

# National Institute UK Economic Outlook

A Risky Present

Summer 2022 Series A. No. 7



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# Foreword: A Risky Present

It is a truism that politics trumps economics. Indeed, with the prospect of our fourth Prime Minister since the advisory referendum on the UK's membership of the EU was called in February 2016, it seems that politics has become trump and joker rolled into one. The swiftest turnover of PMs since the 1920s itself is indicative of economic doldrums and some national atrophy. Politics though not only decides the feasible space for many economic decisions it can also interact with decision-making by households and firms and elevate uncertainty to the extent that plans are delayed, and opportunities lost. I am afraid that is where we have sat as a country for the past six years.

As the Office for Budget Responsibility indicated recently in its 'Fiscal risks and sustainability' report, we have entered riskier times. Meeting the challenges of climate change with an aging population and an increasing demand for health and social care will push up our level of public indebtedness in the long run to extraordinary levels, unless the tax base is widened or we find some way of returning to higher levels of productivity. But the risk may also manifest itself in other ways. Our modelling suggests that higher levels of risk may mean we have more cyclical volatility, with a greater frequency of downturns that we have come to expect in the post-industrial period. Recall that we had termed the period of growth from 1992 to 2007, the long expansion. That period already is looking like an arcane piece of economic history; a third year Special Paper. Climate change itself may re-enforce this change as patterns of production are disrupted. Such patterns will provide an acute challenge for fiscal policy.

This is because, as we have been recently reminded, downturns are most keenly felt by poorer households who may need new forms of income support. During the Covid-19 lockdowns and again during the cost-of-living crisis we have eventually innovated fiscal support with a furlough scheme and money for energy bills. It would therefore seem that, in this new riskier world, fiscal support may have to be redesigned and targeted to meet modern requirements. The best way of funding this over time will be the taxes levied on wealthier households. No politician who wants to get elected traditionally says such things. But if we look to the long run, our ability to withstand increases in economic volatility will be considerably easier if our physical and digital infrastructure has been modernised, and we address the gaps exposed by Covid-19 in the provision of our health and social care. Managing risk therefore implies a redesigned tax system to raise revenues more efficiently and a consistent, long-term commitment to public sector investment. In the short run these interventions imply, unfortunately, a greater encroachment of the state in the private sector but as growth is spurred injections of public investment now will, in the long run, not look overwhelmingly large.

Somehow this transformation of fiscal policy must be affected while, at the same time, the main economic priorities are addressed. The Monetary Policy Committee must reign in inflation by focusing on normalising interest rates, embarking on rapid quantitative tightening, and concentrating on communicating its stance over time more clearly. The government's objective of levelling up or regional regeneration is to be applauded but, as yet, no targets or measures of success have been agreed. And there will have to be some acceptance that it will require not only more public investment, but also some devolved powers to local and devolved nations, perhaps in some form of fiscal federalism. The huge fall in real disposable incomes this year, which primarily arises from the external terms of trade shock of war in Ukraine interacting with Brexit, will greatly strain industrial relations in the public sector and will lead to considerable hardship in many families in the lower income brackets. The incoming PM will have an overflowing in-tray of economic problems to resolve and solutions for the common good must be found.

The prizes awarded for success are huge. If we fail, the UK will continue to decline in importance on the international stage, indeed the rate of decline may accelerate as the main actors fail to take a lead from British empiricism. But if we can adopt the right set of policy interventions, that increasing tide of global risk may decide to lodge more of its funds in a modernised and forward-looking country. And that is where we can benefit from a riskier world by nurturing good governance, lively debate and wise choice.

Jagjit S. Chadha, Director, NIESR August 2022

# National Institute UK Economic Outlook – Summer 2022

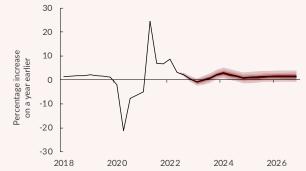
- The UK economy is likely to enter recession in the third quarter of 2022 and remain there until the first quarter of 2023. Our forecast for year-on-year GDP growth is 3.5 per cent in 2022 and 0.5 per cent in 2023. Unemployment is expected to rise above 5 per cent over the coming twelve months as firms respond to the fall in aggregate demand.
- CPI inflation is forecast to peak close to 11 per cent in the fourth quarter of 2022, returning to around 3 per cent a year later. This fall results from tighter monetary policy, a slowing in energy price inflation and falls in real incomes. The Bank of England's Monetary Policy Committee must continue to be cautious as it walks a fine line between tightening policy too quickly, worsening the recession, and too slowly, increasing the risk of high inflation becoming embedded in expectations.
- Earnings are expected to rise by 6 per cent in 2022 but we do not expect engrained domestic inflation to result from a wage-price spiral. With prices settling indefinitely at a higher level relative to incomes, real household incomes are forecast to fall by 2.5 per cent in 2022 and remain over 7 per cent below their pre-Covid trend beyond 2026.
- Three shocks have combined to shift real incomes onto a permanently lower path. Brexit has raised the cost of imports from continental Europe and incentivised households to switch towards more expensive domestically-produced goods and services. The recent rise in energy prices has constituted a large terms-of-trade shock for the UK. Finally, discretionary fiscal tightening over the 2021-24 period, following the shock of Covid-19, has reduced the resources available to the private sector.
- With government budgets set in cash terms, the government's debt and deficits will be lower as a percentage of GDP, with the deficit forecast to fall to around 5 per cent in 2022-23 and 1 per cent in 2023-24. This means the government has more room to borrow to mitigate the effects of these three shocks, and we suggest some of this extra fiscal space is used to redistribute resources to the most financially vulnerable households (see Chapter 2).
- If overall government consumption is held fixed in nominal terms, either real public sector wages will fall significantly after a decade of very low growth, or services will be cut, or as seems likely both. We suggest that the government use some of its extra fiscal room to allow government employees' wages to be set according to the requirements of individual sectors, rather than with an eye on inflation, to which they do not directly contribute.
- Finally, we would advise the government to focus on minimising the negative effects of Brexit by reducing the trade barriers between the UK and the European Union, including the Republic of Ireland. We would certainly advise against risking a trade war with our nearest and largest trading partner, the EU, by overturning the Northern Ireland Protocol, which has supported productivity and output growth in some sectors in Northern Ireland.

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

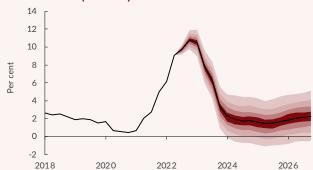
	2018	2019	2020	2021	2022	2023	2024	2025	2026
GDP	1.7	1.7	-9.3	7.4	3.5	0.5	1.8	1.3	1.5
Per capita GDP	1.1	1.1	-9.7	6.9	3.3	0.1	1.5	0.9	1.2
CPI Inflation	2.4	1.8	0.8	2.6	9.0	6.9	1.9	1.6	2.1
RPIX Inflation	3.3	2.5	1.7	4.2	10.4	7.5	2.6	2.2	2.8
RPDI	2.8	1.3	-0.3	1.4	-2.5	-0.8	2.9	2.0	2.0
Unemployment, %	4.1	3.8	4.6	4.5	4.0	4.7	4.0	3.7	3.3
Bank Rate, %	0.6	0.8	0.2	0.1	1.4	3.1	3.1	3.1	3.1
Long Rates, %	1.4	0.9	0.3	0.8	1.9	2.5	2.7	2.9	3.0
Effective exchange rate	1.9	-0.3	0.5	4.8	-1.0	-1.5	-0.8	-0.7	-0.7
Current account as % of GDP	-3.9	-2.7	-2.5	-2.6	-7.2	-7.0	-6.2	-5.0	-4.0
Net borrowing as % of GDP	1.7	2.3	14.4	6.1	5.1	1.2	1.1	0.8	0.7
Net debt as % of GDP	79.3	83.9	95.1	92.9	89.8	88.1	86.1	81.6	78.4

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.





#### **CPI inflation (forecast)**



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 growth will lie outside the shaded area of the fan.

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

Note: Harmonised index of consumer prices. 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. UK economic outlook

#### By Rory Macqueen, Stephen Millard, Urvish Patel and Kemar Whyte<sup>1</sup>

#### **Economic background**

As we publish our Summer Economic Outlook, the UK economy may already be in recession and, with consumer price inflation close to double figures, the threat of stagflation has returned for the first time since the 1970s. Though comparisons with that period are generally overstated, the UK economy - following a decade of stagnation and Brexit - was not in a healthy position when the Covid-19 shock arrived: the 'lockdown recession' actually began with a small contraction in the fourth guarter of 2019.

When the pandemic first arrived, fiscal and monetary policy responded appropriately to protect the balance sheets of both businesses and households but, when it became clear that the economy was emerging from the shadow of the pandemic, monetary policy was too slow to begin normalisation and failed to respond to the first round of inflation, which was generated by supply chain disruptions in 2021. The Monetary Policy Committee (MPC) of the Bank of England was not aided by fiscal policy, which switched too quickly to contractionary, and - not for the first time in recent history – left the monetary authorities reluctant to raise rates with demand still fragile.

This initial rise in prices was then followed by Russia's February invasion of Ukraine, which drove energy prices yet higher and disrupted the supply of food items, experienced in the UK as a terms-of-trade shock. Because of the Ofgem energy price cap, in the UK this led to a large rise in inflation from April in particular (see Figure 1.1).

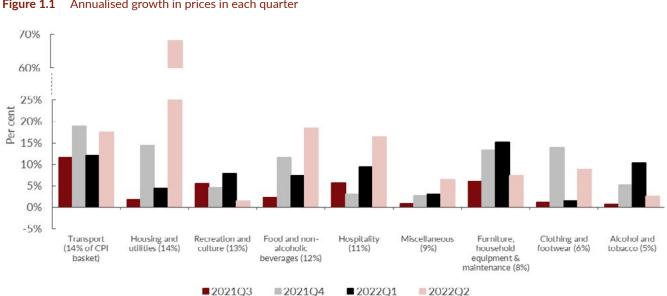


Figure 1.1 Annualised growth in prices in each quarter

Source: ONS, NIESR calculations

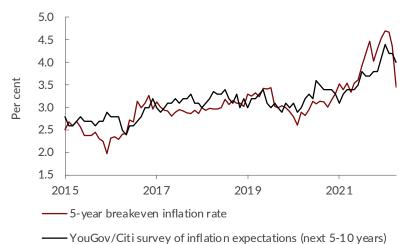
Note: Sectors ordered from largest share of the CPI basket (left) to smallest (right), excluding the smallest three sectors: Education (3%), Communication (3%) and Health (2%). Each bar represents the twelve-month inflation rate implied by the three-month change in prices.

Both of these shocks were exogenous from the point of view of UK economic agents. What will determine whether they are followed by a third wave of inflation is the degree to which rising global input prices are passed on by businesses to higher UK consumer prices, and the response of nominal wages. If firms protect profit margins and workers protect real wages, then domestically generated inflation could prove more stubborn. Inflation expectations have risen over the past year but on some measures have recently fallen a little (see Figure 1.2). This is probably

The authors are grateful to Bart van Ark 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 18 July 2022; 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).

because beliefs about future robust price setting are running head-on into fears about weakening demand and impending recession but also, possibly, because the MPC has started tightening monetary policy. Confidence indicators suggest increasing concern among households, though this is likely to disguise considerable heterogeneity. Growth could potentially be sustained in the second half of 2022 by a side-product of the initial Covid-19 policy response: the £200 billion of largely 'forced' savings accumulated by the household sector during lockdowns. But these savings are distributed highly unequally and demand for foreign holidays seems to be surging as millions are reported to be struggling with shopping for household essentials.





Source: Bank of England, YouGov/Citi, NIESR calculations. Financial market expectations are based on 5-year break even inflation rates.

Monetary policy is limited in what it can do to support living standards. With a mandate to ensure price stability, the MPC has raised interest rates five times since late 2021, and market expectations are that it will continue to do so, though this may be difficult to sustain if activity continues to decline and unemployment to rise.

Rather than the central bank, the economic agent with the power to smooth the path to a permanently higher price level is the government. Fiscal policy was loosened somewhat by then Chancellor of the Exchequer Rishi Sunak in May, but this will not have prevented real incomes falling again. With the energy price cap rising again in October, further support may well be needed. Depending on political developments, this may come in the form of tax cuts, which run the risk of stoking further inflation; we think that immediate support would be better directed through targeted transfers. The government also has significant control over public sector wages, which are currently growing much slower than those in the private sector though government-sector wage growth does not feed directly into consumer price inflation, as public services are generally provided without price.

Beyond the unsolved problems of Brexit, most notably arising from attempts to unpick the Northern Ireland Protocol, the long-term challenge facing the UK economy remains its low level and growth rate of productivity. NIESR's Productivity Commission published its Evidence Review in June,<sup>2</sup> reporting potential priorities as including business support, capital investment including in public transport, 'levelling up' (including in housing availability) and additional investment in skills and training.

Compared with our quarterly analyses over the past two and a half years, Covid-19 makes relatively few appearances when examining the most recent economic data, despite rising case numbers. This reflects not an end to the virus but the increasing extent to which UK businesses and households – willingly or otherwise – are adapting and learning to 'live with it'. This does not mean ignoring the different impacts it continues to have on the sectoral makeup of the UK economy and the differential outcomes arising from that: Figure 1.3 illustrates its negative impact on job creation in hospitality, transport, and arts and recreation.

<sup>2</sup> The Productivity Institute, 'Productivity in the UK: Evidence Review', First report of the UK Productivity Commission, NIESR, June 2022. Available at https://www.niesr.ac.uk/wp-content/uploads/2022/06/Productivity-in-the-UK-Evidence-Review.pdf

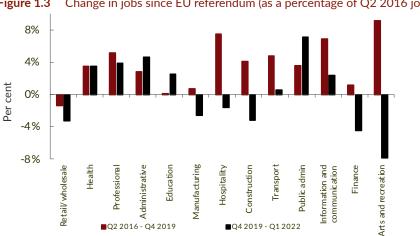


Figure 1.3 Change in jobs since EU referendum (as a percentage of Q2 2016 jobs)

Source: ONS, NIESR calculations

Note: Sectors ordered from largest number of jobs in 2016 (left) to fewest (right), excluding the smallest sectors: Other Services, Real estate, Water, Electricity, Private households and Extraction.

#### **Current economic conditions**

#### Demand and output

#### Consumption solid in first quarter despite falling incomes

Consumption by households and Non-Profit Institutions Serving Households (NPISH) grew by 0.6 per cent in the first quarter of 2022 but remains 0.4 per cent lower than its pre-Covid level. Real personal disposable income fell by 0.2 per cent in the first quarter: its fourth consecutive quarterly fall. Figure 1.4 shows that this was again driven by increases in taxes and inflation offsetting relatively healthy compensation growth: despite the rise in the National Insurance threshold at the beginning of July, the introduction of the new 'Health and Social Care Levy' at the beginning of April, together with the freezing of income tax allowances, has meant that the tax burden on households has risen in 2022. Annual consumer price inflation has already risen to 9.4 per cent, well above average wage inflation, which is likely to continue to put downward pressure on consumption over the rest of 2022 and, possibly, beyond.

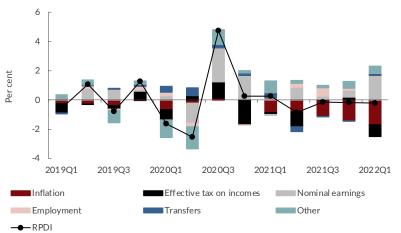
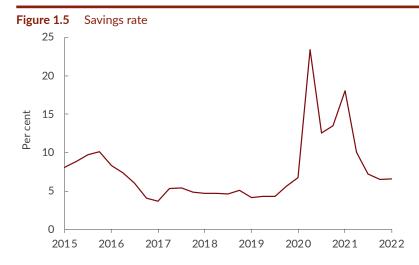


Figure 1.4 Components of quarterly growth in real disposable personal income

Source: ONS, NIESR calculations

#### Households keep saving...

Despite the ongoing real income squeeze, the savings ratio remained at 6.8 per cent in the first quarter of 2022 (Figure 1.5). We might expect this to fall as households continue to use up the savings accumulated during the Covid-19 lockdowns to maintain their level of consumption. However, it remains the case that the poorest households will struggle to maintain their level of real consumption given they spend a larger fraction of their income on food and fuel and were less able to build up savings during the lockdowns. We discuss the distributional impact of the real income squeeze in Chapter 2.



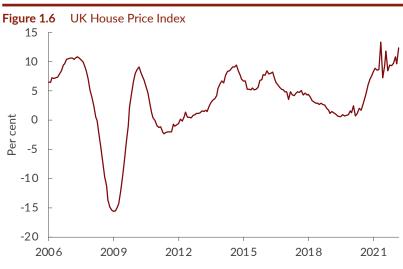
Source: ONS

#### ...as confidence remains low

The GfK Consumer Confidence Survey reached a new record low of -41 in June, its seventh consecutive monthly fall and now slightly lower than it was in July 2008, when the UK economy went into the Great Recession. The forward-looking index for personal financial situation fell to -28, also a record low, and that for the general economic situation fell to -57, roughly in line with where it was in April 2020 and in July 2008.

#### House price inflation continues to rise

House price inflation in April 2022 was 12.4 per cent, up from 9.7 per cent in March (Figure 1.6). This represents its tenth consecutive monthly rise: the longest streak since 2016. Recent NIESR research by Patel (2022) discusses in detail where the UK housing market might be going and argues that, even if house price inflation falls over 2022 as interest rates are raised in response to the increase in inflation, we are still unlikely to see a housing market crash.

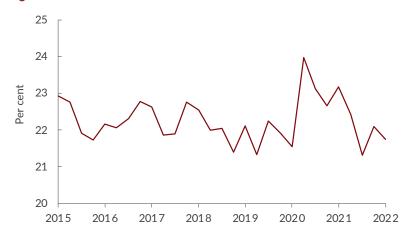


Source: HM Land Registry

#### Input costs rise and the profit share falls

The ongoing war in Ukraine continues to have a large effect on business sector costs. Producer input prices rose by 24.0 per cent in the year to June 2022, the highest rate since records began in January 1985. Producer output prices rose by 16.5 per cent over the same period, with food products providing the largest contribution. Despite rising prices, the gross operating surplus of private non-financial corporations increased by 2.5 per cent in the first quarter of the year and that of financial corporations by 4.3 per cent though, given the larger increase in nominal GDP (3.2 per cent), the profit share fell slightly, remaining roughly in line with its average level in the years before Covid-19 (Figure 1.7).

Figure 1.7 Profit share in GDP



Source: ONS, NIESR calculations

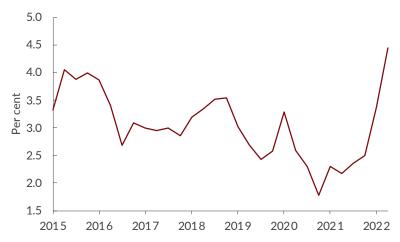
#### Investment remains weak...

Business investment fell by 0.6 per cent in the first quarter of 2022 and is now 9.2 per cent below its level in the fourth quarter of 2019. Surveys suggest that investment continued to be weak in the second quarter: three quarters of firms in the British Chambers of Commerce (BCC) Quarterly Economic Survey reported no increase to investment in plant and equipment. In the manufacturing sector 11 per cent more firms reported an increase in investment in machinery or technology than a decrease, the lowest since the first quarter of 2021. The service sector balance also stands at 11 per cent, unchanged from the previous quarter, and there is little expectation that things will improve in the near future, with only 54 per cent of firms expecting their turnover to increase over the next twelve months, down from 63 per cent in the first quarter of 2022. This negative view is confirmed by the Bank of England's Decision Maker Panel (DMP) Survey published on 7 July. Firms reported ongoing supply shortages, with just under two thirds of firms experiencing some disruption to non-labour inputs.

