Office for **Budget Responsibility**

Economic and fiscal outlook

March 2022



Office for Budget Responsibility: Economic and fiscal outlook

Presented to Parliament by the Exchequer Secretary to the Treasury by Command of Her Majesty

March 2022



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Foreword

In this Economic and fiscal outlook (EFO) we set out a central forecast to 2026-27 taking account of recent data and Government policies announced up to and including the March 2022 Spring Statement. The forecasts presented in this document represent our collective view as the three independent members of the OBR's Budget Responsibility Committee (BRC). We take full responsibility for the judgements that underpin them and for the conclusions we have reached.

Our remit requires us to present an economic and fiscal forecast that takes account of all factors that influence it. The implications of the Russian invasion of Ukraine for the forecasts in the EFO are reflected primarily through its effect on energy prices and financial markets. But the invasion is first and foremost a human tragedy and a reminder of the terrible costs of wars that bring immense losses for those caught up in them. Our thoughts, and those of OBR staff, are with those affected.

As always, we have been greatly supported in our work by the staff of the OBR, who have once again demonstrated their flexibility and resilience in a very challenging and fast-moving environment. We are very grateful for their hard work, expertise and professionalism.

We have also drawn heavily on the work and expertise of numerous officials across government in preparing these forecasts, including in HM Treasury, HM Revenue and Customs, the Department for Work and Pensions, the Department for Levelling Up, Housing and Communities, the Department for Education, the Department for Business, Energy & Industrial Strategy, the Ministry of Justice, the Home Office, the Department for Transport, the Department for International Trade, the Oil and Gas Authority, the Office for National Statistics, the UK Debt Management Office, the British Business Bank, the BBC, Homes England, UK Government Investments, the Government Actuary's Department, the Insolvency Service, the Scottish Government, the Scottish Fiscal Commission, the Welsh Government, the Department for Communities and the Department of Finance in Northern Ireland, Transport for London, and various public service pension schemes. We are grateful for their knowledge and patience.

We have also held useful discussions with the Bank of England, the Confederation of British Industry, the National Institute of Economic and Social Research, the Institute for Fiscal Studies, the Resolution Foundation, the Institute for Government, the UK Trade Policy Observatory, and the International Monetary Fund.

Since our October forecast, the Omicron variant emerged, spread rapidly, and then declined. But with hospital admissions rising again in recent weeks in the UK, and in other parts of the world, it remains too early to consider the pandemic as over. Risks of vaccine-escaping variants and of waning vaccine (or infection-conferred) immunity remain, while the longer-term behavioural legacy of the pandemic will also affect economic and fiscal outcomes for many years. In considering these we have again drawn on the expertise of government scientists, epidemiologists and public health experts, including the Chief Medical Officer, the Scientific Pandemic Influenza Group on Modelling

(SPI-M), the UK Health Security Agency, and the Joint Committee on Vaccination and Immunisation. These discussions have been invaluable in helping us to understand the likely future course of the pandemic and to design the vaccine-escaping variant scenario presented in Chapter 4 of this document. As ever, we retain sole responsibility for all the assumptions in the *EFO*.

The publication date for our forecast was announced on 23 December, well in advance of the required ten weeks' notice. For this forecast, the Chancellor again requested additional time between the finalisation of our pre-measures fiscal forecast and the deadline for those policy decisions that would cause movements in our economy forecast. The original timetable anticipated closing the pre-measures economy forecast on 25 February – 19 working days prior to publication of the *EFO* and five more days than the average gap since the OBR was established. This would have required us to finalise market determinants, including gas and oil prices, in the ten working days to 17 February in order to run them through our full suite of economic and fiscal forecasting models. In normal circumstances, we agree with the Treasury that the closure of our pre-measures economy forecast is the final opportunity to incorporate any new data into the forecast, in order to give the Chancellor a stable base on which to take his policy decisions.

In the event, the Russian invasion of Ukraine on 24 February and the international response resulted in dramatic movements in key market determinants, especially energy prices, after the planned closure date of our pre-measures economy forecast. We therefore reopened the forecast to capture market movements in the first week of the invasion, and in particular the movements in gas and oil prices. Our economy forecast is therefore based on financial and energy market prices in the five working days to 2 March, which have been incorporated into our full economy and fiscal forecast models. As well as ensuring that our forecast is as up to date as possible, it also ensures that it is consistent with the Government's policy measures that respond to these price movements.

As a consequence of this decision, the Chancellor no longer had a stable base against which to take his policy decisions. He therefore requested that we provide some guidance on the implications of post-invasion movements in market determinants for the pre-measures economic and fiscal outlook ahead of it being finalised, in order to inform his policy deliberations. The Treasury assisted us in producing an interim 'ready-reckoned' pre-measures forecast round in the week commencing 7 March, to meet the Chancellor's request in a period when OBR staff were fully deployed on the final forecast round itself. We reviewed, endorsed, and transmitted this updated 'ready-reckoned' premeasures economic and fiscal forecast to the Chancellor on 8 March – 11 working days before publishing the EFO. We have used this 'ready-reckoned' forecast as the basis for the pre-measures fiscal aggregates presented in this EFO. And exceptionally we allowed Treasury officials to observe our final pre-measures economy forecast meetings, as is normally the case for fiscal challenge meetings, to facilitate the rapid flow of information between us and the Treasury in these final stages. In the context of these timetable changes, one decision relating to a measure with a direct effect on our economy forecast was altered after our economy forecast had been finalised. However, its direct fiscal implications are captured in our fiscal forecast. If we had been able to incorporate the final measure in our economy forecast, it would not have made a material difference.

The full forecast timetable for this EFO has been as follows:

- The OBR staff prepared an initial economy forecast, drawing on data released since our previous forecast in October 2021 and incorporating our preliminary judgements on the outlook for the economy. This economy forecast was sent to the Chancellor on 21 January.
- Using the economic determinants from this forecast (such as the components of nominal income and spending, unemployment, inflation and interest rates), we commissioned updated forecasts from the relevant government departments for the various tax and spending items that in aggregate determine the position of the public finances. We discussed these in detail with the officials producing them, which allowed us to investigate proposed changes in forecasting methodology and to assess the significance of recent tax and spending outturn data. In many cases the BRC requested changes to methodology and/or the interpretation of recent data. This forecast was sent to the Chancellor on 4 February.
- As the process continued, we identified further key judgements that we would need to generate
 our full economy forecast. Where we thought it would be helpful, we commissioned analysis
 from the relevant teams in the Treasury to inform our views. The BRC then agreed further
 judgements, allowing the production by OBR staff of a second economy forecast, which was
 sent to the Treasury on 10 February.
- This second economy forecast provided the basis for the next round of fiscal forecasts. Discussions with HMRC, DWP and other departments gave us the opportunity to follow up our requests for further analysis, methodological changes and alternative judgements from the previous round. We sent our second fiscal forecast to the Chancellor on 21 February.
- Concurrently, we scrutinised the costing of tax and spending measures announced since the October 2021 forecast. As usual, the BRC requested further information and/or changes to almost all the draft costings prepared by departments. We have certified all but two policy measures in the forecast as reasonable and central. As noted in Annex A, the two uncertified measures were finalised too late for us to scrutinise them fully. In both cases we have used the Treasury's estimate of their fiscal impact and will return to them at our next forecast.
- We then produced a third, and what was originally planned to be final, pre-measures economy forecast, in which we took on the latest data and incorporated judgements embodied in our fiscal forecast. This economy forecast included energy and financial market data based on the average over the ten working days to 17 February and was sent to the Treasury on 25 February. The associated fiscal forecast was sent to the Chancellor on 4 March, at which point we informed him of the need to reopen the pre-measures forecast, given the invasion of Ukraine, and the key judgements we would be changing.
- Alongside the development of the final economy forecast we also made an assessment of the economic and fiscal effects of the emerging policy package. In line with the agreed timetable, on 11 March the Treasury provided the final package of measures that we had deemed via earlier engagement would cause movements in our economy forecast. We sent the final economy forecast which also incorporated the implications of the market movements in the

first week of the invasion – to the Treasury on 15 March and a near-final fiscal forecast on 16 March. All final policy decisions were provided by the Treasury on 17 March and our forecast was then finalised on 18 March.

• The Treasury made a written request, as provided for in the MoU between us, that we provide the Chancellor and an agreed list of his special advisers and officials with a near-final draft of the EFO on 18 March. This allowed the Treasury to prepare the Chancellor's statement. We also provided 24 hours pre-release access to the full and final EFO on 22 March.

During the forecasting period, the BRC held around 40 scrutiny and challenge meetings with officials from other departments, in addition to numerous further meetings at staff level and those with external stakeholders. We have been provided with all the information and analysis that we requested and have come under no pressure from Ministers, advisers or officials to change any of our conclusions as the forecast has progressed. A full log of our substantive contact with Ministers, their offices and special advisers can be found on our website. This includes the list of special advisers and officials that received the near-final draft of the EFO on 18 March.

Our non-executive members, Sir Christopher Kelly and Bronwyn Curtis OBE, provide additional assurance over how we engage with the Treasury and other departments. Since November 2015 that has included reviewing any correspondence that OBR staff feel either breaches the *MoU* requirement that it be confined to factual comments only or could be construed as doing so. That review takes places as soon as practicable after each *EFO* has been published. Any concerns our non-executive members have will be raised with the Treasury's Permanent Secretary or the Treasury Select Committee, if they deem that appropriate.

We would be pleased to receive feedback on any aspect of the content or presentation of our analysis. This can be sent to feedback@obr.uk.

Richard Hughes

Professor David Miles CBE

Andy King

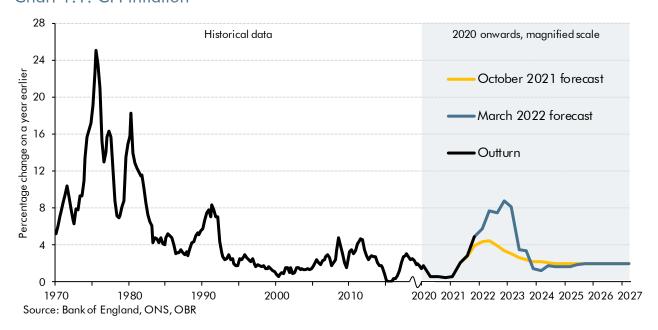
The Budget Responsibility Committee

1 Executive summary

Overview

- Two years since the start of the pandemic, this Economic and fiscal outlook (EFO) is presented against the backdrop of another unfolding global shock. The Russian invasion of Ukraine is foremost a human tragedy and a reminder of the terrible costs of wars and the immense and immeasurable losses for those caught up in them. The conflict also has major repercussions for the global economy, whose recovery from the worst of the pandemic was already being buffeted by Omicron, supply bottlenecks, and rising inflation. A fortnight into the invasion, gas and oil prices peaked over 200 and 50 per cent above their end-2021 levels respectively. Prices have since fallen back but remain well above historical averages.
- 1.2 As a net energy importer with a high degree of dependence on gas and oil to meet its energy needs, higher global energy prices will weigh heavily on a UK economy that has only just recovered its pre-pandemic level. Petrol prices are already up a fifth since our October forecast and household energy bills are set to jump by 54 per cent in April. If wholesale energy prices remain as high as markets expect, energy bills are set to rise around another 40 per cent in October, pushing inflation to a 40-year high of 8.7 per cent in the fourth quarter of 2022 (Chart 1.1). Higher inflation will erode real incomes and consumption, cutting GDP growth this year from 6.0 per cent in our October forecast to 3.8 per cent. With inflation outpacing growth in nominal earnings and net taxes due to rise in April, real livings standards are set to fall by 2.2 per cent in 2022-23 their largest financial year fall on record and not recover their pre-pandemic level until 2024-25.

Chart 1.1: CPI inflation



Executive summary

- 1.3 Despite these economic headwinds, the public finances have continued to recover from the pandemic more quickly than we expected. Tax receipts this year have been revised up by 4 per cent thanks to strong growth in tax paid by higher earners and by companies. And despite higher inflation pushing up debt interest costs, borrowing is set to more than halve from its post-World War II high of £322 billion (15.0 per cent of GDP) in 2020-21 to £128 billion (5.4 per cent of GDP) in 2021-22, £55 billion less than we forecast in October.
- 1.4 Borrowing in 2022-23 is then £16 billion higher than we forecast in October, at £99 billion (3.9 per cent of GDP). That reflects record-high debt interest costs of £83.0 billion, double our October forecast, and near-term rebates and tax cuts that inject £17.6 billion into the economy. The latter offset half the blow to household finances from higher energy and fuel bills and a third of the overall fall in living standards that households would otherwise have faced. Over half the £9 billion in energy costs support is recouped over the subsequent five years, while the 5p fuel duty cut is to be more-than-fully reversed next year. The 'pay later' phase of these measures comes when energy bills are set to fall back.
- 1.5 Before taking account of the policies in this Spring Statement, positive news since October has led us to revise up receipts by £37 billion in 2024-25 the Government's fiscal target year. Higher inflation and interest rates mean nearly two-thirds of that is consumed by higher spending (revised up £23 billion in 2024-25), leaving a net £14 billion (0.5 per cent of GDP) pre-measures borrowing windfall. Student loans reforms that reduce the share of loan balances expected to go unpaid free up a further £5 billion, leaving almost £20 billion of fiscal room for manoeuvre in the target year at this Spring Statement. Cuts to personal taxes costing £10 billion consume just over half of that, with the remainder reducing borrowing. In the process the Chancellor has undone just over a quarter of the overall value of the personal tax rises he announced last year and around a sixth of the overall net tax rises he has announced since becoming Chancellor.
- 1.6 Public sector net debt excluding the Bank of England falls by 1.0 per cent of GDP in 2024-25, a margin of £27.8 billion against the Government's fiscal mandate, £10.3 billion greater than in our October EFO. And the current budget is in surplus by £31.6 billion (1.2 per cent of GDP), up £6.5 billion from October. History suggests these margins would be consistent with a 58 and 66 per cent chance of meeting each fiscal target respectively, broadly in line with the headroom previous Chancellors have given themselves.
- 1.7 But few of these fiscal targets were actually met in the past and there are numerous risks to the outlook at present. Higher energy prices and inflation as a result of a longer war in Ukraine or tougher international sanctions would reduce the Chancellor's headroom by over £4 billion in our illustrative scenario. There could be pressure to: provide further support for households in the event of another large rise in the energy price cap in October; address the 5 per cent fall in the real value of welfare benefits in 2022-23; or cancel next year's fuel duty super-indexation that would raise petrol prices 6 per cent overnight and be the first duty increase in 12 years. In the medium term, a sustained increase in global energy prices could lower potential output for a net energy importer like the UK, damaging fiscal prospects. And while successful vaccines have reduced pandemic-related uncertainties, the recent rise in hospitalisations demonstrate that Covid remains a risk.

Economic outlook

Developments since October

- The Russian invasion of Ukraine, and the international response, pushed already elevated gas and oil prices to their highest levels in more than a decade. Month-ahead gas prices jumped to around £5.40 a therm on 7 March and oil to a 14-year high of around \$130 a barrel on 8 March, following the announcement of US and UK curbs on Russian oil exports, before falling back. When we closed our forecast for commodity prices on 2 March, the monthly peaks in market expectations for future gas and oil prices averaged just over £3 a therm and \$103 per barrel, almost 100 and 45 per cent higher respectively than the peaks in our October forecast. Energy prices have remained volatile since, with gas and oil price expectations over the next six months respectively around 15 per cent below and 5 per cent above the levels assumed in our forecast when we finalised the EFO on 20 March.
- 1.9 This latest jump in global gas and oil prices hits a UK economy that has only just returned to pre-pandemic levels of activity and was already experiencing rising inflation from higher global goods and energy prices and a tightening labour market. Despite being buffeted by the Omicron variant, output regained its pre-pandemic level in January 2022, two years after the start of the pandemic and broadly in line with our October forecast. Buoyant labour demand has helped the unemployment rate to fall to 3.9 per cent in the three months to January, rather than rise above 5 per cent as we expected in October following the end of the furlough scheme. But total employment remains 450,000 below prepandemic levels due to a smaller population and weaker labour market participation, especially among older people. CPI inflation reached 5.5 per cent in January 2022, 1.2 percentage points above our October forecast. In response, the Bank of England has raised Bank Rate three times to a level of 0.75 per cent.

Global outlook and energy prices

- 1.10 We have assumed that the Russian invasion reduces global GDP growth by 0.5 percentage points in 2022. This adds to downside news since October from Omicron and persistent supply bottlenecks, taking our forecast for global growth in 2022 down a full percentage point from 4.9 to 3.9 per cent. But these headwinds are assumed to be temporary, with gas and oil prices falling part of the way back next year and global GDP returning to our October forecast levels by the forecast horizon. But given the unfolding situation in Ukraine, there is unusually high uncertainty around this outlook in both directions.
- 1.11 The UK is a net energy importer, and despite having a relatively low energy intensity of output, we are highly reliant on gas and oil in our energy mix. Gas and oil together supplied 76 per cent of total UK energy consumption in 2019 compared to a European average of 57 per cent. And while we import little of it directly from Russia (6 per cent of our gas and 8 per cent of our oil), we pay global market prices for all of it and so, like all net importers of these commodities, face a deterioration in our terms of trade. Our forecast is based on the average gas and oil future prices over the first week of the Russian invasion between 24 February and 2 March, which imply prices fall back sharply from their current multi-year highs, but remain elevated (Chart 1.2).

0.5

0.0

Oil prices Gas prices 120 3.5 October 2021 forecast **Forecast** Forecast 3.0 100 Pre-invasion expectations 2.5 Pounds per therm Dollars per barrel 80 March 2022 forecast 2.0 60 1.5 40 1.0

20

0

2013 2015 2017 2019

2021

2023

Chart 1.2: Gas and oil prices

Note: We have based our March 2022 forecast on three years (rather than our usual two years) of the futures curve. We then hold gas and oil prices flat in real terms for the remainder of the forecast.

Source: Datastream, OBR

2025 2027

Short-term economic outlook

2015 2017

2019

2021

2023

- 1.12 Higher global energy prices will feed through to higher domestic prices over the course of 2022, with CPI inflation now forecast to peak at close to 9 per cent in the fourth quarter of this year, 4.3 percentage points higher and two quarters later than the peak in our October forecast (Chart 1.1). This would be the highest level of consumer price inflation in around 40 years when the second oil shock pushed inflation into double digits in the late 1970s and early 1980s. Our forecast is conditioned on market expectations of further interest rate rises that take Bank Rate to a peak of 1.9 per cent by the third quarter of 2023, well above the path in our October forecast, which peaked at 0.75 per cent at the end of 2023.
- Rising inflation outpaces nominal earnings growth which, combined with net tax increases starting in April, weigh heavily on living standards in the coming 12 months. Real household disposable incomes per person fall by 2.2 per cent in 2022-23, the largest fall in a single financial year since ONS records began in 1956-57. Government support for household bills announced in February boosts most households' incomes by £350 in 2022-23, offsetting around half the £700 rise in energy bills taking effect in April. This fraction is broadly maintained across 2022-23, with the temporary 5p cut in fuel duty and permanent increase in the National Insurance contributions (NICs) primary threshold announced in this Spring Statement partly offsetting the further £830 increase in the energy price cap that we expect in October. Taking account of both energy and non-energy pressures on household incomes, the policy measures announced since October offset a third of the overall fall in living standards that would otherwise have occurred in the coming 12 months.

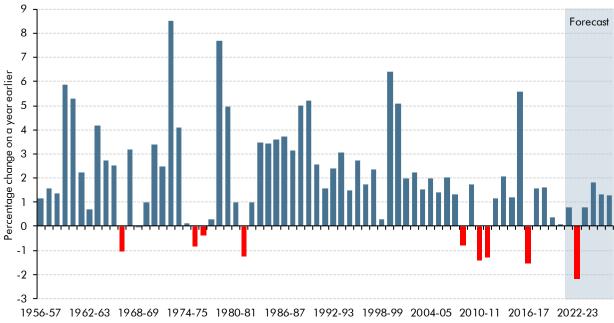


Chart 1.3: Change in real household disposable income per person

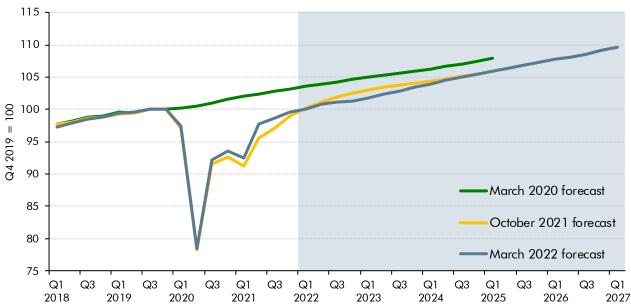
1930-37 1902-03 1908-09 1974-73 1900-01 1900-07 1992-93 1996-99 2004-03 2010-11 2010-17 2022-23 Source: ONS, OBR

1.14 This additional fiscal support boosts growth in 2022-23 by 0.3 percentage points, but the large fall in real disposable incomes weighs on household consumption and real GDP. We now expect real GDP growth of 3.8 per cent in 2022, down 2.2 percentage points from our October forecast. Consumption is given some support in the near term by greater drawdown of savings built up during the pandemic than we have previously assumed. And business investment is expected to grow by more than 10 per cent this year, boosted by the super-deduction on business investment, although we have halved our initial estimate of its peak impact. Net trade subtracts from growth again in 2022, but by less than we assumed in our October forecast, as weaker domestic demand lowers import growth.

Medium-term economic prospects

1.15 Real GDP growth slows further to 1.8 per cent in 2023 as the rebound from pandemic-related restrictions fades, the cost of living squeeze continues, some fiscal support is withdrawn, and monetary policy tightens further. Growth then recovers in 2024 to 2.1 per cent as lower energy prices drag inflation below the 2 per cent target, supporting real incomes. Growth then settles around its potential rate of 1¾ per cent a year from 2025 onwards, while per-capita GDP growth averages just over 1½ per cent a year. The level of real GDP from 2025 is unchanged from our October forecast as we have maintained our assumption that the pandemic has led to economic scarring of 2 per cent of GDP (Chart 1.4). But we have revised up the contribution to scarring of lower labour supply (due to a smaller population and lower labour force participation) from 0.8 to 1.2 percentage points and made an offsetting downward revision to the hit to productivity (see Annex C).

Chart 1.4: Real GDP



Note: Outturn data are consistent with the first estimate of the fourth quarter of 2021.

Source: ONS, OBR

- 1.16 The weak outlook for households' real incomes means that we expect lower consumption over the forecast period than in October especially in the near term although it is cushioned initially by a lower saving rate, which falls to a historically low rate of around 3 per cent. Business investment is expected to grow rapidly this year and to continue to outpace GDP growth. With little evidence to suggest that we revise our assumption about the negative effect of Brexit on UK trade flows, we continue to forecast little growth in export and import volumes and a fall in the trade intensity of the economy over the medium term.
- 1.17 CPI inflation slows to 4.0 per cent in 2023 as global energy and goods prices fall back but domestic inflationary pressures gather pace. Wholesale energy futures prices are consistent with a significant fall in the energy price cap in 2023 and the assumed easing of global supply bottlenecks should result in a normalisation in tradable goods prices. But the increase in nominal wage growth this year, driven by high inflation and a tight labour market, should flow through to the prices of non-tradable goods and services. Inflation then falls below target to 1.5 per cent in 2024 as energy prices fall further and the opening up of a small amount of excess supply lessens domestically generated inflation pressures. Inflation remains slightly below its 2 per cent target in 2025 before returning to 2 per cent in 2026 as falls in energy prices drop out of the annual calculation.
- 1.18 Nominal GDP was revised up materially in the 2021 Blue Book, so the level is around 2 per cent higher than our October forecast in the medium term. But cumulative growth across the forecast period the metric that matters most for our fiscal forecasts as it closely drives tax receipts has been revised only modestly. Nominal GDP growth averages 4.6 per cent a year between 2022 and 2026, down from 4.7 per cent a year in our October forecast.

Labour market

1.19 Labour market developments since our last forecast have been mixed. Unemployment troughs in the first quarter of 2022 at 3.9 per cent, 1.1 percentage points lower (390,000 fewer people), than we expected in October. The combination of record-high vacancies, lower participation, and low redundancies indicates a tighter labour market than we expected in October, meaning unemployment rises only slightly over the forecast period (Chart 1.5). We expect it to settle at its sustainable rate of 4.1 per cent in the medium term, 0.1 percentage points lower than assumed in October. But positive news on unemployment has been offset by negative news on labour market participation. Employment is still down 450,000 on pre-pandemic levels. And we now expect there to be around 400,000 fewer people in the labour force at the forecast horizon than was assumed pre-pandemic. Of this, around 190,000 is due to a smaller population (largely the result of lower net inward migration), and 210,000 is accounted for by a higher inactivity rate among those of working age (largely the result of more early retirements and greater prevalence of long-term sickness).

Chart 1.5: Unemployment rate



1.20 Nominal earnings rise by 5.3 per cent in 2022, 1.4 percentage points faster than forecast in October as a result of tight labour market conditions and high labour market churn in an environment of rising inflation. But wage growth is not expected to fully compensate for higher inflation, much of which is externally driven, meaning that real wages fall in both 2022 and 2023. Thereafter, earnings growth eases a little further, but inflation drops back more rapidly, resulting in a partial recovery in real wages in the final three years of the forecast. On a post-tax basis, real wages stagnate over much of the forecast period.

Key risks to the economy forecast

In the first quarter of this century, the UK economy has been subjected to an extraordinary array of shocks. The financial crisis, Brexit and the pandemic are all expected to have long-term consequences for potential output, a key determinant of medium-term fiscal prospects. The uncertain course of the invasion of Ukraine and international sanctions brings with it the prospect that energy prices could rise further than markets (and therefore our forecasts) currently assume (as explored in a scenario in Chapter 4) driving inflation close to double digits and GDP 0.8 per cent lower in the near term. A more *sustained* increase in whole-economy input costs could do lasting damage to potential output in a net energy importing economy like the UK, compounding the long-term economic legacy of past shocks. With Covid cases once again on the rise in the UK and around the world, the emergence of an vaccine-escaping variant could lead to a further sharp contraction in GDP and an increase in long-run economic scarring (as explored in another Chapter 4 scenario).

Table 1.1: Overview of the economy forecast

Percentage change on a year earlier, unless otherwise stated							
_	Outtu	ırn					
	2020	2021	2022	2023	2024	2025	2026
Output at constant market prices							
Gross domestic product (GDP)	-9.4	7.5	3.8	1.8	2.1	1.8	1.7
GDP per capita	-9.7	7.4	3.5	1.5	1.9	1.6	1.5
GDP levels (Q4 2019=100)	90.4	97.1	100.8	102.6	104.8	106.6	108.4
Nominal GDP	-4.6	7.7	6.7	5.0	4.0	3.7	3.7
Nominal GDP (£ billion)	2,153	2,318	2,474	2,597	2,701	2,801	2,904
Output gap	-0.4	1.3	0.7	-0.3	0.0	0.0	0.0
Expenditure components of real GDP							
Household consumption	-10.5	6.1	5.4	1.0	1.5	1.1	1.2
General government consumption	-5.4	14.5	2.6	1.2	1.4	1.6	2.0
Business investment	-11.4	-0.7	10.6	5.6	3.6	5.4	4.5
General government investment	2.7	11.9	-1.1	7.8	-2.0	1.1	1.7
Net trade ¹	8.0	-1.2	-0.6	-0.1	0.5	0.0	-0.1
Inflation							
CPI	0.9	2.6	7.4	4.0	1.5	1.9	2.0
Labour market							
Employment (million)	32.5	32.4	32.7	32.9	33.1	33.2	33.3
Average earnings	1.8	6.2	5.3	2.8	2.6	2.9	3.2
LFS unemployment (rate, per cent)	4.6	4.5	4.0	4.2	4.1	4.1	4.1
Productivity (output per hour)	1.3	1.2	-0.2	1.0	1.6	1.3	1.3
¹ Contribution to GDP growth.							

Fiscal outlook

Developments since October

1.22 Despite the challenging economic backdrop, borrowing in 2021-22 has been revised down sharply – by £55 billion relative to our October forecast to £128 billion (5.4 per cent of GDP). Tax receipts have been revised up £38 billion (4.4 per cent) this year thanks to strong growth in income tax (especially from those in higher tax brackets) and corporation tax (especially from the financial sector), as well as much higher self-assessment payments over the past two months. Growth in tax receipts has outstripped growth in nominal GDP, pointing to a more tax-rich composition of economic activity and a stronger medium-term revenue outlook. Departmental spending has come in lower than expected again (by £9.4 billion, or 1.9 per cent), as has local authority spending; only debt interest costs are materially higher, as the spike in RPI inflation has hit index-linked debt, adding £13.1 billion to debt interest spending since October. Overall, borrowing falls 60 per cent this year from the post-World War II record of £322 billion (15.0 per cent of GDP) it reached in 2020-21. This partly reflects the withdrawal of pandemic-related fiscal support, which we now estimate to have totalled £310 billion, of which just under half went to public services, a third went to households, and a fifth went to businesses.

Fiscal prospects

1.23 Despite the large undershoot this year, borrowing in 2022-23 is £16.1 billion higher than we forecast in October at £99.1 billion (3.9 per cent of GDP). That reflects the spike in inflation – both directly via debt interest and indirectly via the policies put in place to help households cope with higher prices – outweighing the £30.1 billion pre-measures upward revision to receipts. Debt interest spending jumps to a nominal record high of £83.0 billion, double our October forecast and its highest level as a share of revenue since 1997-98. Policy support for household incomes in 2022-23 totals £17.6 billion, with £8.9 billion coming via support for households' energy bills (£6.0 billion of which is recouped over the subsequent five years), £2.4 billion via a one-year 5p cut in fuel duty, and £6.3 billion via raising the primary NICs threshold from £9,880 to £12,570. These costs are partly offset by student loans reforms that reduce the effective subsidy provided by the state for new loans from over half to just over a third in the long term, but for which the associated fiscal savings are recorded upfront, lowering borrowing by £11.2 billion.

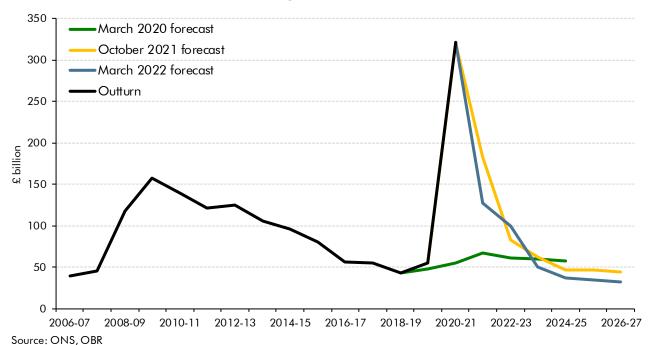


Chart 1.6: Public sector net borrowing

- 1.24 Borrowing continues to fall in subsequent years, reaching a little over 1 per cent of GDP (£31.6 billion) in 2026-27. This would be the smallest budget deficit for 25 years and 0.8 per cent of GDP lower than our pre-pandemic March 2020 forecast for 2024-25 (the final year of that forecast). Between 2023-24 and 2026-27, borrowing is around ½ per cent of GDP (£11 billion) below our October forecast. Focusing on changes in the level of borrowing in the fiscal target year of 2024-25 since that forecast, Chart 1.7 shows:
 - Forecast changes have given the Chancellor a fiscal windfall of almost £15 billion in 2024-25. This reflects a £37 billion boost to receipts (largely from more tax-rich economic activity than we assumed in October), which is only partially offset by a £23 billion upward revision to spending (primarily due to higher interest rates adding to debt interest spending and higher inflation adding to welfare spending).
 - The Chancellor has also freed up £5 billion in terms of borrowing (although not in terms of debt) from the **student loans reforms**.¹
 - He has used around half of this additional £20 billion of fiscal room for manoeuvre to finance two personal tax cuts raising the primary NICs threshold to align with the income tax personal allowance from July 2022 and cutting the basic rate of income tax from 20 to 19 per cent from April 2024 which together cost £10 billion in 2024-25.
 - After factoring in other modest policy-related effects, this leaves £10 billion to reduce borrowing.

¹ Student loans affect borrowing and debt in different ways. The reforms reduce the proportion of cash outlays that are recorded upfront in accrued borrowing much more than they affect the overall cash outlays that matter for debt. See Box A.1 in Annex A.

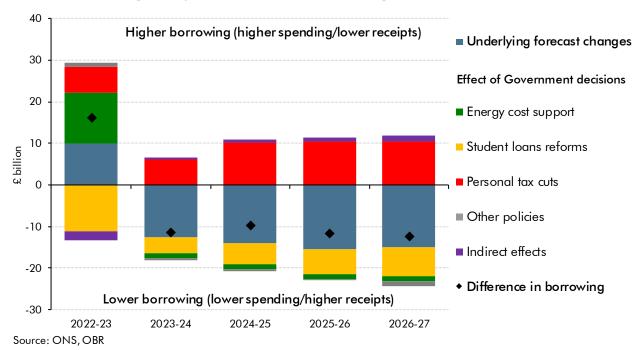


Chart 1.7: Changes in public sector net borrowing since our October forecast

Table 1.2: Changes to public sector net borrowing

	£ billion						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	54.8	66.6	61.5	60.2	57.9		
October 2021 forecast	319.9	183.0	83.0	61.6	46.3	46.4	44.0
March 2022 forecast	321.9	127.8	99.1	50.2	36.5	34.8	31.6
Difference since March 2020	267.1	61.2	37.7	-10.0	-21.4		
of which:							
Underlying differences ¹	97.1	13.5	31.7	20.4	27.1		
Direct effect of Government decisions ²	220.6	75.4	18.9	-20.9	-43.5		
Indirect effect of Government decisions	-50.6	-27.7	-12.9	-9.4	-5.0		
Difference since October 2021	2.0	-55.2	16.1	-11.4	-9.8	-11.5	-12.4
of which:							
Underlying differences ¹		-50.9	10.0	-12.5	-14.1	-15.4	-15.0
Direct effect of Government decisions		-4.2	8.3	0.6	3.6	2.9	1.2
Indirect effect of Government decisions		0.0	-2.1	0.5	0.7	1.0	1.3

Note: This table uses the convention that a negative figure means a reduction in PSNB i.e. an increase in receipts or a reduction in spending will have a negative effect on PSNB.

1.25 Net tax cuts announced in this Spring Statement offset around a sixth of the net tax rises introduced by this Chancellor since he took over the role in February 2020, and just over a quarter of the personal tax rises he announced last year (the freezing of the income tax personal allowance and higher-rate threshold and new health and social care levy). Those net tax rises, plus the more tax-rich composition of economic activity that has been factored into this forecast, raise the tax burden from the 33.0 per cent of GDP recorded in 2019-20

15

¹ Includes classification changes.

² The cost of policy decisions announced up to and including at October 2021 Budget and Spending Review has been adjusted to include signficant updates to estimates via the usual recosting process.

to 36.3 per cent of GDP in 2026-27 – its highest level since the late 1940s.² This 3.3 per cent of GDP increase in the tax burden in the space of seven years reflects (Chart 1.8):

- Plans this Chancellor inherited in March 2020 and underlying forecast changes, including higher effective tax rates observed this year and largely carried through to the rest of the period, which together raise the tax burden by 1.4 per cent of GDP.
- Previously announced net tax rises that add a further 2.2 per cent of GDP to the tax burden. These include the increase in the main rate of corporation tax to 25 per cent from April 2023, the income tax personal allowance and higher-rate threshold freezes, and the introduction of the new health and social care levy. These are partly offset by the cost of the customary annual fuel duty freezes.
- Tax cuts announced in this Spring Statement that lower the tax burden by 0.4 per cent of GDP. The personal tax cuts lower the tax take by £11 billion in 2026-27. Unlike previous freezes, the temporary 5p cut to fuel duty does not affect the tax burden in the medium term because it is slated to be reversed after 12 months, with RPI indexation on top implying an 8p increase next year although the past decade of fuel duty freezes highlights a risk that that will not happen.

4.5 Policy changes ■ Factors increasing tax/GDP 4.0 +0.2-0.2 ■ Factors decreasing tax/GDP +0.6-0.2 +3.3 3.5 +0.63.0 Per cent of GDP 2.5 +0.9 2.0 +0.61.5 1.0 +0.80.5 0.0 Inherited tax Underlying Onshore CT Income tax Health and Other Fuel duty Income tax: NICs: Total rise system rate rises threshold social care 1p basic increase in forecast measures freeze

levv

rate cut

thresholds

Chart 1.8: The rise in the tax-to-GDP ratio between 2019-20 and 2026-27

Note: This reflects the National Accounts measure of taxes.

chanaes

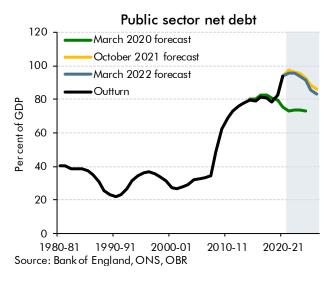
Source: OBR

freezes

² This refers to the National Accounts measure of taxes and National Insurance contributions.

- 1.26 Public spending is on a declining path as a share of GDP throughout the forecast period, though it settles at 41.1 per cent of GDP in 2026-27, 2.1 per cent of GDP higher than in 2019-20 and the highest sustained level since the late 1970s. Relative to our October forecast, it has been revised up sharply in 2022-23 (by £41 billion) and by material amounts thereafter (£17 billion a year on average). This largely reflects inflation-driven revisions to welfare spending (via the uprating of awards) and to debt interest spending, which is also affected by higher interest rates. Indeed, the effect of higher RPI inflation on debt interest explains all the addition to public spending in 2022-23, with debt interest hitting a record £83 billion in nominal terms (and a 36-year high of 3.3 per cent of GDP). Comparatively small net spending reductions in the Spring Statement offset an average of £5.4 billion a year of the upward revisions in our pre-measures forecast from 2023-24.
- 1.27 Lower cumulative borrowing across the forecast means that headline public sector net debt (including the Bank of England) peaks as a share of GDP in 2021-22, before falling to 83.1 per cent of GDP by 2026-27. Debt has been revised down from our October forecast in all years, by 2.7 per cent of GDP this year and by larger amounts thereafter, rising to 4.8 per cent of GDP in 2026-27 (left panel of Chart 1.9). Even so, the debt-to-GDP ratio in 2024-25 is 16 percentage points higher than in our pre-pandemic March 2020 forecast. But while debt has been revised down, the higher paths for RPI inflation in the near term and for interest rates throughout the forecast have raised the cost of servicing the debt (right panel). Indeed, the record-high accrued spending on index-linked debt next year takes the debt-interest-to-revenue ratio to a 25-year high of 7.6 per cent, and while it falls back to a historically low average of 3.4 per cent across the final three years of the forecast, that remains 0.7 percentage points higher than in our October forecast.

