	*10.4*	*2.7*	*3.6*	*15.9*	*17.9*	*2.0*	*4.5*	*0.8*

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)

	2021	2022	2023	2024	2025	2026	2027	2028-2032
GDP (market prices)	7.5	4.6	0.7	1.7	1.6	1.6	1.6	1.5
Average earnings	4.7	5.9	5.6	4.4	2.2	2.1	2.4	2.3
GDP deflator (market prices)	0.2	6.3	7.5	4.0	2.4	2.4	2.5	2.1
Consumer Prices Index	2.6	9.0	8.0	3.9	2.2	2.2	2.3	1.9
Per capita GDP	6.9	4.4	0.4	1.3	1.3	1.3	1.3	1.2
Whole economy productivity[a]	1.1	0.1	-0.3	0.9	0.9	1.0	1.1	1.3
Labour input[b]	6.6	4.2	0.6	0.9	0.8	0.7	0.5	0.2
ILO Unemployment rate (%)	4.5	3.7	4.1	3.9	3.7	3.5	3.5	3.9
Current account (% of GDP)	-2.0	-7.3	-8.5	-6.2	-4.5	-3.0	-2.0	-0.3
Total managed expenditure (% of GDP)	44.7	43.9	42.2	40.8	40.8	40.9	41.1	42.2
Public sector net borrowing (% of GDP)	5.8	4.8	5.0	3.2	2.9	2.8	2.7	2.5
Public sector net debt (% GDP)	98.3	94.0	94.5	93.2	90.2	88.4	86.7	84.5
Effective exchange rate (2011=100)	106.9	104.9	102.2	101.0	99.9	99.3	98.9	98.6
Bank Rate (%)	0.1	1.6	4.5	4.5	4.1	3.8	3.6	3.4
10 year interest rates (%)	0.8	2.5	4.1	3.8	3.6	3.5	3.4	3.3

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

Table A11 Gross Value Added by sector percentage change

	2018	2019	2020	2021	2022	2023	2024	2025	2026
Utilities and agriculture	-3.5	8.9	5.0	6.4	2.8	3.7	2.9	2.7	2.5
Mining and quarrying	6.3	2.2	-3.2	-11.1	2.1	-7.8	-5.6	-5.8	-5.9
Manufacturing	4.3	1.2	0.1	9.7	-4.2	1.0	2.3	1.1	0.9
Construction	-1.7	1.5	-13.5	13.2	5.1	1.6	0.6	0.3	0.4
Public sector	1.3	2.7	-19.8	12.5	7.1	0.7	0.6	0.8	1.0
Private non-traded services	0.8	1.2	-18.4	5.1	6.2	2.6	2.0	1.2	1.3
Financial services	-0.9	-2.5	0.3	5.3	0.7	0.6	0.9	0.8	0.7
Imputed rent	2.0	1.2	0.1	1.0	1.0	0.5	0.4	0.8	1.0
Private traded services	3.9	2.5	-10.5	8.8	10.0	2.0	2.3	2.3	1.3

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).

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