#### ...as corporate credit conditions tighten

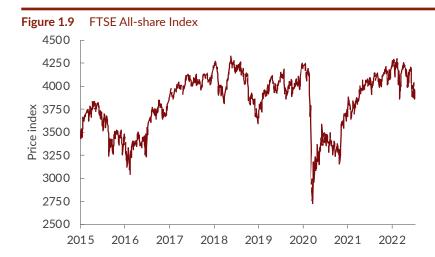
The ongoing monetary policy tightening has led to a tightening in corporate financing conditions. Corporate bond yields (UK BBB-rated companies) have risen to 4.5 per cent, as of 11 July (Figure 1.8), and the FTSE All Share index (Figure 1.9) has fallen by around 6 per cent since NIESR's Spring Outlook. In addition to the rise in interest rates, increased uncertainty associated with the ongoing war in Ukraine and UK domestic politics is likely to be bearing down on share prices. That said, the longer-term context remains that – leaving aside the large movements brought about by Covid-19 – UK equity prices and bond yields have been relatively flat for the past five years, implying a relatively flat cost of capital.

Figure 1.8 Yields on UK BBB corporate bonds



Note: ICE BofA BBB sterling corporate and collateralized index (yield to maturity)

Source: Datastream



Source: FTSE

#### The government has moved to revoke the Northern Ireland Protocol...

The Northern Ireland Protocol Bill would unilaterally rewrite parts of the Northern Ireland Protocol, part of the overall European Union Withdrawal Agreement. Given that passing this bill will mean the UK government reneging on a previously-signed international agreement, we would expect a response from the European Union (EU) and any action that made trade with the EU harder will likely have a negative effect on UK productivity and GDP. It would, of course, have a negative effect on the EU as well, but this would be much smaller as the UK is a much smaller trading partner for the EU (as a proportion of GDP) than the EU is for the UK. We discuss the Northern Ireland economy in more detail in Chapter 2 and in Box D on page 44.

#### ... as Brexit bites

Indeed, there is evidence that the increase in the costs of trading with the EU resulting from the UK's withdrawal has already had economic effects. Freeman et al. (2022) have found that Brexit – specifically, the UK leaving the EU single market and customs union – led to a sudden and persistent 25 per cent fall in UK imports from the EU relative to those from the rest of the world. Less competition from EU imports is likely to have a negative effect on UK productivity, a mechanism stressed in, e.g. Millard et al. (2019). On the other hand, UK exports to the EU relative to those to the rest of the world only declined temporarily and by a smaller amount.

#### The trade deficit widened at the start of the year...

The UK's trade deficit widened to a record 5.4 per cent of GDP in the first guarter of 2022, 4.2 per cent of GDP if movements in non-monetary gold are excluded. Total export volumes fell by 4.4 per cent while total import volumes rose by 10.4 per cent, meaning that the United Kingdom's net borrowing position with the rest of the world rose to 8.4 per cent of GDP in the first quarter of 2022: a record high, though the ONS has noted some changes to data collection, which may affect this number. More recent data suggests that the trade deficit, excluding precious metals, widened by £8.6 billion to £27.9 billion in the three months to May 2022, with the goods deficit widening to £63.1 billion and the services surplus widening slightly to £35.2 billion. Exports of goods to the EU increased by 2.6 per cent between April and May and are at the highest levels in real terms since December 2020, while exports to the rest of the world increased by 12.7 per cent. Imports of goods from the EU increased by 5.2 per cent in May relative to April, while those from the rest of the world rose by 3.2 per cent.

#### ...despite sterling's fall

The pound has fallen by roughly 4 per cent since our Spring UK Outlook (Figure 1.10), though it remains slightly higher than its average over the past five years. The big picture remains of sterling moving within a small band since late 2016 and, more generally, being relatively weak vis-à-vis its position prior to the financial crisis.



Figure 1.10 Sterling effective exchange rate index

Source: Bank of England

#### GDP growth slowing ...

Overall economic activity is estimated to have grown by 0.8 per cent in the first quarter of 2022. GDP is currently estimated to have grown by 0.5 per cent in May (after a decline of 0.2 per cent in April) and reached 1.7 per cent above its level in February 2020. Services grew by 0.4 per cent in May, mainly on account of a large rise in GP appointments. Production grew by 0.9 per cent, driven by growth of 1.4 per cent in manufacturing. Construction grew by 1.5 per cent, the seventh consecutive month of growth. Of course, we should be careful putting too much weight on any one month's numbers given the volatility of these series.

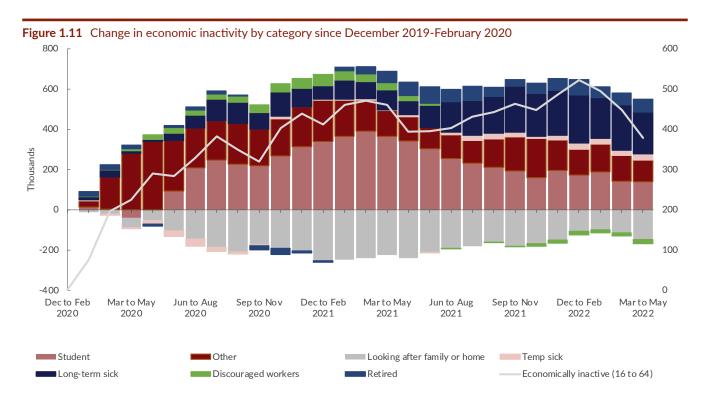
#### ... but it looks as though we may have just avoided a recession beginning in the second quarter

The IHS Markit/CIPS UK services PMI rose to 54.3, from 53.4 in May. We now think service sector activity fell by 0.1 per cent in the second quarter of 2022. NIESR's GDP tracker currently estimates that production grew by 0.6 per cent in the second quarter, though output in this sector is volatile and difficult to predict with accuracy on a quarterly basis. Within production, the IHS Markit/CIPS and JP Morgan Global PMIs for manufacturing both fell in June but remain above 50, and our Tracker nowcast is that manufacturing grew by 0.3 per cent in the second quarter of 2022. The IHS Markit/CIPS construction PMI fell to 52.6 in June from 56.4 in May and the GDP tracker estimates that construction output grew by 2.8 per cent in the second quarter of 2022, giving overall growth in GDP of 0.2 per cent in the second quarter, though all months of the quarter are still subject to potential revisions.

#### Labour market and productivity

#### Unemployment remains low, despite employment remaining below pre-pandemic levels

The UK unemployment rate decreased slightly to 3.8 per cent in the three months to May 2022 compared with the preceding three months. A rise in short-term unemployment (up to six months) was largely offset by a fall in long-term unemployment. The UK employment rate increased by 0.4 percentage points on the preceding three-month period, to 75.9 per cent, though still 0.7 percentage points below pre-pandemic levels. Both full-time and part-time employment increased. The economic inactivity rate decreased by 0.4 percentage points to 21.1 per cent in the three months to May, including falls in each of the reasons for inactivity (Figure 1.11). Box A on page 15 looks at the labour market in historical context, stressing the importance of the Public Employment Service in maintaining the labour market attachment of benefit claimants to keep the inactivity rate down and ensure continuing increases in employment.



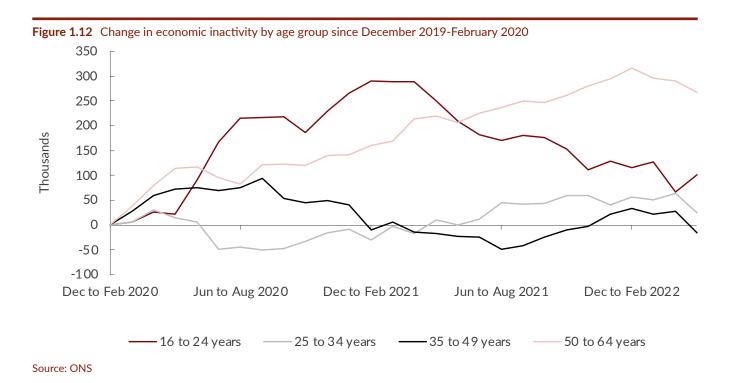
Source: ONS

#### Total hours still struggling to recover to pre-pandemic levels

Total weekly hours worked in the UK increased in the three months to May, but remained 6.5 million hours below their prepandemic level. Average actual weekly hours worked have returned to around their pre-Covid levels, so the shortfall in hours is driven by there being over 200 thousand fewer people in employment.

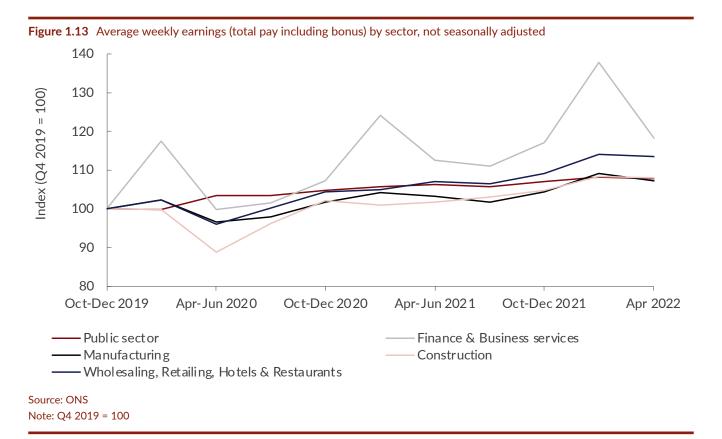
#### The participation crisis continues

Despite worklessness among older workers remaining high, the growth in older people leaving the labour force is now reversing (Figure 1.12). Recovery in the participation rate will depend on the future course of the pandemic and may also be affected by the cost-of-living crisis, if those who had exited the workforce have to come back to work to maintain their standard of living.



#### Real wages are falling at their fastest rate in two decades

In the three months to May 2022, annual growth in average weekly earnings including bonuses in the UK was 6.2 per cent: significantly below the rate of inflation. Strong bonuses continued to push up headline figures, with regular pay growing by just 4.3 per cent.



#### Box A: Full employment and the 'office of hope'

#### By Bill Wells<sup>1</sup>

June 2022 will almost certainly be the month when the number of jobs in the economy and possibly the number of people in employment will reach new record highs. The latest published statistics for the official estimates of jobs and employment – Workforce Jobs and Labour Force Survey (LFS) Employment respectively - are within a sliver of the previous record and are growing rapidly (Figure 1). But given the necessary delays in collection and publication of statistics we will have to wait until September for confirmation.

Figure A1 Total jobs and jobs rate



Source: ONS

Yet, even as the numbers hit record highs, the task of achieving full employment gets ever harder because of a growing population. So, even as the jobs/employment numbers reach the previous peak it would require a further 300-350 thousand more to reach the previous peak in the jobs rate, defined as the ratio of workforce jobs to the adult population. And population is just one of several moving parts: in 'normal' times, a net change in (the stock of) jobs of 300 thousand would involve around 7 million 'hires' a year and 6.7 million 'separations'.

In this box, the outcomes for Workforce Jobs from all these moving parts are outlined for the Post-War period both in terms of the number of Workforce Jobs and as a share of (total) population. Also set out is the central role the 'Office of Hope' – Employment Agencies/Jobcentres<sup>2</sup> – played in these labour market developments.<sup>3</sup>

#### 1945-48: The Great Reallocation

During the Second World War, as well as conscription in the Armed Forces, state direction of labour was a major feature of the labour market. The Ministry of Labour & National Service had responsibility for this.

All key industries could only advertise vacancies through the employment exchanges, and other industries were forbidden from recruiting miners and farmworkers. To fill vacancies in essential industries fully 32 million people registered with the Exchanges, including 8 million women registering by 1942 for national service, which was considered revolutionary. Matching people and jobs also involved compulsion, with a total of 1 million directions in the war, though this was still only a tiny fraction of total engagements.

<sup>1</sup> Former Senior Labour Market Economist in the Civil Service.

<sup>2</sup> See Price (2000).

<sup>3</sup> Focusing on just Workforce Jobs does not provide a full picture of the labour market as it does not include LFS employment – as proposed in the ONS Labour Market Framework. But the focus is on long term trends which is only available for Workforce Jobs.

Just as the War involved Mobilisation in both the Armed Forces and civilian employment, so the period 1945-48 marked Demobilisation in both areas. However, Ernest Bevin the Minister for Labour & National Service banned the word 'demobilisation' and instead referred to the 'reallocation of manpower'.

Unlike the demobilisation after the First World War (and indeed the Napoleonic War) the re-allocation was successful. Between 1945 and 1948 total employment fell by 1½ million but male civilian employment rose by over 3½ million, whilst the reduction in the Armed Force was over 4 million. The other element of the reallocation was the partial restoration of the 'male breadwinner' model with total female employment down by over ½ million.

The great re-allocation succeeded despite the Severe Winter of 1947, which has some echoes of 2020, when large parts of the economy were closed. As with the 2020 Coronavirus Job Retention Scheme ('furlough' scheme) large numbers of employees were supported by the state, but in 1947 the payments were to cover for unemployment benefits that were temporarily stopped. The 1947 support was very large but also short-lived with total registrant unemployment in December 1946 at 400 thousand, jumping to 1.9 million in February 1947, but back to 300 thousand by June.

#### Main trends since 1948

<b>Table A1</b> Workforce jobs:	Numbers and rates: 1948-2022
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	Employee Jobs (Millions)	Self- employment Jobs (Millions)	Govt. Employment Programmes (Millions)	HM Forces (Millions)	Total Workforce Jobs (Millions)	Jobs Rate %
June 1948	21.4	1.9		1.0	24.3	48.5%
March 2022	31.3	4.1	0.1	0.2	35.6	52.7%
Change	9.9	2.2		-0.8	11.4	4.2%

Within total Workforce Jobs the structure of jobs has changed since 1948 as shown in Table 1. Employee Jobs continue to dominate, but Self Employment Jobs have grown even faster, with virtually all the growth after 1979 when there was a shift towards a more decentralised, entrepreneurial economy. Conversely, HM Forces as a source of jobs has declined substantially and is now a very small part of the total workforce.

Government Employment Programmes began and ended the period as a tiny part of the workforce but in the UK and elsewhere they were a more important element in the 1970s & 1980s before disappearing as a major part of the labour market policy landscape. They covered a range of make-work schemes such as Job Creation Programme, workfare such as Project Work, and Government Funded third sector activities such as Community Programmes (see Macqueen, 2020).

The largest of the measures was the Youth Training (YT) Guarantee which essentially had the same objectives as the Youth Employment Service: providing a universal service which provides a seamless transition for 16-year-old school-leavers into a job or training within 8 weeks. As a result, under 18s eligibility for Unemployment Benefits was removed. However, within a decade the YT Guarantee had disappeared. Yet the benefit eligibility was not restored, so there is a serious gap in the help available to Under 18s.

#### 1948-66: Full employment

Increases in the Job Rate from cyclical peak to peak and trough to trough provide a good summary indicator of a structural improvement. The period 1948-66, therefore, can be seen as one of full employment with, particularly in the 1960s, rising numbers of jobs keeping pace with the rapidly growing population.

And, just as the work of the Employment Exchanges helped make the Great Reallocation a success, so it also helped make a success of this period. The help for each unemployed claimant was based on regular and

frequent contact – twice a week – with more help as duration without getting a job increased. Nor did it take very long for the extra help to start: after a month unemployed, claimants were given a special interview with a placing officer. Thereafter there were further review meetings, including a reset interview with the National Assistance Board for the few who reached 6 months. By contrast, now it takes at least a month to get on Universal Credit and the interventions are monthly. So, before 1966, only around 200-250 thousand were unemployed for more than a month. By 1986, before Restart was introduced, the equivalent figure was around 2% million.

This active management of the registers also applied to sickness benefits (SB) where, despite around 10 million people joining SB at any one time, there were only around 1 million on the count. Nor did many of them move on to Disability Benefits.

#### 1966-83: Stagnation

The contrast between the period 1948-66 and the next period, 1966-83, is marked. The number of jobs stagnated between 1966 and 1979 – historically unusual – before falling substantially in the 1980s recession. The deterioration in the labour market is generally attributed to the recessions of the 1970s and 1980s but, in an echo of the current situation, the size of the workforce fell by 1 million between 1966 & 1971.

This was a period where the focus shifted away from helping the long term unemployed and inactive look for and find work towards a) helping the short term unemployed and even those working b) 'protecting' jobs and industries – whether through the Temporary Employment Subsidies or bailing out 'lame ducks' and c) shifting away from jobsearch assistance towards skill/human capital acquisition. Whether through the Robbins expansion of universities, the Raising of the School Leaving Age to 16 (ROSLA) in 1972, or the advent of the Manpower Services Commission which downplayed the role of the Employment Service and focused much more on skills.

Symbolic of these changes is that between 1982 and 1986 the unemployed no longer had to visit a Jobcentre to receive benefit, but only had to attend the benefit office. It is not surprising, therefore, that there was a build-up of unemployed workers on unemployment benefits for long durations – with many on these benefits 'inactive', i.e. not looking for work. And, without active management of 'inactive' benefits (and the abolition of the temporary Sickness Benefit), durations on disability and lone parent benefits built up.

#### 1983-2015: Recovery in employment

For the period 1983-2015 the UK has been a successful employment performer, with each employment cycle peak and trough higher than the previous one. These structural improvements favoured the most disadvantaged in society and could, therefore, be regarded as 'levelling up'. They were also achieved despite a growing proportion of pensioners and a rapidly growing population, and the Jobs Rate is now substantially higher than the 1966 full employment peak.

Policy will have helped this improvement. From 1986 when Restart was introduced – a review interview for the long term unemployed – the pre-1966 approach was re-introduced and extended to new groups. Regular and frequent contact (although not as frequent as pre-1966) with a focus on ensuring that the claimant was active in the labour market – 'available for work' and 'looking for work'. Essentially the approach extended the working age population into new areas – whether lone parents with children over 3 or women (and men as the 1980s early retirement policies were finally reversed) aged 60-66 as part of the equalisation of the state pension age.

#### 2015 onwards

It is probably too soon to see if there has been a structural improvement in the labour market since 2015. It depends on how the introduction of Universal Credit (UC) has improved things – particularly for the most disadvantaged – and whether it can successfully deal with the labour market aftermath of the pandemic. Total hiring is at record levels – 8.2 million over the past year compared to 7 million normally. But, as in the period 1966-83, it does not seem that the focus of UC help is on the most disadvantaged. Rather it seems to be focusing on the short term unemployed and those in employment.

So, whereas between 1999 and 2015 the numbers on out of work benefits (unemployed and health-related) fell from 5 to 3½ million, since then they have risen back to over 5 million. And the fall between 1999 and 2015 was even faster than the total working age (16-64) workless – International Labour Office (ILO) defined unemployment and inactivity combined. So, in 2015, the out of work benefit share was down from 1 in 2 of the working-age workless to 1 in 3. Since then, it has risen back up to 1 in 2.