Chart 1.9: Public sector net debt and debt servicing costs



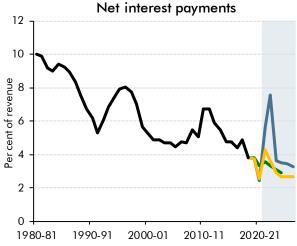


Table 1.3: Overview of the fiscal forecast

Per cent of GDP, unless otherwise stated							
	Outturn Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Revenue and spending							
Public sector current receipts	37.0	38.0	39.3	40.1	40.0	40.0	40.1
Total managed expenditure	52.1	43.4	43.2	42.0	41.3	41.2	41.1
Deficit: Current supplementary targets	and previo	ous fiscal ı	nandate i	measures			
Current budget deficit	11.7	3.8	1.7	-0.8	-1.2	-1.3	-1.4
Public sector net investment	3.4	1.6	2.2	2.7	2.5	2.5	2.5
Public sector net borrowing	15.0	5.4	3.9	1.9	1.3	1.2	1.1
Cyclically adjusted net borrowing	14.9	6.1	4.4	1.9	1.3	1.3	1.1
Debt: Current fiscal mandate and previ	ous suppl	ementary	target me	easure			
Public sector net debt ex BoE	83.9	82.5	83.5	82.9	81.9	80.9	79.8
Public sector net debt	94.0	95.6	95.5	94.1	91.2	85.8	83.1
				£ billion			
Revenue and spending							
Public sector current receipts	793.0	899.5	987.5	1,050	1,090	1,131	1,175
Total managed expenditure	1,115	1,027	1,087	1,100	1,127	1,166	1,206
Deficit: Current supplementary targets	and previo	ous fiscal ı	nandate i	measures			
Current budget deficit	250.2	89.5	42.7	-21.9	-31.6	-36.2	-40.6
Public sector net investment	71.8	38.3	56.4	72.0	68.1	71.0	72.2
Public sector net borrowing	321.9	127.8	99.1	50.2	36.5	34.8	31.6
Cyclically adjusted net borrowing	318.6	143.7	109.9	48.6	35.6	35.3	31.7
Debt: Current fiscal mandate and previ	ous suppl	ementary	target me	easure			
Public sector net debt ex BoE	1,905	2,011	2,145	2,218	2,274	2,329	2,382
Public sector net debt	2,134	2,330	2,453	2,516	2,533	2,469	2,480

Performance against the Government's fiscal targets

- 1.28 In our central forecast, the Government's fiscal mandate and all three supplementary targets are met. The rolling three-year-ahead targets for falling debt and the current balance are also each met a year early in 2023-24. The improved fiscal outlook means the Government has a little more headroom against these targets than we predicted in October:
 - The fiscal mandate to have **public sector net debt (excluding the Bank of England)** as a share of GDP falling by the third year of the rolling forecast period (currently 2024-25) is met by a margin of 1.0 per cent of GDP (£27.8 billion), a 0.4 per cent of GDP (£10.3 billion) improvement relative to our October forecast.
 - The supplementary target to balance the **current budget** by the third year of the rolling forecast period is met by a margin of 1.2 per cent of GDP (£31.6 billion), a 0.2 per cent of GDP (£6.5 billion) improvement relative to October.
 - The cap requiring **public sector net investment** not to exceed 3 per cent of GDP on average over the rolling five-year forecast period is met by a margin of 0.5 per cent of GDP (£13.8 billion), a 0.3 per cent of GDP (£6.5 billion) increase from October. This

- reflects the accounting treatment of long-term fiscal savings from student loans reforms rather than any reductions in department capital spending plans.
- The 'welfare cap', which requires that a subset of **expenditure on welfare** is contained within a predetermined cap in 2024-25 set by the Treasury, is met by £5.3 billion, a £2.6 billion improvement relative to October. This might seem surprising when spending subject to the cap has been revised up by £3.2 billion in 2024-25 relative to our October forecast, but that is because the Treasury stipulates that an 'inflation adjustment' should in effect raise or lower the welfare cap to reflect the consequences of inflation surprises relative to forecast for the uprating of benefits subject to the cap.

Table 1.4: Performance against the Government's fiscal targets

		Per cent of	GDP	£ billio	n	
		Forecast	Margin	Forecast	Margin	
Year-on-year change in public sector n	et debt exclu	ding the Bank	of England in	2024-25		
March 2020 forecast		-0.2	0.2		5.7	
October 2021 forecast	Met	-0.6	0.6		17.5	
March 2022 pre-measures forecast	Met	-1.3	1.3		34.9	
March 2022 forecast	Met	-1.0	1.0		27.8	
Current budget surplus in 2024-25						
March 2020 forecast		8.0	0.8	21.2	21.2	
October 2021 forecast	Met	0.9	0.9	25.1	25.1	
March 2022 pre-measures forecast	Met	1.5	1.5	41.3	41.3	
March 2022 forecast	Met	1.2	1.2	31.6	31.6	
Public sector net investment average ov	er the five-y	ear forecast				
March 2020 forecast		2.9	0.1		2.7	
October 2021 forecast	Met	2.7	0.3		7.3	
March 2022 pre-measures forecast	Met	2.7	0.3		8.8	
March 2022 forecast	Met	2.5	0.5		13.8	
Welfare cap: specified welfare spending in 2024-25						
October 2021 forecast	Met			138.3	2.8	
March 2022 forecast	Met			137.4	5.3	

- 1.29 These margins are consistent with a 58 and 66 per cent chance of meeting the debt falling and current balance targets, respectively. They are broadly in line with the headroom retained by previous Chancellors but could be wiped out by relatively small changes to the economic outlook, including a 1.3 percentage point shortfall in GDP growth in 2024-25 or a 1.3 percentage point increase in the effective interest rate in 2024-25.
- 1.30 More broadly, the modest improvement in headroom needs to be set against the elevated risks to the economic and fiscal outlook, with the Russian invasion of Ukraine the latest in a series of global shocks in the first quarter of this century. Greater disruption to energy markets from the war in Ukraine, widening of the conflict, or further tightening of international sanctions could mean energy prices and inflation remain higher for longer. Our energy markets downside scenario based on the highest market prices over the past three weeks but with prices still dropping back sharply next year reduces fiscal target headrooms by between £4 billion and £7 billion in 2024-25. And with infections rising at

Executive summary

home and abroad, our Covid downside scenario suggests the emergence of a vaccine-escaping Covid variant next winter could trigger another $3\frac{1}{2}$ per cent fall in real output at its most severe point and with it demands for further fiscal support.

The more inflationary environment creates risks in specific policy areas. Despite the £9 1.31 billion in fiscal support for household energy bills delivered in the Spring Statement, pressure for more could build if the energy price cap in October does rise by the roughly 40 per cent assumed in our central forecast. Similarly, having frozen fuel duty in cash terms for the previous 12 years, the Government's plans for an RPI+5p super-indexation of fuel duty next year, which adds £3.6 billion to receipts but would raise petrol pump prices by 6 per cent overnight, are ambitious. In the welfare system, lags in CPI uprating of benefits mean they fall by almost 5 per cent in real terms in 2022-23, reducing their real value by £12 billion, and take up to 18 months to catch up fully with higher inflation. Higher inflation has also eroded the real value of the departmental budgets set in cash terms in October's Spending Review by between £5 billion and £17 billion, while many departments are still coping with pandemic-related backlogs. And these policy and delivery pressures must all be managed in a context of heightened sensitivity of government borrowing costs to higher inflation and interest rates – as illustrated by the doubling of debt interest costs in 2022-23 from our October forecast, and the £9 billion a year upward revisions in interest costs thereafter.

2 Economic outlook

Introduction

The economic shock from Russia's invasion of Ukraine hit a UK economy whose recovery was already being slowed by the Omicron variant and persistent global supply bottlenecks, and which was experiencing a sharp rise in inflation. The invasion and international response prompted a sharp rise, and increased volatility, in global gas and oil prices. The UK relies heavily on gas and oil to meet its energy needs, so the large movements in energy prices have important consequences for our economic outlook. The economy forecast described in this chapter is conditioned on market participants' expectations for gas and oil prices averaged over the first five working days of the invasion (24 February to 2 March). These imply significantly higher prices in the short term than pre-invasion and even more so relative to our October forecast. They also imply gas and oil prices fall back in 2023 but settle higher in the medium term than in our October forecast. However, there has been significant volatility in energy and financial markets since 2 March, so in Chapter 4 we assess the impact of higher energy prices than in our central forecast.

2.2 This chapter describes:

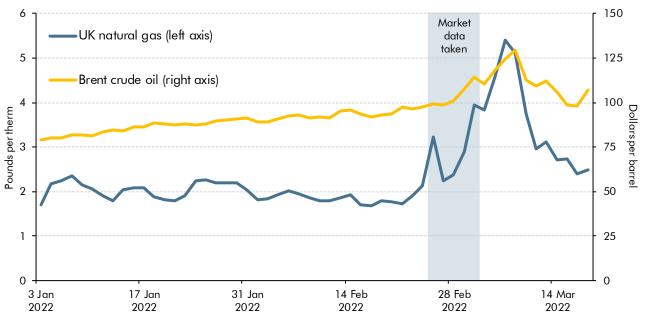
- the major developments since our previous forecast (from paragraph 2.3);
- our assumptions relating to commodity prices, the global economy, asset prices, fiscal and monetary policy, and the Covid pandemic (from paragraph 2.10);
- the prospects for **inflation** (from paragraph 2.22);
- the outlook for **real GDP**, **potential output and the output gap** (from paragraph 2.28);
- the outlook for the labour market (from paragraph 2.40);
- our forecast for household incomes and consumption, the other expenditure components of GDP and for the property market (from paragraph 2.49);
- the path for **nominal GDP** (from paragraph 2.67) and **sectoral balances** (from paragraph 2.70); and
- how our economy forecast compares with a range of recent **external forecasts** (from paragraph 2.71).

Developments since our previous forecast

Global developments

2.3 The Russian invasion of Ukraine and the international response pushed already-elevated global gas and oil prices to their highest levels in more than a decade. European gas prices had already begun to rise late last year due to lower Russian exports, low gas reserves in EU countries, an unusually low supply of wind power over the summer, a colder than usual winter in Europe (though not in the UK), and rising geopolitical tensions. UK gas prices averaged £2.18 a therm in the fourth quarter of 2021 (46 per cent higher than our October forecast), before falling back to around £1.71 a therm in January, still 4.4 times higher than the pre-pandemic average from 2019. Oil prices were also already 12 per cent above our October forecast in the fourth quarter of 2021. The Russian invasion on 24 February sent gas prices to an all-time (close of day) high of £5.40 a therm on 7 March and oil to a 14-year high of around \$130 a barrel on 8 March before falling back (Chart 2.1). The invasion also led to surging prices for other commodities, for example wheat prices reached record highs in March while the price of nickel quadrupled in a week.

Chart 2.1: One-month futures prices for gas and oil



Note: Daily ICE UK natural gas and Brent crude oil 1-month futures prices from 3 January 2022 to 17 March 2022. Source: Datastream

2.4 Soaring energy prices, the rebound in demand from the easing of pandemic-related restrictions, and persistent supply bottlenecks for goods (discussed in Box 2.1) have fuelled higher inflation and weighed on output across advanced economies. In February, annual US inflation rose to a 40-year high of 7.9 per cent and euro area inflation reached a record high of 5.9 per cent. In both regions, energy prices have pushed inflation up, but core inflation is much higher in the US than in the euro area. High energy prices and tight domestic labour markets are expected to keep inflation high this year. In addition, port congestion, lengthening delivery times, and increasing input and transportation costs, have

reduced output growth, although there are signs that some of these effects may have peaked towards the end of 2021. Despite these challenges, global growth in 2021 was in line with our October forecast and the level of global GDP back at its pre-pandemic level.

Box 2.1: The impact of bottlenecks in global product markets

'Bottlenecks' has become a catch-all term to describe the temporary imbalance between supply and demand that has hampered the global economic recovery from the pandemic and fuelled inflation across advanced economies. These imbalances have appeared in many markets, including energy and labour, but are most evident in global product markets. Until the Russian invasion of Ukraine, product market bottlenecks arose primarily as a result of the resurgence in demand in the wake of the pandemic, especially for durable goods in the US (Chart A, top-left panel). Demand for these goods, which are more energy, material, and transport-intensive than services, outpaced the capacity for global supply chains to respond. The IMF estimates that this mismatch between global demand and supply reduced world GDP growth by between 0.5 and 1.0 percentage points in 2021.^a

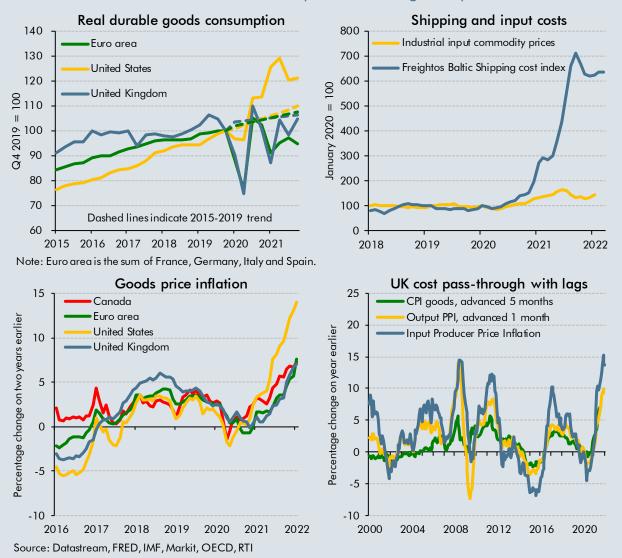
Supply has responded only gradually to this heightened demand, with the response being hampered by Omicron outbreaks in key ports and factories in Asia. Global semiconductor sales were nearly 40 per cent above 2019 levels by the third quarter of 2021,^b but, partly due to increased demand from other sectors, the supply to car manufacturers remained constrained, contributing to car production being 15 to 65 per cent below 2019 levels across major manufacturers.^c Global ports handled 7 per cent more freight in January 2022 compared to December 2019.^d But this supply response has not been quick enough to avoid sharp rises in supplier delivery times, port congestion, and shortages in key inputs. In early March 2022 it took 110 days to ship freight from China to Europe, up from just over 55 days in 2019.^e

The global mismatch between demand and supply has fuelled increases in the prices of the commodities, manufactured inputs, and services required to produce and then deliver goods to consumers. Since January 2020 a broad index of the price of commodities used for industrial inputs has risen by 50 per cent (Chart A, top-right panel), while global shipping costs have risen over six-fold. These higher input and transportation costs have led to increases in the price of consumer goods in advanced economies (Chart A, bottom-left panel). Goods price rises have been greatest in the US where demand has been the strongest, with prices up 14 per cent compared to two years ago in January 2022, while goods price inflation has so far been lower, but still rising, in the UK and other advanced economies.

Abstracting from the latest supply disruptions associated with Russia's invasion of Ukraine, the persistence of global goods bottlenecks will depend both on how much longer elevated demand persists and how much longer it will take for additional supply to come on stream. Growth in demand for goods is likely to slow as higher inflation squeezes real incomes, durables stocks are replaced, and demand shifts back to services as Covid restrictions and voluntary social distancing continue to ease. In the US, real spending on all goods and durable goods fell by around 4 and 7 per cent respectively between October and December 2021, before rising again in January. This should allow producers and logistics networks to begin to clear backlogs, though retailers' desire to rebuild inventories will support goods demand in the near term. On

the supply side, additional manufacturing and transport capacity is also expected to come on stream with stainless steel production forecast to reach an all-time high in 2022; the number of new containerships on order has almost tripled and these are largely scheduled for delivery in 2023 and 2024. Surveys of industry insiders suggest bottlenecks will clear in the second half of 2022, spilling into 2023, though further Omicron outbreaks and shutdowns in China present a risk to the outlook. But it is clear that the supply response will be disrupted further by Russia's invasion of Ukraine, which has already forced the redirection of some air and sea freight, and will disrupt the supply of metals such as palladium (important for semiconductors) and nickel (used in producing stainless steel).⁹

Chart A: Global and UK increases in input costs and goods prices



Higher global goods prices can be expected to feed into UK output and consumer prices with a lag. Chart A, bottom-right panel, shows that changes in the price of inputs to manufacturing are passed through to output prices and then consumer goods prices partially and with lags of around one and five months respectively. This means the domestic inflationary effects of supply bottlenecks have yet to be fully felt and can be expected to linger for some time. We reflect this in

our inflation outlook, with inflation in tradable goods remaining elevated until 2023, when it starts to fall sharply, reflecting some normalisation in the recent very high levels of input prices. There is a risk of second-round effects, where high inflation, driven by rising goods prices, leads to much higher wage demands in a tight labour market. We discuss this from paragraph 2.22.

UK developments

Inflation and monetary policy

2.5 The jump in energy prices following the Russian invasion of Ukraine has hit an economy that was already experiencing rising prices, with CPI inflation reaching 5.5 per cent in January 2022, 1.2 percentage points above our October forecast. Higher inflation has largely been driven by global energy and tradable goods prices; utilities, fuels and other tradables accounted for 1.1 percentage points of this upside surprise compared to our October forecast (Table 2.1). The recent rise in wholesale energy prices will drive inflation higher in April, when the Ofgem price cap rises by 54 per cent. The Bank of England has responded to rising inflationary pressures by increasing its policy rate three times since October from 0.1 per cent to 0.75 per cent (so by 17 March market expectations for Bank Rate were around ½ a percentage point above the level assumed in October) and starting 'quantitative tightening' of its balance sheet by no longer reinvesting the proceeds of gilt redemptions into new gilt purchases.

Table 2.1: January CPI inflation outturn versus October forecast

	Per	Percentage point contribution to annual CPI inflation								
	Food, beverages			Other	Other non-					
	and tobacco	Utilities	Fuels	tradables	tradables	Total				
January 2022 outturn	0.6	8.0	8.0	2.1	1.2	5.5				
October 2021 forecast	0.5	0.7	0.3	1.6	1.2	4.2				
Difference	0.2	0.1	0.5	0.5	0.0	1.2				

The pandemic

2.6 Compounding the effects of rising inflation, the UK's economic recovery was buffeted by the large wave of Covid infections caused by the rapid spread of the Omicron variant in December. Our October 2021 Economic and fiscal outlook (EFO) had assumed that a seasonal rise in cases over the winter would lead to either a modest tightening of public health restrictions or increased voluntary social distancing, but not a large wave of infections. The economic impact of Omicron was therefore slightly worse than we allowed for in October (see paragraph 2.28). Reported cases peaked around three times higher than the previous winter, but hospitalisations and deaths remained well below previous

^a IMF, World Economic Outlook Update, January 2022.

^b BIS, Bottlenecks, labour markets and inflation in the wake of the pandemic, December 2021.

^c OECD, Economic Outlook: Volume 2021 Issue 2, December 2021.

^d ISL, Container index, December 2021.

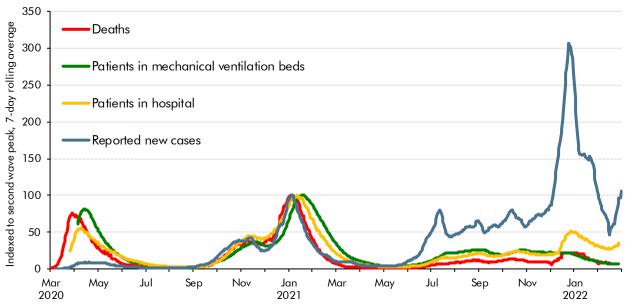
^e Flexport, Ocean Timeliness Indicator, 2022.

^fIMF, Supply Bottlenecks: Where, Why, How Much, and What Next?, February 2022.

⁹ Reuters, U.S. follows Canada, Europe on Russian aircraft ban, March 2022.

- waves thanks to the milder Omicron variant,¹ widespread vaccine- and infection-acquired protection, and more effective treatments (Chart 2.2).
- 2.7 The Government's 'Plan B' public health restrictions were introduced on 8 December,² then fully removed on 27 January, with all remaining domestic legal restrictions dropped on 24 February.³ More important for the level of economic activity was the significant increase in voluntary social distancing over the Christmas period when the average number of contacts dropped to the same level as Christmas 2020.⁴ Large numbers of infections raised staff absences, which peaked in the two weeks to 9 January when 2.9 per cent of staff were absent, three times higher than in the final two weeks of November.⁵ The impact on both consumption and labour supply eased significantly over January and February as reported cases and hospitalisations fell. However, cases and hospitalisations began rising again in March, underscoring the continued downside risk posed by the pandemic especially were a new and more virulent variant to emerge (as explored in Chapter 4).

Chart 2.2: Covid cases, hospitalisations, mechanical ventilation and deaths



Note: Second wave peak is the maximum between 1 December 2020 and 31 March 2021. Patients in hospital and mechanical ventilation beds advanced by 3 days, and deaths by 15 days. Reported new cases includes reinfections from 31 January 2022. Source: GOV.UK

Real GDP and the labour market

2.8 Despite these headwinds, real GDP recovered its pre-pandemic level in January 2022, broadly as expected in our October forecast. In our October *EFO*, we explained that we thought the news which emerged after we closed the forecast (including higher gas prices,

¹ For example, see Scientific Advisory Group for Emergencies, One-hundred-and-second SAGE meeting on COVID-19, January 2022.

² These included the acceleration of the vaccine booster programme, guidance to work from home if possible, compulsory face masks in most indoor public venues, and a requirement to use the NHS Covid Pass for entry into settings where large crowds gather.

³ Free mass symptomatic and asymptomatic testing will end from 1 April 2022.

⁴ Jarvis, C., et al., Descriptive analysis of social contacts in the UK during Christmas period in 2020 and 2021 from the CoMix social contact survey, February 2022.

⁵ Share of staff absent on sick leave or not working due to Covid symptoms, self-isolation or quarantine, ONS, Business insights and impact on the UK economy.

increased evidence of supply bottlenecks, and shortages in key occupations) would weigh on GDP growth. But we also judged that this news would offset the impact of the upward revisions to the historical path of GDP in the annual Blue Book, to leave the level of GDP broadly unchanged from our forecast by around the turn of the year. That judgement has been largely borne out, with monthly output just 0.3 per cent below our previous forecast in November. The unexpected adverse impact of the Omicron variant in December followed by the 0.8 per cent rebound in January left the level of monthly real GDP in January 0.5 per cent below our previous forecast, but still 0.4 per cent above its pre-pandemic peak from January 2020.⁶

2.9 The performance of the labour market has been mixed following the closure of the coronavirus job retention scheme (CJRS) in September with lower unemployment countered by weakness in participation. The unemployment rate fell from 4.3 per cent in the third quarter to 4.1 per cent in the final quarter of 2021, rather than rising to 5.2 per cent as we expected in October. Labour demand has remained strong, with vacancies reaching a record level of over 1.3 million in the three months to February 2021. However, one of the factors keeping the unemployment rate low has been the large rise in economic inactivity since the start of the pandemic (up 563,000 in the latest data). This has left the employment rate significantly below pre-pandemic levels, falling from 61.7 per cent in the final quarter of 2019 to 60.6 per cent in the final quarter of 2021 (equivalent to 448,000 people). Strong labour demand coupled with lower overall employment has begun to fuel upward pressure on underlying annual wage growth, which have risen 4 per cent since mid-2021, up from an average of 1.7 per cent in 2020.

Key economy forecast assumptions

2.10 Against the background of these developments since our October *EFO*, this section sets out the key assumptions on which our current forecast is conditioned. The assumptions made about the evolution of energy prices over the next few years are particularly important for the profile of our forecast, and the path that those prices take is also highly uncertain. Our assumptions for fiscal policy are – as mandated by Parliament – based on the Government's current stated policies on taxes, public spending, and financial transactions. We also condition our central forecast on a set of assumptions about the future course of the pandemic and in Chapter 4 consider an alternative, less benign, scenario in which a vaccine-escaping variant emerges.

Commodity prices

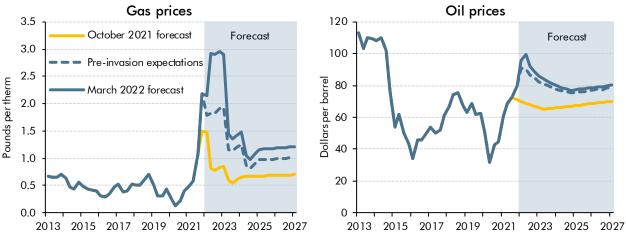
2.11 For both gas and oil, our forecast is conditioned on an average futures curve taken over the first five working days of the invasion from 24 February to 2 March. Based on that, quarterly gas prices peak at just under £3 a therm and oil prices peak at \$100 per barrel, 100 and 40 per cent above their respective peaks in our October forecast. We have based our

⁶ There have been large upward revisions to historical growth rates since our October forecast. These left the level of headline GDP in the fourth quarter of 2021 0.7 per cent above our October forecast, but 0.4 per cent below its pre-pandemic level.

⁷ 'Underlying' annual wage growth as estimated in Bank of England, Monetary Policy Report, February 2022.

forecast on three years (rather than our usual two years) of the futures curve, since movements in gas price futures three years ahead are unusually significant. We then hold wholesale gas and oil prices flat in real terms (as at extended horizons the futures curve is not the best predictor of prices⁸). Since the Russian invasion, gas and oil prices have been very volatile, and have at times been much higher than the levels assumed in our forecast. In Chapter 4, we therefore assess the economic and fiscal implications of higher energy prices than in our central forecast. These energy price movements are the main channel through which the war in Ukraine has affected our forecast, as detailed in Box 2.2.

Chart 2.3: Commodity prices



Note: Pre-invasion expectations conditioned on the futures curve averaged over the 10 working days to 17 February.

Source: Datastream, OBR

Box 2.2: How does the Russian invasion of Ukraine affect the UK economy?

Where does the UK get its energy from?

The UK does not have significant direct trade links with either Russia or Ukraine, so our economy's most direct exposure to Russia's invasion of Ukraine is via its impact on the global price of energy. The UK's total energy demand fell by 22 per cent between 2000 and 2019, reflecting both a shift away from more energy-intensive industries and improvements in economy-wide energy efficiency. That has brought about a significant, 43 per cent, reduction in the overall energy intensity of UK output over the same period (and means that UK output is now almost 70 per cent less energy intensive than during the global energy crises of the 1970s). But declining North Sea gas and oil output means the UK has, over that same period, become more dependent on other countries to meet our energy needs, with the share of net imports in total demand rising from minus 17 per cent to plus 35 per cent since 2000 (Chart B, top-left panel). Despite the share of renewable energy increasing 11-fold over this period, the share of gas and oil in energy consumption has remained reasonably stable at 73 per cent owing to declining coal and nuclear power (Chart B, top-right panel).

⁸ Reichsfeld, D., and S. Roache, IMF Working Paper: Do Commodity Futures Help Forecast Spot Prices?, November 2011.

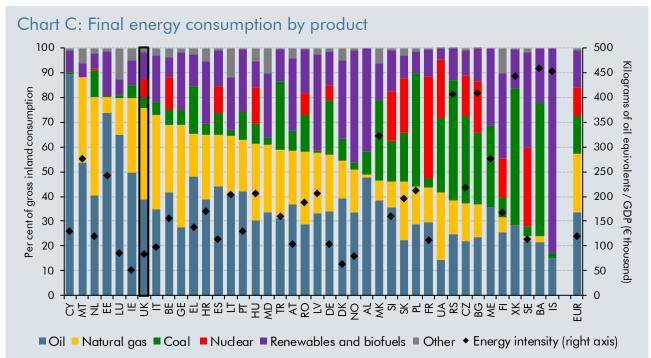
With regard to the source of our energy imports, Russia accounted for only 6 per cent of our gas imports and 8 per cent of our oil imports in 2019, with Norway and the US together accounting for 64 per cent and 69 per cent respectively (Chart B, bottom-left panel). But Russia is a major producer in global energy markets, accounting for 17 per cent of gas and 12 per cent of oil production globally in 2019 (Chart B, bottom-right panel). And both the UK's domestic and foreign supplies of oil and gas are purchased at market prices which, as described elsewhere in this chapter, have risen sharply following the Russian invasion and international response.

UK net energy demand UK energy consumption by source 600 200 325 Total demand 300 Tonnes of oil equivalents / GDP (£ million) Energy intensity (right axis) ■ Nuclear Renewable 275 Million tonnes of oil equivalents ■ Exports ■ Production ■ Other Million tonnes of oil equivalents Natural gas ■ Petroleum products 250 400 150 225 200 175 200 150 125 100 0 75 50 25 -200 0 2000 2004 2008 2012 2016 2020 2004 2008 2012 UK imports by country Global share of oil and gas production 100 100 Rest of Europe Other cent of world production in 2020 Per cent of total imports in 2019 S. & Cent. America 75 Algeria 75 Africa Qatar 50 50 Asia & Pacific USA ■ North America 25 Norway 25 Middle-East Russia Russia 0 0 Natural gas Petroleum products Natural gas

Chart B: UK and global energy market indicators

Note: Top-right shows inland consumption by primary fuel. Renewable includes bioenergy, waste, wind, solar and hydro. Source: BEIS, BP

Compared to other European countries, the UK economy is less energy intensive. This is partly due to the relatively large share of services in UK output and relatively large shares of energy-intensive manufacturing in some other countries (Chart C). However, 76 per cent of the UK's gross consumption comes from gas and oil compared with a European average of 57 per cent. So, as a net energy importer with a high dependence on gas and oil, higher global energy prices will still weigh heavily on the UK economy.



Note: Coal includes other solid fossil fuels. European energy mix figures are aggregated over the countries shown, while energy intensity figure is the EU average. GDP in energy intensity calculation in 2010 euros.

Source: Eurostat

How do higher energy prices affect inflation?

Higher global energy prices feed through to domestic consumer price inflation in the UK in four, partly overlapping, phases:

- First, higher oil prices directly increase the domestic 'pump' price of petrol and diesel.
 Two and a half weeks on from the invasion, petrol and diesel prices were already up 12
 and 18 pence (8 and 12 per cent) per litre on their 21 February values. Fuels account for
 3.3 per cent of the basket of goods and services used to calculate the Consumer Prices
 Index (CPI).
- Second, higher gas prices raise domestic retail energy prices with a lag through the operation of Ofgem's energy price cap. The cap is adjusted every six months to reflect changes in market expectations for future wholesale prices and other producer costs over the six months prior to the announcement of the cap. The next revision to the energy price cap was announced in February, will take effect in April, and will raise typical energy bills by £693 (54 per cent) a year. This was based on wholesale energy price expectations for the period between April 2022 and March 2023 averaged over the six months to January 2022. So, the latest increases in energy prices since the Russian invasion will not be reflected in the cap until October 2022 and will depend on price expectations between October 2022 and September 2023 averaged over the six months to July 2022. Household energy bills are a further 3.4 per cent of the CPI basket.
- Third, higher fuel and energy prices raise the costs of producing other goods and services in proportion to the energy intensity of their production. After stripping out road transport and domestic energy use, other uses accounted for the remaining 46 per cent of final

consumption of energy in the UK in 2019. For firms that purchase their gas on the wholesale market, month-ahead prices have reached a level 70 per cent higher than the peak assumed in our October 2021 forecast, and have increased by around 40 per cent since the beginning of February. If firms pass these increased input costs onto consumers, higher energy prices would lead to higher CPI inflation beyond the direct effect on fuel and utility prices.

• Finally, as price movements of this magnitude ripple through the economy they will affect other macroeconomic variables. Most importantly, the drag on demand from lower real incomes resulting from high inflation will generate some downward pressure on prices, partly offsetting the upward cost pressures outlined above. This could occur if lower demand relative to supply reduces wage growth and/or firms were less able to protect margins by passing on higher input costs. The extent of this effect would also depend on how the Bank of England responds to the inflation shock with monetary policy.

How have these changes been reflected in our economy forecast?

The impact of the Russian invasion of Ukraine on our forecast for the UK economy comes primarily via the impact of higher energy prices on inflation, real incomes, consumption and imports. Higher oil prices feed into the fuel component of CPI prices directly, while the household utility component is adjusted for expected changes in wholesale gas and electricity prices every six months via the Ofgem price gap. Based on past evidence, we assume the net effect of the two indirect channels discussed above adds a further 25 per cent to the effect for the first two direct channels. This higher inflation will affect the real economy primarily by eroding real household incomes and reducing consumption. We assume that wages do not rise to compensate for this bout of higher inflation which is driven by external forces. We already expected firms' profit margins to be squeezed by other cost increases that were expected before the invasion.

A smaller, indirect effect on the UK economy comes via the impact of the Russian invasion and resulting sanctions on global output. Based on initial estimates from other independent forecasters, we assume the invasion will reduce the level of global GDP by 0.5 per cent in 2022 and 2023, relative to its pre-invasion trajectory, before returning to its pre-invasion path by 2025. The decision by the US, EU and UK to suspend Russia's 'most-favoured nation' status at the World Trade Organization came after we had finalised our economy forecast. The direct impact on the UK is likely to be limited given modest direct trade links that are heavily concentrated in energy products and precious metals.^c

In addition to capturing these impacts on the UK economy forecast, there is a smaller, though significant, impact on the fiscal forecast from lower UK equity prices, which have fallen in the wake of the Russian invasion. Our fiscal forecast captures the direct effect of lower equity prices on capital gains tax on the disposal of financial assets, though we do not assume any indirect wealth effect from lower equity prices on consumption and GDP.

What is not explicitly captured in our forecast?

If, contrary to what is reflected in futures prices, energy prices stay at current levels beyond the middle of next year, the UK would face a larger and more persistent increase in the price level and fall in real household incomes. If prices fall more quickly than currently expected the reverse

would be true. Permanently higher energy prices could deliver an adverse supply shock that reduced potential output in the medium term, which in turn would damage the structural fiscal position.

We have not taken explicit account of the impact on inflation, or on the wider economy, of price rises of other commodities of which Russia and Ukraine are also major global producers such as wheat, nickel, and palladium. Ukraine and Russia combined provide around 30 per cent of the world's wheat. Some global wheat prices have risen by more than 40 per cent this year and food and non-alcoholic beverages comprise 11.5 per cent of the CPI basket. So, price increases and potential shortages in these non-energy commodities represent additional upside risks to our inflation forecast and downside risks to our real GDP forecast.

We have also not made any explicit adjustments for the domestic consequences of international sanctions on Russian financial institutions or individuals, beyond what might be reflected in equity prices in the fiscal forecast. As of 15 March, the UK had "designated over 1,000 individuals and entities under the Russia sanctions regime". The latest round of sanctions expanded the number of sanctions by 370 (including 51 oligarchs and their family members with an estimated worth of "more than £100 billion"). We do not assume these actions have a material effect on overall financial stability, lending, or investment in the UK.

World economy and the exchange rate

- 2.12 Our global GDP forecast is based on the IMF's latest World Economic Outlook (WEO) update adjusted for the Russian invasion of Ukraine. The most recent IMF WEO update, published on 25 January 2022, forecast global GDP growth of 4.4 per cent in 2022, 0.5 percentage points slower than in October largely due to downside news stemming from the Omicron variant, supply bottlenecks, and rising energy prices. In 2023, growth was forecast at 3.8 per cent, 0.2 percentage points stronger than in October, as these pressures abated.
- 2.13 At the time we finalised our forecast, the IMF had not presented updated global GDP forecasts following the Russian invasion. However, IMF staff have noted that they "already see our growth forecasts as likely to be revised down next month". We therefore made a simple, top-down adjustment to a baseline informed by the IMF's January WEO update, guided by a range of initial estimates from private sector forecasters, that reduces growth by

^a The energy intensity ratio is the total inland consumption of primary energy in tonnes of oil equivalents (on a temperature corrected basis) that it takes to produce every £1 million of GDP (in 2018 prices).

^b External literature suggests the pass-through from changing oil prices to core (non-energy) inflation has declined in recent decades to near zero, and that the UK sees relatively low pass-through across countries, e.g., Conflitti, C., and M. Luciani, Oil Price Pass-Through into Core Inflation, August 2017; Millard, S., An estimated DSGE model of energy, costs and inflation in the United Kingdom, July 2011; Choi, S., et al, Oil Prices and Inflation Dynamics: Evidence from Advanced and Developing Economies, September 2017. However, large and upward shocks of this type tend to have more significant pass-through (e.g., Abdallah, C. and K. Kpodar, How Large and Persistent is the Response of Inflation to Changes in Retail Energy Prices?, June 2020), so we have incorporated some of these second round effects into the forecast. We have assumed they are around half the size of the upper end of a range suggested by external historical analyses (e.g., European Central Bank, Oil prices – their determinants and impact on euro area inflation and the macroeconomy, August 2010) and analysis of the weight of energy in consumption and production.

^c See, Gasiorek, M., Russian MFN suspension: Implications for UK trade, Trade policy observatory article, March 2022.

^d GOV.UK, Foreign Secretary announces historic round of sanctions on Russia, March 2022.

⁹ Azour, J., et al., How war in Ukraine is reverberating across world's regions, IMF, March 2022.

0.5 percentage points in 2022,10 and have left growth rates broadly in line with the IMF in 2023, as Chart 2.4 shows. Overall, this this leaves the level of world GDP lower than our October forecast by 0.7 and 0.6 per cent in 2022 and 2023 respectively (of which 0.5 percentage points is attributable to the war in Ukraine). In the medium term, we have assumed that the level of global GDP recovers to our October forecast levels by 2025. Given the evolving situation in the war in Ukraine and the global response, there is significant uncertainty around the outlook for global GDP.

October 2021 forecast Forecast IMF January 2022 WEO update 6 March 2022 forecast 4 Per cent 0 -2

Chart 2.4: Global GDP growth

2019 Note: The IMF January projections only go up to 2023.

2020

Source: IMF, OBR

2018

-4

2.14 The sterling effective exchange rate has appreciated slightly since our October forecast. It settles 0.7 per cent higher than we forecast in October and we assume it remains unchanged in nominal terms over the forecast period.

2022

2023

2024

2025

2026

2021

Fiscal policy

2.15 Our economy forecast is conditioned on the fiscal stance implied by the forecasts set out in Chapter 3. The large-scale fiscal support to households, firms, and public services provided during the first two years of the pandemic has now mostly been withdrawn. This support helped to keep unemployment and business failures low and to protect incomes from the drop in output caused by the pandemic, public health measures and voluntary social distancing. The withdrawal of support and net tax rises means the fiscal stance tightens in 2022-23 – though it is looser than in our October forecast thanks to new measures to support households in the face of higher energy prices. Further net tax rises (tempered somewhat by net tax cuts announced in this Spring Statement), partially offset by higher

¹⁰ These ranged from a slowdown in global growth in 2022 of between 0.2 and 0.8 percentage points. NIESR suggested that the level of GDP could be 0.5 percent lower in 2022 and 1 per cent lower in 2023. NIESR, The economic costs of the Russia-Ukraine conflict, March 2022.

- departmental spending, mean the fiscal stance tightens further in 2023-24 and 2024-25, and then remains broadly stable.
- 2.16 The contribution of discretionary fiscal policy measures announced since our October forecast, and incorporated in this forecast, loosens the fiscal stance in the near term and to a lesser extent in future years. These include measures to support households facing rising energy and fuel bills in the coming year (council tax and energy bill rebates, reductions in personal taxes via raising the NICs primary threshold, and a 5p cut to fuel duty) as well as a 1p cut in the basic rate of income tax that takes effect from April 2024. As described in Box 2.3, these measures raise real GDP by 0.3 per cent at their peak impact in 2022-23 and by more modest amounts thereafter cushioning some of the near-term blow from higher energy prices.

Box 2.3: The economic effects of policy measures

To estimate the effect of discretionary fiscal policy changes on economic activity, we use multipliers drawn from the empirical literature. These capture the wider effects of fiscal policy measures over and above their immediate effect on demand, through changing private incomes and spending. These effects diminish steadily to zero by the forecast horizon, as the Bank of England is assumed to respond to the upward pressure on wages and prices with a tighter monetary policy response to bring inflation to its 2 per cent target, by bringing demand back to the economy's supply potential.

Since our October forecast, the Government has announced measures with an uneven effect across the next five years. These include: a large near-term giveaway comprising £8.9 billion of support to households via council tax and energy rebates, around half of which will be clawed back over the subsequent five years; a temporary 5p cut in fuel duty costing £2.4 billion in 2022-23; and £6.3 billion in personal tax cuts via permanently raising the NICs primary threshold to align with the income tax personal allowance. From 2024-25 onwards, the net tax cut rises to around £10 billion a year as the basic rate of income tax is cut from 20 to 19 per cent. Several other measures have relatively large fiscal effects but are assumed not to affect the path of real GDP. These include the package of reforms to student loans (the long-term effects of which are captured in the accrued fiscal deficit upfront) and the Bulb Energy bailout.

The overall impact of these measures increases the level of GDP in 2022-23 by 0.3 per cent and by smaller amounts thereafter, so growth rates are raised in 2022-23 but then lowered in 2023-24 as the near-term boost fades. This reduces the extent to which high energy prices are expected to drag output below potential in the near term. In fact, the income tax cut in 2024 results in a very modest degree of excess demand as it takes effect when falling energy prices are also expected to boost household disposable incomes and consumption.

The combined impact of the energy-related support measures and tax cuts in 2022-23 boosts household disposable incomes by £17.6 billion. This reflects £350 worth of rebates for most households (£150 in April and £200 in October), the £6.3 billion NICs cut, and the 0.1 percentage point reduction in CPI inflation as a result of the temporary fuel duty cut. But as discussed in Box 2.5, real household disposable incomes still fall by around 2 per cent in 2022-

23 – with the rebates and tax cuts reducing that fall by roughly 1 percentage point relative to no further support being provided, and thereby reducing the fall in real household disposable income by around a third. So the fall in real household disposable incomes in 2022-23 would be half as great again without these measures.

The policy package raises CPI inflation by 0.1 percentage points in 2022-23. This figure reflects the positive impact on inflation from higher demand slightly outweighing the negative impact of the cut to fuel duty and the freezing of the BBC licence fee. The cut to fuel duty that we incorporated into our economy forecast is slightly different to the final policy decision. The Government informed us of the final policy after the deadline for including it in the final economy forecast. Incorporating the final policy would have had less than a 0.1 percentage point impact on our inflation forecast.