Those who are on out of work benefits are increasingly dominated by those who have been on benefits for a very long time or are stuck on the 'legacy' benefits. Most of the massive cohort who started taking up UC during the first lockdown are now reaching durations of 2 years or more and are still there. There are now around 2 million on an 'out of work conditionality' regime, up from ¼ million pre-crisis. And of these 2 million only 700 thousand are on the 'job search' regime – the rest are on 'inactive' conditionality regimes and, as a result, have much less contact with the Jobcentre and much less Welfare to Work help.

In summary, in line with the conclusions of OECD (2006) the Public Employment Service has proved central to delivering a successful and inclusive labour market. However, to deliver inclusive employment growth it is necessary to focus the most attention on the most disadvantaged, to bring the inactive into the labour force so they are in a position to take up a job, and to provide individual help to devise a jobsearch strategy that maximises their chances of finding and getting a job that suits them.

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#### Headline private sector wage growth remains strong...

Growth in earnings have continued to be stronger in the private sector, growing by 7.2 per cent in the year to March-May, than in the public sector, which saw growth of 1.5 per cent. Variation in pay growth across sectors may continue to diverge as firms will face different pricing power environments when deciding whether and how to absorb or pass on increases in costs. NIESR's Business Conditions Forum in July heard that some private sectors employers are raising wages as a result of inflation but others are having to raise wages in response to the tight labour market.

#### ...though much of this reflects pay drift, including bonuses, rather than settlements

The June KPMG and REC jobs report suggests that permanent starters' salaries rose at one of the quickest rates since the survey began because of significant competition among candidates who are already scarce in supply. Incomes Data Research found that the median pay award for the UK as a whole was 4.0 per cent in the three months to June 2022, slightly up from 3.6 per cent in the three months to May 2022. Pay awards at the upper quartile grew at an annual rate of 5.5 per cent, compared to 3.0 per cent at the lower quartile. The median pay award for the private sector was 4.0 per cent. A similar measure from XpertHR found the median also at 4.0 per cent in June (Figure 1.14).

4.5 4.0 3.5 3.0 2.5 2.0 1.5

Sep-21

Dec-21

Figure 1.14 Median pay settlements (three-month average)

Source: XpertHR, IDR

1.0 ⊢ Mar-21

#### Vacancies continue to grow, but more slowly

Jun-21

**XpertHR** 

In the three months to June 2022, the number of job vacancies increased to a new record of 1.3 million although the rate of growth in vacancies continues to slow. The June jobs market report by KPMG and REC indicated that, on a regional basis, London experienced the largest increase in permanent starting salaries out of the main English regions in May. Meanwhile, at the sector level, private sector demand for staff was stronger than public sector demand, especially in IT and computing followed by the hotel and catering sector.

Mar-22

- Income Data Research

Jun-22

#### Productivity growth shows little sign of picking up

UK productivity, measured by output per hour worked, declined by 0.6 per cent in the first quarter of 2022 compared with the previous quarter, although it remained 1.4 per cent higher than pre-pandemic levels. The number of hours worked increased by 1.3 per cent on the quarter, far more than the increase in gross value added (+0.8 per cent). Productivity in public services declined for the first time since the first quarter of 2021, falling by almost 3 per cent on the quarter, largely attributable to the fall in output in healthcare activities such as test and trace and vaccinations.

#### Fiscal policy

#### Some help has been forthcoming with the rising cost of living

Former Chancellor of the Exchequer Rishi Sunak announced additional financial support in late May to help households with the cost of living. Additional borrowing in financial year 2022-23 was estimated at just under £11 billion in the Office for Budget Responsibility's (OBR) Fiscal Risks and Sustainability report, with £15.1 billion of transfers to households offset by around £4.5 billion coming from a windfall tax – or 'Energy Profits Levy' – on the profits of North Sea oil and gas companies.<sup>3</sup> We welcomed this near-term fiscal loosening at the time<sup>4</sup> as likely to reduce the chances of a recession and the severity of any recession, though the net effect of the package will be less stimulative to GDP overall if the windfall tax leads to lower investment by energy companies.

#### The first signs are of borrowing slightly overshooting March's forecast, even discretionary loosening...

Early data for fiscal year 2022-23 suggest that borrowing may overshoot the OBR's March forecast: a result compatible with weaker growth than in the OBR's forecast scenario, though these data are provisional and subject to revision. As of the end of June, borrowing for the fiscal year to date was 7 per cent (£3.7 billion) higher than in the March forecast, thanks in part to higher-than-expected interest payments on inflation-linked debt. Spending in the first three months of the fiscal year did not include any of the additional support announced in May, which began to be distributed in July. At the end of June, public sector net debt was estimated to stand at 96.1 per cent of GDP: 0.6 per cent of GDP lower than forecast, despite the above-forecast borrowing, as a result of higher nominal GDP.

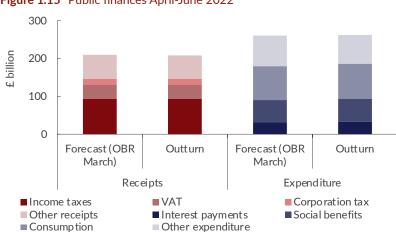


Figure 1.15 Public finances April-June 2022

Source: Office for Budget Responsibility

#### ...and rising interest rates present a risk to fiscal forecasts

Higher and more persistent inflation will have fiscal consequences, both directly and indirectly through higher interest rates. The OBR's March analysis suggested a large but temporary rise in government debt interest payments to £83 billion in fiscal year 2022-23. Set against this, greater fiscal drag and higher nominal earnings support government income. While higher interest rates only feed through gradually to interest payments thanks to UK gilts' long average maturity, with a large proportion of government debt effectively financed at Bank Rate, there is a risk that the flow of 'net interest margin' payments from the Bank of England's Asset Purchase Facility (APF) to HM Treasury may turn negative. Recent NIESR research<sup>5</sup> estimated an £11 bilion loss over the past year from not taking out insurance against interest rate rises by swapping bank reserves for government securities.

#### While policy should be looser, this ought to be both targeted and sustainable

There has been recent political focus on the potential for tax cuts as a response to rising prices but, while looser fiscal policy may be an appropriate response to falling household living standards, any policy intervention ought to be appropriately targeted. Cuts to income tax in general disproportionately support the incomes of better-off

<sup>3</sup> See 'Is a Windfall Tax a Good Idea?' (Millard, S., Naisbitt, B., & Patel, U.), NIESR Monday Interview, 23 May https://www.niesr.ac.uk/blog/windfall-tax-good-idea

<sup>4</sup> See 'Cost of living: Rishi Sunak's support package lowers risk of recession, economists say', Sky News, 27 May

<sup>5 &#</sup>x27;Quantitative Tightening: protecting monetary policy from fiscal encroachment – One Year On', NIESR, 10 June, available at https://www.niesr.ac.uk/news/quantitative-tightening-protecting-monetary-policy-fiscal-encroachment-one-year, based on Allen et al (2021)

households, on whose balance sheets Covid-19 lockdown savings are already concentrated. From both distributional and macroeconomic standpoints, any fiscal loosening would be better directed to Universal Credit (see Chapter 2). Furthermore, the long-term sustainability of any such loosening ought to be weighed up in the context of the OBR's recent Fiscal Risks and Sustainability report, which estimated that bringing government debt back to 75 per cent of GDP – the level at which it stabilised in the Government's pre-pandemic March 2020 Budget – would require 1.5 per cent of GDP of additional tightening (£37 billion a year in today's terms) at the beginning of each decade over the next fifty years.

#### Inflation and monetary policy

#### UK inflation reaches historic high

Twelve-month CPI inflation rose to 9.4 per cent in June from 9.1 per cent in May, marking the eleventh consecutive month that inflation has overshot the Bank of England's target of 2 per cent (Figure 1.16). Whilst the large increase in April was mainly driven by domestic energy prices, food has been an important driver keeping inflation high in May and, along with fuel costs, in June. In terms of headline inflation, current developments in the UK are similar to those being experienced in the United States and the Euro Area where inflation is currently running at over 8 per cent.

Figure 1.16 Consumer price index inflation (annual per cent)



Source: ONS

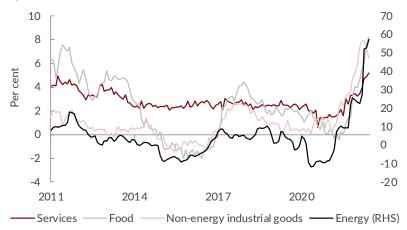
#### Recent geopolitical events have exacerbated the upward pressure on inflation

The ongoing overshoot of the Bank of England's 2 per cent inflation target largely reflects previous large increases in global energy and other tradable goods prices. The former has been hugely exacerbated by Russia's invasion of Ukraine, which has also put upward pressure on the wholesale prices of a number of agricultural commodities. Increasing inflation in other tradable goods has been mainly driven by the impact of the pandemic, which shifted demand towards goods but also disrupted supply chains.

#### However, not all of the excess inflation is directly attributable to external events...

Core CPI inflation (i.e., CPI inflation excluding energy, food, and alcohol and tobacco) has reached record levels, and is higher than levels seen in the United States and the Euro Area. Further, consumer services price inflation, which is more influenced by domestic costs than goods price inflation, has strengthened in recent months: to 4.9 per cent in May from 4.7 per cent in April (Figure 1.17).

Figure 1.17 Inflation (annual per cent) for elements of the consumer price index



Source: ONS

#### ...and the labour market is also tight

The unemployment rate remains low, partly thanks to exits from the labour force (see 'Labour market and productivity', page 13). Recent data show that job vacancies continue to match the number of unemployed, with the vacancy rate at a record high of 4.3 per cent. Recruitment difficulties have remained elevated and labour demand has remained strong. These conditions mean firms may come under pressure to consider higher pay awards in order to attract and retain staff, increasing their costs. Firms' profit margins have also come under pressure from input price inflation, which is at its highest level on record, but it appears that, so far, businesses have been successful in passing on many of their rising costs to consumers.

#### Monetary tightening is underway, with the potential for a change in pace

The risk exists that global shocks may interact with domestic factors, including the tight labour market and the pricing strategies of firms, to lead to more persistent inflationary pressures. The role of monetary policy is to ensure that, as the adjustment in the real economy occurs, CPI inflation returns to the 2 per cent target sustainably in the medium term, while minimising undesirable volatility in output. The Bank of England has continued to raise interest rates to anchor longer-term expectations at the 2 per cent level and, at its most recent meeting in June, the MPC voted to increase Bank Rate by 0.25 percentage points, to 1.25 per cent. The increase means the MPC has now raised rates at five consecutive policy meetings since December 2021. Box B on page 23 critiques monetary policy over recent years.

#### Quantitative tightening expected to give some support to rate hikes

In addition to raising interest rates, the Bank of England will no longer reinvest maturing assets held within its Asset Purchase Facility and has intimated that it could even begin sales as early as September. The move to 'quantitative tightening' (QT) will shrink the Bank of England's balance sheet and play a complementary role to rate hikes, potentially allowing for a more gradual rise in the policy rate. Though some have argued that the effect of QT on demand and inflation is likely to be small (e.g., Tenreyro, 2022), it could be a less painful form of tightening for households, given their exposure to increased rates, particularly at a time of headwinds from fiscal policy and higher energy prices. The MPC is now weighing the risk of high inflation becoming entrenched against the risk of a recession. The dovish stance taken at its most recent meeting reflects the view that the UK economy will not grow by much in the next three years.

# Box B: A serious monetary policy failure – how policy-makers let the inflation cat out of the bag

#### By Andrew Sentance CBE

Since the late 1970s and early 1980s, it has been widely recognised that monetary policy needs to play the key role in controlling inflation. High interest rates were used to subdue UK inflation in the early 1980s and again in the late 1980s/early 1990s. On both occasions, the official Bank of England rate was raised to 15 per cent or higher. Inflation was brought under control, but a severe cost to the real economy. The early 1980s recession was the worst post-war economic downturn in terms of its broader economic and social impact. The unemployment rate rose to double digit levels in 1981 and stayed over 10 per cent until 1987. The UK economy bounced back more strongly in the 1990s, partly because of labour market reforms - introduced in the 1980s and 1990s - and partly as a result of a more pragmatic approach to economic policy under John Major's government when compared with Margaret Thatcher's administration in the early 1980s.

We now face the biggest inflation surge that the UK has experienced for over 40 years, with consumer price index (CPI) inflation widely expected to reach over 10 per cent later this year. This wave of inflation is not confined to the UK, however: North America and Europe are experiencing something very similar. But the response of central banks has been slow and ineffective. In the UK, official interest rates have risen from 0.1 per cent to 1.25 per cent so far. They have risen slightly faster in the United States but by much less in the Euro area. There appears little urgency in raising interest rates across the industrialised world, but these interest rate levels are totally out of kilter with the actual and expected levels of inflation in the UK and other countries in the western world.

This now looks like a major policy failure. In the UK, the Bank of England Monetary Policy Committee (MPC) was established in 1997 to keep inflation under control – at or close to the official inflation target. The target was initially set as a benchmark of 2.5 per cent inflation for the Retail Price Index excluding mortgage interest payments (RPIX) and, since 2004, 2 per cent inflation for the CPI. Before the current inflation surge, there were a few short-term inflation spikes, most notably in 2008/9 and 2011/12. CPI inflation briefly exceeded 5 per cent in each of these but quickly fell back. In general, inflation was kept close to the official target.

The expectation of central banks when inflation started rising last year was for something similar. In the UK, CPI inflation rose above 2 per cent in May last year and was already over 5 per cent in November 2021. But instead of reaching a peak, inflation kept rising and hit 9 per cent in April this year. The projected peak for inflation has now been pushed back to the end of this year, when the latest Bank of England projection (Bank of England, 2022) suggests CPI inflation will reach around 11 per cent. After that, inflation is projected to drop back to the 2 per cent target quite rapidly, over the following 12-18 months.

Though the response of the MPC so far has been to raise interest rates very gradually, its policy response has been very slow and reluctant. After resisting calls for rate rises in the second half of 2021, the first increase came in December of that year. That followed a bizarre situation in November 2021 when the Bank's forecasts pointed to the need for a rate rise, but the majority of the MPC voted against. At the same time, the MPC continued to pump new money into the UK economy through its policy of Quantitative Easing until December, sending a clear signal to financial markets that the MPC was not taking the inflation threat seriously, even though projections for price rises were rising sharply.

One reason for this reluctance to act was that a large part of the inflation surge was being driven by global energy and food prices. As we moved through the year ahead, the MPC argued, the impact on inflation of these upward global price pressures was likely to subside. There was therefore a danger of overkill if interest rates were raised too far or too fast.

The MPC's second argument was that economic growth would slow sharply as the "cost of living crisis" hit the spending power of households. According to the Bank's forecast, this effect was likely to produce very slow growth in the next couple of years with a heightened risk of recession.

However, setting monetary policy is about judging a balance of risks. There are some powerful counterarguments to the MPC's thinking. These now point to the need for a stronger interest rate response.

First, the current inflation surge is affecting a wide range of prices in the consumer basket, not just food and energy. Of the 12 sub-categories which make up the CPI, all are rising at above 2 per cent per annum and 9 are increasing at over 4 per cent. For clothing and footwear, as well as in pubs, restaurants and hotels, prices are up by around 7-8 per cent or more on a year ago. Manufacturers are also seeing large price increases coming through the pipeline which are likely to affect consumers and business costs later this year. Factory gate price inflation is 15.7 per cent and the cost of manufacturing materials and components is rising by over 22 per cent a year. This evidence points to a much longer and more sustained rise in inflation.

Second, the UK labour market is very tight and this is leading to upward pressures on wages – potentially fuelling future inflation via a wage-price spiral. The unemployment rate – at 3.8 per cent – is very close to the lowest recorded since the 1970s and there are now more vacancies (1.3 million) than unemployed people for the first time since current records began. This is contributing to upward pressure on wages. In the private sector, total pay in the first quarter of 2022 was up 8 per cent on a year ago and regular pay (excluding bonuses) increased by nearly 5 per cent. In addition, demands for pay rises are likely to intensify as employees seek compensation for high headline inflation this year and next.

The expectations of the general public about future price rises are already shifting upward. The latest Citi/YouGov survey shows that inflation expectations for the next 12 months are over 6 per cent and for the next 5-10 years are at 4 per cent. These high expectations are not consistent with the Bank's 2 per cent inflation target and could well rise further as we move through this year.

Another factor pointing to the need for tighter UK monetary policy is the evidence from the housing market, where property prices have been rising at around 10 per cent or more for some time. Extremely low interest rates, coupled with a low level of housebuilding, have fuelled a house price boom over many years. This has been preventing potential new homeowners from getting on the first rung of the housing ladder. Higher interest rates would generate a more affordable level of house prices for new homeowners, bringing social as well as economic benefits.

It is often argued that higher interest rates would not help the economy when a large part of inflation is being generated by high energy and food prices – driven by global factors. But, as the German Bundesbank demonstrated in the 1970s, a robust monetary policy response can also help counter imported inflation by supporting the value of the currency in difficult circumstances. Imported inflation in the UK has been boosted recently by a significant decline of the pound against the dollar – from around \$1.40 last summer to less than \$1.20 over the past year. A stronger monetary policy response from the MPC could have helped resist this currency-driven rise in import prices.

As I argued in a recent blog (Sentence, 2022), more robust monetary policy last year could have headed off the recent surge in inflation in other ways. The pandemic crisis has created a significant negative hit to the supply capacity of the economy. Restricting the growth of demand to bring it more closely into line with supply would have helped to keep price increases in check. A stronger signal from the MPC via monetary policy would also have helped curb the rise in inflation expectations.

Unfortunately, inflation is now "out of the bag" in the UK and many other countries. We face a sustained inflation surge, which can only be brought in check by more robust monetary policy. How high interest rates need to rise to bring inflation in check remains to be seen, but, if the MPC continues its slow and ponderous course, the negative impact on the real economy will be much harsher. Timely monetary policy action is the best response to a significant inflation surge, whatever its cause. The Bank of England and other central banks are now behind the curve and need to catch up quickly before more damage is done.

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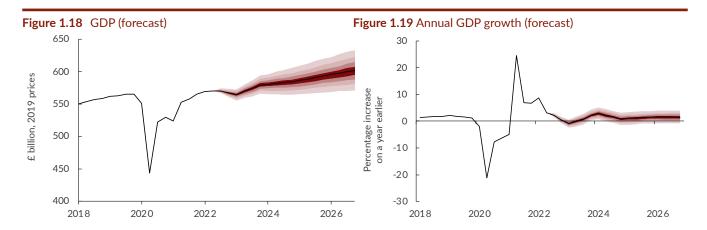
Sentance, A (2022), 'Should the MPC have acted differently to control inflation?', NIESR Monday Interview, 13 June.

#### **Forecast**

#### **GDP**

Our central case forecast is for GDP to grow by 3.5 per cent year-on-year in 2022, followed by growth of 0.5 per cent in 2023 (see Figures 1.18 and 1.19). We forecast slightly negative growth in the third and fourth (but not the second) quarters of 2022, and the first quarter of 2023: a three-quarter technical recession, but a relatively shallow one.

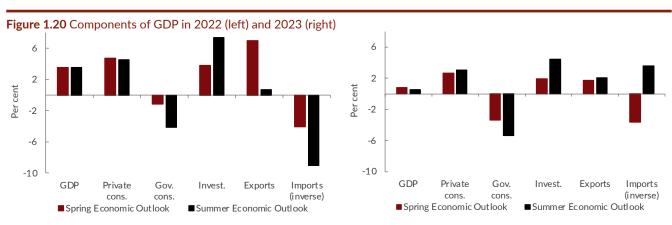
That said, we now see an increased possibility of a deeper recession. Repeating the analysis in Box B of our Spring Economic Outlook (Dixon, 2022) on the most recent data suggests that there is now a 43 per cent probability of a year-on-year fall in GDP in the fourth quarter of this year.



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.

This represents little change from our forecast three months ago in terms of headline growth. We now expect what growth there is in 2022 to be slightly more balanced towards investment (Figure 1.20), though this is largely down to the housing and government sectors rather than a stronger forecast for business investment. Our assumption that government department budgets remain unchanged in nominal terms means large falls in real spending, which will either translate into large real wage cuts for public sector workers, or cuts to services, or both.

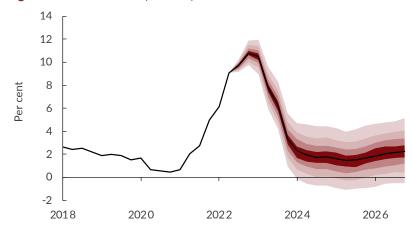


Source: NiGEM database, NIESR forecast

#### Inflation and monetary policy

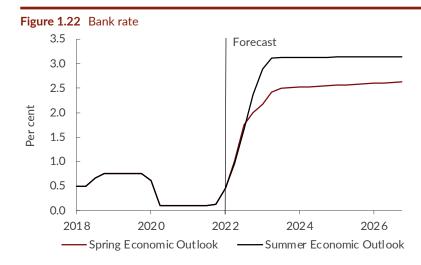
In our central case forecast scenario CPI inflation peaks at 10.8 per cent in the fourth quarter of 2022. A combination of slowing growth in international energy prices, monetary tightening, wage restraint and falling real incomes sees it fall to 3.3 per cent by the end of 2023 (Figure 1.21). RPI inflation is forecast to reach 17.7 per cent in the fourth quarter of 2022. The MPC will need to continue to be cautious as it walks a fine line between tightening policy too quickly, worsening the recession, and too slowly, increasing the risk of high inflation becoming embedded in expectations. Our central case scenario assumes that the MPC sets a path for the Policy Rate in line with market expectations as of 8 July, up to the third quarter of 2023, after which it stays flat (Figure 1.22). This path delivers a fall in inflation back to target together with a relatively mild recession.

Figure 1.21 CPI inflation (forecast)



Note: Harmonised index of consumer prices. 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.

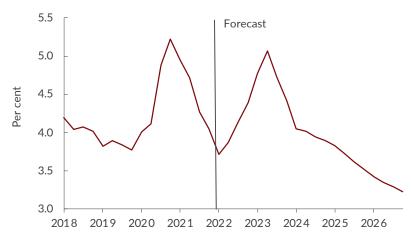


Source: NiGEM database, NIESR forecast

#### Household incomes

With recession expected, unemployment is forecast to rise somewhat over the coming year, peaking slightly above 5 per cent in the second quarter of 2023 (Figure 1.23).

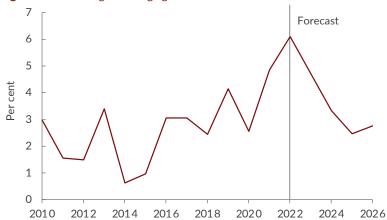
Figure 1.23 Unemployment rate



Source: NiGEM database, NIESR forecast

Average earnings are forecast to grow by 6.1 per cent in 2022 and 4.7 per cent in 2023 (Figure 1.24), contributing to growth in nominal incomes of 6.4 per cent and 5.7 per cent respectively.

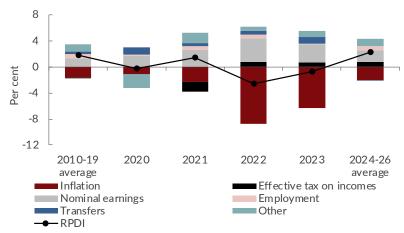
Figure 1.24 Average earnings growth



Source: NiGEM database, NIESR forecast

Inflation means that real disposable incomes are forecast to fall by 2.5 per cent in 2022 and 0.8 per cent in 2023. Over the medium term, real incomes grow by around 2 per cent.

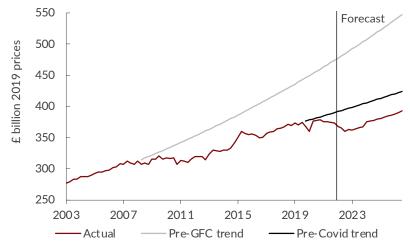
Figure 1.25 Contributions to growth in real personal disposable income



Source: NiGEM database, NIESR forecast

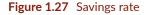
When compared to a continuation of the 2010-2019 trend from the middle of 2021, the present combination of shocks is forecast to lead to household incomes 7 per cent lower beyond 2026 (see Figure 1.26). While we do not forecast a comparable slowing in the growth rate, the short- to medium-term impact is comparable in magnitude to that of the Global Financial Crisis. This did not occur as a result of Covid-19: thanks to fiscal and monetary support, incomes rapidly recovered to trend after the initial shock. Instead, it appears that the permanent relative impoverishment resulted from three shocks. Firstly, Brexit has made imports from continental Europe more expensive and incentivised households to substitute towards more expensive domestically-produced goods and services. Secondly, the recent rise in energy prices has constituted a large terms-of-trade shock for the UK, making the country poorer. Thirdly, the decision to tighten fiscal policy over the 2021-24 period, effectively to pay for the fiscal interventions to support the economy during the Covid-19 pandemic, will reduce the resources available to the private sector.

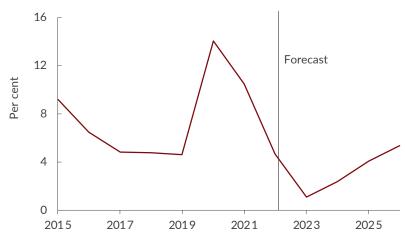
Figure 1.26 Real personal disposable incomes



Source: NiGEM database, NIESR forecast

The ability of households to draw down aggregate savings (including forced savings from lockdown periods) to sustain their consumption means that the household savings rate is forecast to fall from 4.6 per cent in 2022 to 1.1 per cent in 2023 before returning gradually towards its pre-referendum level of 6 per cent (Figure 1.27).



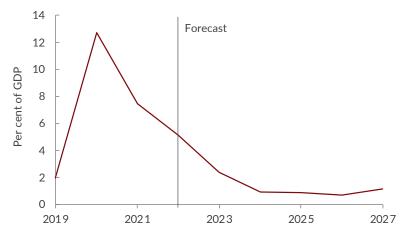


Source: NiGEM database, NIESR forecast

#### Fiscal policy

Tightly constrained government consumption helps to close the government deficit in our forecast to 5 per cent of GDP in 2022-23 and 1 per cent in 2023-24, despite the increase in transfers announced in May. Although this means the government has more room to borrow to mitigate the effects of the shocks that have affected the UK economy recently, our central forecast scenario is conditioned on current announced spending plans: no further loosening takes place other than the scheduled cut to income taxation rates in 2024, with public sector pay deals expected to be funded out of department budgets as of the Spring Statement in March. We hope that this assumption is wrong, and that the government uses some of its extra fiscal space to redistribute resources to the most financially vulnerable households (see Chapter 2) as well as allowing government employees' wages to be set according to the requirements of individual sectors rather than with an eye on inflation, to which they do not directly contribute.

Figure 1.28 Public sector net borrowing



Source: NiGEM database, NIESR forecast

#### Risks to the forecast

Risks to growth are judged to be skewed to the downside. Recession may be avoided by further government intervention, by stronger than expected earnings growth, or by lower savings. If this supports business confidence, the rise in unemployment may also be smaller than forecast. Downside risks principally arise from a larger than expected downturn, including as a result of higher than forecast inflation affecting household incomes, but the risk of further Brexit-related disruption as a result of the Northern Ireland Protocol Bill is also a material one.

Inflation risks are weighted to the upside. Energy price inflation may accelerate or persist for longer than in our central case forecast and nominal earnings may rise more quickly than they appear to be doing at present, contributing to a wage-price spiral as businesses protect their profit margins. The principal downside risk arises from the potential for households to respond to recession by protecting accumulated savings, rather than spending them to get through an assumed temporary downturn, leading to weaker demand.

Risks to the paths for government debt and deficit are also skewed to the upside; indeed, we would advise a slower path for deficit reduction, with targeted support as described in Chapter 2.

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

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

- As incomes fail to keep up with prices, households have run down their savings: we project that the number of households with no savings is set to double by 2024, rising to around 5.3 million (20 per cent of all households; see Box C).
- The cost-of-living crisis will have persistent effects upon the hardest hit households: soaring bills for basic necessities mean that the number of households living 'pay cheque to pay cheque' (i.e., having savings worth less than two months' disposable income) will nearly double from around 3.9 million (14 per cent of households) in 2023 to approximately 6.8 million (26 per cent) by 2024.
- The support measures announced in May cushioned the worst effects of rising inflation (see Box E) but are insufficient to protect around 11 million low-income households from the coming headwinds; more than 10 per cent of these households, about 1.2 million, will experience destitution as they see food and energy bills exceeding their disposable income, so will need to choose between eating and heating.
- As the energy price cap is lifted in October and food prices continue to soar, we renew our call for a Universal Credit uplift of £25 per week for at least six months from October 2022 to March 2023 and an increase in the energy grant from £400 to £600 for 11 million low-income households.
- Regional disparities are deepening as London continues to power ahead while the West Midlands, and parts of Wales and Scotland fall further behind: the Towns Fund of £4.8bn and other Levelling Up funding streams need to be at least doubled to stimulate growth in the devolved nations and English regions outside London and the South-East and unlock greater private investment.
- On balance Northern Ireland has benefitted from the Protocol compared with the counterfactual of not having access to the EU single market and customs union: but the heightened uncertainty over new legislation and political paralysis in Stormont and Westminster raise the prospect of diminished growth, and low productivity remains a particular problem for the Northern Irish economy (Box D).

#### Income shock and distributional consequences

In our Spring Outlook published on 9 May 2022, we called for a targeted intervention to help the hardest hit households and those on low incomes (Bhattacharjee et al., 2022a). The measures announced on 26 May by the then Chancellor provided partial respite with a £650 cash payment for the poorest in society on top of a £400 non-repayable energy grant (HMT, 2022). These measures cushioned some of the effects of the cost-of-living crisis (Figure 2.1). As a result, we project the number of hardest hit households (those facing energy and food bills outstripping their disposable income) to be lower by around 300,000, from 1.5 million (without the emergency May 2022 grants) to 1.2 million.

Certain households qualify for assistance worth up to £1,200, which is approximately equivalent to the increase in energy prices, such as the 8 million pensioner households and the 6 million that receive non means-tested disability benefits. However, the package lacks balance: it gives top earners £400 off their energy bills while low-income households struggle to make ends meet and have to choose among essential necessities such as heating or eating (see Box E).

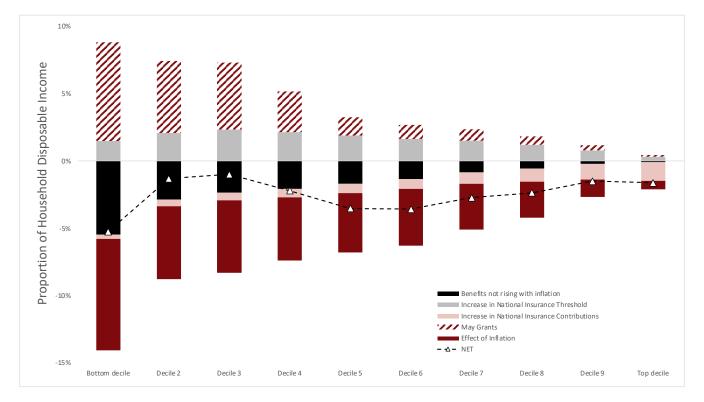


Figure 2.1 Effect of inflation and the May 2022 support measures on Household Budgets

Source: LINDA

Both wage and benefit increases remain well below inflation, and the tax burden (tax revenues as a percentage of GDP) is rising to some of the highest levels for the past forty years. Energy prices are set to increase substantially in October when the current cap is lifted for the second time this year. In a letter to the Chancellor and the Business Secretary, the CEO of the regulator Ofgem said that "we expect that the price cap is likely to increase from its current level of £1,971 to approximately £2,800 in October 2022" (Ofgem, 2022). Other estimates suggest that bills could reach £3,200 (Sheppard, 2022) or even £3,500 (as per the independent energy market analyst Cornwall Insight). This additional income shock will most of all affect those 11 million lower-income households that spend a disproportionate share of their incomes on energy. Of those, the hardest hit households (around 1.2 million) – for whom the bills on necessities exceed their disposable income – will either have to take out debt, go into arrears or run down their savings.

#### Savings

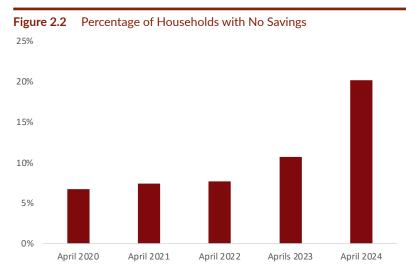
NIESR's Winter 2022 Outlook showed how the rising costs of food and energy disproportionately dominate the budgets of low-income households (Bhattacharjee et al., 2022b). This raised the question of how expenditures develop when taking into account the rising costs of other items, which we explored in our Spring 2022 Outlook using our microsimulation model LINDA (Bhattacharjee et al., 2022a). One striking finding from this analysis was that around 1.5 million households would have spent more on food and energy bills in 2022-23 than they had in income, with the worst affected households seeing their bills for basic necessities rising to around 190 per cent of their disposable income. This hit to household budgets was partly moderated by emergency measures announced by the Chancellor in May 2022, reducing projected hardest hit households to around 1.2 million.

Faced with this once-in-a-generation hike in prices, how are households able to withstand financial hardship and for how long? With incomes going up by less than inflation, the answer depends on their savings. What a household accrues over their lifetime acts as a buffer to offset temporary, negative financial shocks. Data from the Bank of England (2021) confirm that personal bank deposits had grown by three times during the pandemic lockdowns compared to the recent average, and consumer debt was also lower. While lockdown savings are regressive, benefiting the wealthy more than the poor (Bangham and Leslie, 2020), they can also potentially mitigate some of

the cost-of-living shock. But savings can only provide a short-lived relief, particularly as price levels are projected to remain high relative to income levels even when inflation falls in the medium run (see Chapter 1).

Consistent with commentary at the time, most notably from the Bank of England, the financial year 2020/21 was the strongest year for household savings while the economy was subject to repeated lockdowns. However, the effect of soaring inflation in 2022 has the greatest effect on households in the bottom income deciles (second to fifth deciles), bringing their expenditures as a proportion of income in line with the poorest households (in the first decile). This implies that the evolution of savings over time has been a tale of two trends: the highest income households have continued to accrue savings each year, further adding to their financial resilience, whereas the poorest ones have had to run down their savings to withstand repeated economic shocks.

As we report in Box C, our analysis suggests that the number of households with no savings is set to rise significantly, doubling in 2024 compared with 2023 and rising to approximately 5.3 million by the end of the financial year. As Figure 2.2 shows, this would represent 20 per cent of all households:



Source: NIESR Analysis of ONS Wealth and Assets Survey (2022), LINDA, NiGEM.

In addition, there are millions of households with extremely meagre accumulated savings: we project that the number of households living 'pay cheque to pay cheque' (which we define as having savings worth less than two months' disposable income) will nearly double from 3.9 million (14 per cent) in 2023 to 6.8 million (25 per cent) in 2024.

#### Overall outlook for the devolved nations and English regions

Six months after the publication of the Levelling Up White Paper (DLUHC, 2022a) and the subsequent publication of the Levelling Up and Regeneration Bill (DLUHC, 2022b), the UK is seeing increasing inequalities between and within the devolved nations and English regions. London continues to power ahead even as the economy slows down and moves towards a recession. Certain parts of the UK are still below pre-pandemic levels of economic output, such as the West Midlands, which have been hit by a combination of Brexit and global supply chain disruptions.

Northern Ireland has had some benefits from the Protocol, relative to the rest of the UK, but heightened uncertainty over the proposed legislation, combined with political paralysis at Stormont and now Westminster, threaten to reduce growth there. Except for London and the metropolitan parts of the South-East, the poor productivity performance is holding back not just the post-pandemic recovery but also the prospect for sustained regional regeneration (NIESR, 2022).

#### Gross Value Added (GVA)

As more data about the regions during the Covid crisis become available, the pattern of regional impacts and regional recovery paths is becoming clearer. After a sharp contraction, London and the metropolitan parts of the South-East have recovered faster than the rest of the UK and extended their advance on the devolved nations and the English regions (Figure 2.3). We have revised upwards economic output, as measured by Gross Value Added (GVA) in London, and we now project higher growth for London than in the previous Outlook published in May 2022 (Bhattacharjee et al., 2022a).

#### Box C: Households savings amid the cost-of-living crisis

#### By Max Mosley (with contributions from Tibor Szendrei)

Throughout the cost-of-living crisis, we have seen evidence – including from NIESR – showing households having to spend more on essential goods than they have income. We know that households are therefore having to use whatever savings they have left to survive this cost-of-living crisis. Therefore, it is important to know how many households have subsequently run out of their last remaining source of liquidity and insurance against any subsequent negative shocks.

To this end, we analyse income and savings for a representative large sample of households drawn from the latest round of the UK Wealth and Assets Survey (data for the financial year 2019-20). Here, savings are defined as liquid wealth that can realistically be deployed as a source of financial assistance to smooth consumption. Therefore, we did not include illiquid financial wealth. For example, we include the value held in all Individual Savings Accounts (ISAs), apart from Lifetime ISAs as these would take too long for households to access and savers frequently incur a fee for doing so.

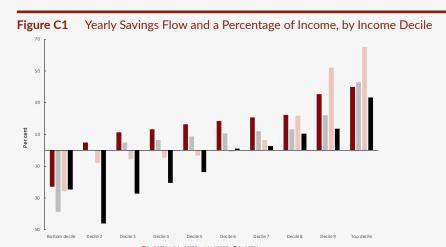
To project how these stocks of savings, for our sample households in 2019-20, evolve into the future, we combine these data with our microsimulation model LINDA (NIESR, 2016) and our global econometric model NiGEM (NIESR, 2018). LINDA provides us a pseudo-sample of household data moving forward in time tracking each household's income and expenditure in line with aggregate economy-wide projections drawn from NiGEM (NIESR, 2022). Generally, consumption shares are expected to vary over the income distribution but remain stable for individual households in the medium run (as evidenced for example in the Living Cost and Food Survey). So long as household income remains stable, we expect household consumption to do the same. The effect of rising prices therefore does not necessarily lead households to adapt their consumption immediately. Instead, we would expect them to run down their savings to maintain their preferred consumption behaviours and adjust their consumption to their permanent income only in the long-term. However, this usual pattern has been disturbed during recent periods of extreme stress following the Covid-19 pandemic and the cost-of-living crisis.

The Covid-19 lockdowns in 2020 and 2021 marked a unique shock to household expenditures. Based on inflation differentiated by goods and services relative to incomes, we model how spending would have adapted for this period – specifically, a large reduction in expenditure on transport, recreation and culture and a small increase on food and drink. Likewise, the ensuing cost-of-living crisis saw a massive rise in expenditures in 2022-23 as inflation, particularly in energy and food, shot through the roof. This meant some households had to make a choice between eating and heating, implying major shifts in consumption shares (Bhattacharjee et al., 2022).