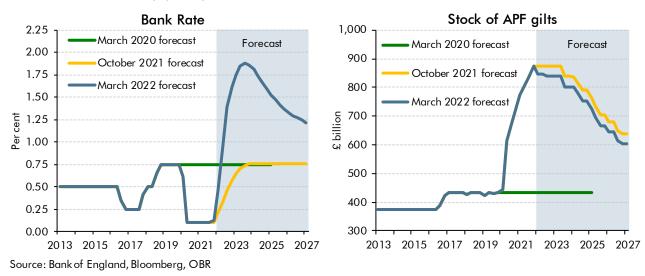
As set out in Chapter 3, there is uncertainty over whether and how the energy bill discount and subsequent clawback will affect inflation. We have assumed for this forecast that neither element will affect official measures of inflation. This may need to be revised in our next forecast once the ONS has issued its classification decisions in respect of each scheme.

Monetary policy

- 2.17 Our forecast is conditioned on the market-derived path for Bank Rate over the five working days to 2 March, which shows it rising gradually to 1.9 per cent over the next 18 months. Since our October forecast three Bank Rate rises have occurred (one after we closed our forecast to new data), taking the current rate to 0.75 per cent. Market participants expect Bank Rate to peak in the third quarter of 2023, then to fall gradually. This is a substantially higher path than in our October 2021 forecast, which assumed Bank Rate rose gradually to 0.75 per cent by the fourth quarter of 2023 and was flat over the rest of the forecast period. Since we closed our forecast, market participants' expectations for Bank Rate have risen to peak at 0.3 percentage points above the peak incorporated in our forecast. Higher market expectations for Bank Rate mainly reflect the significant increase in inflationary pressures and signs of continued capacity constraints in recent months. Despite this monetary tightening in our forecast, Bank Rate remains historically low and far below the average of around 5 per cent in the decade before the global financial crisis.
- 2.18 Further monetary tightening occurs through a gradual reversal of quantitative easing ('quantitative tightening' or QT); the Monetary Policy Committee (MPC) announced at its February 2022 meeting that it would start unwinding the assets built up under quantitative easing. This consists, at least initially, of two elements. First, a 'passive unwind' in which the Asset Purchase Facility (APF) ceases to reinvest maturing assets, so the total stock of gilts held in the APF falls gradually over time. Second, the Committee also voted to reduce the stock of corporate bonds held within the APF through the same 'passive' process, in combination with some active sales, to fully unwind the £20 billion of these assets held "no earlier than towards the end of 2023". We have incorporated both aspects of QT into our forecast and the fiscal implications of doing so are described in Chapter 3.

2.19 The MPC also said that it "will consider actively selling some of the stock of purchased assets only once Bank Rate has risen to at least 1 per cent" – in an 'active unwind' of gilts held in the APF. As the 1 per cent threshold triggers consideration of active sales, not sales themselves, we have not incorporated any active unwind of gilts in our forecast. But with Bank Rate above 1 per cent from the third quarter of 2022 onwards, it is clearly possible that active sales will take place over the next five years – although the scale, pace and timing of any such sales is unknown. Thus, in our forecast, the stock of assets held in the APF falls to £603 billion by the horizon through passive unwind alone, compared to £637 billion in our October forecast (Chart 2.5).

Chart 2.5: Monetary policy



Pandemic assumptions

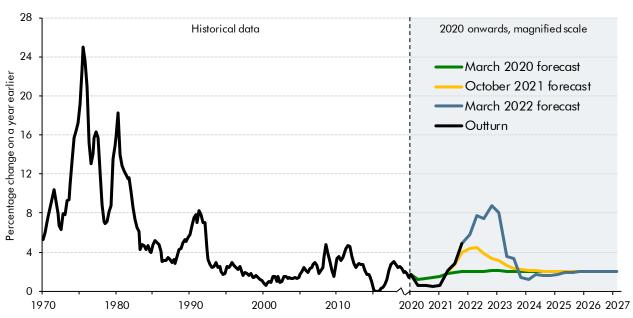
- Our forecast assumes that the pandemic remains in check, public health restrictions are not reintroduced, and voluntary social distancing fades over the spring. While infections are likely to remain relatively high, the protection from vaccines, natural immunity and therapeutics should mean serious illness and deaths remain much lower than early in the pandemic. Our central forecast assumes that boosters largely offset waning vaccine immunity and no new variant emerges that would require the reintroduction of economically significant public heath restrictions or materially increase voluntary social distancing.
- 2.21 But risks around the pandemic are skewed to the downside and the key one is the emergence of a new, more virulent vaccine-resistant variant. This could require the reintroduction of stricter public health restrictions and/or much greater voluntary social distancing while vaccines are adapted, manufactured and deployed (see Chapter 4 for our assessment of the potential economic impact of such a scenario). Other downside risks include: vaccine or infection-conferred immunity against severe disease waning more quickly than assumed; lower booster coverage of the population in the future; and the ending of mandatory isolation and free tests leading to a faster spread of future waves and thus greater caution via more voluntary social distancing. There also remains a risk to the UK economy from global developments as many other countries have significantly lower

vaccination rates, less effective vaccines, or less natural immunity. For example, the recent rise in cases and imposition of regional lockdowns in China could exacerbate global supply bottlenecks and fuel inflation.

Inflation

The most significant domestic economic consequence of the war in Ukraine, and the most dramatic change to the UK outlook since our October 2021 forecast, has been to the path of inflation. We now expect CPI inflation to peak at close to 9 per cent in the fourth quarter of this year – double the peak in our October forecast (Chart 2.6). This would be the highest inflation rate in around 40 years, when the 1979 oil shock pushed inflation into double digits in the late 1970s and early 1980s. The increase is driven primarily by higher gas prices feeding into sharp rises in domestic energy bills, alongside higher fuel prices and global goods inflation. Excess demand in the domestic economy means we expect that much of these cost increases will be passed onto consumer prices and will be partly matched with higher nominal wage growth. Conditioned on market assumptions taken over the first week of the Russian invasion of Ukraine, inflation rises first to 7.7 per cent in the second quarter of 2022, slows slightly, and then rises again to reach its 8.7 per cent peak in the last quarter of 2022 after another large increase in the energy price cap in October.

Chart 2.6: CPI inflation



Note: 1970 to 1989 from the Bank of England's A Millennium of macroeconomic data, outturn from 1989 onwards from the ONS. Source: Bank of England, ONS, OBR

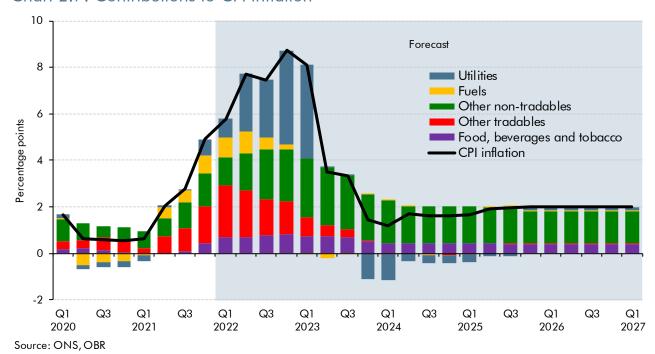
2.23 In the first quarter of 2022, fuel and utilities inflation account for over a quarter of our overall inflation forecast, despite making up only around 7 per cent of the CPI basket, while the contribution from food and other tradable goods and services inflation has risen significantly and accounts for over a half of inflation (Chart 2.7). The contribution from fuel and utility price inflation increases to nearly a half at inflation's peak in the fourth quarter of 2022, as the energy price cap rises further in April and October 2022, and inflation in

tradable goods and services begins to fall away as supply bottlenecks ease. We also expect higher energy prices to feed through indirectly into the prices of other goods and services as described in Box 2.2. Meanwhile, inflation in non-tradable goods and services rises until mid-2023, thanks to increased labour costs feeding through to consumer prices, such that it contributes almost all of the 1.5 per cent inflation forecast by the fourth quarter of 2023.

- The profile of CPI inflation over the forecast period reflects the interplay between a range of global and domestic pressures over the next five years:
 - In the short term, inflation is primarily driven by **tradable goods and services**. This is driven by supply bottlenecks and increased transportation costs which have pushed up global goods prices (see Box 2.1). We expect these bottlenecks to peak in early 2022 and gradually subside leading to a normalisation of goods prices. This reduced input price inflation should be passed onto consumers with a lag, such that annual tradables inflation is below its pre-pandemic average by the second half of 2023.
 - Higher global oil prices have already raised fuel prices, which contribute almost 0.9 percentage points to inflation in the second quarter of 2022, even after incorporating the impact of the cut in fuel duty announced in the Spring Statement. By 2023, based on market expectations for oil prices, we expect pressure on fuel prices to ease and have a minimal contribution to inflation, despite the reversal of the temporary fuel duty cut in 2023.
 - Utility bills continue to raise inflation as the Ofgem price cap rises by 54 per cent in April 2022, 39 percentage points higher than the 15 per cent rise we assumed in our October forecast. This contributes nearly 2.5 percentage points to overall CPI inflation in the second and third quarter of 2022. The rise in market expectations for gas prices due to the Russian invasion of Ukraine will not be felt by consumers until October 2022, when current futures prices suggest the cap will have to rise dramatically again. Based on the wholesale gas price futures assumed in our forecast, we assume it would rise by around 40 per cent, taking it from £1,277 last October and £1,971 this April to nearly £2,800 a near 120 per cent increase on a year earlier. This causes inflation to peak in the last quarter of 2022 at 8.7 per cent, the highest rate in around 40 years. Sharp falls in market expectations for wholesale prices next year would imply utility bills falling by around 30 per cent in April 2023, and by a further 5 per cent in October 2023. While the energy price cap framework formally ends in 2023, if it were to continue the futures curve is consistent with a further fall in utility prices of around 10 per cent in 2024.
 - We expect domestic price pressures to continue to rise as labour market tightness and sharp increases in the cost of living lead to higher nominal wage growth. We expect some of this increase to be passed back on to consumers with a lag, such that non-tradable goods and services account for the bulk of inflationary pressures from the second quarter of 2023. Inflation in these goods and services peaks in the first quarter of 2023 before falling back to more normal levels as headline inflation drops back and excess demand fades.

- The assumed fall in the energy price cap and easing of pressures on other tradables inflation leads **inflation to temporarily undershoot the 2 per cent target** at the end of 2023. Subsequently, we expect inflation to return to target at the end of 2025 as the large swings in energy prices fall out of the annual CPI calculation and output grows broadly in line with the economy's productive potential.
- Spring Statement policy measures have modest effects on inflation. The overall impact is a 0.1 percentage point boost in 2022-23; the addition from discretionary fiscal policy is only partly offset by the fuel duty cut and BBC licence fee freeze.

Chart 2.7: Contributions to CPI inflation



2.25 As well as the risks to the inflation forecast from the Russian invasion of Ukraine, there are domestic sources of risk to our forecast. In particular, we have assumed that nominal wages do not rise fast enough to prevent a significant fall in real incomes (discussed from paragraph 2.45); were workers able to secure higher pay rises for the duration of abovetarget inflation, firms would again look to pass them on and high inflation could prove more persistent. Alternatively, the decline in real incomes and tightening in monetary policy could lead to a sharper-than-forecast reduction in demand, which could coincide with a reversal of energy and goods price inflation to cause a more material undershoot of the 2 per cent target than expected.

RPI inflation

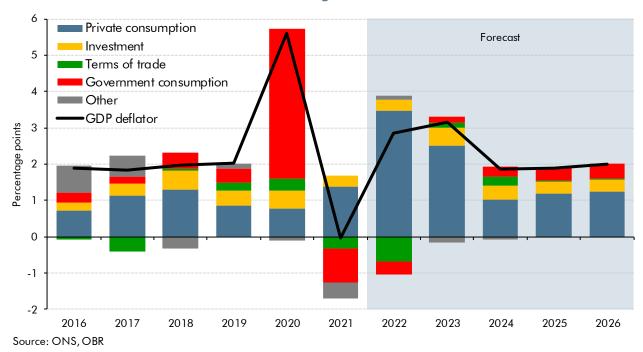
2.26 RPI inflation reached 7.8 per cent in January 2022 – 2.4 percentage points higher than CPI inflation. At 9.8 per cent in 2022 as a whole, our forecast for RPI inflation is 2.4 percentage points higher than CPI inflation and 4.9 percentage points higher than our October forecast. This reflects higher house price inflation (which affects the housing depreciation component of RPI), alongside higher interest rates (which affect the mortgage interest

payments component). We forecast RPI inflation to reach 10.5 per cent in April 2022, and peak at almost 11 per cent in the last quarter of 2022 then to fall back over the next two years reflecting the easing of CPI inflation to a below-target rate described above and falling house price inflation. Thereafter, we expect RPI inflation to rise a little as CPI inflation returns to target to reach around 2.7 per cent at the end of the forecast. This is slightly below the rate consistent with our current estimate of the long-term wedge between CPI and RPI inflation of around 1 per cent as the downward-sloping Bank Rate curve means we expect mortgage rates to fall slightly in the medium term.

GDP deflator

2.27 The GDP deflator is a broad measure of prices in the domestic economy. At 2.8 per cent, GDP deflator growth is 4.6 percentage points lower than CPI inflation in 2022. Growth in the private consumption deflator is lower than CPI inflation this year as the price of imputed rent – which is not included in the CPI – does not rise as guickly as other consumer prices. Also, the measured price of delivering public services like health and education (the government consumption deflator) continues to fall back to more normal levels as the levels of activity recover from the pandemic. The difference between GDP deflator growth and CPI inflation also relates to the terms of trade, which subtracts around 0.7 percentage points from deflator growth this year. This reflects the global energy and tradable goods price shock, which boosts the import deflator more than the export deflator as the UK is a net importer of both. These factors were evident in the latest outturn data: in the fourth quarter of 2021, the GDP deflator was up just 0.8 per cent on a year earlier, despite CPI inflation standing at 4.9 per cent. Notably, the private consumption deflator was up only 3.5 per cent compared to CPIH (which has a similar composition and was up 4.4 per cent). Cumulative growth in the GDP deflator over this forecast period is around 1.7 percentage point higher than in our October forecast, mainly due to stronger consumer price inflation.

Chart 2.8: Contributions to GDP deflator growth



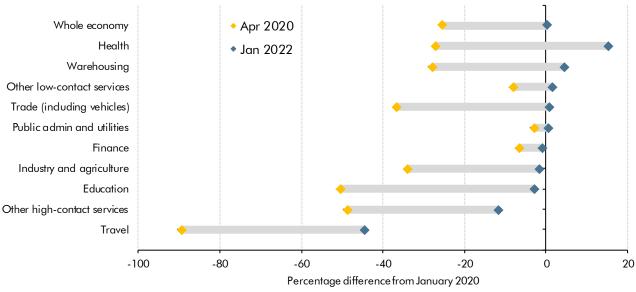
Economic and fiscal outlook

Prospects for real GDP growth

Developments since our October forecast

2.28 The latest monthly GDP data show an Omicron-induced fall of 0.2 per cent in December followed by a rebound of 0.8 per cent in January. This took monthly output to 0.4 per cent above its January 2020 pre-pandemic peak following a trough of 25.3 per cent below in April 2020, during the first lockdown. However, its sectoral composition remains significantly affected by the pandemic. Some sectors (notably health and warehousing) are operating substantially above pre-pandemic levels but others (notably travel and higher-contact services) are still operating well below (as shown in Chart 2.9).

Chart 2.9: GDP recovery since the depths of the pandemic by sector



Note: Other low contact services includes real estate, ICT, professional, scientific and technical services, and gambling. Travel includes air and rail transport and travel agency services, while warehousing includes other transport, postal and warehousing service s. Source: ONS

2.29 The rebound in output in January suggests a strong recovery from Omicron and some easing of supply bottlenecks at the start of the year. Output in the health sector grew despite a slowdown in vaccinations, due to increases in testing, though we expect this impact to reverse later in the year as cases remain below their January peak and free mass testing comes to an end in April.¹¹ Over the remainder of the first quarter of 2022, our forecast assumes the impact of Omicron, which was concentrated in travel, high-contact services and retail, continues to reverse. And that the ongoing easing of supply bottlenecks and rebuilding of inventories will support demand and output growth in the short term, consistent with improvements in PMI surveys of output in February.

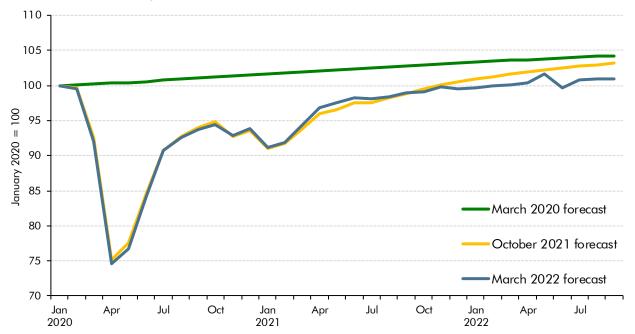
¹¹ With growth in January 0.7 percentage points stronger than the 0.1 per cent we had assumed, these forces now look a little stronger than our forecast assumes. But the rise in Bank Rate expectations since we closed our forecast along with the reversal of the testing impact could offset the positive surprise in the January data, leaving output broadly in line with our forecast by mid-2022.

2.30 As worries about Omicron fade, concerns about rising living costs have begun to weigh on consumer sentiment. There is some evidence that the decline in real household disposable incomes resulting from rising inflation is already constraining demand. Real-time indicators of mobility and card spending were below their November 2021 levels at the start of March, while in February consumer confidence saw its largest monthly fall since April 2020. So, while surveys show a sharp reduction in people who are afraid of the virus, this appears to have been replaced by households' growing worries about their finances.

The short-term outlook for GDP

Over the remainder of 2022, growth is held back by weaker consumption as real incomes fall (Chart 2.10). Despite the rise in the energy price cap and National Insurance contributions in April, we expect growth to increase in the second quarter of 2022 as the impact of the council tax rebate is concentrated in that quarter and business investment increases to take advantage of the super-deduction. The shifting of the bank holiday from late May into June is expected to shift output from June into May, while the extra bank holiday for the Queen's Platinum Jubilee further lowers output in June. This results in a fall in output in June, and stronger growth in May and July, such that the extra bank holiday has no impact on the level of output beyond the third quarter.

Chart 2.10: Monthly real GDP outturns and near-term forecast



Note: This chart shows our October 2021 forecast for the monthly real GDP release from the ONS. It is slightly higher than the forecast published in Chart 2.10 of the October 2021 *EFO*, which was for real GDP, adjusted downwards for apparent measurement issues. We explained the adjustment in the footnote on page 42 of that report. Source: ONS, OBR

2.32 Quarterly GDP growth falls in the second half of 2022, as the cost of living squeeze continues and intensifies in the fourth quarter with October's rise in the energy price cap only partially and gradually offset by the energy rebate (Table 2.2). Quarterly growth picks up a little in 2023, as lower inflation eases the squeeze on real incomes, particularly when

the energy price cap falls in April 2023. Growth is slightly above pre-pandemic rates as the economy gradually catches up to its pre-pandemic path adjusted for the lasting 2 per cent scarring impact of the pandemic on the size of the economy, discussed in Annex C. But it is below recent rates of growth as real household disposable income still falls on an annual basis in 2023, weighing on consumption. Unwinding fiscal policy support (including the end of the investment super-deduction) and higher interest rates also reduce growth rates.

Table 2.2: The quarterly GDP growth outlook

	Percentage change on previous quarter												
		2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
October 2021	-1.6	4.8	1.6	1.9	1.2	1.0	0.7	0.7	0.4	0.4	0.3	0.3	
March 2022 ²	-1.2	5.6	1.0	1.0	0.5	0.6	0.3	0.2	0.4	0.6	0.6	0.5	
Change ³	0.4	8.0	-0.6	-0.9	-0.7	-0.3	-0.4	-0.4	0.0	0.2	0.3	0.2	

¹ Forecast from the third quarter of 2021.

The medium-term outlook for GDP

2.33 Annual real GDP growth slows in 2022 and 2023 (Table 2.3), although this path is heavily influenced by base effects – strong growth at the end of 2021 boosts annual growth in 2022, while weak growth at the end of 2022 drags down annual growth in 2023. In terms of expenditure components, recoveries in real consumption and, to a lesser extent, government spending have so far driven much of the recovery in real GDP. As outlined above, lower real incomes, waning fiscal support, and higher interest rates reduce consumption growth in 2023, so it now grows more slowly than the economy as a whole in that year. Consumption's contribution to growth picks up again from 2024 onwards as these influences fade. In addition, the withdrawal of the super-deduction reduces the contribution of business investment to growth from 2023 onwards, while fiscal policy also becomes a little less supportive in 2024. The contribution of net trade to growth is uneven across the forecast, partly reflecting the large swings in energy prices and the influence of the super-deduction on imports.

² Forecast from the first quarter of 2022.

³ Changes may not sum due to rounding.

Table 2.3: Expenditure contributions to real GDP

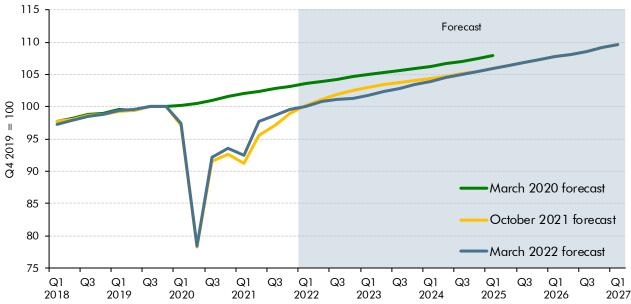
	Percentage points, unless otherwise stated									
	Outtur	n								
	2020	2021	2022	2023	2024	2025	2026			
GDP growth (per cent)	-9.4	7.5	3.8	1.8	2.1	1.8	1.7			
Main contributions:										
Private consumption	-6.7	3.9	3.4	0.6	0.9	0.7	0.7			
Business investment	-1.1	-0.1	1.0	0.5	0.4	0.6	0.5			
Dwellings investment ¹	-0.6	0.6	0.1	0.1	0.0	0.1	0.1			
Government ²	-0.9	3.2	0.5	0.5	0.2	0.4	0.5			
Change in inventories	-0.7	0.6	-0.3	0.0	0.0	0.0	0.0			
Net trade	8.0	-1.2	-0.6	-0.1	0.5	0.0	-0.1			
Other ³	0.0	0.4	-0.3	0.0	0.0	0.0	0.0			

¹ The sum of public corporations' and private sector investment in new dwellings, improvements to dwellings and transfer costs.

Note: Components may not sum to total due to rounding.

2.34 Real GDP returns to the level we had expected in the October forecast in 2024, as shown in Chart 2.11. This is largely driven by the catch-up in consumption growth as global energy prices fall back. This level of real GDP is about 2 per cent below our pre-pandemic forecast in the final three years of the forecast, in line with our pandemic-related scarring assumption that is detailed in Annex C. This, along with an output gap that is broadly closed means that GDP grows broadly in line with potential output at that point (as discussed in more detail in the next sections).

Chart 2.11: Real GDP



Note: Outturn data are consistent with the first estimate of the fourth guarter of 2021.

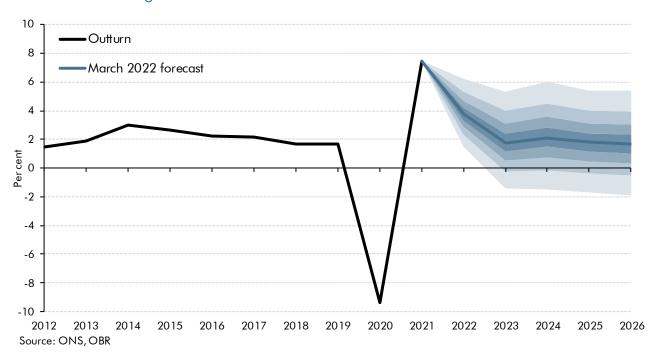
Source: ONS, OBR

 $^{^{2}\,\}mbox{The sum of government consumption}$ and general government investment.

³ Includes the statistical discrepancy and net acquisition of valuables.

2.35 As we stress in all our forecasts, there is significant uncertainty around this projection. Chart 2.12 shows the likelihood of different outcomes surrounding our central GDP forecast based on our recently developed approach of using stochastic simulations. The solid dark blue line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands. It implies around a one-in-five chance that GDP will fall in 2022 or 2023, and the same probability that growth will exceed 5.5 per cent. The simulations are based on historical time series going back to the 1950s, and it should be emphasised that historical experience may not be a good guide to the scale of current risks. A longer war in Ukraine, sustained disruption to Russian energy exports, or widening of the conflict beyond Ukraine's borders, would all have a more pronounced impact on GDP, as explored in Chapter 4. The emergence of a more virulent, vaccine-escaping variant of Covid poses another threat to economic prospects as explored in Chapter 4. On the other side, commodity prices – including those of gas and oil – might fall further and faster than futures prices imply.

Chart 2.12: GDP growth fan chart



Potential output

2.36 In the medium term, our forecast for the level of output is anchored by our projection for the supply capacity of the economy (also known as 'potential output'). This reflects the quantity of labour and capital available to businesses and the efficiency and intensity with which they are deployed ('total factor productivity'). We normally assume that by the forecast horizon a combination of monetary and fiscal policies and natural economic adjustment mechanisms have driven demand back into line with potential output. Were that not to be so, an excess of demand relative to supply would tend to mean inflation rising above the target.

¹² This involves generating a large number of scenarios that are driven by random shocks typical of those that have been experienced in the past. See, Steel, D., OBR working paper No. 17: Evaluating forecast uncertainty with stochastic simulations, December 2021.

Relative to our pre-pandemic March 2020 forecast, we continue to assume that the pandemic will eventually reduce the level of potential output by 2 per cent. Since the October 2021 EFO, the evidence on the actual extent of this 'scarring' of components of potential output has been mixed and largely offsetting, so we have retained our previous 2 per cent assumption. But we have raised the negative contribution from the supply of labour, while lowering the scarring from productivity to reflect the latest evidence on these likely effects (these changes are discussed in Annex C.) Our central assumption is that energy prices fall back from the very high levels since the invasion of Ukraine and so potential output is not affected. However, if real energy prices remain at a substantially higher level for longer than is implied by futures prices, potential UK output could be lower.

The output gap

- 2.38 Developments since the autumn suggest that demand has outpaced supply by more than we thought, leading to a more positive output gap than assumed in our October forecast (Chart 2.13). The root causes of supply bottlenecks are global, as described in Box 2.1. However, lengthening supplier delivery times, congestion at UK ports, and lower overall employment imply a domestic supply capacity that is also struggling to keep up with domestic demand. In March, the Bank of England Agents' index for capacity use in firms was at its highest level since the series began around 25 years ago. The labour market has tightened, with vacancies per unemployed, indicators of overemployment, and recruitment difficulties all reaching record highs in the final quarter of 2021 and underemployment dropping to the lowest level in a decade. This is consistent with survey evidence suggesting that employees of firms faced with recruitment difficulties have been working longer hours to compensate. The rise in staff absence rates due to Omicron also temporarily reduced supply capacity.
- 2.39 We previously expected excess demand to continue into 2023 in part due to the discretionary fiscal easing and the peak impact of the super-deduction policy on business investment. We now expect it to have peaked in the final quarter of 2021 and to decline relatively quickly as product supply bottlenecks recede and higher energy prices and the net increase in NICs weigh on real household income and demand growth, despite the near-term support from the rebates and tax cuts announced in the Spring Statement. This leaves a small degree of excess supply opening up by the end of 2022 (Chart 2.13). While excess demand in the labour market may prove more persistent as participation takes longer to recover (see Box 2.4), there will be some easing as employers react to the weaker economic backdrop by reconsidering recruitment plans or reducing some of the additional hours existing employees have been working. The uneven path for the output gap beyond the near term reflects both the sharp movements in energy prices implied by wholesale futures markets and the income tax cut that takes effect in April 2024.

¹³ Bank of England, Agents' summary of business conditions – 2022Q1, March 2022.

¹⁴ The ONS Labour Force Survey's gross measure of overemployment reflects employees who want fewer hours with less pay. An alternative measure – overemployment net of underemployment (those who are working below an hours threshold and who want and are available for work) – has also risen close to record highs.

¹⁵ ONS Business insights and impact on the UK economy wave 51, March 2022: this survey reports over 40 per cent of firms experiencing worker shortages have increased the working hours of existing employees, peaking at 49 per cent in the week before Christmas.

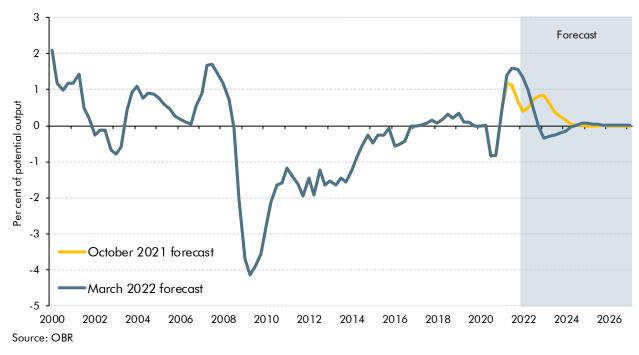


Chart 2.13: The output gap

Labour market

Unemployment, employment, and participation

2.40 Following the end of the furlough scheme, labour demand has proved stronger than we anticipated in October. The number of vacancies has risen to a record level of 1.3 million and also reached all-time highs relative to hires and to those either unemployed or inactive (Chart 2.14, left panel). Buoyant labour demand has helped the unemployment rate fall to 4.1 per cent in the final quarter of 2021, rather than rise to the 5.2 per cent we expected in October. In the three months to January 2022, the unemployment rate fell further to 3.9 per cent. The tight labour market, together with higher inflation, is expected to push up nominal wages going into 2022 by more than assumed in our October forecast. As the right panel of Chart 2.14 shows, staff retention and recruitment have been key considerations for employers in pay settlements. The faster rise in nominal wages reflects a degree of push back against high inflation but is still not strong enough to stop average real wages falling in 2022.

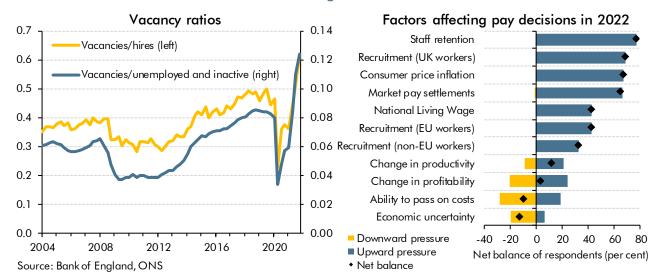
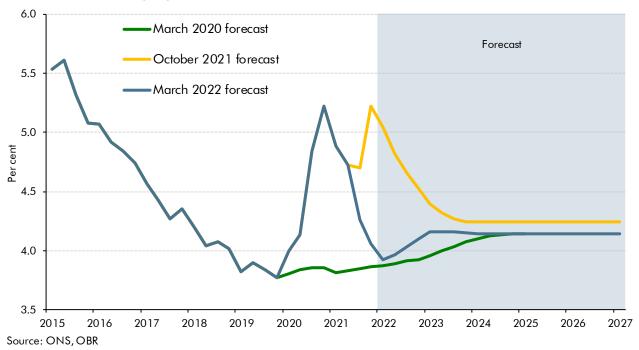


Chart 2.14: Indicators of labour market tightness

- 2.41 Despite the success of the Government's job support schemes in mitigating a rise in unemployment, labour market participation has disappointed relative to our October forecast. The participation rate was 63.2 per cent in the final quarter of 2021, 0.1 percentage points lower than expected in October and 0.9 percentage points below prepandemic levels. As a result, despite unemployment coming in 402,000 below our October forecast, total employment was only 290,000 above forecast. And although the PAYE RTI measure of employees has reached record levels, this partly reflects the self-employed reclassifying into payroll jobs in the wake of the pandemic. The more comprehensive Labour Force Survey (LFS) measure of employment is still 448,000 below its level in the fourth quarter of 2019, largely due to lower participation and significantly lower self-employment. The reasons for lower participation that informed our decision to revise up participation scarring from the pandemic (discussed in Annex C) are explored further in Box 2.4.
- 2.42 In the light of the strength of labour demand, we have revised down our forecast for unemployment in the near term. We now expect the unemployment rate to trough in the first quarter of 2022 at 3.9 per cent, 1.1 percentage points lower than expected in October (equivalent to 388,000 fewer people unemployed; see Chart 2.15). This translates into a stronger forecast for employment in the near term, with 266,000 more people employed in the first quarter of 2022 than expected in October. The current combination of record-high vacancies and low redundancies suggests that unemployment will remain low, although the slowdown in GDP growth due to higher energy prices causes it to rise very slightly.
- Over the medium term, we expect unemployment to settle at its structural rate of 4.1 per cent, 0.1 percentage points lower than we forecast in October (equivalent to around 41,000 people). But thanks to the 145,000 downward revision to participation in the medium term (due to greater scarring), we have revised total employment down by approximately 104,000, despite lower unemployment.

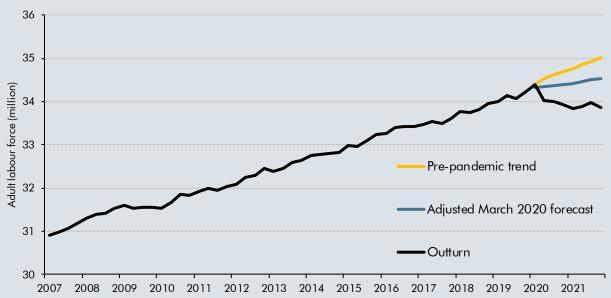
Chart 2.15: Unemployment rate



Box 2.4: The impact of the pandemic on labour market participation

Labour market participation fell markedly over the course of the pandemic and has remained lower even as output has returned to its pre-pandemic level. Participation in the final quarter of 2021 was 527,000 lower than in the first quarter of 2020, with the participation rate down 1.1 percentage points from 64.3 to 63.2 per cent. Using a counterfactual based on a simple extrapolation of the pre-pandemic historical trend, the shortfall in the labour force is close to 1.2 million.^a But prior to the pandemic, our forecasts assumed some slowdown in participation growth, largely due to lower net migration as a result of a stricter regime for EU migrants and the impact on participation rates of an ageing population. Even so, as Chart D shows, the labour force is currently 678,000 lower than implied by our pre-pandemic judgements, due to lower activity rates, lower migration, and more deaths than previously assumed.

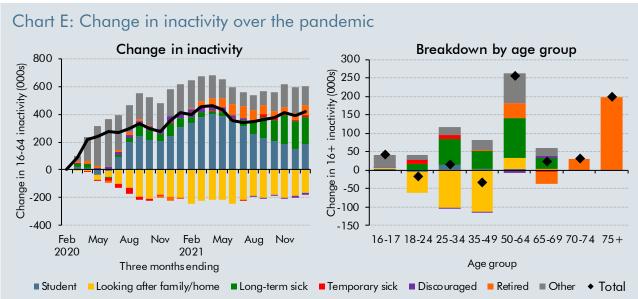
Chart D: Labour market participation levels



Note: We have adjusted our March 2020 participation forecast up by around 0.2 per cent to take into account the unexpected strength in participation before the pandemic hit.

Source: ONS, OBR

The flipside to lower participation is higher economic inactivity, the reasons for which can be explored in the Labour Force Survey. This shows it to be largely due to increases in the numbers of students, individuals with long-term ill health, and those inactive for 'other' reasons (Chart E).^b The increase in the number of students is likely to reflect fewer opportunities for young people to enter the labour market during the pandemic, the disruption to A-levels that raised average grades, and fewer students with part-time jobs (and therefore not counted as inactive). Of the rise in the long-term sick, a recent CIPD study suggests that long Covid is a major cause of long-term job absence.^c The number of additional inactive peoples with 'other' as a reason has largely tracked the different waves of the pandemic and accompanying restrictions, indicating that inactivity in this group is also likely to be a result of the pandemic. Inactivity due to caring responsibilites has been lower through the pandemic, likely as a result of increases in homeworking opportunities.



Note: The left-hand panel captures the change in inactivity from the three months ending in February 2020. In contrast, the right-hand panel shows changes between the fourth quarter of 2019 and the fourth quarter of 2021, so the totals are not equal. Source: ONS, OBR analysis of LFS microdata

Increases in inactivity have been concentrated in older age groups where there have been significant rises in the long-term sick and 'other' groups (although inactivity among younger and prime-age people has also increased). Whether these individuals return to the labour market is uncertain – a recent ONS survey of over 50s suggests that 59 per cent of respondents would not consider returning to work, and of those who would consider returning to work, adjustments such as flexible working would be required.^d The survey also indicated that a number of over 50s had taken their pensions early, suggesting that the pandemic may have led them into early retirement, despite their given reason for inactivity being different. (This is supported by the strong growth in income tax paid on such withdrawals, discussed in Annex A.)

Our forecast assumes participation partially recovers to 63.4 per cent in 2023, however this still leaves the active labour force 1.1 per cent below our pre-pandemic expectations. This would be consistent with a reversal of the addition to inactivity from students, which is already apparent in the latest data, and a part-reversal of other sources of inactivity while long-term ill health remains higher than pre-pandemic trends. These trends would be supported to the extent that labour demand remains buoyant in the face of rising labour costs.

Productivity

2.44 Despite the impact of Omicron and supply bottlenecks, productivity was stronger in the fourth quarter of 2021 than we expected in October (Chart 2.16). Upward revisions to GDP in the 2021 Blue Book translated into higher productivity in the first three quarters of 2021, while supply bottlenecks and the Omicron wave had no discernible effect on productivity in the fourth quarter. Productivity is also at a slightly higher level than in our October forecast

^a As noted in, Institute for Employment Studies, Labour market statistics, February 2022.

^b The 'other' group is defined by the ONS as including "people who are awaiting the results of a job application, have not yet started looking for work, do not need or want employment, have given an uncategorised reason for being economically inactive, or have not given a reason for being economically inactive."

^c Chartered Institute of Personnel and Development, Working with Long Covid: Research evidence to inform support, February 2022.

^d ONS, Early insights from the Over 50s Lifestyle Study, March 2022.

in the medium term reflecting our decision to lower scarring to total factor productivity (explained in Annex C). However, if energy prices remained at their current levels permanently, it would present a downside risk to productivity.¹⁶

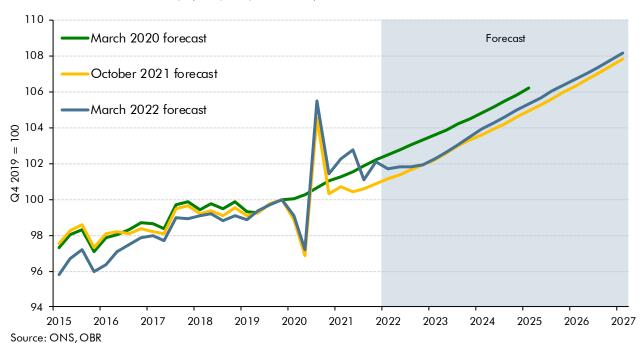


Chart 2.16: Productivity (output per hour)

Earnings growth

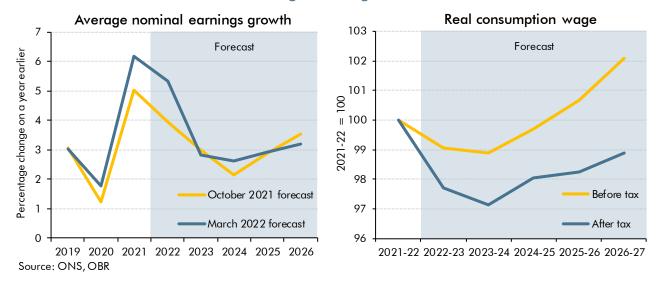
- 2.45 Nominal earnings are expected to grow faster than we forecast in October due to tight labour market conditions and high labour market churn in an environment of rising consumer price inflation. Headline measures of average earnings growth have eased from their mid-2021 peaks as distortions from compositional and base effects have unwound. In contrast, underlying earnings growth has been supported by increasingly tight labour markets driven by a rapid pick-up in labour demand alongside a contraction in supply from lower participation. This has been accompanied by an exceptionally sharp rise in job-to-job flows over the second half of 2021, reaching a record of 1.1 million in the final quarter and probably reflecting pent-up activity after an extended period of subdued job moves. This high level of churn will add to employer concerns on staff retention. According to the Bank of England Agents' pay survey, this is the number one consideration in forthcoming pay settlements, followed by recruitment and inflation.
- 2.46 We have therefore revised up our central forecast for nominal earnings growth to 5.3 per cent in 2022, compared to 3.9 in October (Chart 2.17, left panel). A recent survey suggests permanent starter salaries rose at the second fastest rate since 1997. Although settlements data has thus far only shown a modest rise, recent surveys from the CIPD and Bank of

¹⁶ We discussed these channels in Box 3.1 of our March 2015 EFO on oil prices and the economy. See also OBR, Assessment of the Effect of Oil Price Fluctuations on the Public Finances, September 2010.