Modelling the dynamics in income and expenditure allows us to infer the resulting effect on the level of savings – that is, income minus expenditure for a given year – for each household within our sample. If this balance is positive for a household in a specific year, it is deemed to be saving some of its income and subsequently increasing the stock of savings, and vice versa. The dynamic microsimulation approach implemented in LINDA evaluates expenditures (consumption) based on a lifetime utility model, and adjusts disposable income for borrowings, taxes and benefits. Further, it ensures that aggregate household income, wages, consumption, etc., are underpinned by economy-wide projections derived from NiGEM.

Once this model has delivered projected household income and savings into the future, we focus on two types of households. First, the number of households that have run out of savings and, second, those that we classify as having 'insufficient savings'. Drawing on Zeldes (1989), we define the latter as a household that has savings worth less than two months' disposable income. This is a helpful threshold for three reasons. First, it captures the number of households that may have some savings but not in sufficient quantity to act as a financial buffer. Second, it forecasts the households at risk of becoming virtually insolvent should the economic situation continue to deteriorate. Third, savings worth less than two months of income is the point at which we can consider a household 'liquidity constrained', i.e. a situation when the consumption for such households is very sensitive to temporary real income shocks given their lack of financial headroom.

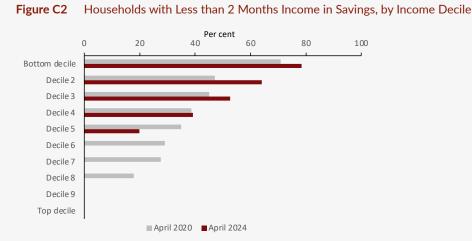
Our analysis shows the distribution of savings trends across the income distribution, presented in Figure C1. Households in the lowest income decile tend to consume more than they have in income, which is consistent with data from the Living Cost and Food Survey (ONS, 2021) and the household analyses in NIESR's Winter 2022 and Spring 2022 outlooks.



Source: NIESR Analysis of ONS Wealth and Assets Survey (2022), LINDA, NiGEM.

Once we have determined the flow of savings per household over a given time period, we can then estimate the subsequent stock of savings at the end of this time period for each household. We find that the number of households pre-Covid with no or insufficient savings was low, at only 6 per cent of the population. This proportion increases only slightly by April 2022, holding steady at around 7 per cent. From 2022-23, it begins to rise, but only moderately when compared to the doubling in the numbers by April 2024. We would expect a lag in the effect of rising prices on household savings, as households run down their savings to cope with the adverse shock, subject of course to their capacity to borrow, which in turn depends also on their accumulated savings.

When we consider the number of households with 'insufficient savings', two interesting observations emerge. First, there are a considerable number of such households. Figure C2 shows that 70 per cent of households in the bottom income decile have insufficient savings, which means that they are highly exposed to fluctuations in their income and the prices of necessities. We project that this proportion will rise to nearly 80 per cent by April 2024, with an even stronger growth in the number of hand-to-mouth households in other income deciles.



Source: NIESR Analysis of ONS Wealth and Assets Survey (2022), LINDA, NiGEM.

The second observation concerns relative trends. In 2020, a significant proportion of households around median incomes (sixth to eighth income deciles) also had insufficient savings. This well-known phenomenon of 'wealthy hand-to-mouth' households reflects their spending a substantial part of their income on mortgage interest payments together with non-essential goods and services partly driven by choice (e.g. eating out and expensive holidays).

The reason that the number of such households falls so sharply is likely because expenditure on non-essential goods such as eating out or travel in 2020-21 were constrained as a result of Covid-19 lockdowns. As a result, their high incomes added to their savings stock at a rapid rate. The ensuing effect is yet again two different stories between low- and high-income households, where the former have had to forfeit their financial resilience to withstand this cost-of-living crisis, whereas the latter have not.

Given these findings and the renewed rise in the energy price cap, the Chancellor will need to consider further support measures for households, especially the poorest households (those in the bottom income decile) but also the vulnerable households in the lower half of the income distribution. It is likely that this situation will force households to increase hours worked, take on second jobs, or (re-)enter the labour market. The latter will probably involve older workers who have previously dropped out (IES, 2022) but who face a number of obstacles in securing employment (Runge et al, 2021; Stockland, 2021).

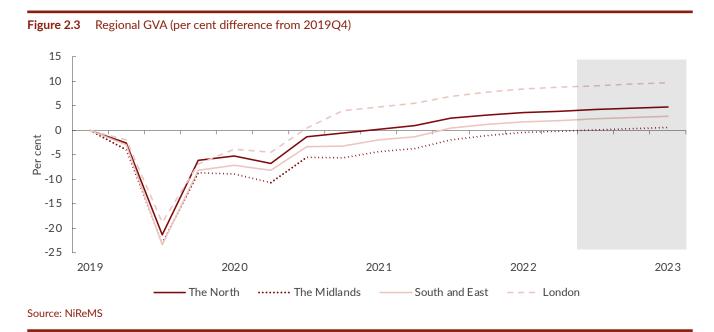
This box concludes what economists and commentators have feared to be the case throughout this cost-of-living crisis: that low-income households could only withstand rising prices and stagnant incomes temporarily. The finding from the NIESR Outlook for Spring 2022 of 1.5 million households seeing food and energy bills greater than their disposable income (Bhattacharjee et al. 2022) implied many were having to resort to financial safety nets to absorb rising prices; however, the evidence presented in this Box and throughout Chapter 2 has identified that many households are now beyond the point of being able to maintain this level of expenditure.

Precisely how a household is able to respond to food and energy bills greater than their income but without any accumulated savings remains an open question. However, what is increasingly clear is that further targeted policy intervention is now undeniably urgent.

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All regions and nations within the UK have now recovered to pre-pandemic levels, except for the West Midlands. Nevertheless, the rate at which they have rebounded is not equal, which leads to divergent paths going forward. As such, the focus for policymakers should be on a long-term plan as well as short- and medium-term 'quick wins' to reduce regional disparities and bring about a renewal of those parts of the UK that have not benefitted from globalisation or from the City of London.

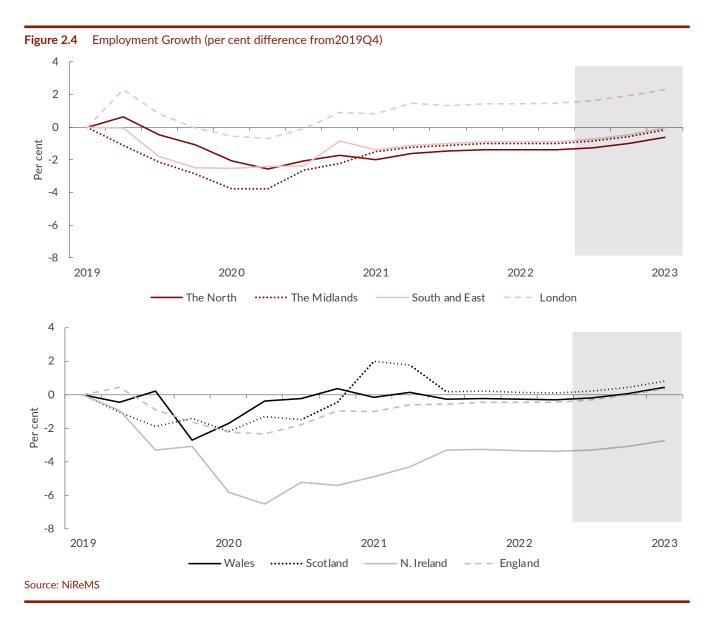


#### **Employment**

In terms of employment levels, there have been large revisions in the Labour Force Survey (LFS) data from 2020 onwards (ONS, 2022). Our projections reflect the new numbers. Northern Ireland's employment growth sees the largest revision with employment numbers now projected to be below pre-Covid levels (Figure 2.4).

In England, the Midlands saw an upwards revision in employment numbers, but the projections are not much better overall. London remains the only region in England to have surpassed pre-Covid employment numbers. This reflects our GVA projections: a clear picture of regional divergence is emerging with London breaking away from the rest of the UK.

This situation will worsen for as long as inflation continues to rise and remain above wage growth and the adjustment of benefits. With CPI inflation projected to peak at 10.8 per cent in the fourth quarter of 2022 and to average 9.0 per cent over the year (see Chapter 1, Table 1.1), there is greater need for fiscal support. In the final section we set out potential policy responses that are fiscally feasible and mitigate the substantial squeeze on household budgets.



#### **Inactivity**

We expect inactivity rates to rise slightly across the UK, except in Scotland (Figure 2.5). The Scottish inactivity rate rise has halted on account of a stronger employment growth profile, with the UN Climate Change Conference (COP26) acting as a catalyst. Of all the regions in the UK, London's labour market remains the most buoyant, with its labour participation rate markedly higher than elsewhere.



Source: NiReMS

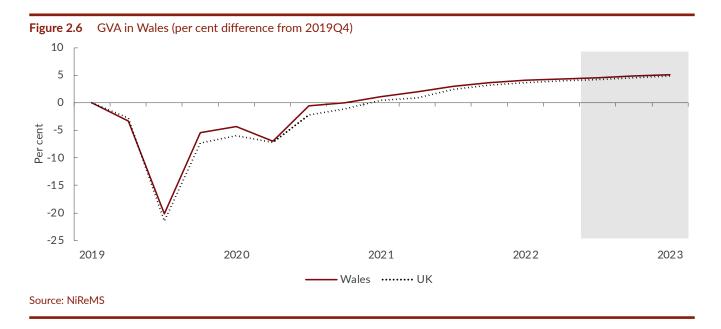
#### **Wales Economic Outlook**

- Welsh output has recovered to pre-pandemic levels and is growing at a rate similar to the UK average.
- Employment growth in Wales outperforms the UK average; due to the revised LFS numbers, we can now see that employment in Wales rebounded much quicker than the UK average but has been stagnating since 2021.
- Labour force participation increased from 2020 to 2021, which coincided with the increase in employment growth, but has since stagnated (Figure 2.9).
- Welsh productivity is lower than the UK average. Productivity growth is projected to lag behind the UK average, further exacerbating regional divergence.
- 280,000 households in Wales (21 per cent) will run out of savings by 2024, an increase of 97 per cent from the previous year. A further 370,000 households (28 per cent) will be without sufficient savings and subsequently vulnerable to further increases in prices.

The Welsh economy continues to show promising signs of recovery, but the persistence of structural challenges constrains future growth prospects. In particular, our projections continue to display positive signs for GVA and with the updated LFS numbers Welsh employment growth rebounded quicker than previously projected. However, the labour force appears to be shrinking, resulting in employers struggling to fill vacancies. As a result, Welsh employment growth has stagnated over the past years. We project employment growth to pick up in 2023; with the economy recovering earlier than the UK average, Wales will experience a healthier employment growth dynamic.

#### **GVA**

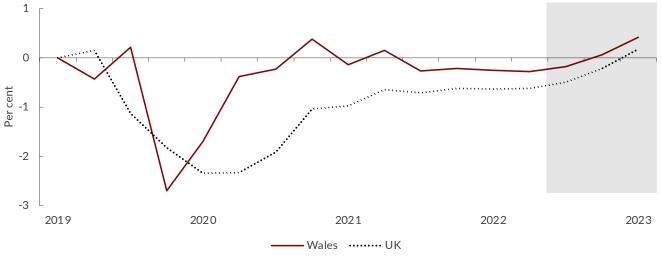
Welsh economic output as measured by GVA continues to recover at a similar trajectory to the UK average (Figure 2.6). Yet structural weaknesses remain which can hinder Wales' future economic growth. Brexit continues to be a key challenge for Wales due to a large concentration of agricultural and manufacturing firms that have been hit by the negative consequences of the UK's changing trade relations with the EU.



#### **Employment and Activity**

Welsh employment has rebounded quicker than the UK average but has stagnated at around pre-Covid levels over the past year (Figure 2.7). The stagnating employment profile is linked to increasing inactivity rates.

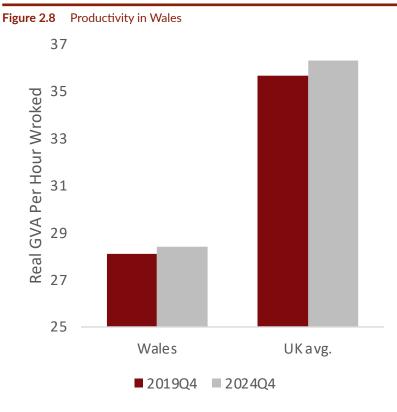
Figure 2.7 Employment growth in Wales (per cent difference from 2019Q4)



Source: NiReMS

#### **Productivity**

Productivity levels in Wales lag far behind the UK average and are further exacerbated by lower projected productivity growth in Wales than the UK average (Figure 2.8). Nevertheless, the promise of the new UK Shared Prosperity Fund (UKSPF) to protect the favourable funding from the European Structural and Investment (ESI) fund offers a prospect for investment to reduce the divergence in the productivity paths.



Source: NiReMS

#### Household savings

In our Spring 2022 Outlook, we projected that 48,000 households in Wales would see food and energy bills greater than their income. The natural question that follows from this finding is how these households are financially able to cope with this reality. In this Outlook we have dedicated our research to forecasting the number of households that would run out of savings as a result of the cost-of-living crisis.

We find that 280,000 households (21 per cent) in Wales will be without any savings by 2024, a rise of 97 per cent from the financial year 2022-23. A further 370,000 (28 per cent) will be without sufficient savings, which we define as having a stock of savings less than two months' disposable income.

#### **Scotland Economic Outlook**

- Scottish output has returned to pre-pandemic levels, but is projected to grow at a slower rate than the UK average.
- Employment benefitted from COP-26, which has seen Scotland attain higher levels than pre-pandemic. Besides London, Scotland remains the strongest performer for employment growth and is projected to remain ahead of the UK average.
- The Scottish Government has announced a date for a prospective Scottish Independence referendum in late 2023. The economic and social implications of potential independence have started to be actively debated (Roy and McIntyre, 2022), but regardless of the case for or against an independent Scotland it adds uncertainty to an already uncertain environment.
- 530,000 households in Scotland (21 per cent) will run out of savings by 2024, an increase in 76 per cent from the financial year 2022-23. A further 710,000 households (28 per cent) will be without sufficient savings and subsequently vulnerable to further increases in prices.

#### **GVA**

The regional divergence in GVA is illustrated by the case of Scotland, where growth is just below the UK average despite a higher performance during the period of COP-26, when the Scottish economy returned to pre-pandemic level (Figure 2.9). We project Scottish GVA growth to remain above pre-pandemic levels but below the UK average in 2023 and beyond.

Figure 2.9 GVA in Scotland (per cent difference from 2019Q4) 10 5 0 -5 -10 -15 -20 -25 2019 2020 2021 2022 2023 Scotland ········· UK Source: NiReMS

#### **Employment and inactivity**

Scottish employment growth is currently the strongest of all the devolved nations (Figure 2.10). Employment benefitted from COP-26, which has meant that Scotland has attained a higher level of employment than prior to the Covid-19 shock. Nevertheless, employment growth fell with the conclusion of COP-26 while still remaining above its pre-pandemic rate. Scotlish employment figures were adjusted downwards by the LFS revisions, but we project that Scotland will continue to be among the strongest performers for employment growth and stay ahead of Wales, Northern Ireland and most English regions.

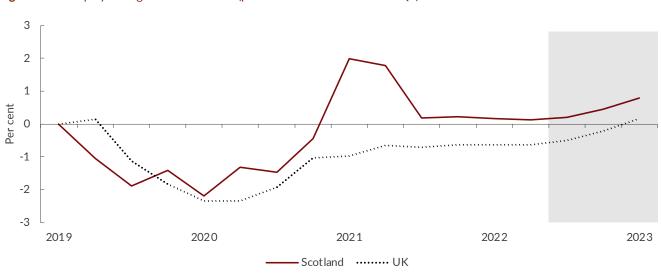


Figure 2.10 Employment growth in Scotland (per cent difference from 2019Q4)

Source: NiReMS

#### **Productivity**

With a strong employment growth profile but lower GVA growth, Scotland's productivity performance is projected to be below the UK average (Figure 2.11). As the Scottish economy rebounds from the Covid-19 shock, it is important that policymakers shift focus from employment to productivity. It is encouraging that the Scottish government's National Strategy for Economic Transformation focuses on promoting greater innovation and skills development to tackle these issues, but the question is what more can be done at the Scottish and UK levels to boost productivity, e.g. targeted public spending to help unlock private investment. North-East Scotland's bid for a freeport status and the green transition ambition for the Highlands and Islands are important current developments. But political uncertainties loom large, not least in the call for a prospective third independence referendum in late 2023 (Roy and McIntyre, 2022).

37.00

Page 2.11 Productivity in Scotland

UK avg.

■ 2019Q4 ■ 2024Q4

Figure 2.11 Productivity in Scotland

Source: NiReMS

#### Household savings

In our Spring 2022 Outlook, we projected that 150,000 households in Scotland (6.1 per cent) would see food and energy bills greater than their income. The question that follows from this finding is how these households are financially able to cope with this reality. In this Outlook we have dedicated our research to forecasting the number of households who would have run out of savings by April 2023 as a result of the cost-of-living crisis.

We find that 530,000 households in Scotland (21 per cent) will be without any savings by 2024, a rise of 76 per cent from the financial year 2022-23. A further 710,000 (28 per cent) will be without sufficient savings, which we define as having a stock of savings less than two months disposable income.

#### Box D: Northern Ireland's productivity problem

#### By David Jordan<sup>1</sup>

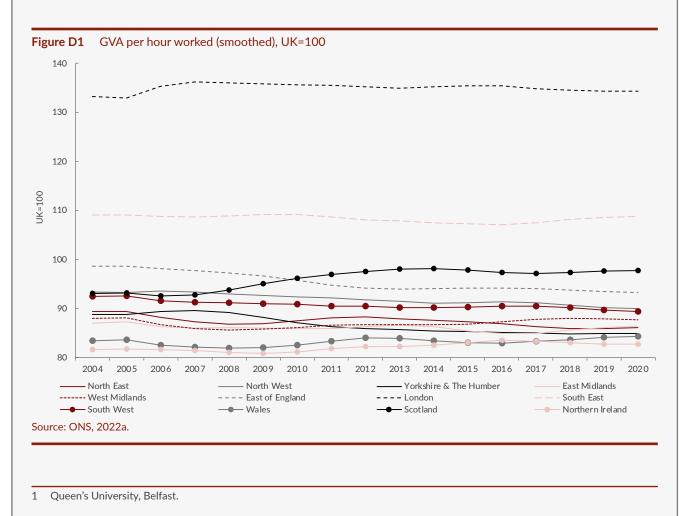
#### Introduction

Recent discussion of Northern Ireland's economy has focused on the pandemic and the rising cost of living, alongside how the Northern Ireland Protocol is affecting local businesses and consumers. Yet these issues have obscured the importance of Northern Ireland's persistent problem of low productivity.

Productivity measures the total value of output produced for a given amount of work, and is a key driver of higher wages and living standards. The UK's productivity growth has been poor since the financial crisis of 2007-08, and it has fallen further behind other advanced economies, including the USA, Germany, and France (NIESR, 2022). But, this problem is even more pronounced in Northern Ireland. It has been described as "the central problem of the Northern Ireland economy", and is responsible for the region's slow growth of GDP per capita over the past two decades (FitzGerald and Morgenroth, 2020).

#### How does Northern Ireland perform?

Northern Ireland has the lowest productivity of any UK region: 17 per cent below the UK average when measured by gross value added (GVA) per hour worked (Figure D1). Northern Ireland saw a slight improvement between 2015 and 2017, briefly overtaking Wales, but has since returned to being the worst performer. The productivity gap closes slightly to 13 per cent when measured by GVA per job, but this means workers in Northern Ireland must work longer hours to produce the same value of output as other poorly performing regions.



This productivity gap has been a persistent feature of the past one hundred years (Figure D2). Prior to partition, productivity in 1912 for the counties that would become Northern Ireland was 28 per cent below the UK level. This situation worsened during the interwar period, with the gap widening to almost 40 per cent. A period of catch-up took place during the 1960s, but the productivity gap has remained similar since then. Despite the effects of the pandemic in 2020, Northern Ireland's position remained almost unchanged compared to the previous decade.

Figure D2 Northern Ireland's long-run productivity per job (UK=100)



Notes: For 1912-1992: manufacturing productivity only, calculated as net output per head. For 2002-2020: productivity across all sectors, calculated as gross value added per job filled. Grouped years are averages per year.

Sources: For 1912-1992: Birnie and Hitchens, 1999, p.34. For 2002-2020: ONS, 2022a.

#### Why is productivity so low in Northern Ireland?

Research has identified a number of explanations for Northern Ireland's poor performance, across seven key areas: economic structure, peripherality, capital and investment, human capital, infrastructure, public policy, and institutions and governance (Jordan and Turner, 2021).

One of the earliest suggested explanations is the structure of the local economy. During the first half of the twentieth century, Northern Ireland was highly concentrated in the declining staple industries of shipbuilding and textiles (Johnson, 1985). The long-term decline of these industries, and Northern Ireland's continued high concentration in other low productivity industries, such as agriculture and retail, might be expected to explain low productivity. Yet analysis of the productivity gap shows it is not simply the result of economic structure. If Northern Ireland had the same structure as Great Britain across all sectors of the economy, it would reduce the productivity gap by less than half (Mac Flynn, 2016).

Another early explanation suggested for the productivity gap is geographic peripherality. Producers in Northern Ireland may face higher costs of importing and exporting goods and raw materials, while a small domestic market might limit the opportunities for growth and agglomeration (Isles and Cuthbert, 1957). However, transport costs have been shown to be only marginally higher, and not of a scale sufficient to explain differences in productivity (Birnie and Hitchens, 1989). Instead, distance from networks and knowledge, when combined with Northern Ireland's relatively small size and geographic peripherality, may result in a 'soft peripherality' problem, creating a barrier to productivity growth (Birnie and Hitchens, 1999; Brownlow, 2013).

For many decades, policymakers focused on the level of capital as a major reason for the local economy's persistent underperformance. However, by the 1980s, capital per worker in manufacturing had reached similar levels and sophistication as Great Britain, yet the productivity gap persisted (Borooah and Lee, 1991).

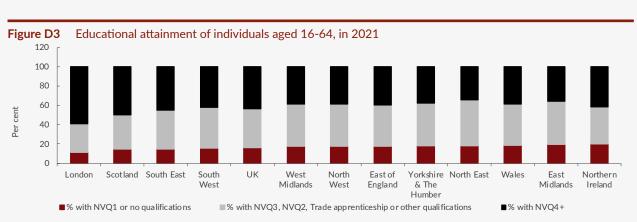
Recently released ONS data suggests aggregate levels of capital in Northern Ireland remain similar to the rest of the UK. Table 1 measures average gross fixed capital formation per job, between 2011 and 2020. Northern Ireland is only 2 per cent below the UK average for this period, and significantly outperforms other low productivity regions.

Table D1	Regional gross fixe	ed capital formation per job, 2011-2020
	Region	(UK=100)
London		126
East of E	ngland	111
South Ea	st	110
Scotland		101
Northern	ı Ireland	98
South W	est	94
West Mid	dlands	89
East Mid	lands	88
North W	est	88
North Ea	st	86
Yorkshire	& The Humber	82
Wales		72

Source: ONS 2022b.c.

While the level of capital may no longer be as important a factor, underinvestment in R&D remains a persistent weakness. Northern Ireland is one of the UK regions with the lowest R&D intensity, particularly from public sector investment (Forth and Jones, 2020). While R&D expenditure per job is only slightly below the UK average, and higher than in other low productivity regions, this reflects R&D expenditure being concentrated in a small number of large firms (Mac Flynn, 2016; Jordan and Turner, 2021).

Low levels of human capital is consistently identified as one of the main sources of Northern Ireland's productivity gap (Hitchens et al., 1990; Crafts, 1995; FitzGerald and Morgenroth, 2020). This skills deficit can be seen in the educational attainment of the working age population (Figure 3). Northern Ireland has the highest proportion of individuals with no or low (NVQ1) skills of any UK region, at almost 20 per cent. Northern Ireland has also suffered from a brain drain: in 2011, almost one-third of those born in Northern Ireland who possessed a graduate level education were living in Great Britain (FitzGerald, 2019). Recently, the proportion with a tertiary education (NVQ4+) has increased dramatically, from 31 per cent in 2016, to 42 per cent in 2021. While this has seen Northern Ireland overtake several UK regions, it is yet to be translated into improved productivity.



Source: ONS, 2022c, Annual Population Survey

An infrastructure gap within Northern Ireland has the potential to create further barriers to productivity growth, by making it more difficult to attract new investment, and limiting the growth of existing firms. Relatively low levels of public expenditure on transport infrastructure has been linked to the productivity gap (FitzGerald and Morgenroth, 2020), reflecting a long-run pattern of underinvestment (Harris, 1991; Jordan, 2020). While Northern Ireland scores well for internet connectivity (Johnston et al., 2021), a lack of investment in water and sewerage has been highlighted as constraining economic development (NI Water, 2021).

Policymakers have tried to address Northern Ireland's productivity gap, but policy interventions have a poor track record. For many decades, policy prioritised addressing high levels of unemployment, particularly in manufacturing, through generous financial support (Crafts, 1995; Brownlow, 2020). This led to a relatively low skilled workforce producing low value added goods, and allowing low productivity firms to survive (Hitchens et al., 1990; Hitchens and Birnie, 1994). Recent policy has targeted stimulating entrepreneurship and innovation, alongside attracting greater foreign direct investment, but competitiveness problems have remained (Brownlow, 2020), and, in 2019, Northern Ireland had the second lowest level of FDI per job of any UK region (ONS, 2021).

There are several potential reasons for the failure of policy to improve Northern Ireland's relative performance. Past problems were often misdiagnosed (Brownlow and Birnie, 2018), while policy has not been sufficiently 'joined-up' to address poor productivity (Nelles et al., 2020). Productivity is also rarely used as a means to measure and evaluate policy outcomes (Jordan and Turner, 2021). Northern Ireland's relatively large public sector has been suggested as a further reason for the productivity gap, by absorbing skilled labour and crowding out private investment (FitzGerald and Morgenroth, 2020). However, others have argued that the effectiveness of public policy, and the ability to build a successful private sector, is of greater importance for competitiveness (Brownlow and Birnie, 2018).

Institutions and governance may best explain the past failures of policy. During the first period of devolution, between 1920 and 1972, financial support was directed towards politically connected firms (Brownlow, 2007; Jordan, 2020). During the Troubles, public expenditure was used to stabilise the economy, with policymakers balancing economic and non-economic considerations, rather than maximising productivity (Brownlow, 2013). More recently, the legacy of a divided society has been linked to emigration of skilled labour (FitzGerald and Morgenroth, 2019), and to long-term health problems affecting the productivity of those in work (Ferry et al., 2015). Greater fiscal powers for Northern Ireland's devolved government at Stormont have been suggested as a way to raise economic performance through improving incentives for local policymakers. But, Northern Ireland's previous experience of greater fiscal devolution, during the twentieth century, suggests more fiscal powers do not automatically lead to improved economic performance, and any effect will be determined by the incentives present (Brownlow, 2007; Jordan, 2020).

#### Conclusion

Raising productivity is key to raising wages and living standards in Northern Ireland, but the productivity gap has been a persistent feature of the past one hundred years. Economic structure, geographic peripherality, and levels of capital were important factors in the past, but soft peripherality, underinvestment in R&D, low human capital, and infrastructure all display sizeable deficiencies today. Despite numerous policy interventions, the productivity gap has persisted, with weaknesses in institutions and governance being an important underlying factor. While the pandemic, inflation, and the Protocol have captured most attention recently, the biggest long-term economic challenge for local policymakers remains Northern Ireland's low productivity. Tackling this will require coordinated and long-term policies, together with a political commitment to prioritise productivity.

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#### Northern Ireland Economic Outlook

- Northern Irish output has slightly outperformed the UK average.
- Employment growth falls well below the UK average. Furthermore, due to the LFS revisions, the updated employment numbers for Northern Ireland paint a worse picture than previously forecast.
- The Northern Ireland Protocol helped Northern Ireland attain higher GVA growth than if there was no deal in place. Nevertheless, these gains in growth are mostly temporary and without more investment in the region, the rest of the UK will overtake Northern Ireland in GVA performance.
- With no deal Northern Ireland would have temporarily had lower GVA growth than the rest of the UK, but then converged to the UK average in 2022.
- With the increase in GVA and lower employment numbers, productivity in NI is projected to increase at a rate greater than the rest of the UK. As mentioned before, this is likely to have resulted from an expanded trade sector.
- We do not have data about household savings in Northern Ireland but the picture is broadly the same as the UK average.

#### **GVA**

The Northern Irish economy continues to grow at a pace similar to the UK average (Figure 2.12). GVA has recovered to pre-pandemic levels and is expected to continue growing. Due to London's new higher projected path, the UK average for GVA has been revised upwards, but Northern Ireland's GVA recovery remains strong compared with the rest of the devolved nations.

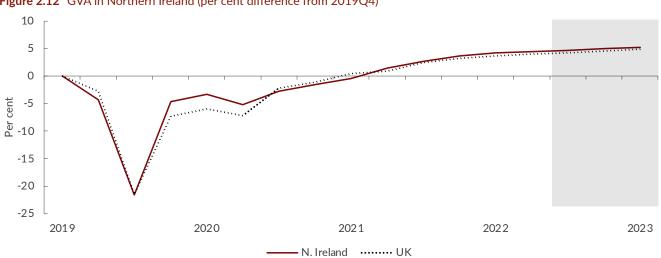
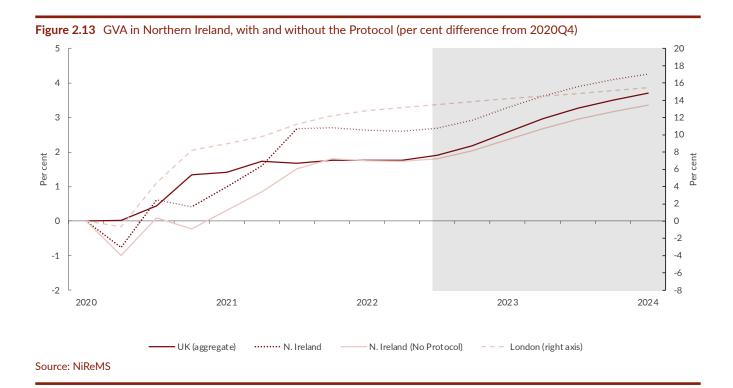


Figure 2.12 GVA in Northern Ireland (per cent difference from 2019Q4)

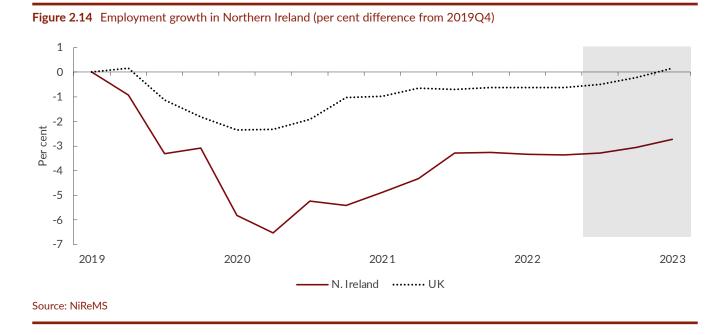
Source: NiReMS

Comparing Northern Ireland's performance versus a "No Protocol" counterfactual reveals that the Protocol has helped the region attain this comparatively respectable GVA growth profile (Figure 2.13). Overall, with no-deal Northern Ireland would have achieved lower GVA growth than the rest of the UK temporarily, but then converged in the long run to the UK average. While this paints a picture of Northern Ireland as a beneficiary of being in the EU's single market and customs union, one must not lose sight of its performance compared to other booming regions of the UK, namely London and the South-East: post-pandemic GVA growth in London is almost four times that of Northern Ireland. As such the Protocol should be viewed as a temporary boost driven by the trading sector, but to convert this into long term success, policymakers have to focus on increasing productivity (see Box D).



#### **Employment and Activity**

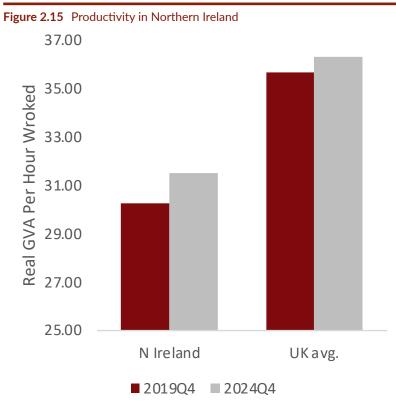
Northern Ireland continues to have the worst employment profile of the UK nations and regions (Figure 2.14). The LFS revisions paint a much grimmer picture of Northern Ireland's employment during the Covid-19 period: while in our previous Outlook we had Northern Ireland lose at most 5 per cent of workers during the Covid crisis, the new figures reveal that this number is closer to 7 per cent. This leads to lower projections for the post-pandemic recovery than previously forecast. Coupled with the highest inactivity rates among the UK nations and regions, Northern Ireland's productivity challenge adds to its employment predicament.



National Institute of Economic and Social Research

#### **Productivity**

With a comparatively high GVA profile and a downward revision in employment, Northern Irish productivity is projected to grow faster than the UK average. Nevertheless, productivity will remain a key challenge for the Northern Irish economy, as levels remain well below the UK average (Figure 2.15). This issue is analysed in greater detail in Box D.



Source: NiReMS

#### **England's regions**

- Economic output, as measured by GVA, has grown more in England than in the devolved nations of the UK, except for the West Midlands, where output is projected not to return to pre-pandemic levels by the end of 2023.
- Productivity growth in London is projected to be the largest of all the regions while in the Midlands it will decrease. These tendencies portray a picture of regional divergence, which needs to be urgently addressed by policymakers, using the Levelling Up agenda as a focal point to double the funding for the Towns Fund (currently capped at £4.8bn) and help unlock greater private investment.
- 4.7 million households in England (20 per cent) will run out of savings by 2024, an increase of 105 per cent from the financial year 2022-23. A further 6 million households (25 per cent) will be without sufficient savings and subsequently vulnerable to further increases in prices.

#### **GVA**

Economic output is expected to rise steadily for all regions, with London well ahead (Figure 2.16). While the other regions are not performing poorly, except the West Midlands, London is growing faster, which exacerbates existing inequalities.

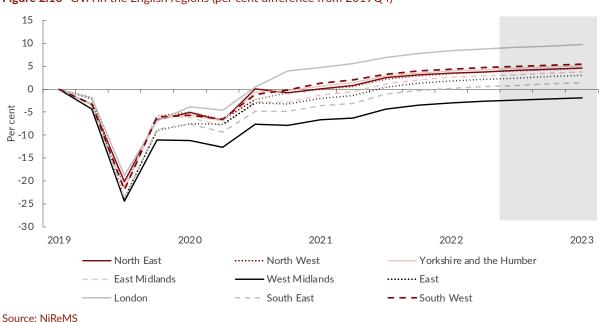


Figure 2.16 GVA in the English regions (per cent difference from 2019Q4)

#### **Employment and inactivity**

Employment growth in England's regions is strong, except for the North West, the East Midlands, the South East and the South West, which are not projected to return to pre-pandemic levels within our forecast period (Figure 2.17). The revised LFS data show that employment growth has stagnated in the South, with 4 different trajectories for the English regions: (1) London powering ahead; (2) the West Midlands, the East, the North East, as well as Yorkshire and the Humber recovering to pre-pandemic levels; (3) the South East and the South West stagnating since 2021 after some initial recovery; and (4) the East Midlands and the North West showing no signs of recovery since the pandemic-induced drop. As with the GVA projections, we see signs of regional divergence within England. The employment data reveals a similar story of London breaking away from the other regions.

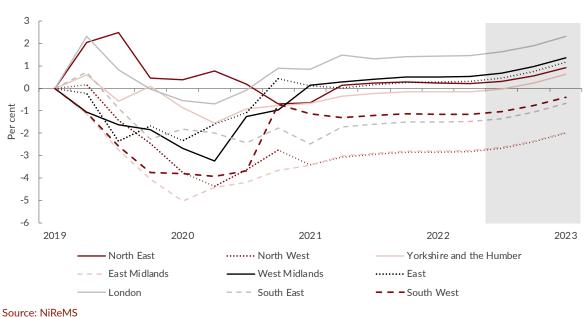
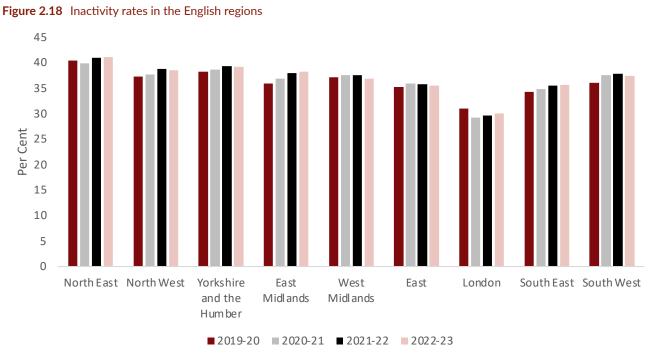


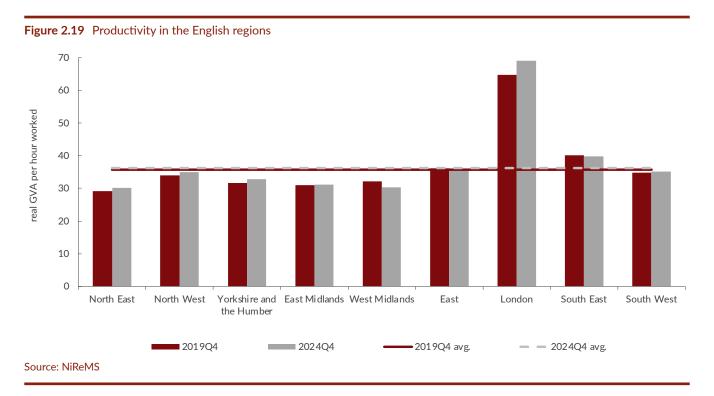
Figure 2.17 Employment growth in the English regions (per cent difference from 2019Q4)



Source: NiReMS

#### **Productivity**

Productivity levels in London remain well ahead of the other English regions (Figure 2.19). Furthermore, we see that growth in productivity will also be the highest in London which will further entrench regional differences.



#### Household savings

In our Spring 2022 Outlook, we projected that 1.1 million (4.9 per cent) households in England would see food and energy bills greater than their income. The natural question that follows from this finding is how these households are financially able to cope with this reality. In this Outlook we forecast the number of households who have run out of savings as a result of the cost-of-living crisis.