¹⁷ KMPG and REC, Report on Jobs, March 2022.

England point to significant rises in employer expectations for pay settlements, well above what has been experienced in the past decade. The Bank survey points to a rise in pay settlements of around 4.8 per cent in 2022, before the latest Russian invasion-fuelled surge in energy prices. April is a key month for pay settlements and will coincide with a sharp rise in CPI and RPI inflation in our latest forecast. Alongside this, aggregate indicators of corporate balance sheets have improved so firms – at least on average – should be in a better position to accommodate higher wages, overtime and bonus payments. This will keep the labour share higher over 2022. Over the medium term, nominal wage growth is expected to slow back to levels consistent with productivity growth, lower inflation and a reversion in the labour share back down to its pre-pandemic average (see Chart 2.25).

Chart 2.17: Nominal and real average earnings



- 2.47 Although we have revised up near-term nominal earnings growth, it is not expected to fully compensate for higher inflation, so the real consumption wage falls by 0.9 per cent in 2022-23, before recovering to growth of 1.4 per cent a year by 2026-27. In our October forecast, real wages on this measure were expected to rise by 1.2 per cent and 1.7 per cent in those two years. The fall in real wages is greatest in the first quarter of 2023, when it reaches 2 per cent on a year earlier, following the peak in CPI inflation of 8.7 per cent in the final quarter of 2022. This fall comes despite our judgement that there will be more of a response from nominal wages to high inflation than in periods of rising inflation over the past decade or so when there was greater labour market slack and lower churn. However, we do not expect the latest surge in energy prices due to Russia's invasion of Ukraine to be matched by higher nominal wage growth, lowering real wages further relative to our October forecast. From 2023, real earnings growth is expected to recover in line with a reversal in inflation and return to a growth path consistent with gains in productivity over the medium term.
- 2.48 Real wage growth is even weaker when factoring in forthcoming net tax rises that cause post-tax real consumption wage growth to be 1.3 percentage points weaker than on a pre-tax basis in 2022-23 (Chart 2.17, right panel). The 3½ per cent peak-to-trough fall in the level of this measure of the post-tax real wage is reached in early 2023. This weakness

comes despite the Spring Statement personal tax cuts offsetting around a third of the overall personal tax rises in 2022-23 that were announced in the March and October Budgets last year.¹⁸

Composition of economic activity

Household income, consumption and saving

Income

- 2.49 As wage growth fails to keep up with inflation, real household disposable income falls by 1.5 per cent in the 2022 calendar year and by 0.2 per cent in 2023 (Chart 2.18). In nominal terms, household incomes are expected to grow by 4.0 per cent in 2022, up from 3.8 per cent in 2021 driven by stronger labour income growth. But net taxes and benefits continue to reduce income growth in 2022 as tax payments rise, with the previously announced NICs rate rise and income tax threshold freezes lowering aggregate post-tax incomes by more than the NICs primary threshold increase raises them. *Non-labour* income growth remains relatively strong, boosted by the council tax and energy bills rebates announced in February. But with the consumption deflator rising by 5.5 per cent, the net result is an annual fall in real household disposable income of 1.5 per cent, the largest since the 1.8 percent fall in 2011. Real incomes fall a further 0.2 per cent in 2023 as prices rise by 3.9 per cent, outstripping nominal income growth of 3.6 per cent.
- 2.50 Aggregate real disposable incomes then grow steadily at 1.7 per cent on average from 2024 onwards as inflation falls and the basic rate of income tax is cut. However, due to a growing population, real household disposable income per person falls by more this year than aggregate real disposable incomes (1.7 per cent on a calendar year basis) and does not return to pre-pandemic levels until the third quarter of 2024, one year later than expected in our October forecast as discussed in Box 2.5.

¹⁸ This captures changes to income tax, NICs (including employer NICs) and the health and social care levy (including the recosting of policies) set out in Table A.5, less the knock-on welfare spending impacts that are captured in that table.

¹⁹ Box 2.5 explains that the fall is larger when measured on a financial year and per person basis, as this provides a more complete account of the change in real living standards over the coming 12 months by taking account of both the increase in the cost of energy and the government support to offset those costs.

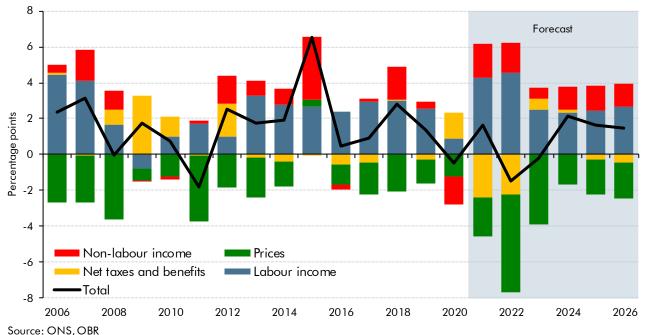


Chart 2.18: Contributions to real household disposable income growth

Source: ONS, OBR

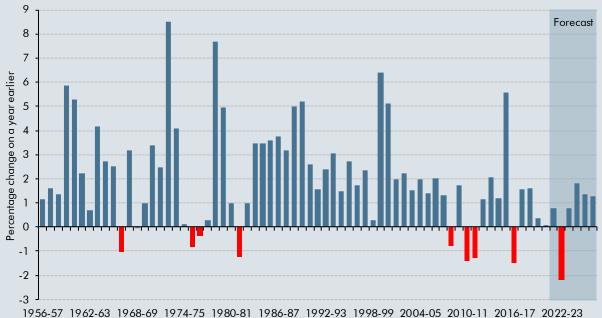
Box 2.5: Developments in the outlook for household living standards

The rise in inflation to a 40-year high this year is expected to reduce real household disposable incomes (RHDI) on a per-person basis by 2.2 per cent in 2022-23, the biggest fall in living standards in any single financial year since ONS records began in 1956-57 (Chart F).^a The underlying source of the reduction in disposable incomes comes from several sources. The failure of nominal earnings growth to keep pace with rising inflation is a key factor. Rising inflation, in turn, reflects increases in global prices of goods (including commodities) that preceded the Russian invasion and the further ratcheting up of energy prices that followed. These increases in global goods and energy prices are a negative terms of trade shock that, as a net importer of both, lowers UK standards of living. Net changes in personal taxes and benefits also reduce real disposable income in the coming financial year. 2022-23 would represent only the ninth occasion since the 1950s that RHDI per person has fallen on a financial year basis and the first time it has done so since 2016-17, as shown in Chart F.

This record fall comes despite the £17.6 billion of fiscal support for households announced in this Spring Statement via the energy support package, fuel duty cut and NICs primary threshold measures (as outlined in Box 2.3). Without these measures, RHDI per person would fall by around another 1 percentage point in 2022-23 meaning the Government has offset around a third of the fall in living standards that would otherwise have occurred. When the energy rebate measures were announced, the Government noted that the £350 would offset just over half of the £694 in annual energy bills that would take effect in April. Our forecast assumes a further rise in the price cap of around 40 per cent in October 2022, which would imply that average annual energy bills are around £1,100 higher between April 2022 and March 2023. The combined effect in that period of the initial rebates and NICs cuts announced in the Spring Statement is sufficient to offset just under half of this rise, broadly maintaining the degree to

which households' finances are cushioned from the blow of higher energy bills over the coming year. However, the prices of other (non-energy) goods and services in the economy are also rising faster than incomes, which means that total tax and benefit changes in this Spring Statement offset only about a third of the overall decline in real per-person disposable incomes.

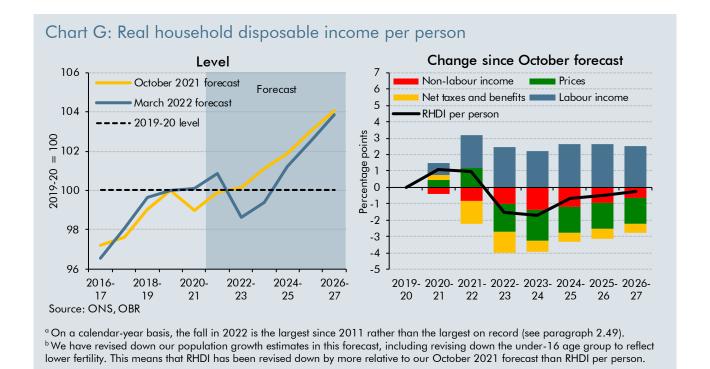
Chart F: Change in real household disposable income per person since 1956-57



1956-57 1962-63 1968-69 1974-75 1980-81 1986-87 1992-93 1998-99 2004-05 2010-11 2016-17 2022-23
Source: ONS, OBR

This substantial fall in 2022-23 means that RHDI per person sustainably returns to its prepandemic level later than we forecast in October (as shown in the left panel of Chart G). Real incomes have been stagnant since the start of 2019 and this is now expected to continue over the next few years, with RHDI per person only sustainably returning to its pre-pandemic level in 2024-25. This is two years later than we forecast in October and four years after the start of the pandemic. Over the forecast period the level of RHDI per person troughs in late 2022 before starting to recover in 2023 as energy prices fall and inflation starts to ease.

The right panel of Chart G decomposes the revision to cumulative growth in RHDI per person between 2019-20 and 2026-27 since our October forecast into contributions from labour and non-labour income, net tax and benefits, and prices. By 2026-27, cumulative growth in RHDI per person is 0.2 percentage points lower than in our October forecast.^b



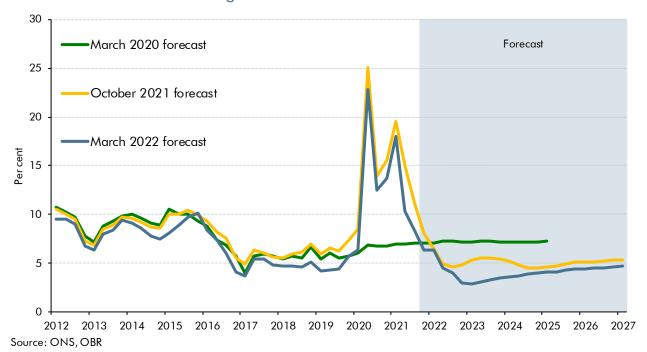
Private consumption

- 2.51 Higher inflation and greater voluntary social distancing in response to the Omicron wave lowered real consumption growth towards the end of 2021, but upward revisions to historical data over 2020 and early 2021 ultimately left consumption 1.1 per cent higher than anticipated in our October forecast in the final quarter of 2021. The continued impact of Omicron alongside further upside news on inflation means we expect consumption growth to be 1.1 percentage points lower in the first quarter of this year than we thought in October, though consumption nonetheless passes its pre-pandemic peak by the first quarter of 2022.
- 2.52 We expect lower real disposable incomes to erode household purchasing power materially over the remainder of 2022, resulting in a 4.4 percentage point downward revision to consumption growth this year relative to our October forecast. (Although, heavily influenced by base effects, calendar year growth in 2022 still reaches 5.4 per cent.) With the cost of living squeeze continuing into 2023, consumption remains around 3 per cent lower than in our October forecast. Higher nominal interest rates also increase the costs of borrowing, contributing to weaker consumption. As energy prices fall back in 2023, consumption growth begins to return to more normal rates. In the first quarter of 2027, consumption is 2.1 per cent lower than assumed in our October forecast and 3 per cent lower than the March 2020 forecast in the first quarter of 2025 (the then forecast horizon), in line with lower expectations for real household incomes post-pandemic.

Household saving

- 2.53 To support consumption in the face of weaker real income growth, households are expected to save less than we assumed in October, especially in the near term, taking the saving ratio to historically low levels (Chart 2.19). During the early part of the pandemic the household saving ratio reached a record high of nearly 23 per cent as restrictions limited spending on certain types of consumption and government policy supported household incomes. As restrictions have eased the saving ratio has fallen back but between the start of 2020 and the third quarter of 2021, households had saved around £230 billion more than in the equivalent period before the pandemic, of which around £185 billion was held in highly liquid deposits.²⁰
- 2.54 Over the course of 2022 we expect the saving ratio to continue to fall and reach a record low of 2.8 per cent by the start of 2023, as households look to maintain their consumption in the face of falling real incomes. In practice the lower saving ratio will reflect some households running down excess savings while others take on more debt. The saving ratio then climbs moderately over the rest of our forecast back towards its pre-pandemic level of a little under 5 per cent.

Chart 2.19: Household saving ratio

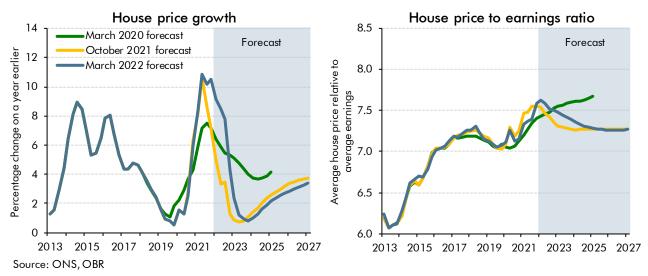


²⁰ The figure for 'excess' deposit saving and 'excess' total saving are calculated by comparing household net currency and deposit accumulation and household total saving between the first quarter of 2020 and the third quarter of 2021 relative to the 2019 quarterly average.

Housing market

2.55 House prices have risen much faster since the start of the pandemic than we had originally expected. This was facilitated by the availability of low-cost mortgages, the stamp-duty holiday, and the accumulation of 'forced' savings during the pandemic (especially by higher-income households). The latest outturns show house prices rose faster than our October forecast, rising 10 per cent over 2021. We expect demand to ease over the next year due to the fall in real incomes and a rise in interest rates, causing house price inflation to slow to around 1 per cent by late 2023. Over the medium term, house price inflation picks up a little to around 3.2 per cent a year, matching the growth in nominal incomes. This leaves house prices around 4 per cent higher at the end of the forecast than we expected in October, due to a stronger outlook for nominal incomes in the medium term. The house price to earnings ratio settles at 7.3, which is still far above where it was after the 2008 financial crisis but close to its average in 2017 and 2018.

Chart 2.20: House price forecast



Property transactions and residential investment

- 2.56 Property transactions rose 43 per cent in 2021 as the stamp duty holiday created a surge in demand and transactions recovered from a sharp fall in the first year of the pandemic. But they fall 13 per cent in 2022 as demand eases. Over the medium term, we expect transactions to pick up a little to return to around 1.4 million a year, a level consistent with longer-term average rates of housing market turnover.
- 2.57 Residential investment also bounced back quickly after the first lockdown and reached 4.1 per cent above its pre-pandemic peak in the fourth quarter of 2021. This is partly due to a rise in new housing orders as a result of pent-up demand. Growth in 2022 slows to 2.6 per cent from 12.6 per cent in 2021, as we expect supply bottlenecks to weigh a little on construction in the near term, as the costs of materials such as timber and bricks have risen. By the end of 2023, we expect it to reach around the same level as our October forecast and grow broadly in line with it thereafter.

Business investment

- 2.58 Since the start of the pandemic, business investment has been weak and has recovered more slowly than other elements of expenditure as high levels of uncertainty have generated hesitancy in committing to longer-term projects. In the final quarter of 2021, business investment remained over 10 per cent below its pre-pandemic peak and 2.7 per cent below our October forecast. Surveys suggest that supply bottlenecks are also holding back investment and the super-deduction (announced in the March 2021 Budget) appears to be incentivising the bringing forward of businesses investment less than we had expected.
- 2.59 We have reduced the anticipated peak amount of business investment brought forward by the super-deduction to 5 per cent in 2022-23 (from the 10 per cent we had previously assumed). According to Deloitte, just 26 per cent of CFOs expected the super-deduction to have a positive effect on their investment plans over the next 12 months.²¹ Similarly, the CBI's recent super-deduction survey found that of the 56 per cent of respondents planning to claim under the measure, only 19 per cent said this brought forward existing investment plans and 20 per cent said planned claims were for new investment that would not have taken place otherwise. The survey was also skewed towards those firms likely to use the super-deduction and each firm is likely to increase their investment by much less than 100 per cent given not all business investment is eligible for the measure.²² In addition, investment intentions as measured by the Bank of England Decision Maker Panel (DMP) have fallen recently, ONS data on investment in ICT equipment and other machinery (the main asset types eligible for the deduction) remain below their pre-pandemic peak,²³ and corporation tax outturns since the introduction of the measure in April 2021 have been much stronger than expected, suggesting take-up of the measure has been lower than expected.
- 2.60 This downward revision to the estimated effect of the super-deduction weakens near-term business investment but raises medium-term investment as less capital spending is brought forward from those future periods (Chart 2.21). It therefore has little effect on the overall capital stock over the forecast period. The downward revision in the near term means that we now expect business investment not to recover its pre-pandemic peak until the end of 2022 nearly a year later than GDP as a whole. Nonetheless, the super-deduction and the easing of global supply bottlenecks means we still expect historically high growth over 2022. Once the incentive is withdrawn, business investment growth slows sharply. It then picks up again towards the end of the forecast.

²¹ Deloitte, CFO Survey - Q4 2021, December 2021.

²² CBI, January 2022 CBI super-deduction survey, February 2022.

²³ ONS, Business investment by asset, February 2022.



Chart 2.21: Real business investment

Government

- Real government consumption has been volatile over the past two years, and despite strong growth in nominal spending due to the pandemic, initially fell in real terms as a result of disruptions in the health and education sectors. But real government consumption has risen sharply since then and it was around 10 per cent above pre-pandemic levels by the end of 2021 partly as a result of a surge in testing and vaccination activity late in the year in response to the Omicron variant. Over the period from 2022-23 to 2026-27, nominal government consumption growth averages 2.8 per cent a year and real growth averages 1.5 per cent a year, both broadly unchanged from our October forecast and reflecting the departmental spending plans set at the October Spending Review that are little changed at this Spring Statement. The inflation that will squeeze departments' budgets (as discussed in Chapter 3) relates to purchases of imports and consumption goods and services, rather than the implied price of government services, hence there being no large downward revision to real spending relative to nominal in this expenditure category.
- Government investment rose by 2.7 per cent in 2020 but an 18.3 per cent spike recorded in the first quarter of 2021 (possibly related to end-of-fiscal-year catch-up spending after the disruptions to projects early in 2020-21) means government investment grew 11.9 per cent over the year as a whole. In 2022, we expect supply bottlenecks to make it more difficult for the Government to carry out planned investment, weakening growth over the year. Government investment rises by around 7.8 per cent in 2023, due to these effects subsiding and the planned increases in capital spending announced in the March 2020 Budget.

Trade and the current account

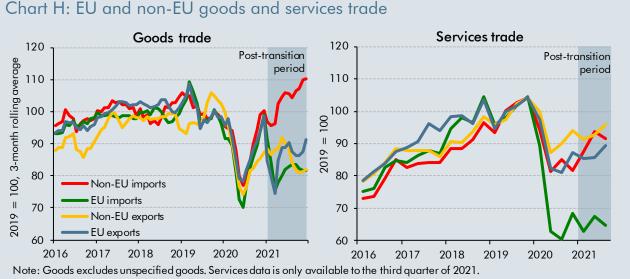
2.63 Total trade flows in 2021 were broadly in line with our October forecast albeit with some volatility. In the fourth guarter of 2021, exports and imports were respectively still 13 and 12 per cent below their 2019 averages, lagging behind the domestic economic recovery. The recovery in UK trade has also been slow relative to advanced economies as total advanced economy goods exports already exceed pre-pandemic levels by 3 per cent, suggesting that Brexit may have been a factor. Our forecast continues to assume that leaving the EU will result in the UK's total imports and exports being 15 per cent lower than had the UK remained a Member State (see Box 2.6 for the latest evidence). This fall in the trade intensity of UK output is likely to reduce the level of potential productivity, though the size of this effect is uncertain; we assume productivity is ultimately 4 per cent lower after a 15-year period. None of the new free-trade agreements (FTAs) or other regulatory changes announced so far would be sufficient to have a material impact on our forecast and, as our forecast is conditioned on current Government policy (including trade agreements), this does not take account of any future FTAs that the UK might conclude, or other deregulatory measures it might enact.

Box 2.6: The latest evidence on the impact of Brexit on UK trade

It is more than five years since the Brexit referendum, two years since the UK left the EU, and just over a year since the transition period ended. Since then, the implementation of the Trade and Cooperation Agreement (TCA) has proceeded at different speeds on either side of the Channel. EU countries applied full customs requirements and checks on UK exports at the start of 2021, while the UK delayed the introduction of full customs requirements on EU imports until January 2022 and full health, safety and security checks to the second half of 2022.

In the year following the end of the transition period, overall UK trade volumes fell, although with some surprising compositional effects:

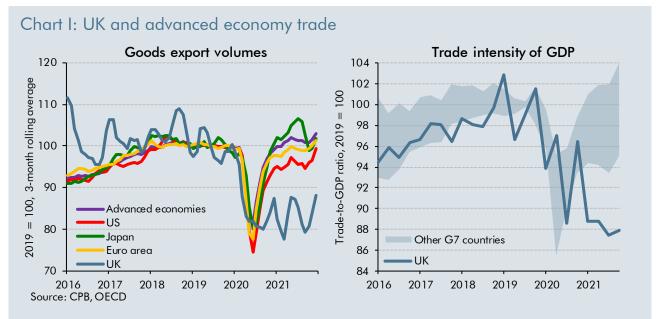
- Goods. Despite tighter restrictions on the EU side of the border, UK goods imports from the EU have fallen by more than UK goods exports to the EU (Chart H, left panel). In the fourth quarter of 2021, goods imports from the EU were down 18 per cent on 2019 levels, double the 9 per cent fall in goods exports to the EU. The weakness of EU imports is more striking compared to the 10 per cent rise in goods imports from non-EU countries, suggesting some substitution between them. However, there is little sign to date of UK goods exports to non-EU countries making up for lower exports to the EU, with the former down 18 per cent on 2019 levels.^b
- Services. UK services trade with the EU has fallen by more relative to 2019 levels than
 non-EU trade (Chart H, right panel). However, much of this decline is likely to reflect the
 impact of the pandemic, particularly in sectors such as travel and transport that
 accounted for a greater proportion of pre-pandemic EU services trade than non-EU. UK
 service exports to the EU and rest of the world have recovered to around 5 and 10 per
 cent below 2019 levels while imports of services from the EU are still down by over 30 per
 cent.



Source: ONS

The seemingly paradoxical weakness in UK imports from the EU relative to exports to the EU since the end of the transition period is likely the result of a combination of factors. This could partly relate to rising prices of energy imports, which are largely sourced from outside the EU. Some of the apparent substitution between EU and non-EU imports might also reflect changes in reporting trade flows or goods that always originated outside the EU no longer passing through the EU on their way to the UK. Brexit-related effects are likely to include the fact that the UK is a relatively small market for individual EU exporters, so it may not be worth the cost of additional paperwork to continue to export to the UK. One survey shortly after the end of the transition period found that 17 per cent of German companies had stopped exporting to the UK, at least temporarily.^c Global supply bottlenecks are likely to have contributed to the weakness in some EU imports, with machinery and transport equipment accounting for around half of the import shortfall at the end of 2021 compared to 2019 levels. Stockpiling likely also boosted EU imports in 2019 before the UK's departure from the EU, though imports from the EU are still much lower than even pre-referendum levels.

Comparing our recent overall trade performance with other advanced economies suggests that the UK saw a similar collapse in exports as other countries at the start of the pandemic but has since missed out on much of the recovery in global trade.d UK and aggregate advanced economy goods export volumes fell by around 20 per cent during the initial wave of the pandemic in 2020. But by the fourth quarter of 2021 total advanced economy trade volumes had rebounded to 3 per cent above their pre-pandemic levels while UK exports remain around 12 per cent below (Chart I, left panel). The UK therefore appears to have become a less trade intensive economy, with trade as a share of GDP falling 12 per cent since 2019, two and a half times more than in any other G7 country (Chart I, right panel).



While additional trade with other counties could offset some of the decline in trade with the EU, none of the agreements concluded to date are of a sufficient scale to have a material impact on our forecast. The Government's own estimate of the economic impact of the free-trade agreement with Australia, the first to be concluded with a country that does not have a similar arrangement with the EU,^e is that it would raise total UK exports by 0.4 per cent, imports by 0.4 per cent and the level of GDP by only 0.1 per cent over 15 years.^f

In summary, there is little in the data since the TCA was implemented to suggest the assumption of a 15 per cent reduction in trade intensity as a result of Brexit is no longer a central estimate. But these effects are likely to take several years to be fully realised, so with only just over a year having passed since the end of the transition period, and given the difficulty abstracting from the impact of the pandemic, we will continue to keep this assumption under review.

With little to suggest that our previous assumption about the effect of Brexit on trade flows is biased one way or the other, we continue to forecast weak growth in exports and imports in the medium term. But we expect trade growth to pick up over 2022 from the unusual weakness of the past two years. Imports and exports rise around 9 and 7 per cent respectively over 2022 as domestic demand and UK export markets recover, although the war in Ukraine and the international response pose risks to demand in UK export markets. Over the medium term, imports level off while exports decline gently. This reflects our assumption that the UK's departure from the EU will reduce the trade intensity of GDP, lowering both import penetration and the UK's export market share. This moderates the previously rising trend in import penetration but accentuates the already declining export

^a Sanitary and Phytosanitary checks on goods imports from the EU will be phased in between July and November 2022.

^b January 2022 outturns have been excluded due to a change in data collection which means that the data are not fully comparable with previous months. See ONS, *Understanding the latest changes to UK trade figures with the EU*, March 2022.

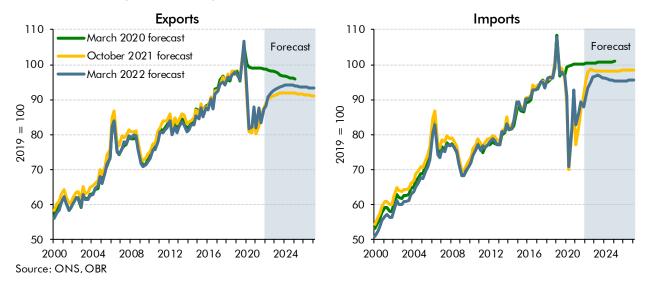
^c KPMG and British Chambers of Commerce in Germany, 100 Days of Brexit – An Interim Conclusion, 2021.

^d Springford, J., The Cost of Brexit: December 2021, March 2022 finds a weak overall UK goods export performance compared to if the UK had stayed in the EU.

^e The FTA signed with Japan in October 2020 contained only limited changes from the EU-Japan Economic Partnership Agreement. ^f Department for International Trade, *Impact assessment of the Free Trade Agreement between the United Kingdom of Great Britain and Northern Ireland and Australia*, December 2021.

market share. Overall, the outlook for net trade in the medium term has improved slightly since our October forecast. However, this reflects a weaker outlook for import volumes in the medium term due to higher import prices and lower import-weighted domestic demand.

Chart 2.22: Import and export volumes



- 2.65 In November 2021, the Government announced its new 'Race to a Trillion' target to raise exports to £1 trillion a year by the mid-2030s. This echoes an aspiration set out in 2012 to reach the same figure by 2020, and an aim expressed in 2018 to reach 35 per cent of GDP by an unspecified date. The first trillion-pound aspiration was missed by a huge margin: exports were just £610 billion in 2020 that partly reflected the pandemic-induced disruption to trade, though exports had reached only £700 billion in 2019. Reflecting the trends outlined above, exports are expected to grow slightly more slowly than GDP as a whole, so fall from 27 per cent of GDP (£620 billion in nominal terms) in 2021 to 26 per cent of GDP by 2026, (£760 billion in nominal terms).²⁴
- The improvement in net trade, along with improved net investment income, narrows the current account deficit relative to our October forecast. This deficit has averaged a little over 3 per cent of GDP over the past four years. We forecast it to widen somewhat in 2022 to around 4.6 per cent, partly driven by import growth on the back of recovery in consumption and investment (which are typically import intensive) but also partly due the energy price-related terms of trade hit from the Russian invasion of Ukraine. The deficit then narrows over the next few years (as the terms of trade hit substantially reverses), before settling close to 3 per cent of GDP over the rest of our forecast. This is 1.5 percentage points narrower than in our October forecast, with the trade deficit around 1 percentage point narrower largely due to our lower medium-term import volumes forecast. The net investment income deficit is narrower than in our October forecast. This change partly reflects data revisions in the latest Blue Book, with outturn data for the investment deficit as a share of GDP now 0.5 percentage points narrower in mid-2021 than in the vintage of data used for our October forecast.

²⁴ Department for International Trade, Made in the UK, Sold to the World, November 2021.

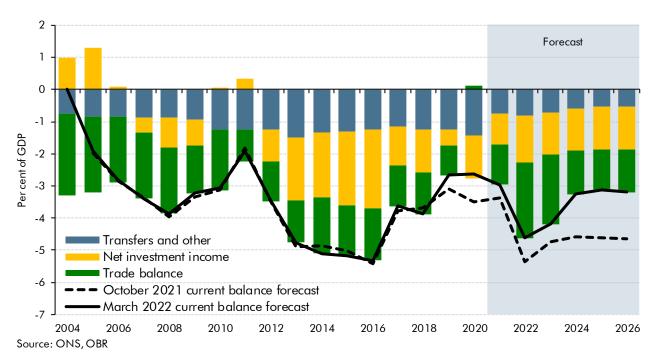
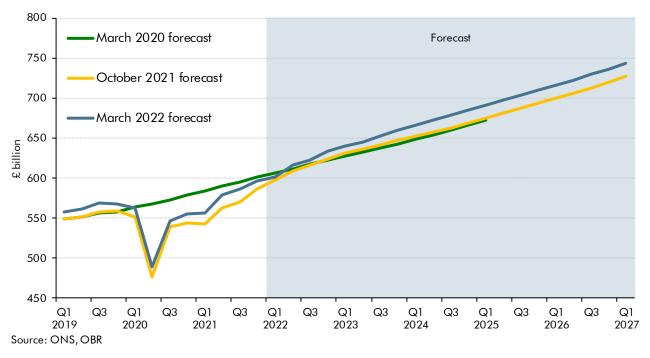


Chart 2.23: Current account deficit

Nominal GDP forecast

2.67 Nominal GDP was revised up materially in the 2021 Blue Book, so the level is around 2 per cent higher than our October forecast throughout. But cumulative growth across the forecast period – the metric that matters most for our fiscal forecasts as it closely drives tax receipts – has been revised only modestly. Nominal GDP growth averages 4.6 per cent a year between 2022 and 2026, down from 4.7 per cent a year in our October forecast. That small revision reflects a modest downward revision to average real GDP growth (thanks to the combination of a more positive initial output gap and an unchanged medium-term scarring assumption) and a modest upward revision to whole economy inflation (driven by the larger upward revision to consumer price inflation that is partly offset at the whole economy level by an upward revision to import price inflation reflecting the worse terms of trade).





Income composition of nominal GDP growth

Labour share

2.68 The labour share is forecast to remain higher in the near term than we had expected in October (Chart 2.25). This reflects our upward revision to the near-term outlook for nominal earnings based on our judgement that companies will accommodate a temporary rise in labour costs via margins as CPI inflation spikes higher and the labour market remains tight. Staff retention and recruitment have been major considerations for employers leading into the main pay settlements season, while company margins, in aggregate, have proved surprisingly resilient (see Chart C.2 in Annex C). Over the medium term, the labour share is assumed to return towards its pre-pandemic average as companies rebuild margins and nominal wage growth moderates as inflation returns to target and labour market tightness eases as participation recovers.

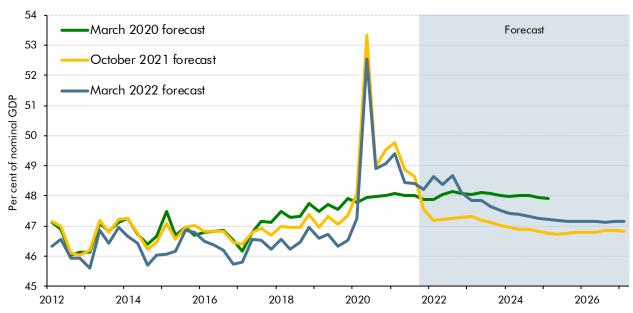


Chart 2.25: The labour share

Note: Measured by wages and salaries and self-employment earnings as a share of GDP.

Source: ONS, OBR

Corporate profits

2.69 Private sector non-oil non-financial profits are expected to fall by around 1.4 per cent in 2022, a significant downward revision from the 3.1 per cent growth we expected in October. We now expect companies to absorb some of the externally driven cost increases, as well as some higher wage demands. Companies in aggregate should be able to afford this, as profit growth in 2021 was stronger than previously recorded at around 5.8 per cent. Indeed, strong corporation tax receipts suggest profits may have been even stronger still (see Box 3.1 in Chapter 3). 2021 also saw the lowest number of profit warnings issued since 2010,²⁵ further evidence for the strength in profits over the past year. Absorbing some of the costs from the spike in inflation and higher nominal wages lowers the profit share to around 15.8 per cent in the near term. Over the medium term, the profit share starts to increase back up to stabilise at around its pre-crisis average.

Sectoral net lending

2.70 The household sector is expected to move from being a net lender to the rest of the economy to a net borrower, as the government deficit narrows. This reflects a transition from a period where the Government took exceptional measures to protect household incomes from the full effect of one crisis (the pandemic) to one in which imported cost rises (partly triggered by Russia's invasion of Ukraine) force households to save less to cushion the blow to real spending. The corporate sector returns broadly to balance. The current account deficit (rest of world surplus) remains significant and of a similar size to the years before the pandemic.

²⁵ EY, Analysis of UK Profit Warnings, February 2022.

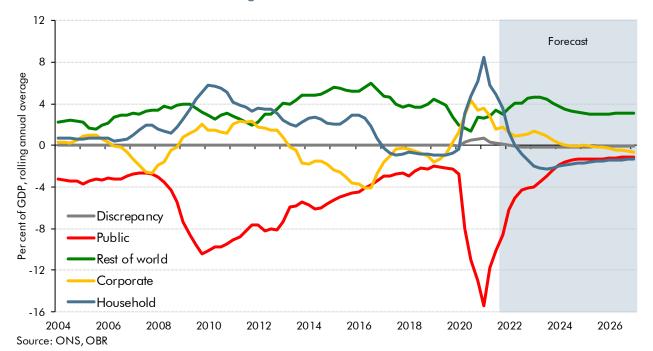


Chart 2.26: Sectoral net lending

Comparison with external forecasters

- 2.71 In this section, we compare our latest projections with those of outside forecasters. The short-term differences between our forecasts and those of external forecasters in part reflect uncertainty around the impact of Russia's invasion of Ukraine and the cost of living squeeze, while medium-term differences largely reflect different assessments of the degree of pandemic-related scarring and the pace of underlying potential output growth.
- 2.72 Given the unexpected nature of the Russian invasion and rapid evolution of the international response, the timing of each forecast matters. In Chart 2.27, we have therefore compared our forecasts for selected economic variables this year to other external forecasts published in March (as these are likely, though not certain, to incorporate the impacts of the invasion). Our forecast for CPI inflation in the fourth quarter of 2022 is higher than the consensus, coming close to the top of the range. This could reflect a number of possible factors, including: some forecasts submitted in March might have been prepared before the invasion; even those made after the invasion could be conditioned on different assumptions for energy prices and the Ofgem price cap; some forecasts may assume that the Government's energy cost measures announced in February will reduce headline inflation rates (which we do not - see Chapter 3); and some may assume the Government will provide further support to cushion the impact of another price cap rise in the fourth quarter of 2022 (which we cannot as our forecasts are conditioned on current policy). Other variables lie nearer the consensus, with our stronger nominal earnings forecast contributing to our real income and GDP growth forecasts in 2022 being only slightly below their respective external consensuses.

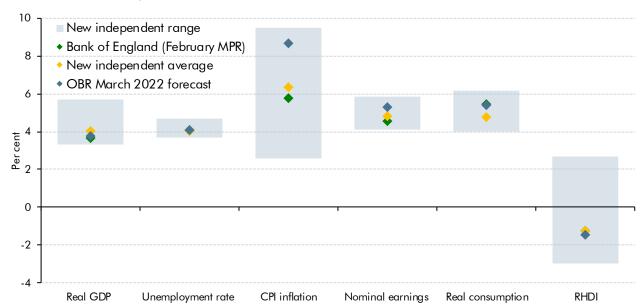


Chart 2.27: Comparison of 2022 forecasts for selected economic variables

Note: Fourth quarter unemployment and year-on-year CPI inflation rates. Independent forecasts compiled by the Treasury in March, although the CPI range has been supplemented by additional recent forecasts.

Source: Bank of England, Bloomberg, HMTreasury, OBR

- 2.73 The latest Bank of England forecast, set out in its 3 February 2022 Monetary Policy Report, was produced before the invasion of Ukraine and so was conditioned on lower gas and oil prices in the short term than our forecast.²⁶ Its CPI forecast therefore peaks at 7.0 per cent in the second quarter of 2022, compared to 8.7 per cent in the fourth quarter of 2022 in our forecast. The Bank has not published a forecast since the invasion, but the minutes of its March Monetary Policy Committee meeting (published on 17 March) noted that inflation "is expected to increase further in coming months, to around 8 per cent" in the second quarter of 2022 "and perhaps even higher later this year".²⁷
- 2.74 In the medium term, the Bank's February expectation was for GDP growth to "slow to subdued rates", and the level of GDP to settle around 2.3 per cent below ours at the Bank's forecast horizon of 2024 (Table 2.4). This partly reflects the fact that the Bank's forecast was conditioned on wholesale energy prices following futures prices for the first six months and remaining constant beyond then. This locks in higher gas and oil prices than implied by the futures curves with more adverse consequences for real household income and spending. In contrast, our forecast is conditioned on the first three years of the futures curve which imply energy prices fall sharply in 2023 and further in 2024, to around 70 per cent above our October forecast for gas and 15 per cent for oil. We assume prices stay flat in real terms thereafter.

²⁶ Bank of England, Monetary Policy Report, February 2022.

²⁷ Bank of England, Monetary Policy Summary and minutes of the Monetary Policy Committee meeting, March 2022. In line with our forecast for inflation peaking in the fourth quarter of 2022 as Ofgem's price cap rises by around 40 per cent, it also stated that if sustained "the latest rise in gas and electricity futures prices would mean that price caps, when reset in October 2022, could be around 35 per cent higher, which would be around 20 per cent higher than had been expected in the February Report" and this "could temporarily push CPI inflation around the end of this year above the level projected for April, which was previously expected to be the peak."

2.75 While forecasts for unemployment this year are similar, we are more optimistic about the medium-term outlook for unemployment than the Bank. We forecast unemployment to reach 4.1 per cent in the first quarter of 2025, rather than the 5 per cent assumed by the Bank. This reflects our judgement that the output gap will close in the medium term rather than excess supply building up as the Bank forecasts. In the short term, the Bank expects the unemployment rate to fall to 3.8 per cent, marginally lower than the trough of our forecast at 3.9 per cent.

Table 2.4: Comparison with external forecasters

			Per ce	nt		
	2021	2022	2023	2024	2025	2026
OBR (March 2022)						
GDP growth	7.5	3.8	1.8	2.1	1.8	1.7
CPI inflation	2.6	7.4	4.0	1.5	1.9	2.0
Unemployment	4.5	4.0	4.2	4.1	4.1	4.1
Bank of England (February 2022) ¹						
GDP growth ²	7.3	3.7	1.3	1.0		
CPI inflation	2.6	6.3	3.6	1.9		
Unemployment	4.5	3.9	4.4	4.8		
NIESR (February 2022)						
GDP growth	7.3	4.8	1.3	0.9	1.1	1.1
CPI inflation	2.6	5.9	3.3	1.9	1.7	1.9
Unemployment	4.5	3.9	4.2	4.2	4.2	4.2
IMF (January 2022) ³						
GDP growth	7.2	4.7	2.3			
CPI inflation	2.2	2.6	2.0	2.0	2.0	2.0
Unemployment	5.0	5.0	4.7	4.5	4.4	4.2
Independent average (March 2022) ⁴						
GDP growth	7.5	4.1	1.6	1.6	1.6	1.6
CPI inflation ⁵	2.6	6.4	2.4	2.0	2.0	2.0
Unemployment ⁶	4.5	4.1	4.0	4.1	4.0	3.9

¹ Modal forecast based on market interest rates.

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² Excludes backcast.

³ GDP growth for 2021 to 2023 uses January WEO update. Others from October 2021 WEO forecast.

⁴ 2021 to 2023 uses the most recent average of independent forecasters' short-term projections, published by the Treasury in March. 2024 onwards uses the medium-term projections, published in February.

⁵ CPI inflation in 2022 and 2023 are fourth quarter year-on-year rates.

⁶ Unemployment in 2022 and 2023 are fourth quarter rates.

Detailed summary of our central forecast

Table 2.5: Detailed summary of our March 2022 forecast

	Perce	ntage char	nge on a ye	ear earlier,	unless oth	erwise stat	red
	Outturn		<u> </u>	Forec			
	2020	2021	2022	2023	2024	2025	2026
UK economy							
Gross domestic product (GDP)	-9.4	7.5	3.8	1.8	2.1	1.8	1.7
GDP per capita	-9.7	7.4	3.5	1.5	1.9	1.6	1.5
GDP level (Q4 2019=100)	90.4	97.1	100.8	102.6	104.8	106.6	108.4
Nominal GDP	-4.6	7.7	6.7	5.0	4.0	3.7	3.7
Output gap (per cent of potential output)	-0.4	1.3	0.7	-0.3	0.0	0.0	0.0
Expenditure components of GDP							
Domestic demand	-9.9	8.4	4.3	1.8	1.6	1.7	1.8
Household consumption ¹	-10.5	6.1	5.4	1.0	1.5	1.1	1.2
General government consumption	-5.4	14.5	2.6	1.2	1.4	1.6	2.0
Fixed investment of which:	-9.4	5.3	6.0	5.2	1.8	3.6	3.2
Business	-11.4	-0.7	10.6	5.6	3.6	5.4	4.5
General government	2.7	11.9	-1.1	7.8	-2.0	1.1	1.7
Private dwellings ²	-12.4	12.6	2.6	2.7	0.8	1.5	1.5
Change in inventories ³	-0.7	0.6	-0.3	0.0	0.0	0.0	0.0
Exports of goods and services	-13.9	-1.1	6.8	2.8	0.7	-0.3	-0.4
Imports of goods and services	-15.9	3.0	8.5	2.9	-1.0	-0.4	0.1
Balance of payments current account							
Per cent of GDP	-2.6	-3.0	-4.6	-4.2	-3.3	-3.1	-3.2
Inflation							
CPI	0.9	2.6	7.4	4.0	1.5	1.9	2.0
RPI	1.5	4.0	9.8	5.5	2.3	2.5	2.7
GDP deflator at market prices	5.6	0.0	2.8	3.1	1.9	1.9	2.0
Labour market							
Employment (million)	32.5	32.4	32.7	32.9	33.1	33.2	33.3
Productivity per hour	1.3	1.2	-0.2	1.0	1.6	1.3	1.3
Wages and salaries	2.1	6.9	6.6	3.1	2.9	3.1	3.3
Average earnings ⁴	1.8	6.2	5.3	2.8	2.6	2.9	3.2
LFS unemployment (per cent)	4.6	4.5	4.0	4.2	4.1	4.1	4.1
Unemployment (million)	1.6	1.5	1.4	1.4	1.4	1.4	1.4
Household sector							
Real household disposable income ¹	-0.5	1.6	-1.5	-0.2	2.1	1.6	1.5
Saving ratio (level, per cent) ¹	13.7	10.7	4.4	3.1	3.8	4.2	4.5
House prices	2.8	10.0	7.4	1.3	1.5	2.5	3.1
World economy							
World GDP at purchasing power parity	-2.8	5.9	3.9	3.8	3.8	3.6	3.3

¹ Includes households and non-profit institutions serving households.

 $^{^{\}rm 2}\, {\rm Includes}$ transfer costs of non-produced assets.

³ Contribution to GDP growth, percentage points.

⁴ Wages and salaries divided by employees.

Table 2.6: Detailed summary of changes since March 2020

	Percentage point difference, unless otherwise stated							
_	Outtur	'n		Foreca	st			
	2019	2020	2021	2022	2023	2024		
UK economy								
Gross domestic product (GDP)	0.3	-10.5	5.7	2.3	0.5	0.7		
GDP per capita	0.3	-10.2	6.1	2.4	0.6	0.8		
GDP level (Q4 2019=100) ¹	0.0	-10.3	-5.3	-3.2	-2.7	-2.0		
Nominal GDP	0.4	-7.7	3.9	3.1	1.6	0.5		
Output gap (per cent of potential output)	0.0	-0.4	0.9	0.3	-0.5	0.0		
Expenditure components of GDP								
Domestic demand	0.0	-11.1	6.4	2.6	0.2	-0.1		
Household consumption ²	0.0	-11.5	4.9	4.2	-0.4	0.1		
General government consumption	0.6	-9.1	11.8	0.5	-0.7	-0.8		
Fixed investment of which:	0.1	-8.7	1.9	3.1	3.2	0.0		
Business	0.7	-11.3	-2.5	7.6	3.3	1.3		
General government	2.9	0.8	0.9	-5.7	6.0	-3.2		
Private dwellings ³	-2.4	-8.2	11.1	1.0	1.4	-0.4		
Change in inventories ⁴	0.1	-0.6	0.4	-0.3	0.0	0.0		
Exports of goods and services	-0.4	-13.4	-0.7	7.4	3.9	1.7		
Imports of goods and services	-0.7	-15.7	2.6	8.3	2.7	-1.2		
Balance of payments current account								
Per cent of GDP	1.2	1.1	1.0	-0.7	-0.2	0.8		
Inflation								
CPI	0.0	-0.6	8.0	5.4	2.0	-0.5		
RPI	0.0	-0.7	1.3	6.8	2.6	-0.5		
GDP deflator at market prices	0.2	3.6	-2.0	0.7	1.1	-0.2		
Labour market								
Employment (million)	0.0	-0.4	-0.7	-0.5	-0.4	-0.3		
Productivity per hour	0.5	0.4	0.0	-1.4	-0.1	0.3		
Wages and salaries	0.2	-1.6	3.1	3.0	-0.2	-0.3		
Average earnings ⁵	0.2	-1.6	2.6	2.0	-0.3	-0.5		
LFS unemployment (per cent)	0.0	0.7	0.6	0.1	0.1	0.0		
Unemployment (million)	0.0	0.2	0.2	0.0	0.0	0.0		
Household sector								
Real household disposable income ²	0.6	-1.6	0.1	-2.8	-1.6	0.8		
Saving ratio (level, per cent) ²	-1.1	7.2	3.8	-2.8	-4.0	-3.4		
House prices	-0.5	-0.5	3.0	1.6	-3.2	-2.3		
World economy								
World GDP at purchasing power parity	-0.1	-5.8	2.2	0.4	0.2	0.2		
Per cent change since March 2020								

¹ Per cent change since March 2020.

² Includes households and non-profit institutions serving households.

³ Includes transfer costs of non-produced assets.

⁴ Contribution to GDP growth, percentage points.

⁵ Wages and salaries divided by employees.

Table 2.7: Detailed summary of changes since October 2021

	P	ercentage	point differ	rence, unle	ss otherwi	se stated	
	Outturn			Forec	ast		
	2020	2021	2022	2023	2024	2025	2026
UK economy							
Gross domestic product (GDP)	0.5	1.0	-2.2	-0.3	8.0	0.2	0.0
GDP per capita	0.5	1.1	-2.1	-0.1	0.9	0.3	0.1
GDP level (Q4 2019=100) ¹	0.6	1.5	-0.6	-0.9	-0.1	0.0	0.0
Nominal GDP	0.2	0.6	-1.5	0.5	0.7	0.1	-0.1
Output gap (per cent of potential output)	0.0	0.4	0.1	-0.8	-0.1	0.0	0.0
Expenditure components of GDP							
Domestic demand	0.6	1.1	-4.0	0.1	0.4	0.0	0.0
Household consumption ²	0.4	1.4	-4.4	-0.2	-0.2	-0.1	0.2
General government consumption	1.1	-0.1	0.6	-0.3	0.2	0.0	-0.1
Fixed investment of which:	-0.7	-0.4	-2.9	1.9	2.6	0.4	-0.7
Business	-1.1	1.7	-5.1	0.9	4.4	0.6	-1.3
General government	-0.8	-2.8	1.0	1.4	-1.0	0.0	-0.1
Private dwellings ³	0.7	-3.7	-2.0	4.2	1.3	0.1	0.0
Change in inventories ⁴	-0.2	0.4	-0.5	0.0	0.0	0.0	0.0
Exports of goods and services	1.9	-1.0	-0.5	1.1	0.5	0.1	0.0
Imports of goods and services	1.9	0.3	-7.1	2.5	-1.0	-0.5	-0.1
Balance of payments current account							
Per cent of GDP	0.9	0.4	0.7	0.5	1.3	1.5	1.5
Inflation							
CPI	0.0	0.2	3.5	1.5	-0.5	-0.1	0.0
RPI	0.0	0.5	4.9	2.1	-0.5	-0.3	-0.1
GDP deflator at market prices	-0.2	-0.4	0.7	0.8	-0.1	-0.1	-0.1
Labour market							
Employment (million)	0.0	0.1	0.1	-0.1	-0.1	-0.1	-0.1
Productivity per hour	0.7	8.0	-1.1	-0.3	0.3	0.0	-0.1
Wages and salaries	0.5	1.8	2.0	-0.6	0.7	0.1	-0.2
Average earnings ⁵	0.5	1.2	1.4	-0.2	0.5	0.0	-0.3
LFS unemployment (per cent)	0.0	-0.4	-0.8	-0.2	-0.1	-0.1	-0.1
Unemployment (million)	0.0	-0.1	-0.3	-0.1	0.0	0.0	0.0
Household sector							
Real household disposable income ²	0.2	0.5	-1.8	-1.7	1.1	0.2	0.1
Saving ratio (level, per cent) ²	-1.9	-2.6	-0.8	-2.3	-1.0	-0.6	-0.7
House prices	-0.2	1.3	4.1	0.5	-0.4	-0.4	-0.5
World economy							
World GDP at purchasing power parity	0.2	0.0	-1.0	0.1	0.3	0.3	0.0
¹ Per cent change since October 2021							

¹ Per cent change since October 2021.

² Includes households and non-profit institutions serving households.

³ Includes transfer costs of non-produced assets.

⁴ Contribution to GDP growth, percentage points.

⁵ Wages and salaries divided by employees.

Table 2.8: Determinants of the fiscal forecast

	Percento	Percentage change on previous year, unless otherwise specified (
	Outturn	0 0		Fore			<u> </u>	over		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	forecast		
GDP and its components										
Real GDP	-10.1	11.1	2.2	1.9	2.1	1.7	1.7	22.1		
Nominal GDP ¹	-5.3	10.4	6.3	4.3	4.0	3.7	3.7	36.9		
Nominal GDP (£ billion) ^{1,2}	2,142	2,364	2,513	2,622	2,726	2,826	2,931	789		
Nominal GDP (centred end-March £bn) ^{1,3}	2,271	2,438	2,570	2,675	2,776	2,877	2,984	713		
Wages and salaries ⁴	2.6	7.5	6.0	2.7	3.0	3.1	3.4	28.4		
Non-oil PNFC profits ^{4,5}	1.7	5.8	-1.4	4.9	4.9	4.0	3.8	23.9		
Consumer spending ^{4,5}	-9.4	8.5	11.2	4.9	3.1	3.1	3.2	38.9		
Prices and earnings										
GDP deflator	5.8	-1.0	4.1	2.4	1.9	2.0	2.0	11.7		
RPI	1.2	5.7	10.3	3.6	2.4	2.6	2.7	30.3		
CPI	0.6	3.9	8.0	2.4	1.7	2.0	2.0	21.4		
Average earnings ⁶	2.6	6.1	5.1	2.4	2.7	3.0	3.3	24.8		
'Triple-lock' guarantee (September) ⁷	2.5	3.1	7.5	3.4	2.6	2.9	3.2	24.9		
Key fiscal determinants										
Employment (million)	32.3	32.5	32.7	32.9	33.1	33.2	33.4	1.0		
Output gap (per cent of potential output)	-0.3	1.5	0.3	-0.2	0.0	0.0	0.0	0.3		
Financial and property sectors										
Equity prices (FTSE All-Share index)	3,490	4,095	4,187	4,370	4,542	4,709	4,885	1,395		
HMRC financial sector profits ^{1,5,8}	-12.2	25.0	-4.0	2.0	1.8	1.7	-0.1	26.6		
Residential property prices ⁹	4.5	10.2	5.7	1.0	1.8	2.6	3.2	26.7		
Residential property transactions (000s) ¹⁰	1,196	1,362	1,306	1,344	1,370	1,387	1,404	207		
Commercial property prices ¹⁰	-9.7	11.3	-0.7	2.4	1.8	1.9	2.0	20.0		
Commercial property transactions 10	-13.6	20.3	-1.1	2.1	1.7	1.7	1.7	27.7		
Oil and gas										
Oil prices (\$ per barrel) ⁵	42.3	70.4	94.0	83.4	78.2	77.7	79.3	37.0		
Oil prices (£ per barrel) ⁵	33.0	51.2	70.1	62.3	58.4	58.0	59.2	26.2		
Gas prices (£ per therm) ⁵	0.2	1.1	2.8	1.8	1.1	1.2	1.2	0.9		
Oil production (million tonnes) ⁵	45.7	38.2	37.3	35.8	33.8	31.7	29.8	-15.9		
Gas production (billion therms) ⁵	13.2	11.0	11.8	11.2	10.2	9.2	8.2	-5.0		
Interest rates and exchange rates										
Bank Rate (per cent)	0.1	0.2	1.4	1.8	1.6	1.4	1.3	1.2		
Market gilt rates (per cent) ¹¹	0.4	0.9	1.4	1.4	1.5	1.5	1.6	1.2		
Euro/Sterling exchange rate (€/£)	1.1	1.2	1.2	1.2	1.2	1.2	1.2	0.1		
¹ Non-seasonally adjusted.		⁷ Adjusted	for suspen	sion of 202	1-22 'triple	e-lock'.				

² Denominator for receipts, spending and deficit forecasts as a per cent of GDP.

³ Denominator for net debt as a per cent of GDP.

⁴ Nominal. ⁵ Calendar year.

⁶ Wages and salaries divided by employees.

Adjusted for suspension of 2021-22 'triple-lock'.
 HMRC Gross Case 1 trading profits.

Outturn data from ONS House Price Index.
 Outturn data from HMRC information on stamp duty land tax.

¹¹ Weighted average interest rate on conventional gilts.

Table 2.9: Changes in determinants of the fiscal forecast since March 2020

	Percentage point difference, unless otherwise specified								
_	Outturn		Forec	ast					
	2020-21	2021-22	2022-23	2023-24	2024-25				
GDP and its components									
Real GDP	-11.5	9.3	8.0	0.7	0.6				
Nominal GDP ¹	-8.7	6.5	2.8	0.9	0.4				
Nominal GDP (£ billion) ^{1,2}	-162.6	-29.5	35.1	59.9	72.0				
Nominal GDP (centred end-March £bn) ^{1,3}	-76.9	1.7	50.6	68.7	76.0				
Wages and salaries ⁴	-1.2	3.9	2.2	-0.5	-0.4				
Non-oil PNFC profits ^{4,5}	-0.9	2.9	-4.7	1.5	0.9				
Consumer spending ^{4,5}	-11.6	5.4	7.9	1.5	-0.4				
Prices and earnings									
GDP deflator	3.9	-3.1	1.9	0.3	-0.3				
RPI	-0.9	2.8	7.2	0.7	-0.5				
CPI	-0.8	2.0	5.9	0.3	-0.4				
Average earnings ⁶	-0.9	2.8	1.6	-0.6	-0.4				
'Triple-lock' guarantee (September) ⁷	-0.7	-0.6	4.1	0.2	-0.4				
Key fiscal determinants									
Employment (million)	-0.7	-0.6	-0.5	-0.4	-0.3				
Output gap (per cent of potential output)	-0.4	1.1	-0.1	-0.4	0.0				
Financial and property sectors	7540	010.0	070.0	0.40.4	0.47.5				
Equity prices (FTSE All-Share index)	-754.9	-313.2	-378.0	-348.4	-346.5				
HMRC financial sector profits ^{1,5,8}	-13.8	23.1	-5.8	0.3	0.0				
Residential property prices ⁹	0.3	3.1	0.2	-3.2	-2.1				
Residential property transactions (000s) ¹⁰	-62.7	84.2	-10.9	-0.6	-3.1				
Commercial property prices ¹⁰	-8.3	11.3	-1.4	0.4	-0.3				
Commercial property transactions ¹⁰	-11.9	18.6	-2.5	0.8	0.2				
Oil and gas									
Oil prices (\$ per barrel) ⁵	-13.8	15.6	38.9	27.2	20.9				
Oil prices (£ per barrel) ⁵	-9.1	10.6	29.4	21.0	16.5				
Gas prices (£ per therm) ⁵	0.0	0.7	2.4	1.4	0.8				
Oil production (million tonnes) ⁵	-5.4	-10.1	-8.6	-7.8	-7.8				
Gas production (billion therms) ⁵	0.2	-1.5	0.0	0.0	-0.5				
Interest rates and exchange rates									
Bank Rate (per cent)	-0.6	-0.5	0.8	1.2	1.0				
Market gilt rates (per cent) ¹¹	-0.5	0.0	0.4	0.4	0.4				
Euro/Sterling exchange rate (€/£)	0.0	0.0	0.0	0.0	0.0				
¹ Non-seasonally adjusted	Adjusted for suspe	ansion of 2021 22	triple lock						

¹ Non-seasonally adjusted.

⁷ Adjusted for suspension of 2021-22 'triple-lock'.

² Denominator for receipts, spending and deficit forecasts as a per cent of GDP.

⁸ HMRC Gross Case 1 trading profits. ⁹ Outturn data from ONS House Price Index.

³ Denominator for net debt as a per cent of GDP.

 $^{^{\}rm 10}$ Outturn data from HMRC information on stamp duty land tax.

⁴ Nominal. ⁵ Calendar year.

¹¹ Weighted average interest rate on conventional gilts.

⁶ Wages and salaries divided by employees.

Table 2.10: Changes in determinants of the fiscal forecast since October 2021

	Percentage point difference, unless otherwise specified						
	Outturn				ecast	<u>'</u>	
	2020-	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
GDP and its components							
Real GDP	0.7	0.2	-2.1	0.2	0.7	0.0	0.0
Nominal GDP ¹	0.3	0.0	-0.8	0.4	0.7	0.0	-0.1
Nominal GDP (£ billion) ^{1,2}	43.1	47.0	32.6	43.6	62.8	65.2	65.0
Nominal GDP (centred end-March £bn) 1,3	60.3	25.5	37.7	56.2	64.7	65.4	65.2
Wages and salaries ⁴	1.2	1.9	1.1	-0.3	0.6	-0.1	-0.2
Non-oil PNFC profits ^{4,5}	2.6	-2.1	-4.4	1.0	2.1	0.7	0.0
Consumer spending ^{4,5}	0.2	0.8	-2.7	1.2	-0.7	-0.2	0.2
Prices and earnings							
GDP deflator	-0.5	-0.3	1.3	0.2	0.0	0.0	-0.1
RPI	0.0	1.1	5.7	0.4	-0.4	-0.2	-0.1
CPI	0.0	0.6	4.3	0.0	-0.4	0.0	0.0
Average earnings ⁶	1.2	1.0	1.2	-0.1	0.4	-0.1	-0.3
'Triple-lock' guarantee (September) ⁷	0.0	0.0	3.6	0.3	0.1	0.1	-0.3
Key fiscal determinants							
Employment (million)	0.0		0.0	-0.1	-0.1	-0.1	-0.1
Output gap (per cent of potential output)	0.0	0.6	-0.5	-0.6	0.0	0.0	0.0
Financial and property sectors							
Equity prices (FTSE All-Share index)	0.0		-242.5	-234.1	-213.6	-220.9	-233.5
HMRC financial sector profits ^{1,5,8}	1.2	11.4	-5.8	0.2		0.0	-1.8
Residential property prices ⁹	-0.1	2.4	3.4	0.0	-0.4	-0.4	-0.5
Residential property transactions (000s) ¹⁰	-1.1	34.5	-3.3	-4.9	-1.5	-1.2	-1.2
Commercial property prices ¹⁰	0.0	9.0	-2.8	0.2	0.0	-0.1	0.0
Commercial property transactions 10	0.0	3.6	-0.1	0.4	0.3	0.0	0.0
Oil and gas							
Oil prices (\$ per barrel) ⁵	0.0	2.3	25.8	17.9	11.7	9.9	10.1
Oil prices (£ per barrel) ⁵	0.0	2.0	20.7	14.9	10.3	9.0	9.2
Gas prices (£ per therm) ⁵	0.0	0.1	1.8	1.1	0.5	0.5	0.5
Oil production (million tonnes) ⁵	-0.2	-1.2	-0.6	-0.5	-0.5	-0.5	-0.4
Gas production (billion therms) ⁵	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Interest rates and exchange rates							
Bank Rate (per cent)	0.0	0.1	0.9	1.1	0.9	0.6	0.5
Market gilt rates (per cent) ¹¹	0.0	0.1	0.5	0.5	0.4	0.4	0.4
Euro/Sterling exchange rate (€/£)	0.0		0.0	0.0		0.0	0.0
¹ Non-seasonally adjusted.		⁷ Adjusted fo	or suspension	of 2021-2	2 'triple-lock'		

¹ Non-seasonally adjusted.

² Denominator for receipts, spending and deficit forecasts as a per cent of GDP.

³ Denominator for net debt as a per cent of GDP.

⁴ Nominal. ⁵ Calendar year.

⁶ Wages and salaries divided by employees.

⁷ Adjusted for suspension of 2021-22 'triple-lock'.

⁸ HMRC Gross Case 1 trading profits.

⁹ Outturn data from ONS House Price Index.

 $^{^{\}rm 10}$ Outturn data from HMRC information on stamp duty land tax.

¹¹ Weighted average interest rate on conventional gilts.

3 Fiscal outlook

Introduction

3.1 The Russian invasion of Ukraine began just as we were finalising our pre-measures fiscal forecast, requiring us to reopen it to reflect the invasion's early economic impacts as captured by movements in financial markets in the first week of the invasion. As set out in Box 2.2, the effects of the invasion on our economy forecast come principally via the impact of higher energy prices on inflation, real incomes, consumption and imports. Financial market movements also affected our fiscal forecast directly – notably through higher North Sea revenues, higher debt interest spending, and lower capital gains tax. Wider economic impacts also affected the fiscal forecast via tax bases and inflation uprating of various rates and thresholds. Given the late stage in our forecast process at which this news materialised, the fiscal forecast was only updated in these respects, with no further tax- or spending-specific judgements applied. Financial markets have since moved sharply, both up and down; we consider the fiscal implications of more adverse energy and financial market prices than assumed in our central forecast in Chapter 4.

3.2 This chapter:

- explains the effects on our fiscal forecast of new policies announced since October
 2021, and recaps the combined effect of all policies announced since the start of the pandemic (from paragraph 3.8);
- notes **classification issues** affecting our forecast (from paragraph 3.16);
- describes the outlook for public sector receipts (from paragraph 3.20) and public sector expenditure (from paragraph 3.72);
- presents forecasts for the **fiscal deficit**, including headline and structural measures of the overall, current and primary fiscal balances (from paragraph 3.121);
- describes the outlook for the public sector balance sheet and for government lending to the private sector and other financial transactions (from paragraph 3.135); and
- summarises key uncertainties and risks to the fiscal outlook (paragraph 3.163).
- 3.3 The forecasts in this chapter start from the estimates of 2020-21 outturn data for the public sector finances published by the Office for National Statistics (ONS) on 22 February. We then present an in-year estimate for 2021-22 that makes use of ONS outturn data for April 2021 to January 2022 (but not the February outturn released on 22 March, to which we did

- not have access for this forecast). Finally, we present forecasts for 2022-23 to 2026-27. We compare our latest forecast with those from both our pre-pandemic March 2020 *Economic and fiscal outlook (EFO)* and our most recent *EFO* published in October 2021.
- 3.4 The Foreword to this document describes the timetable followed in producing the forecasts presented here. As discussed above, the Russian invasion of Ukraine meant that we departed from our normal practice of finalising a pre-measures fiscal forecast in advance of incorporating the Chancellor's policy decisions in a subsequent forecast round. Instead, we revised both pre- and post-measures forecasts in tandem in the final round of the process to reflect both Ukraine-related movements in financial markets and the Chancellor's policy decisions in this Spring Statement. This fiscal forecast was completed on 18 March.

3.5 This fiscal forecast:

- represents our **central view** of the path of the public finances, conditioned on the current policies of the Government and financial market prices that prevailed in the first week of the Russian invasion of Ukraine (from 24 February to 2 March);
- is based on **announced Government policy** on the indexation of rates, thresholds, and allowances for taxes and benefits, and incorporates estimates of the effects of new policies announced since our October 2021 forecast; and
- focuses on official 'headline' fiscal aggregates that exclude public sector banks.
- In recent forecasts the economy has been subject to extraordinary shocks creating exceptional uncertainty. The course of the Brexit negotiations, the path of the pandemic, and now the war in Ukraine have seen dramatic movements in the exchange rate, energy prices, trade volumes, output, inflation, and other key forecast variables. The agreement and progressive implementation of the UK-EU Trade and Cooperation Agreement (TCA) over the past two years has reduced some, but not all, of the uncertainty about the UK's most important trading relationship. The successful development and rollout of vaccines and boosters has helped to significantly reduce, but not eliminate, the risks from a resurgence of Covid infections over the past year. The Russian invasion of Ukraine and international policy response are delivering a further significant shock to the UK economy, in particular through their impact on global energy prices and on inflation at home and abroad.
- 3.7 Our fiscal forecasts reflect our latest view of the economic implications of these important and ongoing changes. Assumptions concerning the implementation of the TCA are set out in Chapter 2, with an assessment of the latest evidence on the impact of Brexit on UK trade provided in Box 2.6. Assumptions concerning the future course of the pandemic and its impact on the economy are also set out in Chapter 2, with an illustration of the economic and fiscal implications of the emergence of a vaccine-resistant Covid variant presented in Chapter 4. And, as noted above, the impact of the war in Ukraine is principally discussed in Box 2.2 in Chapter 2, with the implications of a more adverse position for energy prices

¹ Further breakdowns of receipts and expenditure, and other details, are provided in supplementary tables on our website.

discussed in Chapter 4. Uncertainty around these things, particularly those related to the short and medium-term implications of the invasion of Ukraine, represent important sources of risk to the fiscal outlook.

Policy announcements

The March 2022 Spring Statement

- Our forecast incorporates the fiscal implications of all policy measures announced since October 2021. Their effect is largely the result of three major packages: (i) a set of energy cost measures that smooth the impact of pre-invasion energy price rises on household bills and of more recent petrol price rises for motorists, but recoup some of that support over time; (ii) a set of reforms to student loans that forms part of the Government's response to the 2019 Augar Review; and (iii) a pair of personal tax cuts in income tax and NICs that gives back just over a quarter of the sums raised via income tax threshold freezes and the NICs rate rise that were announced last year and take effect in April.² The overall impact of policy decisions is largely the sum of these three packages, amounting to a material fiscal giveaway to households in the medium term, whose cost is partly offset by long-term fiscal savings from the student loans reforms that are recorded upfront in borrowing.
- 3.9 The net effect of all policy measures announced since October raises borrowing by £8.3 billion in 2022-23, and an average of £2.1 billion a year thereafter. The largest fiscal giveaways are this year's temporary support for energy and fuel costs and the personal tax cuts that take effect from this July (for NICs) and from April 2024 (for income tax). The largest fiscal takeaway comes from the long-term savings on student loans, which reduce borrowing for the Government in every year of the forecast, but for affected students the costs will be borne over a period of decades. In thinking about the economic impact of measures announced since October, it is therefore helpful to strip out the effects of student loans reforms on borrowing. On that basis, fiscal policy has been eased by £19.4 billion in 2022-23 (0.8 per cent of GDP), and by an average of £7.5 billion (0.3 per cent of GDP) a year from 2023-24 onwards a material medium-term fiscal easing.
- 3.10 Table 3.1 presents the direct and indirect effects of new policy announcements since October.³ The **energy cost support** measures provide £13.4 billion of support, mostly in 2022-23, just under half of which is recouped between 2023-24 and 2027-28. There are three components to the package:
 - On 3 February the Government responded to the 54 per cent rise in Ofgem's price cap on domestic energy bills through a mixture of rebates and discounts on household bills. This includes a council tax rebate of £150 in April, available to around 80 per cent of households (those in bands A to D) and a £200 energy bill discount in October for all domestic electricity customers. In addition, a discretionary fund totalling £144 million will be made available to local authorities, with an extra £40 million to finance

² This captures changes to income tax, NICs (including employer NICs) and the health and social care levy over the five years from 2022-23 to 2026-27, including the recosting of policies, as set out in Table A.5.

³ See Annex A for more detail on the policy package.

setting up the scheme. This amounts to £8.9 billion of support for household energy bills in 2022-23. From 2023-24 onwards, the discount on bills will be clawed back via a new charge applied to household energy bills for five years. This will be levied at a rate of close to £40 a year, raising £1.2 billion a year, with the rate set to precisely recoup the estimated £6.0 billion distributed via the discount in October.⁴

- The Government has reduced fuel duty by 5 pence for a single year from 23 March 2022, at a cost of £2.4 billion in 2022-23. This marks the first change in the duty rate since April 2011 (when it was cut by a penny) despite successive Governments stating every year since 2010 that default policy is to increase rates by RPI inflation. The current policy which we must use as the basis of our forecast is to reverse the rate cut in 12 months' time and revert to increasing it by RPI inflation, which currently implies an 8 pence rise to protect fuel duty revenue from 2023-24 onwards.
- The Government's **bailout of Bulb Energy** incurs a £1.2 billion cost in 2021-22 and a further £1.0 billion in 2022-23, to cover the company's operating losses. Given the volatility in global energy markets, there remains uncertainty around the final cost.
- 3.11 The second main element of the policies in this Spring Statement are two significant cuts to personal taxes costing £6.3 billion in 2022-23 rising to £10.4 billion a year on average from 2024-25 onwards:
 - The Government has met its 2019 manifesto commitment to **raise the primary** threshold for employee NICs and the lower profits limit for self-employed NICs to the level of the income tax personal allowance. This will take effect from July of this year, raising the two NICs thresholds from £9,880 to £12,570. This is a tax cut for almost 30 million workers equivalent to around £290 over a full year (and £220 in 2022-23). It costs £6.3 billion in 2022-23 and by diminishing amounts until 2025-26, with the profile reflecting the personal allowance being frozen until 2025-26, whereas absent this measure the NICs thresholds were due to be uprated by CPI inflation each year.
 - A 1 percentage point cut in the basic rate of income tax from 20 to 19 per cent, from April 2024. This is the first change to the basic rate in 15 years (when it was cut from 22 to 20 per cent). It also benefits around 30 million taxpayers by an average of £170 a year. It costs an average of £5.8 billion a year from 2024-25 onwards.
- 3.12 On 24 February the Government announced a package of **student loans reforms** that lower borrowing by £2.3 billion in 2021-22, £11.2 billion next year, and an average of £5.4 billion a year over the remaining years of the forecast. The accounting for student loans in the public finances is complex. In effect, the reforms amount to the equivalent of an income tax rise for most existing and new students over their working lives. This reflects, first, repayment thresholds being frozen for existing borrowers and lowered for new borrowers (equivalent to freezing or reducing the income tax personal allowance), and second, the

⁴ All customers will be liable for the new tax, so levying it at precisely £40 would be expected to raise more than the cost of the discount due to growth in the number of households from year to year.

extension of loan terms from 30 to 40 years for new borrowers (equivalent to imposing a 9 percentage point marginal income tax rise for a period of up to a decade for those affected, three decades into the future). The long-term fiscal savings from these changes are accrued upfront and therefore reduce borrowing in the medium term. The full fiscal effects of these measures on both borrowing and debt are set out in Box A.1.

3.13 The **indirect effects** of measures announced since October are small and uneven across the forecast period, reflecting the modest boost to output and receipts from the discretionary fiscal easing (whose effect is largest in 2022-23) and the modest additions to debt interest and welfare spending from slightly higher inflation (whose effect is more persistent).⁵

Table 3.1: Total effect of Government decisions since October 2021

			£ bil	llion		
			Fore	cast		
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total effect of Government decisions	-4.2	6.1	1.2	4.3	3.9	2.5
of which:						
Direct effect of tax decisions	-0.1	8.1	3.8	8.3	9.0	9.0
Direct effect of spending decisions	-4.1	0.2	-3.2	-4.7	-6.1	-7.8
Indirect effects of Government decisions	0.0	-2.1	0.5	0.7	1.0	1.3
of which:						
Energy cost support	1.2	12.2	-1.2	-1.2	-1.2	-1.2
of which:						
£150 council tax rebate	0.0	2.9	0.0	0.0	0.0	0.0
£200 energy bills discount and clawback	0.0	6.0	-1.2	-1.2	-1.2	-1.2
Fuel duty: 5p cut	0.0	2.4	0.0	0.0	0.0	0.0
Bulb Energy bailout	1.2	1.0	0.0	0.0	0.0	0.0
Personal tax cuts	0.0	6.3	6.1	10.3	10.5	10.6
of which:						
NICs: increase in thresholds	0.0	6.3	6.1	5.0	4.4	4.6
Income tax: 1p basic rate cut	0.0	0.0	0.0	5.3	6.1	6.0
Student loans reforms	-2.3	-11.2	-3.8	-4.8	-6.1	-7.0
Other policies	-3.1	0.9	-0.4	-0.6	-0.3	-1.1
Memo: Direct effects excluding student loans	-1.9	19.4	4.4	8.4	9.0	8.3
of which:						
Tax decisions	0.0	8.9	5.0	9.0	9.6	9.6
Spending decisions	-1.9	10.5	-0.6	-0.6	-0.6	-1.3
Note: This table uses the convention that a positive sign	ı implies an ind	crease in borr	owing.			

The cost of pandemic-related support measures

3.14 In our November 2020 and March 2021 *EFOs* we described the evolution of the Government's fiscal policy response to the pandemic and its growing cost over the course of successive 'mini-budgets' as well as the formal fiscal events of the November 2020 Spending Review and the March 2021 Budget. There is no straightforward definition of a

⁵ As a consequence of needing to reopen our pre-measures forecast alongside factoring in policy measures in a single forecast round, this indirect effect has been calculated top-down rather than via our standard practice of comparing pre- and post-measures economy forecasts to calculate the fiscal consequences of differences between them.

pandemic-related support measure, so we decided to draw a line at the March 2021 Budget, such that new policies announced since then have not been added to our running total of the cost of the Covid policy response. This means revisions to the estimated cost of this response since March 2021 largely reflect updates to estimates of the cost of previously announced interventions.⁶

3.15 Our latest estimate of the total cost of pandemic-related rescue measures is £310.7 billion. This covers their costs between 2019-20 and 2026-27, although the vast majority of the cost (99 per cent) falls in 2020-21 and 2021-22. Our latest estimate is down £5.9 billion (2 per cent) from our October estimate and down £27.7 billion (8 per cent) from our initial November 2020 estimate. The revision since October largely reflects a lower estimate of total write-offs on government-backed loan schemes, reflecting an improved economic outlook and a reduction in the proportion of loans assumed to have been claimed fraudulently. Of this total, we now estimate that £141.9 billion (46 per cent) was spent on support for public services, £104.3 billion (34 per cent) on support for households, and £64.5 billion (21 per cent) on support for businesses (Chart 3.1).

400 ■ Support for businesses Latest estimate Support for households 350 ■ Public services 300 250 200 150 100 50 November 2020 March 2021 October 2021 March 2022 Source: OBR

Chart 3.1: The cost of pandemic-related rescue measures

Classification and other statistical changes

3.16 Our fiscal forecasts also reflect the latest ONS view on the statistical classification of government activities, including any changes made since our last forecast. When new policies raise classification questions, we draw on the advice of Treasury classification experts in instances where the ONS has yet to decide on the appropriate treatment.

⁶ We do however include extensions of any measures that are deemed to provide pandemic-related rescue. There were two such examples in our October 2021 *EFO*, and a further two in this *EFO*. See Annex A for more detail.

- 3.17 The package of energy-related measures announced in February raises several classification issues for both our economy and fiscal forecasts:
 - The ONS has decided that the April 2022 **council tax rebate** should be recorded as current expenditure specifically as a current transfer to households rather than a tax cut, since it does not reduce households' council tax liability. As such, it raises household incomes. However, by the time we closed our forecast, the ONS had not stated whether or not this measure would affect RPI inflation (which includes council tax) but as inflation generally reflects household spending rather than income, our economy forecast assumes it is not affected by this measure.
 - The ONS has yet to deliver its view on other aspects of the energy measures.

 Conceptually, the **energy rebate** resembles the council tax rebate, as a transfer that benefits household incomes. So, we likewise assume this is a current transfer to households with no inflation consequences. But the precise mechanism used to deliver the rebate could equally lead to it being considered a transfer to energy providers and a reduction in energy bills, which would then have inflation consequences.
 - The energy clawback seems likely to be classified as a tax. By increasing the cost of purchasing energy this would typically affect inflation. But the mechanism used to deliver the clawback is also uncertain and so it is not clear that it would automatically be recorded by the ONS as affecting inflation. Absent sufficient certainty we have accepted the advice of the Treasury's experts to assume no inflation effect here either. But they and we would highlight the uncertainty around this. We will revise this as necessary in our next forecast once the ONS has finalised its decisions.
- 3.18 Since our October *EFO*, the ONS has begun recording flows relating to the unwinding of the discount rate applied to expected future calls on **pandemic-related loan guarantees** as debt interest. In our October forecast, we included this effect with the expected calls as capital spending, so have come into line with the ONS treatment in this forecast.
- 3.19 The ONS is also considering several issues that we have not tried to anticipate in this forecast but that are likely to be resolved by our next forecast.⁷ These include:
 - Changes to the treatment of **leases**, which the ONS aims to complete for central government this year and for other sectors to a slower timescale.
 - Improvements to the methodology for national non-domestic rates (business rates).
 - The potential classification of Bulb Energy Ltd into the public sector. As the Government is currently covering Bulb's losses via the 'special administration regime' (SAR), the deficit implications of a reclassification are probably small, though the balance sheet implications are less certain. Our public spending forecast includes these costs in 2021-22 and 2022-23, but not beyond as the Government intends for Bulb to exit the SAR later this year. The key fiscal issue is therefore how long Bulb remains under the SAR and loss-making, with those losses borne by the Government.

⁷ ONS, Looking ahead – developments in public sector finance statistics: 2022, February 2022.

Public sector receipts

Summary of the receipts forecast

- 3.20 In this section we discuss our latest forecast of public sector receipts, and how it has changed since both our March 2020 forecast (produced on the eve of the pandemic) and our previous forecast in October 2021.
- 3.21 Receipts fell by £36.1 billion (4.3 per cent) in 2020-21 but outperformed nominal GDP, meaning that both receipts and National Accounts taxes (a slightly narrower measure that is more comparable over longer historical periods, shown in Chart 3.2) rose as a share of GDP, by 0.4 and 0.1 percentage points, respectively. This rise in the tax burden is unusual in a recession and reflected the enormous increases in pandemic-related public spending, which supported private-sector incomes and tax receipts, more than offsetting the cost of discretionary tax cuts. We expect receipts to rise £106.4 billion (13.4 per cent) in 2021-22, again outperforming nominal GDP (which is expected to rise by 10.4 per cent) and driving a further 1.0 percentage point increase in the receipts-to-GDP ratio (and a 1.2 percentage point increase in the National Accounts tax-to-GDP ratio). Box 3.1 explores the factors driving the remarkable increase in tax receipts relative to GDP over the past two years.
- 3.22 Receipts growth is expected to continue outpacing GDP growth in 2022-23 and 2023-24, pushing the receipts-to-GDP ratio up by a further 2.0 percentage points over those two years. This is largely driven by previously announced rises in income tax, corporation tax and NICs rates (superseded in 2023-24 by the permanent health and social care levy), the effects of which are only partially offset by tax cuts announced in this Spring Statement: the increase in starting thresholds for NICs from this July and a one-year 5p cut in fuel duty rates from March. The receipts-to-GDP ratio then stabilises from 2024-25 onwards, as the ongoing effects of some previously announced tax rises are tempered by the other personal tax cut newly announced in this Spring Statement: the 1p cut to the basic rate of income tax that takes effect from April 2024.
- 3.23 As Table 3.2 shows, the personal tax cuts announced in this Spring Statement still leave income tax and NICs (including the health and social care levy) raising 2.0 per cent of GDP more in 2026-27 than they did in 2019-20, while corporation tax raises 1.0 per cent of GDP more. By the final year of the forecast, the ratios of both public sector receipts and National Accounts taxes to GDP rise by just under 3½ percentage points above their prepandemic (2019-20) levels, before they peak in the final year of the forecast to 40.1 and 36.3 per cent, respectively, with the latter representing the highest tax burden since the late 1940s under Clement Attlee's post-war Government.