We find that 4.7 million (20 per cent) households in England will be without any savings by 2024, a rise of 105 per cent from the financial year 2022-23. A further 6 million (25 per cent) will be without sufficient savings, which we define as having a stock of savings less than two months disposable income.

Table 2.1 Househ	olds running out of savings	across English regions		
	% of households without savings by 2024	Number of households without savings by 2024	% of households with less than 2-months income in savings by 2024	Number of households with less than 2-months income in savings by 2024
North East	28%	330,000	34%	400,000
North West	22%	690,000	28%	900,000
Yorkshire	25%	580,000	30%	710,000
East Midlands	19%	390,000	25%	520,000
West Midlands	25%	620,000	30%	730,000
East	15%	390,000	21%	530,000
London	18%	630,000	23%	830,000
South East	12%	450,000	17%	630,000
South West	16%	380,000	21%	500,000
Source: LINDA and cos	t-of-living simulations.			

#### **Policy options**

In our Spring 2022 Outlook published on 9 May, we called on the government to provide more targeted help for the 1.5 million hardest hit households and 11 million low-income households. Therefore, we welcomed the government's measures announced on 26 May 2022 to support the most vulnerable households during the cost-of-living crisis, especially the conversion of the £200 energy loan into a non-repayable £400 energy grant and the one-off cash payment of £650 to around 11 million households.

But these measures should have been announced in the March Spring Statement and they only address some of the most urgent needs over the summer. As the energy price cap is lifted in October to at least £2,800 for an average household and food prices show no signs of stabilising, more policy mitigation will be needed. Unfortunately, political uncertainty in Westminster is untimely and will delay fiscal support to millions of struggling households will be devastating. Instead of waiting for a budget in November or focusing any emergency budgets on tax cuts, the government could and should act now to reduce uncertainty and give the poorest some reassurance and targeted welfare support.

Of the £30bn of fiscal space identified by the OBR (2022), the government has so far committed around £20bn and also decided to raise revenue via an energy profits levy. Given that some fiscal headspace remains, we renew our call for a Universal Credit uplift of £25 per week for at least 6 months from October 2022 to March 2023 at a cost of around £1.35bn. Our other proposal is to raise the energy grant from £400 to £600 for the 11 million low-income households, at a total cost of £2.2bn.

And in order to turn some of the Levelling Up ambition into reality, the government should consider doubling the financial support for the Towns Fund from £4.8bm to £9.6bn, expand the remit of the UK Infrastructure Bank and increase its capital from £14bn to £50bn.

A combination of remaining fiscal headspace and new revenue from the energy profits levy means that the government has room for manoeuvre to act now and announce further support for vulnerable households rather

than leaving them to face radical uncertainty until budget day in November. Instead of committing resources to tax cuts, our much better targeted interventions can help the poorest while also stimulating growth.

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## Box E: No quick respite from the cost-of-living crisis By Arnab Bhattacharjee, Max Mosley and Adrian Pabst

The analysis in NIESR's Spring Outlook published in May 2022 examined the soaring prices of necessities such as energy and food and its effects on low-income households (Bhattacharjee et al., 2022). Using NIESR's regional, microsimulation and global macroeconometric models (NiReMS, LINDA and NiGEM, respectively), the distributional consequences of rising inflation were projected for households in 2022-23 across the income distribution, with a focus on how effective the policies announced in the then Chancellor's Spring Statement were in offsetting at least part of the fall in disposable incomes; see Figure 2.1 and Table 2.6 in Bhattacharjee et al. (2022).

In May 2022, the then Chancellor announced a package of further support to tackle the cost-of-living crisis. Unfortunately, the current inflation episode is not temporary, and its effects will be very persistent. Further rises in energy bills are forthcoming in autumn and an even further rise in the energy price cap is predicted for early 2023. While inflation may get somewhat moderated in the medium run, the prices particularly of energy and food are predicted not to move southwards. This implies that hardship due to cost-of-living rises will persist into the next financial year 2023-24. The purposes of this box are to: (a) revisit NIESR's previous analysis to determine the impact of the May 2022 emergency grants; and (b) project the distributional impacts forward through to 2023-24. Part of this work was conducted in association with The Guardian and is reported elsewhere (de Hoog et al., 2022).

Bhattacharjee et al. (2022) reported that the rising prices of necessities hit hardest low-income households who spend a disproportionate share of their budgets on food and energy. A key finding from this analysis was that the policy choices at the time, designed to help with this cost-of-living crisis, were having a minimal effect and, in some cases, were cancelled out by other policy decisions, such as the rise in National Insurance Contributions (NICs) from April onwards, which largely negated the increase in the threshold of NICs from £9,880 to £12,570 that came into effect in July.

Consequently, the net effect of inflation and the support measures meant the poorest households were seeing the greatest fall in their real incomes. Our analysis uncovered that 1.5 million households across the UK (5 per cent) would face food and energy bills greater than their disposable income, and that a further 250,000 households would slide into destitution (a measure of extreme poverty), bringing the total to around 1 million. We therefore concluded that further government support was needed to help the poorest households, with the expressed aim of equalising the fall in real incomes so that the burden of inflation is felt equally across the distribution. Our proposals included an uplift to Universal Credit of £25 a week, along with a one-off cash transfer of £250 to the 11.3 million lower-income households.

On 26 May, the then Chancellor Rishi Sunak announced a further package of support with two features. The first was a targeted one-off cash transfer of £650 to the poorest households on Universal Credit. This approximately equates to our proposal of introducing a £25 Universal Credit uplift for six months. The second was a universal grant of £400 to all households distributed via a rebate on energy bills. While they were patchy (neither progressive nor regressive) and not well targeted, these measures were nevertheless welcome. They cushioned part of the adverse impacts of the cost-of-living crisis on households particularly in the bottom half of the income distribution.

Using NIESR's microsimulation model LINDA (NIESR, 2016), we find that the net effect of inflation and previously announced support policies (in the Spring Statement) left the poorest households worse off than the rest, but when we add the new targeted help and the universal cash-grants (announced in May 2022) to the analysis, the impact on the hardest hit households is much more cushioned than before, as displayed by the flatter net-effect across the income distribution. In short, the targeted assistance NIESR called for in its Spring Outlook will help the poorest households whose real incomes will now not fall more than the median. Figure 2.1 in Chapter 2 of this Outlook graphically illustrate the effects and the detailed numbers are reported in Table E1.

Aggregate	2022-23	Sources/uses	HHHHs	Bottom	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Тор
		of income		decile									decile
62,000		Disp. Income	£14,800	14,300	19,600	21,100	23,900	29,400	37,700	46,900	62,800	105,100	260,60
[0.2%]		Spring Stmt. + May Effect	[2.8%]	[3.0%]	[4.1%]	[4.4%]	[2.5%]	[0.9%]	[0.7%]	[0.7%]	[0.3%]	[-0.2%]	[-1.0%
-421		- Benefits	£(771)	-780	-559	-492	-494	-497	-503	-387	-345	-227	-210
622	Income	- NI threshold	£239	213	412	495	516	556	618	711	765	833	820
-678	<u> </u>	- NI rates	£(53)	-45	-99	-122	-149	-201	-279	-402	-605	-1,206	-3,647
563		- May Emergency Grant	£1,000	1,050	1,050	1,050	725	400	400	400	400	400	400
62,100		Net Income	£15,200	14,800	20,500	22,000	24,500	29,700	38,000	47,200	62,900	104,900	257,90
13,500		Necessities	£28,400	11,200	10,300	10,400	11,300	13,100	15,800	16,400	17,600	14,900	18,700
[21.8%]		%	[192.5%]	[78.1%]	[52.6%]	[49.3%]	[47.3%]	[44.5%]	[41.8%]	[35.0%]	[28.0%]	[14.2%]	[7.2%]
4,900		- Food	£10,800	4,300	4,000	4,000	4,300	5,000	6,000	6,100	6,400	5,000	5,600
2,200	ā	- Fuel	£5,100	2,300	1,900	1,900	2,000	2,300	2,700	2,700	2,800	2,200	2,500
3,100	ditu	- Transport	£4,300	1,600	1,600	1,700	1,900	2,400	3,000	3,500	4,100	4,300	7,100
[-2.1%]	Expenditure	(excess inflation >5%)	[-9.5%]	[-8.3%]	[-5.4%]	[-5.0%]	[-4.7%]	[-4.4%]	[-4.2%]	[-3.4%]	[-2.7%]	[-1.3%]	[-0.6%
23,000		Discretionary	0	8,200	11,900	12,900	14,700	18,000	23,200	28,000	32,000	34,700	48,700
[37.0%]			[0.0%]	[57.1%]	[60.4%]	[61.1%]	[61.2%]	[61.3%]	[61.3%]	[59.7%]	[51.1%]	[33.0%]	[18.7%
36,500		Consumption	£28,400	19,400	22,200	23,300	26,000	31,100	38,900	44,400	49,600	49,600	67,40

Source: LINDA

Notes: HHHHs refers to 'Hardest Hit Households' for whom the cost of necessities (food and energy) exceeds their disposable income, so that they are left with the choice of easting or heating. Amounts reported are average annual nominal figures in pounds sterling (percentage of household disposable income in brackets).

Although the policies employed are effective in equalising the burden of the cost-of-living crisis, our analysis suggests their combination could have been enhanced. In particular, the universal cash grant received the bulk of criticism for its wastefulness in giving a significant cash-transfer to wealthy households and not having the mechanism necessary to avoid individuals with two homes receiving the payment twice.

Our criticism in this regard is more nuanced. We do not take the view that universal cash-transfers are themselves a waste, but more a necessary evil. The reason is that if we only attempt to tackle this cost-of-living crisis with targeted policies, there is a greater risk of creating an insider-outsider problem, where one household that receives welfare is assisted but those who may also need help, as they have a very similar income, do not. When we start to attach conditions to support measures of this kind, we increase the risk of people falling through the cracks. Therefore, it is eminently sensible to follow-up targeted support measures with more universal cash-transfers to minimise this risk.

The challenge with this approach is not with wealthy households getting support they do not need (that is a necessary inevitability), but how to balance this against targeted support measures. Our analysis, shown in Figure 2.1 and Table 2.2, suggests more support could be given to those in the bottom decile. We therefore take the view that the combination of policies was sensible, but a better balance could have been achieved by raising the generosity of the targeted support at the cost of reducing the size of the universal part of the support measures.

We also need to remember that our analysis assumes that households receive support measures all at once. In reality, this is not quite the case, as households eligible for the £650 cost-of-living payment through Universal Credit have only recently received the first half of this payment, with the second scheduled for 'Autumn 2022'. From 26 May to 14 July,¹ those households identified as 'hardest hit' had no additional support.

<sup>1</sup> This is the earliest point at which the payment could be made, households could still expect to wait until the 31 July at the latest for their cost-of-living payment.

Our previous recommendations only looked at the period ending in October, as this is when the energy price cap is due to be increased. Therefore, although our recommendations are closely aligned with the Chancellor's package of support for this period, they will only remain so if the Chancellor chooses to update these support measures for the forthcoming six months. Given the energy price cap is due to increase even further, the next round of support measures will have to be even more generous than the last to keep up with these rising prices. To achieve this, we recommend a Universal Credit uplift of £25 per week for at least six months from October 2022 to March 2023 and an increase in the energy grant from £400 to £600 for those 11 million households.

Further, as discussed earlier, the cost-of-living crisis is predicted to persist in the medium run. This is because of two effects. The first effect is due to astronomical prices, particularly of energy and food, that are now rising sharply but will continue to stay high even if the rate of inflation falls somewhat in 2023-24 (see Chapter 1). Second, as discussed in Chapter 2 and Box C, accumulated savings of poor households are predicted to fall sharply, leaving them with little or no headroom to cushion the impact of persistently high prices of necessities. The continued effects of high prices across the distribution of households by income deciles in reported in Table E2.

Table E2	Impa	act of Spring	g Budget	t and Co	st of livi	ing on h	ousehol	d financ	es, by in	come de	ecile, in	2023-24	ļ
Aggregate	2023-24	Sources/uses of income	HHHHs	Bottom decile	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Top decile
65,900		Disp. Income	£19,300	19,200	21,200	27,100	34,100	42,600	51,300	64,900	84,900	118,000	195,700
[-0.9%]		Spring Stmt. + May Effect	[-3.1%]	[-3.5%]	[-2.0%]	[-0.9%]	[-0.8%]	[-0.8%]	[-0.3%]	[-0.7%]	[-0.7%]	[-0.9%]	[-1.1%]
-409	me	- Benefits	£(713)	-773	-591	-456	-468	-471	-280	-379	-336	-243	-167
491	Income	- NI threshold	£191	159	263	392	441	484	614	574	607	664	659
-699		- NI rates	£(67)	-57	-94	-170	-261	-333	-491	-617	-899	-1,437	-2,631
65,300		Net Income	£18,700	18,600	20,800	26,900	33,800	42,200	51,100	64,500	84,200	117,000	193,600
21,500		Necessities	£35,500	12,000	14,300	15,700	18,100	21,000	17,600	22,100	26,500	33,900	40,400
[32.6%]		%	[183.7%]	[62.0%]	[67.6%]	[57.8%]	[53.0%]	[49.4%]	[34.3%]	[34.0%]	[31.2%]	[28.8%]	[20.7%]
7,600		- Food	£13,600	4,600	5,600	6,000	6,900	7,900	6,400	7,900	9,300	11,500	12,300
3,600	ē	- Fuel	£7,500	2,600	2,800	2,900	3,300	3,800	2,900	3,700	4,300	5,200	5,700
5,400	ditu	- Transport	£5,300	1,800	2,300	2,700	3,400	4,200	4,100	5,400	7,000	10,100	14,600
[-3.7%]	Expenditure	(excess inflation >5%)	[-23.1%]	[-7.9%]	[-8.2%]	[-6.8%]	[-6.3%]	[-5.8%]	[-3.8%]	[-3.8%]	[-3.4%]	[-3.1%]	[-2.1%]
38,400		Discretionary	0	12,000	17,800	19,700	23,800	28,800	32,600	41,300	50,300	69,900	92,500
[58.3%]		%	[0.0%]	[62.2%]	[83.7%]	[72.8%]	[69.8%]	[67.7%]	[63.5%]	[63.5%]	[59.3%]	[59.3%]	[47.3%]
59,800		Consumption	£35,500	23,900	32,100	35,400	41,900	49,800	50,100	63,300	76,800	103,900	132,900
[-4.6%]		Spring Statement + Inflation	[-26.2%]	[-11.4%]	[-10.2%]	[-7.7%]	[-7.1%]	[-6.6%]	[-4.1%]	[-4.5%]	[-4.1%]	[-4.0%]	[-3.2%]

Source: LINDA

It is clear that the continued impact of inflation will persist into 2023-24 and will be highly regressive, to devastating effect particularly upon poor households at the bottom of the income distribution. These households will also lack savings and access to financial markets. Many will be left to seek support from foodbanks and charities but many others may also lack such support and be left with no option but to borrow from loan sharks. It is also interesting that in the current prime-ministerial contest, there is greater focus on tax cuts than the urgent necessity to continue support for the most vulnerable in our society. Our analysis suggests that there is no substitute to continued targeted welfare.

In summary, although the support measures were generous, they fell short in key areas: too much was spent on expensive universal measures rather than on making targeted measures more generous, the support took too long to administer (leaving households without any support for months) and the support will need to be extended in October when the energy price cap increases further. Importantly, we are in the cost-of-living crisis for the long haul and targeted welfare support needs to continue.

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### Forecast tables:

	Uŀ	Cexchange rate	es	FTSE			
	Effective 2017=100	Dollar	Euro	All-share index	10-year gilts	Worlda	Bank Rate
2016	105.9	1.35	1.22	2565	1.30	0.90	0.25
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	105.8	1.25	1.19	2933	1.90	2.10	2.36
2023	104.3	1.20	1.18	2974	2.50	3.20	3.13
2024	103.5	1.21	1.16	3125	2.70	3.20	3.13
2025	102.8	1.22	1.14	3290	2.90	3.00	3.14
2026	102.1	1.22	1.12	3399	3.00	2.90	3.15
2021Q1	105.6	1.38	1.14	2749	0.60	1.10	0.10
2021Q2	107.3	1.40	1.16	2903	0.80	1.10	0.10
2021Q3	107.4	1.38	1.17	2952	0.70	1.10	0.10
2021Q4	107.4	1.35	1.18	2995	0.90	1.10	0.13
2022Q1	108.6	1.34	1.20	3025	1.40	1.20	0.45
2022Q2	105.6	1.26	1.18	2986	2.00	1.60	0.95
2022Q3	104.6	1.20	1.18	2854	2.10	2.40	1.66
2022Q4	104.6	1.20	1.18	2869	2.20	3.00	2.36
2023Q1	104.6	1.20	1.18	2931	2.40	3.10	2.90
2023Q2	104.4	1.20	1.18	2956	2.50	3.20	3.11
2023Q3	104.1	1.21	1.17	2988	2.50	3.30	3.13
2023Q4	103.9	1.21	1.17	3019	2.60	3.30	3.13
Percentage changes							
2016/2015	-9.8	-11.4	-11.2	-1.5			
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	-1.0	-9.1	1.9	1.2			
2023/2022	-1.5	-3.7	-0.8	1.4			
2024/2023	-0.8	0.6	-1.6	5.1			
2025/2024	-0.7	0.5	-1.5	5.3			
2026/2025	-0.7	0.3	-1.4	3.3			
2021Q4/2020Q1	5.0	2.1	6.4	18.0			
2022Q4/2021Q1	-2.6	-10.8	0.4	-4.2			
2023Q4/2022Q1	-0.7	0.4	-1.3	5.3			

Notes: <sup>a</sup> Weighted average of central bank intervention rates in OECD economies. <sup>b</sup> End of period.

Table A2 Price indices (2019=100) Consumer prices Unit **GDP Imports Exports** World Oil Consumption labour deflator deflator deflator Price (\$)a deflator RPI<sup>b</sup> CPIc CPIH<sup>d</sup> costs (market prices) 2016 92.9 91.3 91.3 42.9 95.1 94.4 91.1 93.3 93.7 2017 94.8 96.7 95.7 54.0 96.8 96.1 94.3 95.9 96.1 2018 97.1 98.8 98.0 70.4 98.7 98.0 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 114.0 99.4 100.2 43.0 105.3 101.5 100.8 101.0 101.1 105.6 111.8 103.8 104.0 69.9 103.5 103.5 103.5 2021 105.4 2022 115.7 110.7 113.7 103.6 112.9 115.9 119.9 112.7 113.4 2023 120.7 115.1 118.4 96.1 120.3 123.5 134.1 120.5 120.9 2024 124.4 118.2 120.9 93.6 122.5 125.6 138.5 122.8 123.1 121.3 125.3 2025 126.9 123.3 94.3 124.7 127.6 141.8 124.7 2026 129.6 124.5 126.0 95.7 127.6 130.4 145.9 127.3 128.2 Percentage changes 4.5 1.9 0.7 1.0 2016/2015 1.8 4.6 -17.7 1.1 1.7 6.0 2.6 2017/2016 2.0 4.8 25.8 1.8 1.8 3.6 2.7 2018/2017 2.4 2.2 2.4 30.5 2.0 2.0 3.3 2.4 2.3 2019/2018 3.0 1.2 2.0 -9.6 1.3 2.0 2.6 1.8 1.7 2020/2019 14.1 -0.6 0.2 -32.5 5.3 1.5 0.8 1.0 1.1 0.1 2.6 2.5 2021/2020 -1.9 4.4 3.8 2.4 4.1 62.6 2022/2021 3.5 6.6 9.3 48.2 9.1 9.9 13.5 9.0 9.5 2023/2022 4.3 4.0 4.1 -7.3 6.5 11.9 6.9 6.6 6.6 2024/2023 3.0 2.6 2.1 1.9 1.7 1.9 1.9 -2.6 3.3 2025/2024 2.0 2.6 2.0 0.7 1.8 1.6 2.4 1.6 1.8 2026/2025 2.1 2.6 2.2 1.5 2.3 2.2 2.9 2.1 2.3 1.7 2021Q4/2020Q1 -2.0 6.6 6.6 74.7 4.3 6.9 5.0 4.4 2022Q4/2021Q1 6.3 4.4 8.1 27.1 12.0 14.1 17.7 10.8 12.2

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

2.5

2.1

6.1

3.3

2.5

-5.3

2023Q4/2022Q1

3.0

3.5

2.5

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

	Final cons expend		Gross capi	tal formation	Domestic	Total	Total final	Total	Net	GDP at market
	H-Holds & NPISH <sup>a</sup>	General govt.	Gross fixed investment	Changes in inventories <sup>b</sup>	demand	exports	expenditure	imports <sup>c</sup>	trade	prices <sup>d</sup>
2016	1376	403	385	10	2172	623	2796	659	-36	2137
2017	1398	405	398	13	2202	658	2861	679	-20	2182
2018	1431	407	397	5	2241	677	2918	700	-23	2218
2019	1449	424	400	3	2276	699	2975	720	-21	2255
2020	1296	399	362	-10	2047	609	2655	606	2	2046
2021	1376	456	383	6	2221	601	2822	630	-29	2199
2022	1438	437	411	64	2351	605	2955	686	-82	2276
2023	1482	414	429	0	2325	617	2942	662	-45	2287
2024	1506	413	439	0	2359	637	2996	674	-37	2329
2025	1510	417	441	0	2368	661	3029	677	-16	2359
2026	1520	422	444	0	2386	685	3071	684	1	2394
Percentage c	hanges									
2016/2015	3.7	0.5	4.7		2.3	3.3	2.5	3.5		2.3
2017/2016	1.6	0.6	3.3		1.4	5.7	2.3	2.9		2.1
2018/2017	2.4	0.4	-0.1		1.8	2.8	2.0	3.1		1.7
2019/2018	1.3	4.2	0.5		1.6	3.4	2.0	2.9		1.7
2020/2019	-10.6	-5.9	-9.5		-10.1	-13.0	-10.8	-15.8		-9.3
2021/2020	6.2	14.3	5.9		8.5	-1.3	6.3	3.8		7.4
2022/2021	4.5	-4.2	7.4		5.8	0.7	4.7	9.0		3.5
2023/2022	3.0	-5.4	4.4		-1.1	2.0	-0.4	-3.6		0.5
2024/2023	1.6	-0.1	2.3		1.4	3.3	1.8	1.8		1.8
2025/2024	0.2	1.0	0.3		0.4	3.7	1.1	0.4		1.3
2026/2025	0.7	1.1	0.7		0.8	3.6	1.4	1.1		1.5
Decomposition	on of growth i	n GDP (perc	entage points)							
2016	2.3	0.1	0.8	-0.1	2.4	1.0	3.3	-1.1	-0.1	2.3
2017	1.0	0.1	0.6	0.2	1.4	1.6	3.0	-0.9	0.7	2.1
2018	1.5	0.1	0.0	-0.4	1.8	0.8	2.6	-1.0	-0.1	1.7
2019	0.8	0.8	0.1	-0.1	1.6	1.0	2.6	-0.9	0.1	1.7
2020	-6.8	-1.1	-1.7	-0.6	-10.2	-4.0	-14.2	5.0	1.0	-9.3
2021	3.9	2.8	1.0	0.8	8.5	-0.4	8.1	-1.1	-1.5	7.4
2022	2.8	-0.9	1.3	2.6	5.9	0.2	6.1	-2.6	-2.4	3.5
2023	1.9	-1.0	0.8	-2.8	-1.1	0.5	-0.6	1.1	1.6	0.5
2024	1.1	0.0	0.4	0.0	1.5	0.9	2.4	-0.5	0.4	1.8
2025	0.2	0.2	0.1	0.0	0.4	1.0	1.4	-0.1	0.9	1.3
2026	0.4	0.2	0.1	0.0	0.8	1.0	1.8	-0.3	0.7	1.5

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

Table A4	External se	ctor								
	Exports of goods <sup>a</sup>	Imports of goods <sup>a</sup>	Net trade in goods <sup>a</sup>	Exports of services	Imports of services	Net trade in services	Export price competitiveness <sup>c</sup>	World trade <sup>d</sup>	Terms of trade <sup>e</sup>	Current balance
			£ billion, 2	019 prices <sup>b</sup>			201	9=100		% of GDP
2016	334	485	-150	289	175	114	99.8	87.5	100.1	-5.3
2017	357	497	-139	301	182	119	97.4	91.8	99.0	-3.6
2018	358	498	-140	319	202	117	101.3	95.2	99.2	-3.9
2019	372	510	-138	327	210	118	100.0	100.0	100.0	-2.7
2020	319	443	-123	289	164	125	99.6	91.6	100.7	-2.5
2021	315	463	-148	286	167	119	105.3	98.9	100.2	-2.6
2022	311	525	-214	294	161	132	106.2	102.4	102.7	-7.2
2023	322	502	-180	295	160	135	104.4	104.6	102.8	-7.0
2024	336	510	-175	302	164	138	102.8	108.6	102.3	-6.2
2025	350	512	-161	311	165	146	101.9	112.8	101.6	-5.0
2026	364	517	-153	321	167	154	101.6	116.9	101.2	-4.0
Percentage o	changes									
2016/2015	0.7	3.6		6.3	3.3		-5.4	3.5	0.1	
2017/2016	6.8	2.4		4.4	4.2		-2.3	5.0	-1.1	
2018/2017	0.2	0.2		5.8	10.7		4.0	3.7	0.2	
2019/2018	3.9	2.5		2.7	4.0		-1.3	5.0	8.0	
2020/2019	-14.1	-13.3		-11.6	-21.9		-0.4	-8.4	0.7	
2021/2020	-1.4	4.6		-1.1	1.8		5.7	7.9	-0.6	
2022/2021	-1.1	13.4		2.7	-3.3		0.9	3.5	2.5	
2023/2022	3.4	-4.5		0.5	-0.8		-1.7	2.2	0.1	
2024/2023	4.2	1.7		2.2	2.2		-1.6	3.9	-0.5	
2025/2024	4.3	0.3		3.0	0.9		-0.9	3.8	-0.6	
2026/2025	3.9	1.0		3.3	1.4		-0.3	3.6	-0.4	

Notes: <sup>a</sup> Includes Missing Trader Intra-Community Fraud. <sup>b</sup> Balance of payments basis. <sup>c</sup> A rise denotes a loss in UK competitiveness.

 $<sup>^{\</sup>rm d}$  Weighted by import shares in UK export markets.  $^{\rm e}$  Ratio of average value of exports to imports.

Table A5	Household	sector							
	Average <sup>a</sup> earnings	Employee compensation	Total personal income	Gross disposable income	Real disposable income <sup>b</sup>	Final consumption expenditure	Saving ratio <sup>c</sup>	Net worth to income ratio <sup>e</sup>	House prices <sup>d</sup>
		£ billio	n, current pr	ices	£ billion,	2019 prices	% of GDP		2019=100
2016	90.9	966	1715	1345	1415	1376	6.4	7.0	91.8
2017	93.7	1007	1771	1381	1427	1398	4.8	7.0	95.9
2018	96.0	1048	1853	1448	1467	1431	4.8	6.6	99.1
2019	100.0	1097	1916	1487	1487	1449	4.6	6.8	100.0
2020	102.6	1129	1932	1499	1483	1296	14.1	7.3	102.8
2021	107.5	1196	2035	1556	1504	1376	10.5	7.3	112.5
2022	114.1	1281	2148	1655	1467	1438	4.6	6.8	122.2
2023	119.5	1343	2256	1750	1455	1482	1.1	6.8	127.1
2024	123.5	1409	2332	1835	1497	1506	2.3	6.5	128.0
2025	126.5	1456	2409	1905	1527	1510	4.1	6.3	128.7
2026	130.0	1509	2500	1988	1558	1520	5.3	6.2	130.2
Percentage o	changes								
2016/2015	3.1	4.1	2.3	1.6	0.5	3.7		7.0	
2017/2016	3.1	4.2	3.3	2.7	0.9	1.6		4.5	
2018/2017	2.4	4.1	4.7	4.9	2.8	2.4		3.3	
2019/2018	4.2	4.8	3.4	2.7	1.3	1.3		0.9	
2020/2019	2.6	2.9	0.8	0.8	-0.3	-10.6		2.8	
2021/2020	4.8	5.9	5.4	3.8	1.4	6.2		9.4	
2022/2021	6.1	7.1	5.5	6.4	-2.5	4.5		8.7	
2023/2022	4.7	4.9	5.0	5.7	-0.8	3.0		4.0	
2024/2023	3.3	4.9	3.4	4.8	2.9	1.6		0.7	
2025/2024	2.5	3.3	3.3	3.8	2.0	0.2		0.5	
2026/2025	2.8	3.6	3.8	4.4	2.0	0.7		1.2	

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

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

		Gross fixed	d investment		11	Corporate	Capita	l stock
	Business investment	Private housing <sup>a</sup>	General government	Total	<ul><li>User cost of capital (%)</li></ul>	profit share of GDP (%)	Private	Public <sup>b</sup>
2016	227	93	66	385	13.1	25.4	3537	789
2017	228	102	68	398	12.9	25.3	3664	740
2018	224	109	65	397	12.7	25.0	3721	756
2019	226	106	67	400	12.9	24.8	3772	774
2020	200	93	69	362	12.9	24.3	3779	794
2021	202	106	76	383	10.2	24.4	3798	819
2022	210	112	89	411	9.5	25.9	3843	856
2023	222	111	96	429	10.8	26.9	3897	897
2024	230	110	99	439	11.7	26.6	3956	938
2025	233	108	99	441	11.7	26.7	4012	977
2026	237	107	100	444	11.7	27.2	4066	1015
Percentage ch	anges							
2016/2015	5.5	6.0	0.6	4.7			1.6	2.1
2017/2016	0.8	9.6	3.0	3.3			3.6	-6.2
2018/2017	-2.0	7.6	-5.0	-0.1			1.6	2.2
2019/2018	0.9	-2.6	4.5	0.5			1.4	2.4
2020/2019	-11.5	-12.4	1.6	-9.5			0.2	2.6
2021/2020	0.8	13.5	10.3	5.9			0.5	3.1
2022/2021	4.3	5.4	18.3	7.4			1.2	4.5
2023/2022	5.5	-0.2	7.7	4.4			1.4	4.8
2024/2023	3.9	-0.9	2.5	2.3			1.5	4.6
2025/2024	1.1	-1.8	0.7	0.3			1.4	4.2
2026/2025	1.6	-1.4	0.8	0.7			1.4	3.8

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)

	Employ	ment	- ILO		Population of	Productivity	ILO
	Employees	Totala	unemployment	Labour force <sup>b</sup>	working age <sup>c</sup>	(2019=100) per hour	unemployment rate
2016	26771	31744	1633	33377	41062	97.8	4.9
2017	27065	32057	1476	33533	41169	98.9	4.4
2018	27494	32439	1380	33819	41260	99.6	4.1
2019	27652	32799	1306	34105	41344	100.0	3.8
2020	27752	32509	1551	34060	41362	101.3	4.6
2021	28023	32407	1525	33931	41392	102.1	4.5
2022	28296	32706	1373	34079	41488	101.2	4.0
2023	28333	32788	1634	34422	41597	101.1	4.7
2024	28762	33242	1375	34617	41710	101.6	4.0
2025	29006	33508	1277	34785	41814	102.1	3.7
2026	29256	33777	1161	34938	41894	102.8	3.3
Percentage ch	nanges						
2016/2015	1.0	1.5	-8.3	0.9	0.4	1.0	
2017/2016	1.1	1.0	-9.6	0.5	0.3	1.1	
2018/2017	1.6	1.2	-6.5	0.9	0.2	0.7	
2019/2018	0.6	1.1	-5.4	0.8	0.2	0.4	
2020/2019	0.4	-0.9	18.8	-0.1	0.0	1.3	
2021/2020	1.0	-0.3	-1.7	-0.4	0.1	0.8	
2022/2021	1.0	0.9	-9.9	0.4	0.2	-0.9	
2023/2022	0.1	0.3	19.0	1.0	0.3	-0.1	
2024/2023	1.5	1.4	-15.8	0.6	0.3	0.5	
2025/2024	0.8	0.8	-7.2	0.5	0.2	0.5	
2026/2025	0.9	0.8	-9.1	0.4	0.2	0.7	

 $Notes: {\it a}\ Includes\ self-employed,\ government-supported\ trainees\ and\ unpaid\ family\ members.\ {\it b}\ Employment\ plus\ ILO\ unemployment.$ 

 $<sup>^{\</sup>rm c}$  Population projections are based on annual rates of growth from 2018–based population projections by the ONS.

		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Current	Taxes on income	484.4	495.8	558.1	554.3	627.1	635.2	664.0	692.7
receipts:	Taxes on expenditure	280.0	143.7	258.9	347.6	375.6	384.9	394.0	406.4
	Other current receipts	65.3	153.7	88.5	67.7	71.4	73.6	75.9	78.8
	Total	829.7	793.1	905.5	969.6	1074.1	1093.7	1133.9	1177.9
	(as a % of GDP)	36.7	37.0	38.0	35.8	37.6	37.1	37.3	37.4
Current	Goods and services	429.3	499.6	515.1	529.1	539.5	555.9	576.6	601.6
expenditure:	Net social benefits paid	241.9	262.9	261.3	286.0	284.5	277.9	282.2	289.5
	Debt interest	52.9	42.0	75.2	97.4	72.0	72.0	72.2	72.4
	Other current expenditure	66.2	182.8	90.1	84.0	89.2	92.0	94.5	97.7
	Total	790.4	987.3	941.7	996.5	985.2	997.7	1025.5	1061.2
	(as a % of GDP)	35.0	46.0	39.5	36.8	34.5	33.9	33.8	33.7
Depreciation		52.4	53.4	55.4	63.7	67.2	69.3	71.5	74.2
Surplus on pub	lic sector current budgeta	-13.1	-247.5	-91.6	-90.7	21.6	26.7	37.0	42.5
(as a % of GDP	)	-0.6	-11.8	-3.9	-3.3	0.8	0.9	1.2	1.3
Gross investme	ent	90.4	113.8	108.6	111.8	123.2	128.6	133.5	138.7
Net investmen	t	38.0	60.4	53.1	48.0	56.0	59.2	62.0	64.5
(as a % of GDP	)	1.7	2.8	2.2	1.8	2.0	2.0	2.0	2.0
Total managed	expenditure	880.8	1101.0	1050.3	1108.3	1108.5	1126.3	1159.0	1199.9
(as a % of GDP	)	39.0	51.3	44.1	40.9	38.8	38.2	38.2	38.1
Public sector n	et borrowing	51.1	307.9	144.8	138.7	34.3	32.6	25.1	22.0
(as a % of GDP	)	2.3	14.4	6.1	5.1	1.2	1.1	0.8	0.7
Public sector n	et debt (% of GDP)	83.9	95.1	92.9	89.8	88.1	86.1	81.6	78.4
GDP deflator a	t market prices (2019=100)	100.7	106.4	106.1	119.3	124.0	126.1	128.3	131.2
Money GDP (£	billion)	2259	2145	2383	2708	2856	2946	3037	3152

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. <sup>a</sup> Public sector current budget surplus is total current receipts less total current expenditure and depreciation.

	Households		Companies		General government		Whole economy		Finance from abroad <sup>a</sup>		Net
	Saving	Investment	Saving	Investment	Saving	Investment	Saving	Investment	Total	Net factor income	national saving
2016	4.5	4.3	8.1	11.1	-0.1	2.4	12.5	17.8	5.3	2.5	-2.1
2017	3.3	4.7	10.3	11.0	1.0	2.5	14.6	18.2	3.6	1.2	-0.2
2018	3.2	4.6	9.6	10.9	1.2	2.5	14.1	18.0	3.9	1.3	-0.8
2019	3.1	4.5	10.9	10.7	1.2	2.7	15.2	17.9	2.7	0.5	0.3
2020	10.1	4.2	12.4	9.4	-8.3	3.0	14.2	16.7	2.5	1.4	-1.9
2021	7.3	4.5	11.9	9.9	-4.2	3.0	14.9	17.5	2.6	0.5	-0.4
2022	3.0	4.6	12.1	12.6	-1.6	3.4	13.5	20.6	7.2	3.3	-1.4
2023	0.7	4.5	8.9	9.9	1.4	3.6	11.0	18.0	7.0	4.8	-3.9
2024	1.5	4.5	7.8	10.3	2.9	3.7	12.2	18.4	6.2	4.2	-2.7
2025	2.7	4.4	7.8	10.4	3.1	3.7	13.5	18.5	5.0	3.7	-1.4
2026	3.5	4.3	7.8	10.5	3.2	3.7	14.5	18.5	4.0	3.2	-0.4

Notes: Saving and investment data are gross of depreciation unless otherwise stated. <sup>a</sup> Negative sign indicates a surplus for the UK.

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

	2020	2021	2022	2023	2024	2025	2026	2027-31
GDP (market prices)	-9.3	7.4	3.5	0.5	1.8	1.3	1.5	1.7
Average earnings	2.6	4.8	6.1	4.7	3.3	2.5	2.8	3.3
GDP deflator (market prices)	5.3	0.1	9.9	6.6	1.7	1.6	2.2	2.6
Consumer Prices Index	0.8	2.6	9.0	6.9	1.9	1.6	2.1	2.3
Per capita GDP	-9.7	6.9	3.3	0.1	1.5	0.9	1.2	1.4
Whole economy productivity <sup>a</sup>	1.3	0.8	-0.9	-0.1	0.5	0.5	0.7	1.2
Labour input <sup>b</sup>	-10.5	6.6	4.5	0.4	1.4	0.8	0.8	0.5
ILO Unemployment rate (%)	4.6	4.5	4.0	4.7	4.0	3.7	3.3	2.9
Current account (% of GDP)	-2.5	-2.6	-7.2	-7.0	-6.2	-5.0	-4.0	-2.8
Total managed expenditure (% of GDP)	51.3	44.1	40.9	38.8	38.2	38.2	38.1	39.0
Public sector net borrowing (% of GDP)	14.4	6.1	5.1	1.2	1.1	0.8	0.7	1.6
Public sector net debt (% GDP)	95.1	92.9	89.8	88.1	86.1	81.6	78.4	71.7
Effective exchange rate (2017=100)	102.1	106.9	105.8	104.3	103.5	102.8	102.1	100.3
Bank Rate (%)	0.2	0.1	1.4	3.1	3.1	3.1	3.1	3.2
10 year interest rates (%)	0.3	0.8	1.9	2.5	2.7	2.9	3.0	3.1

Notes: <sup>a</sup> Per hour. <sup>b</sup> Total hours worked.



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