⁸ The National Accounts taxes-to-GDP ratio rises by 1.8 percentage points over the same period.

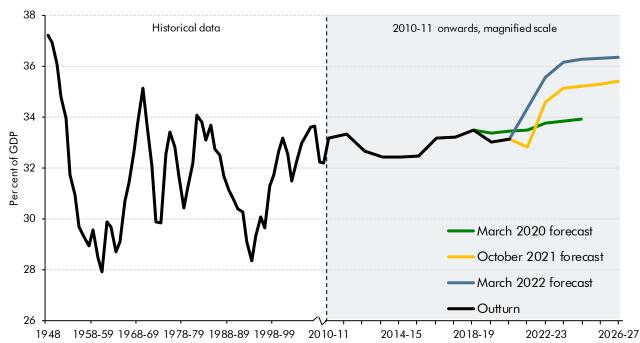


Chart 3.2: National Accounts taxes as a share of GDP

Note: We have increased the GDP denominator in forecast years for our previous forecasts by the upward revision to 2020-21 nominal GDP in the recent Quarterly National Accounts data. This is to enable like-for-like comparisons with our March 2022 forecast. Source: ONS, OBR

Table 3.2: Major receipts as a share of GDP

		Per cent of GDP						
	Out	turn			Fore	ecast		
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Income tax	8.6	9.1	9.5	9.8	9.8	9.9	10.0	10.2
NICs and H&SC levy ¹	6.4	6.7	6.7	7.1	6.9	6.8	6.8	6.8
Value added tax	6.0	5.5	5.9	6.1	6.1	6.0	6.0	5.9
Onshore corporation tax	2.2	2.4	2.4	2.3	3.0	3.2	3.3	3.2
Council tax	1.6	1.8	1.7	1.7	1.7	1.7	1.7	1.6
Capital taxes ²	1.4	1.4	1.7	1.7	1.7	1.7	1.8	1.8
Business rates	1.4	0.9	0.9	1.2	1.3	1.3	1.3	1.3
Fuel duties	1.2	1.0	1.1	1.0	1.1	1.1	1.1	1.0
Alcohol and tobacco duties	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
Other taxes	3.3	3.3	3.4	3.8	3.7	3.6	3.5	3.5
National Accounts taxes	33.0	33.1	34.4	35.5	36.2	36.2	36.3	36.3
Interest and dividend receipts	1.0	1.1	1.0	1.2	1.3	1.2	1.2	1.2
Other receipts	2.6	2.8	2.7	2.5	2.5	2.6	2.6	2.6
Current receipts	36.7	37.0	38.0	39.3	40.1	40.0	40.0	40.1

¹ National Insurance contributions and health and social care levy.

² Includes capital gains tax, inheritance tax, property transaction taxes and stamp taxes on shares.

Box 3.1: Why have receipts recovered so strongly in the wake of the pandemic?

While the real economy has performed largely as expected since our October forecast, tax receipts have come in well above forecast (Chart A). And while consumer price inflation has exceeded our forecast, broader whole-economy inflation (the GDP deflator) has not, leaving nominal GDP also in line with our October forecast. The result is that we now expect the tax-to-GDP ratio this year to *rise* by 1.2 percentage points on last year, in contrast to the 0.5 percentage point *fall* we expected in October.^a

Real GDP Receipts excl. SA income tax and CGT 110 12 120 15 110 12 100 ≥₁₀₀ January 2020 = 100 90 Per cent Per cent January 2020 90 Latest ONS estimates (LHS) 80 Difference (RHS) 80 3 70 60 -3 60 -3 Oct Jan Jan Jan Apr Jan Jan Jul Jan 2021 2022 2020 2021

Chart A: Real GDP and tax revenues: October forecast versus outturn

Note: Our October 2021 GDP forecast has been adjusted to align with the ONS's approach to measuring monthly real GDP. Receipts also exclude PSNB-neutral transfers related to quantitative easing. SA income tax and CGT are excluded as the tax receipts are collected the year after the activity takes place, see footnote ^b. Source: ONS, OBR

This outperformance of receipts relative to economic growth poses a challenge for our forecast, as the models we use to predict receipts are based on growth in tax bases, and other factors cannot explain all the strength in receipts this year. The unexplained strength in receipts in 2021-22 amounts to £19.6 billion (0.8 per cent of GDP). Largely as a result, the tax-to-GDP ratio this year is, remarkably, set to be 1.4 percentage points higher than its pre-pandemic position in 2019-20 – whereas in October we assumed the ratio would be flat between those two years.

Understanding why receipts have recovered so strongly – and so much faster than nominal GDP – is therefore crucial to deciding how much of the recent strength will persist across the forecast. As Table A shows, our assessment is that the strength results from a combination of (i) growth in some tax bases outperforming nominal GDP and (ii) some effective tax rates (the pence raised in tax for every pound of tax base) having risen for identifiable reasons. But it also shows that some of the strength in effective tax rates remains unexplained. As ever, the biggest yielding taxes account for much of the movement in the tax-to-GDP ratio. Taking them in turn:

• PAYE income tax and NICs receipts. Almost three-quarters of the jump in receipts relative to GDP reflects an increased labour share of national income, with wages and salaries growing faster than nominal GDP thanks largely to fiscal support measures. The remaining quarter can be explained by fiscal drag – largely as a result of tax thresholds having risen only 0.5 per cent between 2019-20 and 2021-22, so that 8.9 per cent nominal earnings growth has dragged more income into higher tax brackets.

- VAT. Relative to GDP, VAT receipts have remained broadly flat due to offsetting changes in the tax base and the effective tax rate. Household consumption has fallen relative to nominal GDP, which all else equal would have led to a 0.2 percentage point fall in the tax-to-GDP ratio. But the effective tax rate has risen due to a higher share of consumption on standard-rated items, such as durable goods, as well as a higher share of non-refundable government procurement.
- Onshore corporation tax. Non-financial company profits have risen slightly as a share of GDP, which explains approximately a quarter of the rise in corporation tax relative to GDP. Financial sector profits have risen by 10 per cent between 2019-20 and 2021-22, while gross deductions (such as loss relief and capital allowances) have fallen relative to profits, increasing the effective tax rate. But the cost of the capital allowance superdeduction and other measures are so large that explainable contributions to the effective tax rate suggest that it should have fallen between 2019-20 and 2021-21. As a result, almost all the rise in receipts as a share of GDP is unexplained at this point.
- Other taxes. The modest fall in other taxes as a share of GDP is largely the result of identifiable sources of decline in effective tax rates for example, due to the cuts to business rates that extended into 2021-22. And some tax bases have fallen relative to GDP for example, the large drop in air travel that has hit air passenger duty receipts.

This analysis therefore explains two-thirds of the surprising rise in the tax-to-GDP ratio over this two-year period. Of the unexplained portion, nine-tenths relates to onshore corporation tax. It is possible that this is due to other tax-related factors that we have not identified. But it is also possible that profits growth – an area that is particularly difficult to measure – has been faster than recorded in the National Accounts. For higher profits to explain all the 0.28 percentage points of the rise in onshore corporation tax receipts as a share of GDP that is currently unexplained, they would need to be around 13 per cent higher than our forecast assumes in 2021-22 based on the latest data. Such a large gap suggests other factors are at play too.

Table A: Explaining the rise in the tax-to-GDP ratio from 2019-20 to 2021-22

			Per ce	ent of GDP				
	2019-20	2021-22	Change	of	of which, due			
			_	Change in Change in				
				tax base	ETR	Unexplained		
				relative to	explained	change in		
				GDP	in forecast	ETR		
National Accounts tax (ex SA IT and CGT) of which:	31.15	32.19	1.04	0.51	0.21	0.32		
PAYE income tax and NICs	13.72	14.75	1.03	0.75	0.28	0.00		
VAT	5.96	5.86	-0.09	-0.20	0.14	-0.03		
Onshore corporation tax	2.17	2.44	0.27	0.06	-0.07	0.28		
Other taxes	9.30	9.13	-0.17	-0.10	-0.15	0.07		

^a This refers to the National Accounts measure of taxes.

^b For this analysis, we have excluded the income tax and capital gains tax that is paid via self-assessment (SA), which relates to economic activity in 2020-21 rather than 2021-22. As noted in the SA income tax section of this chapter, the strength in SA payments received this year points to materially faster growth in self-employment incomes than recorded in the National Accounts for 2020-21.

Changes in the tax-to-GDP ratio relative to the pre-pandemic position

- The tax-to-GDP ratio at the forecast horizon in 2026-27 is 3.3 percentage points higher than its pre-pandemic 2019-20 position. As Chart 3.3 shows, based on the tax system the Chancellor inherited in March 2020 (as reflected in our pre-measures forecast at that time), the ratio would have risen by a more modest 0.8 percentage points over that period. The 2.5 percentage point rise in the tax burden relative to that inherited position is largely explained by the tax rises announced by the current Chancellor. Underlying forecast revisions since March 2020 have added a further 0.6 percentage points to the rise, reflecting tax-rich changes in the composition of activity that outweigh small pandemic-related scarring of individual tax bases (such as a small hit to business rates and a permanent reduction in business travel reducing air passenger duty).
- 3.25 The 1.8 percentage point increase in the tax burden due to policy measures announced by the current Chancellor since he took office includes 2.2 percentage points from measures announced up to and including the October 2021 Budget and Spending Review, including:
 - Corporation tax rate rises, including the cancelling of the rate cut from 19 to 17 per cent announced in the March 2020 Budget and the rate increase to 25 per cent from April 2023 announced in the March 2021 Budget. In 2026-27, these add 0.9 percentage points to the tax-to-GDP ratio.
 - The income tax personal allowance and higher rate threshold freezes announced in the March 2021 Budget, which mean more income will be subject to tax and a greater proportion of it taxed at the higher rate. This measure adds 0.6 percentage points to the tax-to-GDP ratio in 2026-27.
 - The **health and social care levy** announced in September 2021 and introduced from April 2023, which adds 0.6 percentage points to the tax-to-GDP ratio in 2026-27.
 - Other tax measures, such as the reduction in the lifetime limit on entrepreneurs' relief in capital gains tax. These raise the ratio by 0.2 percentage points in 2026-27.
 - Successive one-year freezes to fuel duty rates, which marginally offset these tax-raising measures. The Chancellor has announced three further years of frozen rates since taking office, reducing the tax-to-GDP ratio by 0.1 percentage points by 2026-27.
- 3.26 In this Spring Statement, the Chancellor has undone around a sixth of those previously announced tax rises by raising the NICs primary threshold to align it with the (frozen) income tax personal allowance and cutting the basic rate of income tax by 1p from 2024-25. These measures undo over a quarter of the previously announced personal tax rises (via the threshold freezes and the introduction of the health and social care levy). Together they reduce the tax burden in 2026-27 by 0.4 per cent of GDP. The temporary 5p cut in fuel

⁹ This captures changes to income tax, NICs (including employer NICs) and the health and social care levy from 2022-23 to 2026-27 (including the recosting of policies) set out in Table A.5, less the knock-on welfare spending impacts that are captured in that table.

duty announced in the Spring Statement is reversed in 2023-24, so has no effect on the medium-term tax burden – so long as the 8p rise in the rate next March – which would deliver a 6 per cent overnight rise in fuel prices – is implemented.

4.5 Policy changes ■ Factors increasing tax/GDP 4.0 -0.1+0.2-0.2 ■ Factors decreasing tax/GDP +0.6-0.2 +3.3 3.5 +0.6 3.0 Per cent of GDP 2.5 +0.92.0 +0.6 1.5 1.0 +0.8 0.5 0.0 Inherited tax Underlying Onshore CT Income tax Health and Other Fuel duty NICs: Total rise Income tax: system forecast rate rises threshold social care measures freeze 1p basic increase in changes freezes levy rate cut thresholds

Chart 3.3: The rise in the tax-to-GDP ratio between 2019-20 and 2026-27

Note: This reflects the National Accounts measure of taxes.

Source: OBR

Changes in receipts since our March 2020 and October 2021 forecasts

3.27 Relative to our March 2020 pre-pandemic forecast, receipts fell short by £79.9 billion (9.2 per cent) in 2020-21 due to tax cuts and the pandemic-related drop in economic activity, with the largest shortfalls coming from VAT, income tax and business rates. Total receipts remain below our pre-pandemic forecast this year, but by a much smaller margin thanks to the more tax-rich composition of economic activity offsetting still-subdued tax bases and the cost of tax cuts. From 2022-23 onwards receipts rise above our pre-pandemic forecast as tax bases recover, the more tax-rich composition of activity persists, and personal and corporate tax rises announced since March 2020 take effect, the effects of which are only modestly undone by measures announced in this Spring Statement. By 2024-25, receipts are £68.2 billion (6.7 per cent) higher than our pre-pandemic forecast – with £43.8 billion due to tax rises and £24.3 billion due to forecast changes that are dominated by effective tax rate movements.

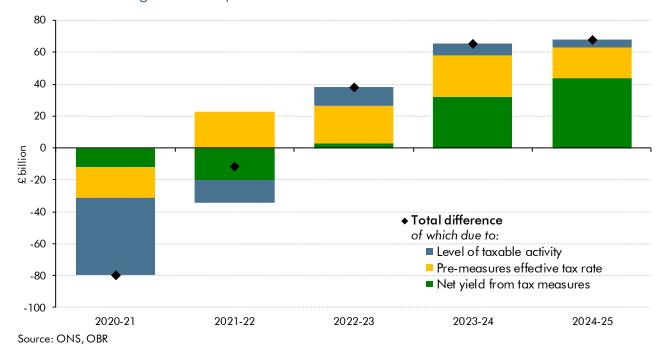


Chart 3.4: Changes to receipts relative to our March 2020 forecast

3.28 Relative to our October 2021 forecast, we have revised receipts up by £37.5 billion in 2021-22, by a slightly smaller £25.1 billion in 2022-23, and then by £28.8 billion a year on average between 2023-24 and 2026-27. In 2021-22, the upward revision reflects a large surplus in self-assessment (SA) receipts across income tax and capital gains tax (CGT), combined with stronger-than-expected outturns across corporation tax, PAYE income tax and NICs, and several other taxes. This strength is largely assumed to reflect changes in the tax-richness of economic activity that will persist – the 'pre-measures effective tax rate' component of Chart 3.5 and Table 3.3, which explains an average of £26 billion a year of upward revision to receipts from 2021-22 onwards. Smaller revisions to tax bases increase receipts by £10 billion a year on average. In 2022-23, net tax cuts cost £8.1 billion (largely from raising the NICs primary threshold and the temporary fuel duty cut). This drops back to £3.8 billion in 2023-24 as the fuel duty cut is reversed and the new clawback tax on energy bills takes effect. It then rises again to average £8.8 billion a year from 2024-25 onwards as the cut in the basic rate of income tax takes effect from April 2024.

◆ Total change ■ Level of taxable activity ■ Pre-measures effective tax rate of which due to: Gross tax rises ■ Gross tax cuts 40 30 20 £ billion 10 0 -10 -20 2020-21 2021-22 2023-24 2022-23 2024-25 2025-26 2026-27

Chart 3.5: Changes to receipts relative to our October 2021 forecast

Source: ONS, OBR

Table 3.3: Receipts forecast: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	872.9	910.8	949.2	984.7	1,022		
October 2021 forecast	795.3	862.0	962.4	1,020	1,061	1,102	1,148
March 2022 forecast	793.0	899.5	987.5	1,050	1,090	1,131	1,175
Change since March 2020 of which:	-79.9	-11.3	38.3	65.4	68.2		
Wages and salaries	-9.1	2.8	11.2	9.9	9.0		
Self assessment income streams	-0.7	-2.0	-2.2	-2.2	-1.2		
Profits	-2.3	-3.3	-1.8	-2.9	-2.9		
Household spending	-22.1	-8.1	-0.8	-0.5	-1.1		
Value of property transactions	-0.7	1.4	0.5	0.1	-0.2		
Other tax bases	-13.8	-4.8	5.0	2.8	1.6		
Pre-measures ETR	-19.0	22.8	23.8	26.0	19.1		
Effect of Government decisions	-12.3	-20.1	2.6	32.3	43.8		
Change since October 2021	-2.2	37.5	25.1	30.3	29.1	28.9	26.8
of which:							
Total tax base	0.8	5.8	14.6	8.9	10.2	9.8	8.1
of which:							
Wages and salaries	0.0		11.1	10.5	13.2	13.5	13.1
Self assessment income streams	0.6	2.5	1.7	0.3	0.4	0.4	0.1
Profits	0.0	-3.7	-1.6	-2.8	-2.3	-2.8	-3.2
Household spending	0.0	-0.6	-2.5	-1.7	-3.0	-3.0	-2.9
Other tax bases	0.2	1.3	5.8	2.6	2.0	1.6	1.0
Pre-measures ETR	-3.0	31.6	18.6	25.2	27.2	28.1	27.7
of which:							
PAYE/NICs/HSC ¹	-1.5	1.3	4.3	2.6	3.7	4.5	5.0
Self assessment ²	-1.3	2.7	2.4	2.9	3.6	3.1	2.9
Corporation Tax ³	1.2	11.2	4.5	6.5	6.6	7.5	7.6
VAT ⁴	-1.6	7.4	1.6	2.3	4.4	4.8	4.9
Other	0.2	9.0	5.7	10.9	9.0	8.2	7.3
Effect of Government decisions	0.0	0.1	-8.1	-3.8	-8.3	-9.0	-9.0

¹ For more information on underlying causes for increases in effective tax rate see Boxes 3.1 and 3.2.

Detailed current receipts forecasts

3.29 Our detailed receipts forecasts, and changes since our March 2020 and October 2021 forecasts, are presented in Tables 3.4, 3.5 and 3.6. Further breakdowns are available on our website. Scottish and Welsh devolved taxes are discussed in our *Devolved tax and spending forecasts* publication.

² For more information see Box 3.1 and paragraph 3.34.

³ For more information see Box 3.1, paragraph 3.42 and chart 3.6.

⁴ For more information see Box 3.1 and paragraph 3.39.

Table 3.4: Current receipts

				£ billion				
	Outt	urn			Fore	ecast		
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Income tax ¹	193.4	195.6	224.9	245.5	256.6	268.6	282.9	298.4
of which: Pay as you earn	165.2	168.5	190.6	208.9	220.0	226.5	239.2	251.2
Self assessment	32.0	31.2	37.0	39.5	39.6	45.0	46.5	49.9
Other income tax	-3.8	-4.2	-2.7	-2.9	-3.0	-2.9	-2.8	-2.7
National insurance contributions	145.0	144.3	158.1	179.0	162.0	166.6	172.6	179.6
Health and social care levy					18.4	19.0	19.7	20.4
Value added tax	134.7	117.0	138.7	154.2	160.0	164.7	169.4	174.4
Corporation tax ²	50.1	53.1	61.4	64.9	82.6	90.8	95.0	96.5
of which: Onshore	49.1	52.4	57.8	56.8	77.5	87.9	92.2	94.1
Offshore	1.0	0.7	3.6	8.1	5.1	3.0	2.8	2.4
Petroleum revenue tax	-0.4	-0.3	-0.6	-0.3	-0.3	-0.2	-0.2	-0.1
Fuel duties	27.6	20.9	26.2	26.2	29.9	30.2	30.1	30.1
Business rates	31.7	19.4	22.4	29.5	35.1	36.1	36.6	37.6
Council tax	36.3	37.6	40.0	41.9	43.6	45.3	46.7	48.1
VAT refunds	19.0	20.2	21.6	23.4	23.7	24.1	24.9	26.2
Capital gains tax	9.8	11.1	14.3	15.0	15.9	17.4	19.0	20.7
Inheritance tax	5.1	5.4	6.1	6.7	6.9	7.3	7.8	8.3
Property transaction taxes ³	12.5	9.5	15.6	17.1	17.8	18.6	19.5	20.8
Stamp taxes on shares	3.6	3.7	4.2	3.6	3.8	3.9	4.1	4.2
Tobacco duties	9.7	9.8	10.3	10.9	11.0	10.9	10.7	10.6
Alcohol duties	12.0	12.2	13.1	12.7	13.3	13.9	14.5	15.0
Air passenger duty	3.7	0.3	1.3	2.9	3.6	4.4	4.6	4.8
Insurance premium tax	6.5	6.3	7.0	7.4	7.6	7.7	7.9	8.0
Climate change levy	2.1	1.8	1.8	1.8	1.8	1.8	2.0	2.0
Bank levy	2.5	1.9	1.3	1.3	1.2	1.2	1.2	1.2
Bank surcharge	1.5	1.1	2.4	1.7	0.9	0.7	0.7	0.7
Apprenticeship levy	2.8	3.0	3.2	3.3		3.6	3.7	3.8
Digital services tax	0.1	0.4	0.6	0.7		0.9	1.0	1.1
Other HMRC taxes ⁴	7.5	7.4	9.5	10.0		10.3	10.4	10.7
Vehicle excise duties	6.8	6.9	7.0	7.2		7.3	7.3	7.3
Licence fee receipts	3.3	3.7	3.8	3.8		4.0	4.1	4.1
Environmental levies	8.0	8.5	7.4	6.9		11.9	12.6	14.1
Emissions Trading Scheme	1.6	1.3	0.9	5.8		5.5	5.3	5.1
Other taxes	9.9	7.6	9.9	10.3		11.8	11.8	11.7
National Accounts taxes	746.3	709.5	812.4	893.3			1,025.8	1,065
Less own resources							7	
contribution to EU	-3.2	-2.2	-	-	-	-	-	-
Interest and dividends	23.5	23.5	24.2	31.3	35.3	32.3	32.7	34.0
Gross operating surplus	57.7	58.6	58.7	59.7	63.3	66.3	68.5	71.3
Other receipts	4.9	3.6	4.1	3.1	3.4	3.5	3.7	3.8
Current receipts	829.1	793.0	899.5	987.5			1,131	1,175
Memo: UK oil and gas revenues ⁵	0.6	0.4	3.1	7.8	4.8	2.8	2.6	2.3

Includes PAYE, self assessment, tax on savings income and other minor components, such as income tax repayments.

 $^{^{\}rm 2}\,{\rm National}$ Accounts measure, gross of reduced liability tax credits.

Includes stamp duty land tax (SDLT), devolved property transaction taxes and the annual tax on enveloped dwellings (ATED).
 Consists of landfill tax (excluding Scotland and Wales), aggregates levy, betting and gaming duties, customs duties, diverted profits tax and soft drinks industry levy.

⁵ Consists of offshore corporation tax and petroleum revenue tax.

Table 3.5: Current receipts: changes since March 2020

	£ billion						
	Outturn Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25		
Income tax ¹	-12.0	7.5	18.2	20.1	22.0		
of which: Pay as you earn	-6.9	6.3	15.5	19.0	16.8		
Self assessment	-3.1	1.1	2.3	0.6	4.5		
Other income tax	-1.9	0.1	0.3	0.4	0.6		
National insurance contributions	-5.9	1.1	14.9	-8.3	-10.5		
Health and social care levy				18.4	19.0		
Value added tax	-23.6	-7.2	3.2	4.1	4.0		
Corporation tax ²	-5.0	1.4	2.3	17.7	23.6		
of which: Onshore	-4.8	-1.1	-4.6	13.9	21.8		
Offshore	-0.2	2.5	6.9	3.9	1.8		
Petroleum revenue tax	0.0	-0.3	0.0	0.0	0.0		
Fuel duties	-6.6	-2.0	-4.3	-1.3	-1.5		
Business rates	-12.2	-10.9	-4.9	0.1	-0.1		
Council tax	-0.4	0.9	1.5	2.0	2.4		
VAT refunds	0.1	0.6	1.7	1.2	0.3		
Capital gains tax	-0.3	1.6	0.7	0.3	0.4		
Inheritance tax	-0.2	0.2	0.4	0.2	0.2		
Property transaction taxes ³	-4.3	0.9	1.0	0.4	-0.1		
Stamp taxes on shares	0.1	0.4	-0.2	-0.2	-0.2		
Tobacco duties	0.8	1.5	2.1	2.3	2.2		
Alcohol duties	0.3	0.7	-0.1	0.0	0.0		
Air passenger duty	-3.7	-2.9	-1.6	-1.0	-0.4		
Insurance premium tax	-0.3	0.2	0.6	0.6	0.6		
Climate change levy	-0.4	-0.3	-0.4	-0.6	-0.8		
Bank levy	0.0	0.2	0.2	0.2	0.2		
Bank surcharge	-0.4	0.8	0.1	-0.8	-1.0		
Apprenticeship levy	0.0	0.1	0.1	0.1	0.1		
Digital services tax	0.1	0.2	0.2	0.3	0.3		
Other HMRC taxes ⁴	-0.3	1.6	2.0	2.2	2.2		
Vehicle excise duties	-0.2	-0.1	0.0	-0.1	-0.3		
Licence fee receipts	0.1	0.0	-0.1	-0.1	0.1		
Environmental levies	-1.1	-2.4	-2.9	-0.8	1.1		
Emissions Trading Scheme receipts	0.1	-0.3	4.5	4.3	4.1		
Other taxes	-1.4	0.6	0.6	1.9	1.9		
National Accounts taxes	-76.7	-5.8	39.8	63.1	69.7		
Less own resources		-5.0	37.0	00.1	07.7		
contribution to EU	0.2	-	-	-	-		
Interest and dividends	-4.2	-4.6	0.7	2.9	-1.5		
Gross operating surplus	1.7	0.0	-1.6	-0.2	0.1		
Other receipts	-0.9	-0.8	-0.6	-0.3	-0.1		
Current receipts	-79.9	-11.3	38.3	65.4	68.2		
Memo: UK oil and gas revenues ⁵	-0.2	2.2	6.9	3.8	1.7		

¹ Includes PAYE, self assessment, tax on savings income and other minor components, such as income tax repayments.

 $^{^{\}rm 2}\,{\rm National}$ Accounts measure, gross of reduced liability tax credits.

³ Includes stamp duty land tax (SDLT), devolved property transaction taxes and the annual tax on enveloped dwellings (ATED).

⁴ Consists of landfill tax (excluding Scotland and Wales), aggregates levy, betting and gaming duties, customs duties, soft drinks industry levy and diverted profits tax.

⁵ Consists of offshore corporation tax and petroleum revenue tax.

Table 3.6: Current receipts: changes since October 2021

	£ billion						
	Outturn Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Income tax ¹	-2.5	11.6	15.9	16.1	15.6	14.6	14.1
of which: Pay as you earn	-0.7	6.8	12.0	13.2	11.6	11.5	11.5
Self assessment	-0.7	5.2	4.2	3.3	4.1	3.0	2.7
Other income tax	-1.1	-0.4	-0.3	-0.4	-0.1	0.0	-0.1
National insurance contributions	0.3	1.1	-3.1	-6.1	-5.1	-3.9	-3.8
Health and social care levy				0.1	0.3	0.3	0.2
Value added tax	-1.6	6.8	-0.8	0.9	1.6	2.0	2.3
Corporation tax ²	1.2	9.4	8.3	6.9	5.6	5.7	5.0
of which: Onshore	1.2	7.6	3.1	3.8	4.2	4.5	4.1
Offshore	0.0	1.8	5.3	3.1	1.4	1.1	0.9
Petroleum revenue tax	0.0	-0.1	0.0	0.0	0.0	0.0	0.0
Fuel duties	0.0	-0.6	-2.6	0.0	-0.2	-0.6	-1.0
Business rates	-0.2	0.0	-0.3	1.1	1.5	1.4	1.5
Council tax	-0.9	-0.1	0.1	0.0	-0.1	-0.2	-0.3
VAT refunds	0.0	0.7	0.6	0.2	0.5	0.3	0.3
Capital gains tax	0.5	5.0	1.9	0.7	0.7	0.9	1.0
Inheritance tax	0.0	0.1	0.3	0.5	0.5	0.6	0.6
Property transaction taxes ³	0.0	0.8	1.3	1.3	1.4	1.4	1.3
Stamp taxes on shares	0.0	0.0	-0.3	-0.2	-0.2	-0.2	-0.2
Tobacco duties	0.0	0.2	0.8	1.0	0.9	0.9	0.9
Alcohol duties	-0.3	0.3	0.1	0.3	0.2	0.2	0.2
Air passenger duty	0.0	0.2	0.8	0.4	0.0	0.1	0.0
Insurance premium tax	0.0	0.4	0.6	0.6	0.6	0.6	0.6
Climate change levy	0.0	-0.2	-0.1	-0.2	-0.3	-0.1	-0.2
Bank levy	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Bank surcharge	0.0	0.8	0.5	0.3	0.2	0.2	0.2
Apprenticeship levy	0.0	0.0	0.1	0.1	0.1	0.1	0.1
Digital services tax	0.1	0.0	0.0	0.0	0.0	0.1	0.1
Other HMRC taxes ⁴	0.0	1.2	1.0	1.1	0.9	0.9	0.9
Vehicle excise duties	0.0	-0.1	-0.2	-0.1	-0.2	-0.3	-0.5
Licence fee receipts	0.0	0.1	-0.1	-0.1	0.0	0.0	0.0
Environmental levies	0.0	-2.1	-2.3	-0.9	1.0	1.4	1.7
Emissions Trading Scheme receipts		0.0	0.8	1.3	1.2	1.1	1.0
Other taxes	-0.2	1.2	0.3	1.6	1.6	1.5	1.3
National Accounts taxes	-3.4	36.8	23.9	26.9	28.4	28.9	27.4
Less own resources	0.0						
contribution to EU	0.0	-	-	-	-	-	-
Interest and dividends	0.1	-0.1	3.5	4.6	1.1	0.5	0.3
Gross operating surplus	1.1	0.2	-1.8	-0.8	-0.3	-0.6	-0.8
Other receipts	0.0	0.6	-0.5	-0.3	0.0	0.0	-0.1
Current receipts	-2.2	37.5	25.1	30.3	29.1	28.9	26.8
Memo: UK oil and gas revenues ⁵	0.0	1.6	5.3	3.1	1.4	1.1	0.9

¹ Includes PAYE, self assessment, tax on savings income and other minor components, such as income tax repayments.

National Accounts measure, gross of reduced liability tax credits.
 Includes stamp duty land tax (SDLT), devolved property transaction taxes and the annual tax on enveloped dwellings (ATED).
 Consists of landfill tax (excluding Scotland and Wales), aggregates levy, betting and gaming duties, customs duties, soft drinks industry levy and diverted profits tax.

⁵ Consists of offshore corporation tax and petroleum revenue tax.

Tax-by-tax analysis

Income tax, NICs, and health and social care levy (excluding self-assessment)

- 3.30 After recording a modest rise of £2.3 billion in 2020-21 (despite the sharp fall in nominal GDP), PAYE income tax and NICs receipts have rebounded strongly in 2021-22. We expect full-year receipts to be up £37.3 billion (12.1 per cent) on last year, and for them to rise again in 2022-23 (by £38.9 billion or 11.2 per cent). The latter reflects the combination of strong wage growth, the freeze in the personal allowance and higher-rate thresholds of income tax, and the one-year 1½ percentage point rise in employee, employer and self-employed NICs rates (to be replaced by the introduction of the permanent 1½ per cent health and social care levy in 2023-24). Receipts grow more gradually thereafter by 3.9 per cent a year on average, moderately faster than growth in nominal GDP.
- 3.31 Our latest forecasts exceed both our most recent forecast and our pre-pandemic forecast by significant margins in all years Table 3.7. Those upward revisions reflect:
 - Relative to our March 2020 forecast, receipts in 2021-22 have been revised up by £7.6 billion (2.2 per cent), thanks to both strength in the tax base and a more tax-rich composition of wages and salaries (embodied in the higher effective tax rate discussed in Box 3.2). Between 2022-23 and 2024-25 receipts have been revised up by an average of £28.7 billion a year, reflecting both higher wages and salaries, and net tax rises announced last year (that are partly offset by the Spring Statement tax cuts).
 - Relative to our October 2021 forecast, receipts in 2021-22 have been revised up by £7.6 billion (2.2 per cent). This reflects both higher earnings and the consequences of fiscal drag as tax thresholds increased only marginally, alongside strong assumed growth in end-year bonuses in the financial and professional services sectors (with year-on-year rises of 20 and 31 per cent, respectively). Receipts have then been revised up by an average of £7.6 billion a year from 2022-23 onwards. This is more than explained by upward revisions to wages and salaries, as higher inflation is expected to feed through to higher earnings growth. This boosts receipts by more than it normally would because income tax thresholds are frozen until 2025-26. Indeed, the upward revision to inflation since our previous forecast means these threshold freezes are now expected to yield £17.5 billion a year (including the effect on SA income tax) by 2025-26 relative to the freezes not being in place, up £4.0 billion from our October estimate. Tax cuts offset part of these pre-measures upward revisions. Raising the NICs primary threshold costs £6.5 billion in 2022-23 and by diminishing amounts until 2025-26 (as it is then frozen rather than rising with inflation). Cutting the basic rate of income tax costs £5.0 billion a year on average from 2024-25 onwards.

Table 3.7: Non-SA income tax, NICs and health and social care levy: changes since March 2020 and October 2021

	£ billion						
	Outturn	rn Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	323.4	338.5	354.2	367.9	383.2		
October 2021 forecast	310.2	338.5	376.3	390.6	402.5	420.7	440.7
March 2022 forecast	308.7	346.0	384.9	397.4	409.1	428.7	448.5
Change since March 2020	-14.7	7.6	30.8	29.5	25.9		
of which:							
Wages and salaries	-9.1	2.8	11.2	9.9	9.0		
Pre-measures effective tax rate	-11.9	3.0	6.1	-1.0	-4.0		
Direct effect of Government decisions	6.3	1.8	13.5	20.6	20.9		
Change since October 2021	-1.5	7.6	8.7	6.8	6.7	8.0	7.8
of which:							
Wages and salaries	0.0	6.2	11.1	10.5	13.2	13.5	13.1
Recosted SB21 threshold freezes	0.0	0.0	-0.3	2.2	4.1	3.6	4.3
Other pre-measures effective tax rate	-1.5	1.3	4.7	0.4	-0.4	0.9	0.7
Direct effect of Government decisions	0.0	0.0	-6.8	-6.3	-10.2	-10.0	-10.3

Box 3.2: Why is the economy generating such strong income tax revenues?

Between April and December 2021, £250.1 billion was raised in PAYE income tax and NICs° – up 11.7 per cent on the same period last year and up 11.6 per cent on the same period in 2019-20, before the pandemic, lockdowns, and furlough distorted the picture. Growth in these receipts has been much stronger than growth in nominal GDP (which is up just 4.0 per cent on the same period in 2019-20). Much of that is due to aggregate pay recorded in HMRC's PAYE-based real-time information (RTI) system growing more strongly than GDP (up 9.4 per cent over the same two-year period, implying a higher labour share of income and a more tax-rich composition of nominal GDP given the higher tax rates levied on labour income). The implied effective tax rate on PAYE income has also risen from 33.2 per cent in the first three quarters of 2019-20 to 33.8 per cent in the first three quarters of 2021-22, so labour income itself has become more tax-rich too. This box explores the drivers of this higher effective tax rate.

Income tax rates are progressive – i.e. they rise with income – whereas employee NICs rates are regressive and employer NICs rates are constant. The progressiveness of the income tax schedule dominates, so that combined PAYE income tax and NICs paid per pound of earnings is higher for high earners than for low earners. The amount of tax this generates depends on how earnings growth varies relative to the thresholds in the tax system. Over the past two years, the 9.4 per cent growth in aggregate RTI pay compares with just a 0.5 per cent rise in most income tax thresholds (with the additional rate threshold frozen in cash terms at £150,000).

This helps explain why stronger aggregate pay growth among just 3.6 million taxpayers facing the higher or additional marginal tax rate (12 per cent of the total) accounts for almost all the rise in the effective tax rate relative to 2019-20 (Chart B). This aggregate growth reflects both increased numbers of employees in those tax brackets, as well as increases to individual pay:

- Aggregate pay among those **earning less than the income tax personal allowance** has fallen 10.3 per cent over the past two years, while that of **basic-rate taxpayers** has risen at less than half the rate of total pay at 4.4 per cent. These two groups averaged 25.5 million employees (88 per cent of total RTI employees) across the first three quarters of 2021-22, but accounted for less than a fifth of growth in PAYE income tax and NICs receipts compared to 2019-20.
- Aggregate pay among higher-rate taxpayers has risen by 21.0 per cent over two years more than twice as fast than the total. This group averaged 3.3 million employees (11 per cent of RTI employees) but accounted for half of growth in receipts. But growth in tax paid by this group does not reflect faster average pay growth; rather it reflects fiscal drag bringing more basic-rate taxpayers into the higher-rate tax bracket. Indeed, the 20.0 per cent growth in tax paid by this group reflects 20.5 per cent growth in the number of employees with monthly pay between £4,167 and £12,500 offsetting an average 0.4 per cent fall in the average amount of tax paid per employee.
- Aggregate pay among additional-rate taxpayers has risen faster still by 23.3 per cent over two years. This group averaged 0.3 million employees (just 1 per cent RTI employees) but accounted for over a third of growth in PAYE income tax and NICs receipts. Again fiscal drag bringing higher-rate taxpayers into the additional-rate tax bracket largely explains this growth. The 23.9 per cent rise in tax paid by this group reflects 22.3 per cent growth in the number of employees whose monthly pay is more than £12,500 and only 1.3 per cent growth in average tax paid per employee.

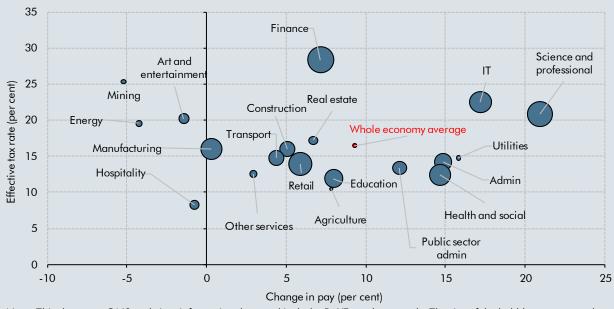
Chart B: Growth in aggregate pay and tax paid, by employees' marginal tax rates



These differences in pay growth at different marginal tax rates during the pandemic may also reflect its differential impact across sectors of the economy. The pandemic hit employment and output in some sectors much harder than others, while the recovery has also been uneven. Some

sectors have performed particularly well either because they could easily switch to remote working (such as financial and professional services) or because demand rotated towards their output (such as health, online retail, and IT services). As Chart C shows, the sectors that have fared worst in terms of aggregate pay growth were also those where effective tax rates and amounts of tax paid are relatively low – most clearly the hospitality and arts and entertainment sectors. By contrast, the sectors that have seen stronger aggregate pay growth – in particular IT and professional services – were also those where effective tax rates are relatively high. In the first three quarters of 2021-22, those two sectors accounted for 12 per cent of all PAYE employees, but more than twice that at 25 per cent of PAYE income tax, and 42 per cent of whole economy growth in PAYE income tax receipts relative to 2019-20.

Chart C: Aggregate two-year pay growth in the first three quarters of 2021-22 and average effective tax rates by sector



Note: This chart uses ONS real-time information data, and includes PAYE employees only. The size of the bubbles represents the sector's contribution to total PAYE in 2019-20. The red bubble is the whole economy average and is not to scale. Source: HMRC, ONS, OBR

The strong growth in higher- and additional-rate taxpayers between 2019-20 and 2021-22 is set to be compounded by the four-year freeze on income tax thresholds that starts in April 2022. This will further increase the number of new taxpayers and higher-rate taxpayers. Upward revisions to our CPI inflation forecasts since we initially costed the threshold freeze in the March 2021 Budget have increased our estimate of the number of new income taxpayers created by the measure from 1.3 to 2.8 million by 2025-26 and the number of new higher-rate taxpayers (including all income, not just that paid via PAYE) from 1.0 to 2.0 million over the same period. That would represent 8.3 per cent more income taxpayers than would otherwise have been the case, and 42 per cent more higher-rate taxpayers (from 33.4 to 36.1 million and 4.8 to 6.8 million respectively).

Table B: Individuals brought into paying tax and taxpayers brought into the higher rate band by freeze on personal allowance and higher rate thresholds

		Thousand				
		Forecast				
	2022-23	2023-24	2024-25	2025-26		
Brought into tax						
March 2021 EFO	319	704	1,027	1,341		
October 2021 EFO	552	1,251	1,641	1,954		
March 2022 EFO	575	1,971	2,542	2,770		
Increase since March 2021	256	1,267	1,515	1,429		
Brought into higher rate band						
March 2021 EFO	186	443	739	1,002		
October 2021 EFO	427	900	1,202	1,496		
March 2022 EFO	441	1,325	1,765	2,024		
Increase since March 2021	255	882	1,026	1,022		

^a This is total NICs so also captures those NICs collected via the self-assessment system.

Self-assessment (SA) income tax

- 3.32 Self-assessed income tax (which applies to income from a range of sources including dividends, savings, property, and self-employment) has far exceeded our forecast this year. Most SA income tax is paid after the tax year has ended, in most cases in the following January, so this year's receipts relate for the most part to tax liabilities incurred during the worst of the pandemic and the strictest public health restrictions in 2020-21. With most of this year's cash received over the past two months, we expect it to raise £37.0 billion in 2021-22 as a whole, £5.2 billion (16 per cent) higher than our October 2021 forecast and even £1.1 billion (3 per cent) higher than our pre-pandemic March 2020 forecast.
- 3.33 Our October forecast expected weak receipts in 2021-22 due to the sharp falls in self-employment numbers and 'mixed income' in 2020-21 (as measured in the Labour Force Survey (LFS) and the National Accounts respectively), albeit moderated by £19.7 billion of self-employment income support scheme (SEISS) grants paid out during 2020-21. We also assumed that the proprietors of small incorporated businesses who pay themselves largely through dividends (and received less direct support from the Government) would experience a sharper drop in income than larger firms.
- 3.34 Provisional analysis of SA returns received to date suggests that the incomes of sole traders and partnerships held up much better than expected, with taxpayer numbers and aggregate incomes both outstripping, respectively, the change in self-employment measured in the LFS and 'mixed income' measured in the National Accounts. 10 Table 3.8 sets out the differences between these two sources of data on self-employment incomes, showing that:

¹⁰ The figures analysed here have been drawn from tax returns for the 2020-21 tax year received up to 12 February. They have not been grossed up to estimate the effects of late filers. The 6 January announcement that returns filed within one month of the 31 January deadline would not be subject to penalties is likely to mean that the proportion of returns filed late will be greater than normal. These administrative data are therefore incomplete and will be revised over time.

- The number of sole traders and partnerships fell by 3.8 per cent in 2020-21, a far shallower fall than the 10.4 per cent decline in self-employment measured in the LFS (and therefore implicitly assumed for sole traders and partnerships in our previous forecasts). This discrepancy will partly reflect the increase in the number of self-employed people who reclassified themselves as an employee in the LFS around the beginning of the pandemic (despite not changing jobs). The ONS has suggested that this reflects a clearer understanding of their employment status based on eligibility for the furlough scheme, or preparations to be compliant with changes to off-payroll working ('IR35' reforms) in April 2020 (which were delayed until 2021), with the implication that the LFS numbers therefore overstate the true fall in self-employment.¹¹
- The average income of sole traders and partnerships inferred from SA tax returns rose by 10.2 per cent in 2020-21, a sharper increase than the 6.0 per cent rise implied by the LFS and the National Accounts. Both of these sources reflect the SEISS grants paid in that year, which the SA data suggest more than cushioned the reduction in non-SEISS income for those who were eligible and claimed. For example, based on SA returns for individuals who submitted them in both 2019-20 and 2020-21, the incomes of the 2.2 million sole traders and partnerships receiving SEISS grants would have fallen 31 per cent in its absence, but actually rose 14 per cent thanks to the SEISS support. In addition, average SA income growth was strongest among those liable to higher marginal tax rates. As above, SA returns for individuals who submitted them in both 2019-20 and 2020-21 show that income growth was negative for those earning less than the income tax personal allowance, but positive for basic, higher and additional-rate taxpayers (at 12.6, 19.1 and 12.3 per cent, respectively).
- As a result of both a shallower fall in the number of sole traders and partnerships and stronger growth in average incomes, **aggregate SA income** for this group grew by 6.0 per cent in 2020-21, in contrast to the 4.9 per cent fall in 'mixed income' currently recorded in the National Accounts. (Mixed income in the National Accounts will eventually be revised to reflect HMRC data, and so growth rates are eventually likely to move more into line with the SA data presented here. ¹²)

¹¹ ONS, Comparison of labour market data sources, February 2022.

¹² ONS, A review of households' mixed income estimates and plans for upcoming improvements, December 2019.

Table 3.8: Measures of self-assessed income and self-employed numbers compared

	Outturn	1	Growth
	2019-20	2020-21	(per cent)
Numbers of self-employed (million)			
Self-employment (Labour Force Survey)	5.0	4.5	-10.4
Sole traders and partnerships (self-assessment)	4.3	4.2	-3.8
Difference (percentage points)			+6.5
Self-assessment income (£ billion)			
Mixed income (National Accounts)	151.8	144.3	-4.9
Sole-trader and partners income (self-assessment)	94.0	99.7	6.0
Difference (percentage points)			+10.9
Average income (£ thousand)			
Inferred from LFS and National Accounts	30.6	32.4	6.0
Inferred from self-assessment tax returns	21.7	23.9	10.2
Difference (percentage points)			+4.2

- 3.35 In contrast to sole trader and partnership income, the SA returns suggest that dividend income fell by 8.6 per cent in 2020-21, a little weaker than the 5.8 per cent fall we assumed in October 2021. This suggests that the lack of fiscal support for this group (which includes single-person incorporated businesses and third-party shareholders) may indeed have left them more exposed to the impact of the pandemic and early lockdowns. Property income rose by 2.2 per cent, just 0.4 percentage points less than we assumed in October. These downside surprises temper the large upside surprise in sole trader and partnership income slightly, which more than explains the £5.2 billion upward revision in our SA income tax forecast for 2021-22 since October. Overall growth in SA income recorded on SA returns to date was 0.7 per cent in 2020-21 a year in which nominal GDP fell by 5.0 per cent (while PAYE incomes recorded in RTI increased by 0.6 per cent).
- 3.36 Relative to previous forecasts, SA receipts are expected to exceed both our March 2020 and October 2021 forecasts from 2022-23 onwards Table 3.9. These revisions reflect:
 - Relative to our March 2020 forecast, receipts are up by an average of £2.5 billion a year between 2022-23 and 2024-25. This reflects tax rises more than offsetting a slightly smaller tax base as a result of a modest medium-term reduction in self-employment relative to our pre-pandemic forecast. These tax rises include the multi-year freeze to the personal allowance and higher-rate thresholds (the yield from which has increased as a result of higher-than-expected inflation), and a rise in the dividend rate from April 2022 (which was announced in September 2021 and so affects the profile of receipts as income is shifted to ahead of the tax rate rising). Cutting the basic rate in April 2024 will only affect self-assessment receipts from 2025-26 onwards due to the lag between liabilities accruing and tax being paid.
 - Relative to our October 2021 forecast, receipts have been revised up by an average of £3.5 billion a year from 2022-23 onwards. This reflects both upward revisions to total SA incomes and higher inflation raising the yield from the income tax threshold freezes announced in March 2021. The revision to SA incomes reflects the consequences of higher-than-expected 2021-22 receipts for the remainder of the forecast. The revision

is smaller in 2022-23 (when receipts largely reflect 2021-22 economic activity) than in 2021-22, because some of the strength now evident in 2021-22 receipts is unwound. This reflects £11.4 billion less in SEISS payments in 2021-22 than the year before and a lower volume of other government grants providing support to small businesses. We also no longer assume that the fall in self-employed numbers during the pandemic is fully reversed, which progressively undoes the upward tax base revision over the remainder of the forecast.

Table 3.9: SA income tax: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	34.3	35.9	37.2	38.9	40.5		
October 2021 forecast	31.9	31.8	35.3	36.3	40.9	43.5	47.2
March 2022 forecast	31.2	37.0	39.5	39.6	45.0	46.5	49.9
Changes since March 2020	-3.1	1.1	2.3	0.6	4.5		
of which:							
Self-assessment incomes ¹	-0.7	-2.0	-2.2	-2.2	-1.2		
Pre-measures effective tax rate	-1.6	0.1	3.0	1.8	3.0		
Direct effect of Government decisions	-0.9	2.9	1.5	1.1	2.7		
Changes since October 2021	-0.7	5.2	4.2	3.3	4.1	3.0	2.7
of which:							
Self-assessment incomes ¹	0.6	2.5	1.7	0.3	0.4	0.4	0.1
Recosted SB21 threshold freezes	0.0	0.0	0.0	0.1	0.5	0.5	0.6
Pre-measures effective tax rate	-1.3	2.7	2.4	2.7	3.1	2.6	2.3
Direct effect of Government decisions	0.0	0.0	0.1	0.2	0.1	-0.5	-0.2
¹ Weighted average of self-employment, partner	ship, dividen	d and saving	ıs income.				

VAT

- 3.37 VAT is expected to raise £138.7 billion in 2021-22, up £21.7 billion (18.5 per cent) on last year due to the strong rebound in household consumption, and is £3.9 billion (3.7 per cent) higher than the pre-pandemic position in 2019-20. Receipts in 2022-23 also rise significantly by £15.5 billion (11.2 per cent) due to continued strong rises in household spending before smaller rises of 3.1 per cent a year on average from 2023-24 onwards.
- 3.38 Our forecast assumes that the 54 per cent rise in household energy bills in April 2022 and the further roughly 40 per cent rise assumed for October 2022, albeit partly offset by support measures announced in February, will reduce VAT receipts. This is because higher spending on energy bills, which are taxed at a lower rate of 5 per cent, shifts consumption away from other goods and services that are on average taxed at higher VAT rates. We assume that the average VAT rate on displaced spending will be 14 per cent, based on analysis of previous episodes of sharply rising energy prices in 2008 to 2012. This is higher than the average VAT rate across all goods of around 10 per cent, but is broadly in line with the average VAT rate on non-essential items such as alcohol, drinks, household goods and services, recreation and culture. This shift reduces VAT receipts by £1.6 billion in 2022-23, £1.5 billion in 2023-24, and a more modest £0.6 billion in 2024-25 as energy prices fall back. The figure in 2022-23 would have been higher at £2.3 billion in the absence of the

council tax rebate and energy bills discount that cover roughly a third of the overall rise in energy bills in 2022-23. We have not assumed that the £1.1 billion a year new tax on energy bills that claws back the cost of the rebate over five years will affect VAT receipts.

3.39 Comparing our latest VAT forecast to previous forecasts (Table 3.10):

- Relative to March 2020, receipts in 2021-22 remain £7.2 billion (4.9 per cent) lower than predicted thanks largely to lower nominal household spending and the cost of pandemic-related tax measures including the temporary rate cut for badly hit sectors (partially offset by additional government procurement). From 2022-23 onwards receipts have been revised up by an average of £3.8 billion a year, in line with the upward revision to nominal consumption, which in turn reflects the much higher and more persistent inflation than predicted in March 2020. Receipts are further boosted by the additional government spending announced in the October 2021 Spending Review, which raises VAT on procurement of goods and services.
- Relative to October 2021, receipts have been revised up by £6.8 billion (5.1 per cent) in 2021-22, reflecting a shift towards spending subject to the standard 20 per cent rate and a revision to the relationship between cash and accrued receipts that moves some accrued receipts from 2022-23 into 2021-22 (and is recorded as a revision to the effective tax rate). Receipts have been revised down in 2022-23 and up only modestly in 2023-24 because higher energy costs reduce the effective tax rate (plus the effect of the cash-to-accruals revision). Receipts remain modestly higher from 2024-25 onwards, more than explained by a more tax-rich composition of spending.

Table 3.10: VAT: changes since March 2020 and October 2021

			£ bi	llion			
	Outturn			Forecast			
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	140.6	145.9	151.0	155.8	160.7		
October 2021 forecast	118.6	131.9	155.0	159.1	163.1	167.4	172.1
March 2022 forecast	117.0	138.7	154.2	160.0	164.7	169.4	174.4
Changes since March 2020	-23.6	-7.2	3.2	4.1	4.0		
of which:							
Nominal consumption	-22.1	-8.1	-0.8	-0.5	-1.1		
Pre-measures effective tax rate	4.4	6.5	3.3	2.8	2.9		
Direct effect of Government decisions	-5.9	-5.5	0.8	1.8	2.2		
Changes since October 2021	-1.6	6.8	-0.8	0.9	1.6	2.0	2.3
of which:							
Nominal consumption	0.0	-0.6	-2.5	-1.7	-3.0	-3.0	-2.9
Pre-measures effective tax rate	-1.6	7.4	1.6	2.3	4.4	4.8	4.9
Direct effect of Government decisions	0.0	0.0	0.1	0.2	0.2	0.2	0.3
Memo: VAT gap (per cent)	7.5	7.9	7.5	7.3	7.3	7.4	7.4

3.40 The 'implied VAT gap' shown in Table 3.10 is the difference between the theoretical total and actual VAT receipts. It is adjusted for timing factors where they can be estimated (such as the effect of last year's VAT deferral measures), with changes reflecting either real-world changes in non-compliance or measurements errors in estimating the theoretical total.

Onshore corporation tax

- Onshore corporation tax (CT) is levied on the taxable profits of limited companies and other organisations, after taking into account various deductions (for the costs of running the business) and allowances (for example, capital allowances for investment spending). It is expected to raise £57.8 billion in 2021-22, £5.4 billion (10.4 per cent) higher than in 2020-21 despite the large cost of the capital allowance super-deduction measure that took effect from April 2021. Receipts in 2021-22 have been revised up by £7.4 billion (15.2 per cent) from our October forecast, largely reflecting high cash receipts in December. Instalment payments from large companies in both the financial and non-financial sectors were much higher than expected, pointing to buoyant profits, with the financial sector in particular benefiting from the unwinding of pandemic-related loan-loss provisions made in 2020 and from strong investment banking profits from trading activities and merger and acquisition (M&A) fees. The strength in receipts this year comes despite the super-deduction capital allowance measure that is expected to reduce 2021-22 receipts by £9.3 billion.
- Receipts in 2021-22 are actually set to exceed their pre-pandemic 2019-20 level by £8.7 3.42 billion (17.7 per cent) – despite the main rate being unchanged at 19 per cent and the cost of the super-deduction. As with PAYE, this extraordinary strength in receipts over the past year is concentrated in a few sectors of the economy. Based on a provisional breakdown of HMRC's administrative receipts data, 14 Chart 3.6 shows that a substantial portion (approximately 60 per cent) of the growth in receipts has come from three sectors (financial services, professional services, and retail) that are typically a large source of receipts. All three were also either little affected by the pandemic or benefited from the shifts in activity that it induced. Financial sector profits were buoyed by high transaction volumes and M&A activity as noted above, grocery stores saw sales and profits rise during the pandemic while other parts of the retail sector benefited from consumer spending shifting away from physical premises to online portals, and professional services are likely to have been buoyed by rapid growth in private sector consultancy activities and government procurement. By contrast, pandemic-affected sectors such as hospitality and arts and entertainment were not typically large corporation taxpayers, meaning their relative underperformance caused limited damage to corporation tax receipts.

¹³ The 'onshore' distinction is relative to the 'offshore' corporation tax regime that applies to UK oil and gas companies.

¹⁴ To estimate the year-on-year growth, we used provisional HMRC administrative data for April to December rather than official statistics. The data were adjusted to exclude 2019 payment regime timing changes for very large companies. Approximately 5 per cent of receipts were excluded because sectoral codes were missing and 'other sectors' accounting for less than 1 per cent of the total were also excluded.

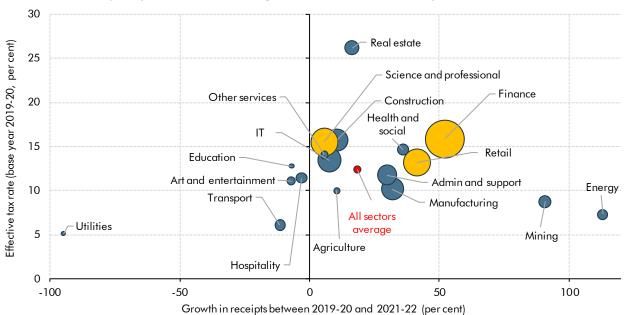


Chart 3.6: Year-to-date onshore corporation tax growth between 2019-20 and 2021-22 and pre-pandemic average effective tax rates by sector

Note: The size of the bubbles represents the sector's contribution to CT receipts. The highlighted bubbles are the main three sectors that together account for approximately half of all CT receipts. The red bubble is the average of all sectors and is not to scale. Missing sectors and other sectors (including public administration, activities of household and activities of extraterritorial organisations) were excluded from the chart.

Source: HMRC, OBR

- 3.43 We expect onshore CT to fall £1.0 billion on a year earlier in 2022-23, reflecting the squeeze on profits from higher wage and energy costs, a larger drag from greater use of the super-deduction, and the one-off factors boosting financial sector receipts this year falling away. Receipts then jump by 36 per cent in 2023-24 when the main rate is raised from 19 to 25 per cent and the super-deduction ends. Receipts are forecast to reach 3.3 per cent of GDP in 2025-26, 1.1 per of GDP higher than in 2019-20 and equalling the highest level ever recorded (in 1969-70).
- 3.44 Comparing our latest forecast to previous forecasts (Table 3.11):
 - Relative to March 2020, receipts have been revised down modestly in 2021-22 and 2022-23 but revised up thereafter, with the upward revision reaching £21.8 billion by 2024-25. Pre-measures effective tax rates exceed our pre-pandemic forecast from 2021-22 onwards. This is overlaid by the cost of the super-deduction in the near term, and then by the subsequent rise in the main rate of corporation tax and the unwinding of the super-deduction cost from 2023-24 onwards.
 - Relative to October 2021, receipts have been revised up by £7.6 billion this year, £3.1 billion in 2022-23 and an average of £4.2 billion a year thereafter, largely due to upward revisions to the effective tax rate. That revision is smallest in 2022-23 thanks to the weaker profile for profits and our assumption that around half the upside surprise in this year's effective tax rate reflects one-off factors (notably the boost to financial sector profits described above).

Table 3.11: Corporation tax: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	57.2	58.9	61.4	63.6	66.0		
October 2021 forecast	51.1	50.2	53.8	73.7	83.6	87.7	90.1
March 2022 forecast	52.4	57.8	56.8	77.5	87.9	92.2	94.1
Change since March 2020	-4.8	-1.1	-4.6	13.9	21.8		
of which:							
Profits	-2.3	-3.3	-1.8	-2.9	-2.9		
Pre-measures effective tax rate	-2.0	12.1	5.1	6.3	6.6		
Direct effect of Government decisions	-0.5	-9.9	-7.9	10.5	18.1		
Change since October 2021	1.2	7.6	3.1	3.8	4.2	4.5	4.1
of which:							
Profits	0.0	-3.7	-1.6	-2.8	-2.3	-2.8	-3.2
Other pre-measures effective tax rate	1.2	11.2	4.5	6.5	6.6	7.5	7.6
Direct effect of Government decisions		0.1	0.1	0.1	-0.1	-0.2	-0.3

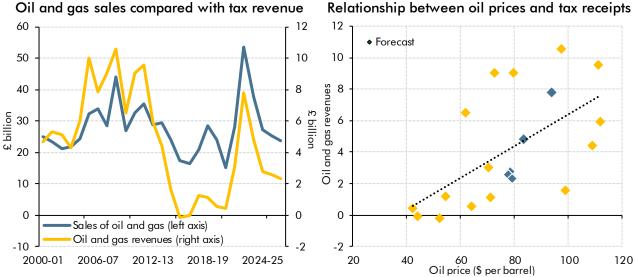
Oil and gas receipts

- 3.45 Following the dramatic rise in oil and gas prices, we expect North Sea oil and gas receipts to jump from £3.1 billion in 2021-22 to £7.8 billion in 2022-23. That would be well over ten times higher than pre-pandemic receipts in 2019-20 and would represent the highest fiscal return from the North Sea since 2010-11, when £9.6 billion was collected. The forecast is based on average oil and gas futures prices over the next three years from the first week of the invasion of Ukraine (from 24 February to 2 March inclusive), with prices held constant in real terms for the remainder of the forecast period.
- 3.46 Oil and gas revenues are then expected to fall back sharply in 2023-24, and to drop to £2.3 billion by 2026-27. This largely reflects the falls in both oil and gas in 2023 and 2024 predicted by futures markets. Gas prices are assumed to average £2.80 a therm in 2022, £1.82 a therm more than in our October forecast. But despite dropping back, they remain around 50p a therm higher than our October forecast in the medium term. Similarly, oil prices are assumed to average \$94 a barrel in 2022, \$26 a barrel higher than our October forecast, but only around \$10 a barrel higher in the medium term. Declining oil and gas production over the forecast period and a high level of trading losses (built up when oil and gas prices were lower) reduce the extent to which higher prices boost receipts. Forecasts for oil and gas production are taken from the North Sea Transition Authority (formerly the Oil and Gas Authority). Oil production is expected to fall by an average of 5 per cent a year from 2022 onwards. Gas production rebounds temporarily in 2022 after a weak 2021, but is then expected to fall by around 9 per cent a year from 2023 onwards.
- 3.47 Comparing our latest forecast to previous ones:
 - Relative to March 2020, receipts have been revised up by a maximum of £6.9 billion in 2022-23 and by £3.7 billion a year on average between 2021-22 and 2024-25.
 Oil and gas prices were assumed to average around \$56 a barrel and 34p a therm,

respectively, across the five years of our March 2020 forecast, so higher prices are a key driver of this upside surprise. By contrast, oil production has been revised down by 17 per cent reflecting lower-than-expected outturns.

- Relative to October 2021, receipts are up by a maximum of £5.3 billion in 2022-23 but by diminishing amounts thereafter and by only £0.9 billion in 2026-27. The upward revisions are again largely explained by higher prices generating more income from oil and gas sales. The effect on receipts from the higher value of oil and gas sales diminishes over the forecast reflecting the drop in futures prices during 2023 and 2024 back closer to our October assumptions.
- 3.48 The large revisions to oil and gas revenues in this forecast echo the oil and gas price driven volatility in receipts in the late 2000s and early 2010s. As the left panel of Chart 3.7 shows, tax revenues move relatively closely with the value of oil and gas sales (proxied by the volume of oil and gas production multiplied by average oil and gas prices). The relationship is not one-for-one because tax-deductible expenditure also varies from year-to-year, as does the proportion of companies that can use past losses to offset current profits. But as the right panel shows, the correlation between revenues and oil prices over the past 15 years has been quite close. The fact that revenues in 2022-23 are greater than implied by this relationship is explained by the much larger rise in gas prices than oil prices. The chart also suggests that the fiscal break-even oil price is around \$40 a barrel.

Chart 3.7: Oil and gas prices, sales and revenues



Note: Sales of oil and gas is generated from spot prices of oil and gas multiplied by production levels. Source: HMRC, OBR

Property transaction taxes

3.49 Property transaction tax systems differ across the UK, with stamp duty land tax in England and Northern Ireland, land and buildings transaction tax in Scotland, and land transaction tax in Wales. Receipts from these taxes have remained strong throughout the pandemic, and are expected to raise £15.6 billion in 2021-22, rising to £20.8 billion by 2026-27.

Growth into the medium term largely reflects rising house prices. These taxes are expected to raise an average of £0.5 billion a year more than our pre-pandemic March 2020 forecast and £1.3 billion a year more than our October 2021 forecast. Those revisions reflect (Table 3.12):

- Relative to March 2020, receipts are slightly higher between 2021-22 and 2023-24. The £3.3 billion cost of tax holidays in the first half of 2021-22 was offset by a higher value of property transactions and a higher underlying effective tax rate from a more tax-rich composition of sales. Revisions are modest in 2023-24 and 2024-25.
- Relative to October 2021, receipts have been revised up by £0.8 billion in 2021-22 and by £1.3 billion a year on average thereafter. This is largely driven by an increase in the value of property transactions, which lift the forecast by £1.0 billion a year on average, with commercial transactions explaining around a third of this difference. A higher effective tax rate also provides a boost to the forecast from 2022-23 onwards, resulting from higher house prices and thus a more tax-rich composition of sales than assumed in our October forecast (which assumed the strength in 2021-22 would fade more quickly). This is assumed to persist across the forecast period.

Table 3.12: Property transaction taxes: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	13.8	14.7	16.2	17.4	18.7		
October 2021 forecast	9.5	14.8	15.8	16.5	17.2	18.2	19.4
March 2022 forecast	9.5	15.6	17.1	17.8	18.6	19.5	20.8
Changes since March 2020	-4.3	0.9	1.0	0.4	-0.1		
of which:							
Value of property transactions ¹	-0.6	1.4	0.5	0.1	-0.2		
Pre-measures effective tax rate	-0.8	2.8	0.4	0.2	0.1		
Direct effect of Government decisions	-2.9	-3.3	0.0	0.0	0.0		
Changes since October 2021	0.0	0.8	1.3	1.3	1.4	1.4	1.3
of which:							
Value of property transactions ¹	0.3	1.0	1.0	0.9	1.0	1.0	0.9
Pre-measures effective tax rate	-0.3	-0.1	0.3	0.4	0.4	0.4	0.4
¹ Equal to prices times transactions summed acros	ss residential	and comme	rcial market	s.			

Taxes on capital

- 3.50 Capital gains tax raises £14.3 billion this year, rising to £20.7 billion in 2026-27. Receipts have been revised up relative to our March 2020 forecast by an average of £0.5 billion a year, and by an average of £1.5 billion a year relative to our October 2021 forecast. This reflects a £3.1 billion (28.3 per cent) year-on-year rise in 2021-22 receipts from 2020-21 (despite that largely relating to asset disposals in the pandemic-affected year of 2020-21). This rise represents a £5.0 billion (55 per cent) surplus relative to October.
- 3.51 Analysis of CGT returns HMRC has received to date (Chart 3.8) points to a small number of high-value disposals in 2020-21 driving the strength in 2021-22 receipts, echoing the

compositional pattern of both the PAYE and SA income tax surprises described above. Of the overall year-on-year rise in receipts, the 309 taxpayers that made up the top 0.1 per cent of CGT taxpayers' accounted for £0.9 billion (a third of total growth), while the next 2,800 CGT taxpayers who make up the remainder of the top 1 per cent accounted for another £3.8 billion (two-fifths of the total, meaning just the top 1 per cent explained three-quarters of growth in CGT receipts). The top 0.1 per cent had average CGT liabilities of £9.2 million each.

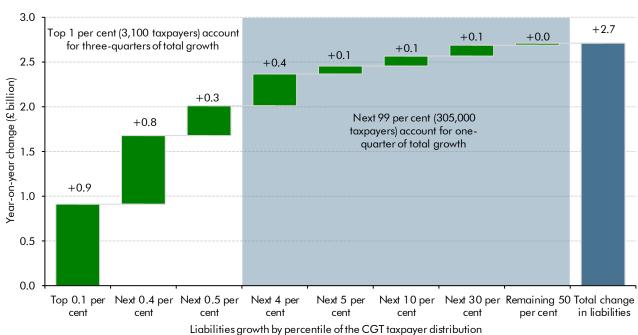


Chart 3.8: Increase in CGT liability from 2019-20 to 2020-21 by percentile

Source: OBR

- 3.52 Much of the upside surprise in receipts could reflect forestalling against feared tax rises (precipitated by an Office of Tax Simplification report in November 2020¹⁵) that were not implemented, suggesting that some of the 2021-22 surplus reflects receipts brought forward from future years rather than strength that will be repeated in future years. For this reason, only a quarter of the 2021-22 surplus has been assumed to persist in 2022-23 and beyond.
- Inheritance tax is expected to raise £6.1 billion this year, rising to £8.3 billion by 2026-27. Receipts have been revised up by an average of £0.2 billion a year relative to our March 2020 forecast, and by an average £0.4 billion a year relative to our October 2021 forecast. This has been driven for the most part by incorporating the latest ONS population projections from 2022-23 onwards, which assume more deaths than in either forecast, as well as higher house prices relative to our October 2021 forecast.
- 3.54 Both CGT and inheritance tax receipts are sensitive to our assumptions about asset prices particularly so for the relationship between CGT and equity prices, which have been volatile since Russia's invasion of Ukraine. This adds to the uncertainty around these forecasts.

¹⁵ Office of Tax Simplification, Capital Gains Tax review – first report: Simplifying by design, November 2020.

Excise duties

3.55 Fuel duties are forecast to bounce back this year by £5.2 billion (25 per cent) from the lockdown-depressed level in 2020-21, and to rise gradually thereafter. Receipts remain below our March 2020 and October 2021 forecasts in every year. Relative to March 2020, this reflects subsequent fuel duty freezes as well as pre-measures forecast revisions. Relative to October 2021, it is largely because of faster growth in the take-up of electric vehicles (see Box 3.3), as well as more modest effects on volumes of fuel purchased due to higher pump prices. The temporary 5p cut in fuel duty in 2022-23 reduces receipts by £2.4 billion, while its reversal alongside an RPI-linked indexation rise takes the rate up by 8p in 2023-24 and delivers a £3.6 billion year-on-year rise in receipts. But there are clearly risks to this forecast since the Government has not implemented a single rise in the main rate of fuel duty in more than a decade despite RPI indexation having been its policy assumption for all of that period (Chart 3.9), and implementing this super-indexation would raise fuel prices by 6 per cent overnight. Of the £3.9 billion rise in receipts between 2021-22 and 2026-27, reversing the 5p cut plus RPI indexation thereafter accounts for £3.3 billion.

(europe and provided and provid

2016-17

Chart 3.9: Successive policy assumptions for the main rate of fuel duty

3.56 Revisions to our fuel duties forecast reflect (Table 3.13):

2014-15

2012-13

2008-09

Source: OBR

2010-11

• Relative to March 2020, receipts have been revised down by an average £3.1 billion (10.8 per cent) a year. This reflects upward revisions to take-up of electric vehicles, which reduce receipts by £2.0 billion by 2024-25, reducing the effective tax rate. Successive fuel duty freezes reduce receipts in the medium term, while the temporary 5p cut reduces them further in 2022-23 but not thereafter once it has been reversed.

2018-19

2020-21

2022-23

• Relative to October 2021, receipts have been revised down by £0.6 billion (4.6 per cent) in 2021-22 reflecting a somewhat slower recovery in vehicle use than assumed.

2024-25

2026-27

Higher RPI inflation adds a little to receipts via the Government's default – but rarely implemented – uprating assumption. But faster electric vehicles take-up lowers receipts by rising amounts from 2023-24 onwards, reaching £1.4 billion by 2026-27. Again, the temporary 5p cut reduces receipts in 2022-23 but not thereafter.

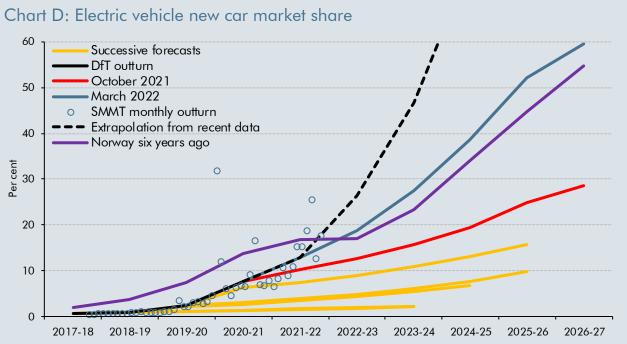
Table 3.13: Fuel duties: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	27.5	28.1	30.5	31.2	31.7		
October 2021 forecast	20.9	26.8	28.8	29.9	30.4	30.7	31.1
March 2022 forecast	20.9	26.2	26.2	29.9	30.2	30.1	30.1
Change since March 2020	-6.6	-2.0	-4.3	-1.3	-1.5		
of which:							
Tax base	-6.7	-1.9	1.1	1.2	1.0		
Pre-measures effective tax rate	0.2	2.3	-0.2	0.4	0.5		
Effects of Government decisions	0.0	-2.4	-5.2	-2.9	-3.0		
Change since October 2021	0.0	-0.6	-2.6	0.0	-0.2	-0.6	-1.0
of which:							
Tax base	-0.1	-0.7	-0.5	-0.7	-0.9	-1.2	-1.6
Pre-measures effective tax rate	0.1	0.2	0.3	0.7	0.7	0.6	0.6
Effects of Government decisions	0.0	0.0	-2.4	0.0	0.0	0.0	0.0

Box 3.3: What does faster take-up of electric cars mean for tax receipts?

The largest single long-term fiscal cost of successful decarbonisation is the loss of revenue from motoring taxes as the vehicle stock moves from petrol and diesel engine vehicles to battery powered electric vehicles (EVs), which pay no fuel duty or vehicle excise duty (VED). Efficiency gains in fossil-fuel vehicles and the shift to hybrids have already had modest effects on receipts, but the shift to fully electric vehicles now appears to be progressing more quickly than we had anticipated. In 2021, 11.6 per cent of cars sold were EVs compared to our October 2021 forecast of 9.5 per cent, as the share surged in the final months of the year. And the share of EVs in total car sales has repeatedly surprised us to the upside in recent years (Chart D).

It appears that take-up of EVs has moved onto a steeper part of the 'S-curve' that many new technologies follow – with slow initial uptake while the technology is novel, followed by a rapid spread as it proves itself, before plateauing as take-up approaches saturation. We have therefore revised up the assumed path of the EV market share significantly, basing it on the mid-point of the Society of Motor Manufacturers and Traders' (SMMT) 'high' scenario and the Climate Change Committee's 'tailwinds' scenario. The share of EVs in new sales now reaches 59 per cent in 2026-27, up from 29 per cent in our October forecast. This path would be similar to that witnessed in Norway over the past six years, but even so implies some slowing relative to the very rapid rise in market share in the UK over the past two years (also Chart D). It is consistent with increasingly strong EV sales forecasts from several external bodies.



Source: DfT (Department for Transport), SMMT (Society of Motor Manfacturers and Traders), European alternative fuels observatory, OBR

These updated EV assumptions have led us to revise down tax receipts by amounts that rise to £2.1 billion in 2026-27. Of this the £1.4 billion loss of fuel duty receipts represents a 4.4 per cent downward revision compared to our October forecast. The £0.6 billion loss of VED receipts is a proportionately larger 7.1 per cent downward revision. That reflects the higher weight of vans and HGVs in fuel duty relative to VED (36 per cent versus 21 per cent in 2020-21). EVs can also obtain more generous capital allowances in the corporation tax system, in particular a 100 per cent first-year allowance until April 2025, rather than 6 to 18 per cent for petrol and diesel vehicles. The higher EV share has therefore also reduced corporation tax receipts by £0.8 billion in 2024-25.

Table C: Effects of higher EV share on our receipts forecasts

			£ billion		
			Forecast		
	2022-23	2023-24	2024-25	2025-26	2026-27
Total change in motoring tax revenue	-0.6	-1.4	-1.8	-1.7	-2.1
Fuel duty	-0.1	-0.4	-0.7	-1.0	-1.4
Vehicle excise duty	-0.1	-0.2	-0.3	-0.4	-0.6
Corporation tax capital allowances	-0.4	-0.7	-0.8	-0.3	-0.2

Our forecast implies that the Government is more than on course to meet its Net Zero Strategy targets for EVs. We considered several factors before making such a large revision:

• Charging infrastructure. The ability to charge EVs will influence the scope for further growth. Public charging points have been growing more slowly than the EV sales themselves, whereas charging points in private homes and workplaces have risen rapidly. Since most drivers have access to off-street parking (72 per cent), we have assumed that charging infrastructure will not act as a major barrier to medium-term growth. h

- Demand. EVs currently cost more to purchase than combustion engines but can have lower operating costs.ⁱ Consumer surveys point to strong demand for EVs.ⁱ
- Supply. Global supply bottlenecks have hit the car industry recently, but manufacturers seemingly prioritised EVs over petrol and diesel vehicles in this period. Shortages of key inputs such as lithium for batteries would hinder the scaling up of EV production, whereas bottlenecks for other rare metals, such as palladium from Russia, could disproportionally hit combustion engine production.^k The UK has already seen significant growth in the value of imported EVs (boosting customs duty receipts in the process).
- Policies. There are many current and mooted policies that could affect the take-up of EVs. New sales of petrol and diesel cars will be banned from 2030 and hybrids from 2035. By 2024 the Government will introduce a new 'zero emissions vehicles mandate'. The Government could also implement its stated policy of raising fuel duty in line with RPI inflation (though that has not happened in more than a decade). And it has discussed expanding the Emissions Trading Scheme, which could cover road fuels, as well as the need to tax motoring in different ways in the future. It is difficult to know the extent to which consumers or manufacturers might respond to these potential policy changes if they are implemented or how they might already be factoring expectations about them into their current purchase and production decisions.

It is, however, still the case that there is significant uncertainty around this assumption. Any of these factors could alter the path of the EV market share of new car sales. And the monthly data have been volatile of late, making it difficult to extract signal from noise. There are also uncertainties around the lifespan of vehicles and the decarbonisation of vans and HGVs that will determine the evolution of the broader motoring tax base.

^a See both our July 2021 Fisk risks report and HM Treasury's October 2021 Net Zero Review: Analysis exploring the key issues.

^b Smil, V., Growth: From Microorganisms to Megacities, 2019; and Way, R., et al., Wright meets Markowitz: How standard portfolio theory changes when assets are technologies following experience curves, Journal of Economic Dynamics and Control, April 2019.

^c Our previous methodology had been to use the short-term outlook for sales from the SMMT and then extrapolate to longer-run assumptions guided by the Government's phase-out dates for fossil-fuel and hybrid vehicles.

d Norway has led the world in battery EV market share, with the share of new sales rising to 51.6 per cent in 2020. The profile in Germany has been similar to the UK's, though slightly ahead, with the EV market share rising from 6.4 to 21.3 per cent last year. Even the Unites States, with lighter fuel tax incentives, saw a near doubling in plug-in market share last year, albeit to only 3.4 per cent. Sources: European Alternative Fuels Observatory, Vehicles and fleet data, accessed Feb 2022; Reuters, Electric cars hit 65% of Norway sales as Tesla grabs overall pole, January 2022; Kane, M., Germany: Almost 700,000 Plug-Ins Were Sold In 2021, Inside EVs, January 2022; US Energy Information Administration, Electric vehicles and hybrids surpass 10% of U.S. light-duty vehicle sales, February 2022.

^e Lam, D., Fuel duty decline: A technical note, RAC foundation, December 2021; and Shah, K., J. Smith, and D. Tomlinson, *Under pressure*, February 2022.

f Our modelling suggests 8.7 per cent of the fleet will be EVs by 2025 against a target of 6 per cent. See, BEIS, Net Zero Strategy: Build Back Greener, October 2021.

⁹ Zapmap, EV Charging Stats 2022, February 2022; and DfT, Electric Vehicle Charging Device Grant Schemes Statistics, January 2022.

^h PwC, Charging ahead! The need to upscale UK electric vehicle charging infrastructure, April 2018.

ⁱ DfT, Transitioning to zero emission cars and vans: 2035 delivery plan, July 2021; and Committee on Climate Change, Methodology Report for the Sixth Carbon Budget, December 2020.

¹ For example, research from EY shows that 40 per cent of consumers who intend to buy a new car have a preference for a plug-in vehicle. EY, How did a global crisis pave the way for EV sales? July 2021.

^k See, Box 2.3 in Committee on Climate Change, Methodology Report for the Sixth Carbon Budget, December 2020; and Capital Economics Global Economics Update Russia/Ukraine: near-term inflation; long-term decoupling, February 2020.

- 3.57 After performing well during the worst of the pandemic, **alcohol duties** have continued to hold up in 2021-22, rising by £0.9 billion (7.6 per cent) thanks to a shift in consumption between on- and off-site trade (i.e. from pubs and restaurants to supermarkets for home consumption). Despite total spending on alcohol falling during the pandemic (because off-trade sales are generally cheaper than on-trade ones), the resilience of receipts suggests a higher effective tax rate on off-trade sales (because more alcohol is consumed per pound spent and duties are levied on alcohol content). Off-trade sales in 2021-22 have been declining towards pre-pandemic levels, and the on-/off-trade split of spending is expected to return towards pre-pandemic patterns too, so our forecast assumes that alcohol receipts will fall by £0.4 billion in 2022-23. From 2023-24 onwards receipts rise steadily by an average £0.6 billion a year as default RPI indexation returns following the latest freeze in 2022-23. Receipts are up £0.2 billion a year on average compared to both our March 2020 and October 2021 forecasts. For October, that primarily reflects higher RPI inflation raising duty rates, while several partly offsetting factors explain the March 2020 revision.
- 3.58 **Tobacco duty** receipts have also held up in 2021-22, rising by 5.3 per cent to £10.3 billion. Receipts are higher in all years relative to both our March 2020 and October 2021 forecasts, by an average of £1.8 billion and £0.8 billion a year, respectively. This is largely due to higher RPI inflation pushing up duty rates.
- 3.59 Air passenger duty (APD) receipts are higher in all years relative to our October 2021 forecast, but remain below our pre-pandemic March 2020 forecast. Air travel was heavily affected by the international travel restrictions in response to the pandemic, leaving receipts this year £2.9 billion (69 per cent) below our March 2020 forecast (having been £3.7 billion or 92 per cent below it in 2020-21). That shortfall lessens over the forecast but is never eliminated due to a permanent reduction in business travel. The upward revision of £0.2 billion a year on average relative to October 2021 largely reflects higher outturn receipts data, which indicates a quicker recovery in passenger numbers than anticipated.
- 3.60 Our first forecast for the **UK Emissions Trading Scheme** (ETS) in October 2021 saw a very large upward revision in receipts compared to the predecessor EU scheme, as carbon prices surged. Since then carbon prices have continued to rise, though less dramatically, which has increased receipts across the forecast period (by an average of £0.9 billion a year). The drivers of the upswing in carbon prices are uncertain, with markets potentially pricing in possible government policies such as reducing the number of allowances to align with net zero, expanding the scheme to other sectors, or linking the scheme back with the EU ETS or other schemes. Carbon prices fell in the first week of Russia's invasion of Ukraine, perhaps reflecting expectations of lower output from energy-intensive industries as gas prices surged. For this forecast we have used spot carbon prices plus the December 2022 future price on 4 March to calibrate our short-term forecast, and then held prices flat in cash terms.

Business rates and council tax

3.61 Receipts from **business rates** fell by £12.3 billion in 2020-21 largely reflecting the holiday in place for the retail, hospitality and leisure sectors in England, and similar schemes in Scotland and Wales. Business rates have partially rebounded in 2021-22 and do so more

fully by 2022-23 as pandemic-related reliefs are progressively withdrawn. From around £12 billion of 'holiday' relief for the worst-affected sectors from the pandemic in 2020-21, this lessened to around £8 billion in 2021-22 (including a one-off scheme worth £1.5 billion to sectors outside retail, hospitality and leisure) and then to around £2 billion in 2022-23. The rebound in business rates in 2022-23 was moderated by the freeze in the business rates multiplier for that year announced in the October 2021 Budget.

3.62 Comparing our latest forecast to previous ones:

- Relative to March 2020, receipts remain nearly £5 billion lower in 2022-23, mainly reflecting policy changes and a modest permanent hit to the tax base from the pandemic. CPI inflation is used to uprate the rateable value of non-domestic property each year. The uprating for 2023-24 will use the September 2022 CPI inflation outturn. We proxy this using our forecast for the third quarter, with the rate expected to hit 7.5 per cent. This compares with a 2.1 per cent assumption in the March 2020 forecast. The higher inflation means that business rates are little changed from the March 2020 forecast in both 2023-24 and 2024-25.
- Relative to October 2021, receipts are up by an average of £1.4 billion a year from 2023-24 onwards, explained largely by the higher path for CPI inflation.
- 3.63 Net **council tax receipts** rose in 2021-22 by £2.4 billion (6.5 per cent) and continue to rise over the forecast, with growth declining to an average of 3.1 per cent a year in the final two years of the forecast. This higher growth early in our forecast reflects policy measures allowing councils to increase the adult social care precept on council tax bills, over and above the almost 2 per cent increases in core rates assumed in our baseline forecast. The £150 council tax rebate taking place from April this year does not affect our council tax receipts forecast as the ONS has classified this as a current transfer to households a spending measure since the rebate does not affect council tax liabilities.

3.64 Comparing our latest forecast to previous ones:

- Relative to March 2020, receipts were £0.9 billion higher in 2021-22, and by increasing amounts in subsequent years, reaching £2.4 billion in 2024-25. This reflects policy measures in 2021-22, allowing local authorities to increase council tax rates by up to 3 per cent without calling a local referendum, and thereafter, raising the adult social care precept by a further 1 per cent a year from 2022-23 to 2024-25.
- Relative to October 2021, receipts are little changed in 2021-22, but then lower by increasing amounts, reaching a downward revision of £0.3 billion by 2026-27. This is due to lower receipts forecasts in Scotland and Wales, stemming from lower outturn data, which reduced assumed growth rates across the forecast.

Other taxes

- 3.65 Most environmental levies have been revised up modestly since our October 2021 forecast. The notable exception to that is contracts for difference (CfD), where higher energy prices have significantly reduced the subsidy needed to reach the 'strike price' guaranteed to renewable energy suppliers. The forecast price actually exceeds the strike price in 2022-23, so CfD payments have been revised from a £2.1 billion transfer to generators to a £0.7 billion transfer from generators, a downward revision of £2.7 billion. Slightly offsetting that, we have revised up capacity markets levies, which add £0.2 billion to receipts in 2022-23, rising to £0.5 billion by 2026-27, mainly as a result of recent auction outturns. As the levies are fiscally neutral, with an equal amount recorded in spending, we did not reopen our forecasts following Russia's invasion of Ukraine.
- 3.66 Customs duty receipts have been revised up by an average of £1.0 billion (23.0 per cent) a year relative to our October 2021 forecast to an average of £5.4 billion a year from 2022-23 onwards. This reflects persistently lower use of preferential tariff rates on imports from the EU under the Brexit free-trade deal as well as growth in high value imports such as electric vehicles. Compared to our March 2020 forecast, receipts are up from 2021-22 onwards by an average of £2.0 billion. Low use of preferential rates has been prevalent in imports of clothing from the EU, with only around a third of imports in 2021 arriving duty free. This is estimated to be worth approximately £600 million in customs receipts. We discuss Brexit's impact on trade more fully in Box 2.6.
- 3.67 VAT refunds are up £0.6 billion this year relative to our March 2020 forecast, but have been revised up by £1.1 billion a year on average from next year onwards. The upward revision reflects higher central government and local authority procurement, following the boost to spending announced in the October 2021 Spending Review. Relative to October 2021, VAT refunds have been revised up £0.7 billion in 2021-22 and then by £0.4 on average thereafter. The share of procurement in consumption this year has been higher than we had previously expected, which has flowed through to future years of the forecast.
- 3.68 Vehicle excise duty (VED) raises over £7 billion a year. Receipts have been revised down modestly in all years relative to both our March 2020 and October 2021 forecasts. Under current legislation, electric vehicles are exempt from VED. This means the higher path for electric vehicle sales discussed in Box 3.3 has led us to revise down VED receipts. The profile of this impact builds over the forecast period to reach £0.6 billion in 2026-27, reflecting the increase in electric vehicles as a proportion of the total vehicle stock.
- 3.69 Bank surcharge receipts have been much stronger than expected in our October 2021 forecast. Both September receipts (which came too late for the October EFO) and December receipts were strong. The boost to bank surcharge receipts reflects the same factors, such as the unwinding of loan-loss provisions from the pandemic and buoyant investment banking revenues, that drove the surplus in corporation tax from the financial sector. With financial sector profits expected to fall in 2022, the surplus relative to our October forecast falls from £0.8 billion in 2021-22 to £0.5 billion in 2022-23. The forecast includes the cut in the bank surcharge rate to 3 per cent (announced at Autumn Budget 2021) from April 2023.

Other receipts

- 3.70 Interest and dividend receipts includes income from the Government's financial assets such as student loans and bank deposits. Revisions since March 2020 are difficult to interpret due to methodological changes that reduced the discount rate used for future liabilities from funded public sector pension schemes. Relative to our October forecast, receipts have been revised up by an average of £2.0 billion a year. This reflects:
 - Returns on non-student loan assets. The higher path for short-term interest rates adds £1.9 billion a year to interest receipts on average. This effect is partly offset by the Bank's announcement that it will run down its stock of corporate bonds over the next two years, which has lowered receipts by £0.7 billion a year from 2024-25 onwards.
 - 'Modified' interest on student loans. The spike in RPI inflation in 2022-23 boosts accrued receipts by £3.0 billion in 2023-24. But inflation gets sufficiently high that the maximum interest rate charged on student loans in England of RPI plus 3 percentage points is expected to trigger the 'prevailing market rate' (PMR) cap that limits interest rates charged to not exceed the rate offered on a particular form of unsecured loan. The effect of this existing policy does not kick-in immediately, but instead due to lags in outturn interest rate data and the need to lay legislation, the Department for Education expects to implement it with a six-month lag between the point at which RPI-based interest rates first exceed the PMR and when the interest rates are actually capped. The cap reduces the extent to which interest receipts rise during the years it is assumed to be in place (from 2023-24 to 2024-25) reducing them by £1.6 billion and £2.5 billion, respectively, relative to RPI-based interest rates. The student loans reforms announced in February conversely increases accrued interest payments, by an average of £0.7 billion across the forecast. This reflects a greater proportion of the interest being expected to be paid in future rather than higher rates, as set out in Box A.1.
- 3.71 **Public sector gross operating surplus** has two main components: general government depreciation and public corporations' gross operating surplus (PC GOS). General government depreciation is neutral for borrowing, as it is also included in spending, whereas PC GOS affects borrowing. Taking each of these in turn:
 - General government depreciation has been revised up relative to our March 2020 forecast by an average of £2.9 billion a year, mostly due to updates to ONS outturn data showing higher government capital stocks. It is little changed since our October 2021 forecast, up slightly in 2021-22 but down by £0.9 billion by 2026-27.
 - Public corporations' gross operating surplus (PC GOS) is the operating income, imputed or otherwise, that public corporations make from their trading activities, gross of depreciation but net of operating costs. Relative to our March 2020 forecast, PC GOS is down by an average of £3.3 billion a year, mostly due to revised capital stocks data and the reclassification of Northern Irish housing associations into the private sector. Trading profits (particularly in relation to Transport for London (TfL)) are also lower. Relative to our October 2021 forecast, PC GOS has been revised down by £1.7

billion in 2022-23 and by £0.6 billion in 2023-24, but is little changed thereafter. These downward revisions largely relate to TfL's trading income, which has been hit by the reduction in passenger numbers relative to pre-pandemic expectations.

Public sector expenditure

Definitions and approach

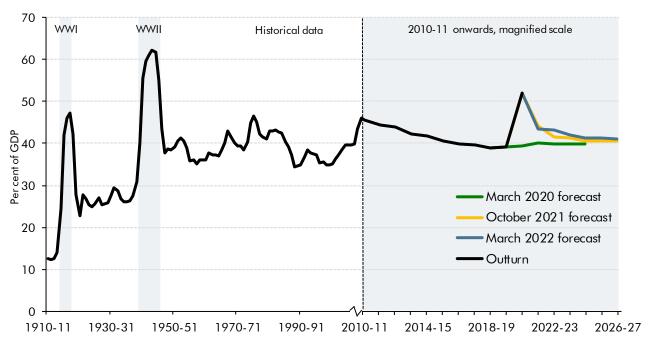
- 3.72 This section explains our forecast for public spending, which is based on the National Accounts aggregates for public sector current expenditure (PSCE), public sector gross investment (PSGI) and total managed expenditure (TME) the sum of PSCE and PSGI. We combine these National Accounts aggregates with the two administrative aggregates used by the Treasury to manage spending, each of which covers roughly half the total:
 - Departmental expenditure limits (DELs) mostly cover spending on public services, grants and administration ('resource' spending), and investment ('capital' spending). These are items that in normal times can be planned over multiple years. Our fiscal forecast therefore shows PSCE in resource DEL and PSGI in capital DEL. We typically assume (in line with historical experience) that departments will underspend the final limits that the Treasury sets for them, so unless otherwise stated when we refer to PSCE in RDEL and PSGI in CDEL (or RDEL and CDEL for simplicity) we mean the net amount that we assume will actually be spent rather than the limits themselves.
 - Annually managed expenditure (AME) covers items less amenable to multi-year planning, such as social security and debt interest. It also includes the pandemic-related income support schemes (such as the CJRS) and the upfront spending recorded to reflect future expected write-offs on the pandemic-related guaranteed loan schemes (such as the Bounce Back Loan Scheme). Again, our fiscal forecast shows PSCE in current AME and PSGI in capital AME.

Summary of the expenditure forecast

- 3.73 The pandemic and the fiscal policy response to it pushed public spending to a post-World War II high of 52 per cent of GDP in 2020-21. It is expected to fall by £88 billion (8 per cent) to 43 per cent of GDP in 2021-22 (Chart 3.10), but that remains 4 per cent of GDP higher than the pre-pandemic level in 2019-20. The fall in 2021-22 reflects the £151 billion reduction in pandemic-related spending, including from the winding down of the furlough scheme and reductions in business grants. But this is partly offset by a significant rise in debt interest costs as a result of the spike in RPI inflation affecting index-linked debt.
- 3.74 We expect spending to increase by £59 billion (6 per cent) in 2022-23 despite the end of pandemic-related support schemes, largely driven by a further temporary spike in debt interest costs as a result of high rates of RPI inflation over the coming year (and to a lesser extent the rise in interest rates). Higher departmental capital spending also contributes to the increase. But nominal GDP grows a little faster than spending in 2022-23, so the spending-to-GDP ratio falls by 0.2 percentage points to 43.2 per cent. Spending then falls more

- steeply as a share of GDP in 2023-24 and 2024-25 (by 1.3 and 0.6 percentage points, respectively) before declining gradually to 41.1 per cent of GDP in 2026-27.
- 3.75 Spending stabilises at 2.1 per cent of GDP above its 2019-20 pre-pandemic level of 39.1 per cent, and 1.3 per cent above the 39.9 per cent it was expected to reach in the middle of the decade on the basis of the pre-pandemic plans reflected in our March 2020 forecast. The rise since the pandemic is largely thanks to higher departmental spending, with resource and capital spending each increasing by around 1 per cent of GDP by 2026-27, while welfare spending as a share of GDP also settles slightly above its pre-pandemic level (Table 3.14). Despite the fall from the peak in 2020-21, spending as a share of GDP in the medium term is still at its highest sustained level since the late 1970s, when it was around 43 per cent of GDP (although it was at a higher, but declining, level following the financial crisis in the early 2010s and also during the early 1980s).

Chart 3.10: Public spending as a share of GDP



Note: We have increased the GDP denominator in forecast years for our previous forecasts by the upward revision to 2020-21 nominal GDP in the recent Quarterly National Accounts data. This is to enable like-for-like comparisons with our March 2022 forecast. Source: Bank of England, ONS, OBR

Table 3.14: TME split between DEL and AME

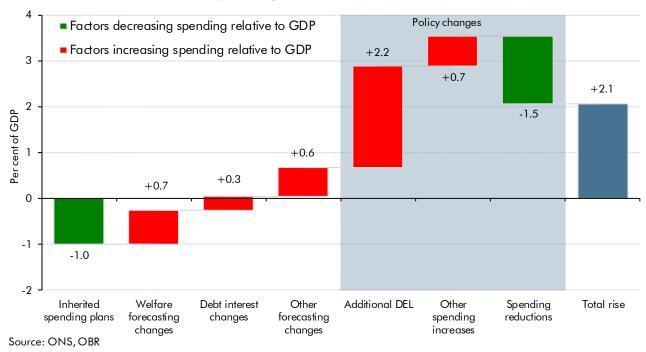
			Per	cent of C	DP					
	Out	turn		Forecast						
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27		
TME	39.1	52.1	43.4	43.2	42.0	41.3	41.2	41.1		
of which:										
TME in DEL	16.8	23.7	20.1	19.6	19.2	18.9	18.9	18.9		
of which:										
Pandemic-related measures	0.1	5.0	2.5	0.0	0.0	0.0	0.0	0.0		
Other PSCE in RDEL	14.1	15.7	14.7	16.2	15.6	15.4	15.4	15.4		
Other PSGI in CDEL	2.6	3.0	2.9	3.4	3.6	3.5	3.5	3.5		
TME in AME	22.3	28.4	23.4	23.6	22.8	22.5	22.3	22.2		
of which:										
Pandemic-related measures	0.1	5.2	0.4	0.0	0.0	0.0	0.0	0.0		
Other welfare spending	10.0	11.1	10.2	9.9	10.3	10.4	10.5	10.5		
Debt interest, net of APF	1.6	1.1	2.3	3.3	1.9	1.7	1.7	1.6		
Other AME	10.6	11.0	10.6	10.4	10.5	10.3	10.2	10.2		

Changes in the spending-to-GDP ratio relative to the pre-pandemic position

- 3.76 Chart 3.11 shows the factors driving the 2.1 per cent of GDP increase in the size of the state (measured by the ratio of public spending to GDP) in 2026-27 relative to its pre-pandemic level in 2019-20. The **spending plans inherited by the Chancellor** (as reflected in our March 2020 pre-measures forecast) would have resulted in the spending-to-GDP ratio falling by 1.0 per cent of GDP over this seven-year period. Of the 3.1 per cent of GDP increase in the size of the state in 2026-27 relative to those inherited plans, 1.7 percentage points relate to changes in forecast assumptions (a larger contribution than when we looked at this in October), while 1.4 percentage points reflect the current Chancellor's decisions.
- 3.77 **Underlying forecast revisions** raise the spending-to-GDP ratio by 1.7 percentage points relative to pre-pandemic expectations. This includes:
 - **Higher welfare spending**, which is up by 0.7 per cent of GDP thanks largely to the impact of more persistent inflation and higher nominal earnings growth on benefit uprating and the state pensions triple lock (on a pre-measures basis), respectively.
 - Higher debt interest spending, thanks largely to higher Bank Rate in the medium term relative to pre-pandemic expectations. Debt interest is up 0.3 per cent of GDP in 2026-27 (which follows larger rises in the near term when RPI inflation peaks).
 - Other forecast revisions, elements of which are also driven by the increase in inflation (such as higher spending on public service pensions), add 0.6 per cent of GDP.
- Once underlying forecast revisions are factored in, the size of the state would have been on course to rise modestly between 2019-20 and 2026-27, so two-thirds of its growth relative to GDP in our forecast is explained by **policy measures**, which add 1.4 per cent of GDP. Summed across all of this Chancellor's Budgets and Spending Reviews, the rise reflects:

- Higher DEL spending. The Chancellor announced large increases in both RDEL and CDEL spending in his March 2020 Budget, then a further large increase to RDEL budgets at the October 2021 Spending Review. These increased DEL spending by 2.2 per cent of GDP relative to our pre-measures March 2020 forecast (1.6 per cent of GDP due to RDEL and 0.7 per cent due to CDEL).
- Other spending increases. Increases to universal credit spending and modest increases to local authority spending add 0.7 per cent of GDP to spending in 2026-27.
- Spending reductions. This largely reflects the cost of the Brexit 'divorce bill' falling over the forecast period, whereas the cost of continuing contributions as a Member State would have been relatively stable as a share of GDP. The temporary suspension of the triple lock in 2022-23 also lowers spending relative to it having operated as normal, while the package of student loans reforms announced this February reduce the share of loans expected to be written off, thereby reducing growth in associated spending.

Chart 3.11: The rise in the spending-to-GDP ratio between 2019-20 and 2026-27



Changes in spending since our March 2020 and October 2021 forecasts

3.79 Table 3.15 shows that spending exceeded our March 2020 forecast by £187 billion in 2020-21 thanks to pandemic-related support for households, businesses, and public services. We expect it to remain £50 billion higher than that forecast in 2021-22, largely as a result of some of these support measures remaining in place, albeit to a lesser extent. Spending remains significantly higher in all subsequent years and is still £47 billion higher than our March 2020 forecast in 2024-25. This reflects both the effects of persistently higher inflation adding to welfare spending and debt interest, as well as increases in

departmental spending plans announced in the October 2021 Spending Review (albeit tempered to some extent in real terms by the recent rise in inflation).

Relative to our October 2021 forecast, we have revised spending down by £18 billion in 2021-22, then up by £41 billion in 2022-23, and by an average of £17 billion a year from 2023-24 onwards. Lower departmental capital spending and local authority spending are the main drivers of the downward revision in 2021-22. Meanwhile, higher debt interest explains most of the increase in later years, particularly in 2022-23 (when debt interest costs are up by over £40 billion in a single year – double our October forecast). While lower welfare spending as a result of lower unemployment helps partially offset this in the first two years of the forecast, higher inflation-related uprating raises spending from 2023-24 onwards. Government decisions since October have two main effects: first, support for households' energy bills (via rebates on council tax and energy bills themselves) increase spending by £8.9 billion in 2022-23; and second, reforms to student loans increase the proportion of loans that is expected to be repaid, thereby reducing the upfront spending that is recorded to reflect the portion that is ultimately expected to be written off.

Table 3.15: Public expenditure: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	927.7	977.4	1,011	1,045	1,080		
October 2021 forecast	1,115	1,045	1,045	1,081	1,108	1,148	1,192
March 2022 forecast	1,115	1,027	1,087	1,100	1,127	1,166	1,206
Changes since March 2020	187.3	49.9	75.9	55.4	46.8		
of which:							
Underlying forecast changes	-15.8	-4.4	48.8	39.9	43.2		
Pandemic-related support schemes	99.1	12.6	0.0	0.0	0.0		
RDEL spending decisions	94.7	51.2	28.3	13.4	8.2		
Welfare spending measures	8.0	5.2	-0.7	-3.2	-4.0		
Other spending measures	1.3	-14.7	-0.4	5.3	-0.6		
Changes since October 2021	-0.2	-17.7	41.2	18.9	19.3	17.3	14.4
of which:							
Debt interest forecast changes	1.2	13.1	42.2	12.7	10.2	9.2	8.3
Welfare forecast changes	-0.1	-2.0	-3.3	4.4	7.1	7.2	7.6
Other forecast changes	-1.4	-24.6	2.1	5.0	6.7	7.1	6.2
Direct effect of Government decisions	o.0	-4.1	0.2	-3.2	-4.7	-6.1	-7.8

Detailed spending forecasts

3.81 Tables 3.16, 3.17 and 3.18 detail our latest spending forecast and how it differs from our March 2020 and October 2021 forecasts.

Table 3.16: Total managed expenditure

				£ bil	lion			
	Outl	urn			Fore	cast		
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Public sector current expenditure (PSCE)								
PSCE in RDEL	321.4	434.5	405.0	407.0	408.0	419.1	435.4	451.6
PSCE in AME	468.2	555.3	528.8	566.0	560.8	578.1	595.5	616.1
of which:								
Welfare spending	227.0	245.4	244.7	250.3	270.8	284.6	296.0	306.7
Virus-related income support schemes ¹	2.2	78.2	17.0	0.0	0.0	0.0	0.0	0.0
Locally financed current expenditure	52.0	40.9	43.7	57.9	61.3	63.6	62.7	64.8
Central government debt interest,	36.8	23.6	53.5	83.0	50.6	46.7	46.9	47.3
net of APF ²								
Scottish Government's current spending	29.1	42.0	42.2	38.6	39.2	39.9	42.3	43.7
EU financial settlement	10.9	10.4	8.4	9.4	4.7	1.9	1.0	0.5
Net public service pension payments	5.8	4.1	3.6	2.5	4.8	5.3	5.2	4.9
Company and other tax credits	7.3	8.7	9.1	10.5	12.3	13.6	14.7	15.6
BBC current expenditure	3.8	3.5	4.0	4.2	4.1	4.1	4.1	4.2
National Lottery current grants	1.3	1.5	1.4	1.3	1.3	1.3	1.2	1.0
General government imputed pensions	0.6	8.0	1.1	0.8	8.0	0.9	0.9	0.9
Public corporations' debt interest	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.6
Funded public sector pension schemes	15.7	19.1	19.2	20.1	21.1	21.9	22.8	23.7
General government depreciation	45.5	46.7	48.5	50.3	52.3	54.4	56.4	58.8
Current VAT refunds	16.2	17.5	18.9	20.5	20.8	21.3	22.0	23.2
Environmental levies	9.0	10.4	8.4	7.9	10.7	12.9	13.7	15.1
Other PSCE items in AME	1.8	2.0	2.1	5.2	2.6	2.6	2.7	2.8
Other National Accounts adjustments	2.9	0.2	2.4	3.1	2.8	2.6	2.5	2.5
Total public sector current expenditure	789.6	989.8	933.8	973.0	968.8	997.2	1,031	1,068
Public sector gross investment (PSGI)								
PSGI in CDEL	57.9	72.6	69.2	86.0	94.6	94.9	99.3	102.9
PSGI in AME	36.3	52.5	24.3	27.6	36.9	34.9	35.5	35.5
of which:								
Locally financed capital expenditure	14.3	12.5	6.8	7.8	8.3	7.9	8.2	8.3
Public corporations' capital expenditure	10.4	9.3	10.5	10.2	10.7	10.3	8.6	12.0
Student loans	10.2	10.6	10.5	2.9	11.0	10.0	9.2	8.9
Funded public sector pension schemes	0.6	-0.3	1.1	1.3	1.6	1.3	1.1	1.1
Scottish Government's capital spending	3.9	4.5	5.1	5.3	5.1	5.0	5.2	5.1
Tax litigation	0.0	0.0	0.0	1.1	0.7	0.3	1.4	1.4
Calls on virus-related loan schemes	0.0	20.9	-4.4	0.0	0.0	0.0	0.0	0.0
Other PSGI items in AME	0.6	-0.1	-0.6	0.9	1.4	2.1	3.8	0.6
Other National Accounts adjustments	-3.6	-5.0	-4.7	-1.8	-2.0	-1.9	-1.9	-1.8
Total public sector gross investment	94.2	125.2	93.5	113.6	131.5	129.8	134.8	138.4
Less public sector depreciation	-52.4	-53.4	-55.2	-57.2	-59.5	-61.7	-63.8	-66.3
Public sector net investment	41.9	71.8	38.3	56.4	72.0	68.1	71.0	72.2
Total managed expenditure	883.9	1,115	1,027	1,087	1,100	1,127	1,166	1,206

¹ Includes the coronavirus job retention scheme and the self-employment income support scheme.

 $^{^{\}rm 2}$ Includes reductions in debt interest payments due to the APF.

Table 3.17: Total managed expenditure: changes since March 2020

	£ billion							
-	Outturn		Forec	ast				
	2020-21	2021-22	2022-23	2023-24	2024-25			
Public sector current expenditure (PSCE)								
PSCE in RDEL	94.8	43.7	31.1	16.3	10.5			
PSCE in AME	79.3	36.0	60.4	42.7	45.9			
of which:								
Welfare spending	14.1	6.9	3.5	13.9	17.8			
Virus-related income support schemes ¹	78.2	17.0	0.0	0.0	0.0			
Locally financed current expenditure	-14.1	-11.3	1.0	2.8	3.5			
Central government debt interest, net of APF ²	-10.8	15.7	45.1	13.4	10.0			
Scottish Government's current spending	8.5	6.7	1.2	0.3	-0.8			
EU financial settlement	1.4	-2.8	0.9	-0.1	-0.3			
Net public service pension payments	-0.1	0.6	0.6	3.6	5.0			
Company and other tax credits	1.3	1.2	2.1	3.5	4.5			
BBC current expenditure	-0.5	0.1	0.1	0.1	-0.1			
National Lottery current grants	0.2	0.3	0.2	0.3	0.4			
General government imputed pensions	-0.5	-0.3	-0.5	-0.5	-0.5			
Public corporations' debt interest	0.0	0.0	0.0	0.0	0.0			
Funded public sector pension schemes	-1.3	-2.2	-2.3	-2.5	-2.8			
General government depreciation	2.5	2.9	2.8	3.0	3.1			
Current VAT refunds	-0.2	0.5	1.4	1.1	0.4			
Environmental levies	-0.2	-2.5	-3.0	-0.9	0.9			
Other PSCE items in AME	0.8	0.7	3.8	1.1	1.0			
Other National Accounts adjustments	0.1	2.6	3.6	3.6	3.8			
Total public sector current expenditure	174.0	79.8	91.5	58.9	56.4			
Public sector gross investment (PSGI)								
PSGI in CDEL	1.4	-13.0	-0.6	3.1	0.1			
PSGI in AME	11.8	-16.8	-15.0	-6.7	-9.7			
of which:								
Locally financed capital expenditure	1.6	-3.5	-3.0	-1.9	-2.6			
Public corporations' capital expenditure	-2.0	-0.8	-1.2	-1.0	-1.7			
Student loans	0.0	-0.7	-9.0	-1.3	-2.8			
Funded public sector pension schemes	-1.2	0.2	0.4	0.7	0.4			
Scottish Government's capital spending	-0.1	-0.3	-0.4	-0.7	-1.0			
Tax litigation	-1.8	-1.2	0.0	-0.4	-0.8			
Calls on virus-related loan schemes	20.9	-4.4	0.0	0.0	0.0			
Other PSGI items in AME	-0.9	-1.4	0.1	0.6	1.4			
Other National Accounts adjustments	-4.6	-4.7	-1.8	-2.6	-2.7			
Total public sector gross investment	13.2	-29.8	-15.6	-3.5	-9.6			
Less public sector depreciation	-1.2	-1.2	-1.2	-1.4	-1.4			
Public sector net investment	12.1	-31.0	-16.8	-4.9	-11.0			
Total managed expenditure	187.3	49.9	75.9	55.4	46.8			

¹ Includes the coronavirus job retention scheme and the self-employment income support scheme.

² Includes reductions in debt interest payments due to the APF.

Table 3.18: Total managed expenditure: changes since October 2021

			· ·	E billion			
	Outturn			Forec	ast		
	2020-21 2	2021-22 2	022-23 2	023-24 2	024-25 2	025-26 2	026-27
Public sector current expenditure (PSCE)							
PSCE in RDEL	0.0	-1.0	9.4	2.2	1.6	1.7	1.3
PSCE in AME	0.7	4.8	42.4	18.7	21.3	19.6	18.5
of which:							
Welfare spending	-0.1	-2.0	-3.7	3.7	6.1	6.1	6.4
Virus-related income support schemes ¹	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Locally financed current expenditure	-8.0	-7.8	1.8	1.1	1.0	0.4	0.4
Central government debt interest,	1.2	13.1	42.2	12.7	10.2	9.2	8.3
net of APF ²	0.0	3.0	0.6	0.4	0.8	1.0	0.8
Scottish Government's current spending EU financial settlement	0.0	-0.1	0.6	-0.2	0.0	0.0	0.0
	0.0	0.1		-0.2 -0.1	0.0	0.0	-0.1
Net public service pension payments			-1.1				
Company and other tax credits	0.0	0.2	0.9	1.5 0.1	1.6	1.6	1.8
BBC current expenditure	0.0	-0.2 -0.1	0.1		-0.1	-0.1	-0.1
National Lottery current grants	0.0		0.0	0.0	0.0	-0.1	-0.3
General government imputed pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public corporations' debt interest	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Funded public sector pension schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government depreciation Current VAT refunds	0.0 -0.4	0.3 0.3	0.0 0.0	-0.3 -0.2	-0.5 0.1	-0.7 -0.1	-0.9 -0.1
Environmental levies	0.0	-2.1		-0.2 -0.8	1.0	1.5	1.7
			-2.3				
Other PSCE items in AME	0.2	-0.3	2.4	-0.1	-0.1 0.8	-0.1	-0.1 0.8
Other National Accounts adjustments Total public sector current expenditure	7.4 0.7	0.3 3.8	1.0 51.8	0.8 20 .9	22.9	0.8 21.3	19.8
Public sector gross investment (PSGI)	0.7	3.0	31.0	20.9	22.9	21.3	19.0
PSGI in CDEL	-0.1	-8.4	-1.0	0.0	0.0	0.0	-0.1
PSGI in AME	-0.1	-13.0	-1.0 -9.6	-2.0	-3.6	-3.9	-5.4
of which:	-0.7	-13.0	-7.0	-2.0	-3.0	-3.7	-3.4
Locally financed capital expenditure	1.6	-1.3	-0.6	0.3	-0.4	-0.4	-0.6
Public corporations' capital spending	-0.7	-0.1	-0.5	-0.3	-1.0	-2.8	0.2
Student loans	0.0	-1.2	-9.5	-2.1	-3.7	-5.2	-6.1
Funded public sector pension schemes	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Scottish Government's capital spending	0.0	-0.4	0.4	0.1	0.0	0.0	-0.2
Tax litigation	0.0	-1.9	0.2	-0.8	-0.4	0.7	0.7
Calls on virus-related loan schemes	0.0	-5.9	-0.5	-0.2	0.0	0.0	0.0
Other PSGI items in AME	0.0	0.0	-0.2	0.3	1.2	3.0	-0.1
Other National Accounts adjustments	-1.8	-2.2	1.0	0.7	0.7	0.8	0.7
Total public sector gross investment	-1.0	-21.4	-10.6	-2.0	-3.6	-3.9	-5.4
Less public sector depreciation	0.1	-0.4	-0.2	0.0	0.2	0.5	0.7
Public sector net investment	-0.9	-21.8	-10.8	-2.0	-3.3	-3.5	-4.7
Total managed expenditure	-0.2	-17.7	41.2	18.9	19.3	17.3	14.4
1							

¹ Includes the coronavirus job retention scheme and the self-employment income support scheme.
² Includes reductions in debt interest payments due to the APF.

Spending within departmental expenditure limits

- 3.82 In this section, we use 'RDEL spending' and 'CDEL spending' to refer to PSCE in RDEL and PSGI in CDEL, respectively. Given the large movements in Scottish Government AME since March 2020 due to the automatic knock-ons from the extra pandemic-related DEL funding (known as 'Barnett consequentials' as they are calculated using the Barnett formula), we also note the combined effect of changes in DEL spending and Scottish Government AME.
- 3.83 Our latest forecasts (reported in Tables 3.19, 3.20 and 3.21) reflect:
 - Departments' latest 'forecast outturns' for 2021-22 that were sent to the Treasury in February, the latest local government finance settlement, this year's Supplementary Estimates, plus our assumptions regarding any further underspending relative to them.
 - **Departments' plans for 2022-23 to 2024-25**, as announced in the October 2021 Spending Review, and the effects of policy announcements since then.
 - The Government's latest post-Spending Review spending assumptions, which set overall spending totals, but not detailed plans, for 2025-26 onwards.
 - The Government returning Official Development Assistance (ODA) to 0.7 per cent of gross national income from 2024-25 onwards.¹⁶
 - In all years, we have added **Scottish Government AME** onto the DEL totals, reflecting Barnett consequentials and our judgements on additions to or use of reserves.¹⁷

Departmental spending in 2021-22

- 3.84 At £447.3 billion, departmental resource spending in 2021-22 is expected to be £29.3 billion less than in 2020-21, as pandemic-related spending has declined (Table 3.19). But it remains higher than we forecast in March 2020, reflecting around £58 billion of pandemic-related spending on health, transport subsidies, and business grants. It has been revised up £2.0 billion from our October 2021 forecast, within which RDEL spending has been revised down £1.0 billion from October, but this is more than offset by a £3.0 billion increase in the Scottish Government's expected use of reserves.
- 3.85 We arrived at our RDEL spending judgement for 2021-22 by considering: a bottom-up assessment of likely full-year actual spending across departments; a top-down assessment of likely underspending in the final few months of the year; year-to-date spending as a share of full-year spending; and cash spending to date. On balance, these pointed to a reduction in actual RDEL spending of £1.0 billion relative to our October forecast. But the

¹⁶ This is unchanged from our October forecast. The Chancellor stated that the return of ODA spending to 0.7 per cent of GNI would occur when a sustainable current budget surplus was achieved and underlying debt was falling, and that this target would be reviewed each year for the following financial year. At this forecast, the current budget reaches surplus and underlying debt falls from 2023-24.

¹⁷ From an administrative perspective, since October 2018 the Treasury has determined that Scottish Government spending will be treated as 'non-fiscal DEL' that scores in AME. The real-world consequences of this unusual classification appear to have been limited, particularly since the pandemic struck. For forecasting purposes, we must therefore account for Scottish Government spending in AME while taking forecast judgements as though it remained part of DEL. For ease of exposition, we therefore combine their presentation here.

Treasury increased departmental spending limits as part of the annual Supplementary Estimates process by £7.2 billion, the majority of which related to spending pressures arising from the Omicron variant (particularly the cost of more lateral flow tests and support for rail services). Our modest downward revision to actual RDEL spending therefore implies greater underspending of £8.2 billion relative to those increased limits. Consistent with our usual approach to policy decisions we have assumed that 10 per cent of the additional allocations at Supplementary Estimates go unspent, with the remaining additional underspend attributed to our pre-measures forecast. This split is somewhat illustrative.

- 3.86 Our forecast for capital spending this year of £74.3 billion is £13.3 billion lower than our March 2020 forecast and £8.8 billion lower than our October 2021 forecast. The supply bottlenecks observed across the economy have affected public investment too, with capital projects progressing more slowly than planned, pointing to a multi-billion-pound downward revision to actual CDEL spending. In light of these constraints, and stretched capacity given the large number of major new capital programmes underway, departments agreed an £8.4 billion reduction in total capital limits for 2021-22 at Supplementary Estimates. We have assumed that this all translates into lower actual spending, leaving our assumption about underspending relative to plans unchanged from October.
- 3.87 Our latest forecasts imply 2021-22 underspending relative to limits of £21.8 billion for RDEL and £10.5 billion for CDEL. With the exception of last year's unprecedented £30.4 billion RDEL underspend, these are by far the largest underspends on record. These figures are important in explaining the faster-than-expected drop in the budget deficit this year.

Departmental resource spending from 2022-23 onwards

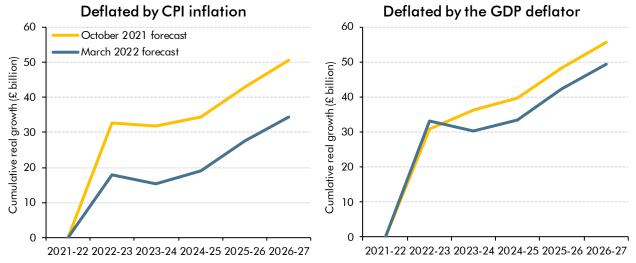
- 3.88 The October 2021 Spending Review set out detailed plans for departmental spending for 2022-23 to 2024-25. Our forecast for resource spending in 2022-23 is £445.6 billion, a small year-on-year decline of £1.6 billion from 2021-22 as the end of pandemic-related spending and start of catch-up spending on public service backlogs is offset by the cost of the Government's energy package. Beyond 2022-23 these plans are little changed in cash terms, with resource spending increasing during the remaining years of the Spending Review to £459.0 billion in 2024-25. But the spike in inflation means budgets have been hit in real terms. Indeed, we have revised down the extent to which plans are assumed to be underspent, particularly in 2022-23 given inflation and wage pressures (as described below). As a result, we have revised up actual RDEL spending by an average of £2.1 billion a year between 2022-23 and 2024-25. In 2025-26 and 2026-27, resource spending is up a little from our October forecast, reaching £495.3 billion by 2026-27.
- 3.89 The Department for Levelling Up, Housing and Communities' RDEL budget in 2022-23 has been increased by £5.8 billion to pay the £200 rebate on energy bills for around 28 million households in Great Britain, with an additional £0.2 billion in Barnett consequentials for Northern Ireland. The £2.7 billion for the cost of the £150 rebate on council tax bills that we expect to reach 18.2 million households in England living in band A to D properties is discussed in paragraph 3.120 and Annex A.

- 3.90 High inflation in 2022-23 will place significant pressure on the departmental budgets that were set in cash terms in October's Spending Review. We have revised up CPI inflation in 2022-23 by 4.3 percentage points and GDP deflator growth by 1.3 percentage points, so a simple calculation based on these percentages of total RDEL budgets as set in the Spending Review would imply a pressure of between £5.4 billion and £17.2 billion on RDEL budgets (if either measure were a good guide to cost pressures faced by departments across their budgets and in aggregate). However, this is likely to overstate the pressure on budgets:
 - Around half of departmental resource spending relates to pay, with Spending Review settlements including funding for what were described as "fair and affordable" pay rises. Pay Review Bodies will be making recommendations in the coming months and departments will need to choose whether and how to absorb any pay pressures beyond what was budgeted for. If they are avoided by holding down nominal pay awards, this could ultimately translate into different pressures by reducing the quality of public services via the impacts of lower real pay on staff recruitment and retention. But real earnings in the public sector fell more often than they rose during the 2010s, suggesting such a pattern can be sustained for a period, though not indefinitely.
 - Around half of departmental resource spending relates to procurement and grants. Procurement costs will be affected by increases in the price of goods and services, but existing longer-term contracts and the Government's purchasing power can be expected to ameliorate this pressure. Grants are set on a cash basis and so will not be directly affected by higher inflation (except by the recipients of them), and these make up around 5 per cent of total departmental resource spending.
 - In recent years the Treasury has increased the size of the centrally held reserve within total departmental spending limits that can be used to fund unexpected pressures from an average of 1.1 per cent of departmental limits between 2015-16 and 2019-20 (£3.6 billion in cash terms) to an average of 2.6 per cent of limits between 2022-23 and 2024-25 (£10.7 billion). The reserve is £11.0 billion in 2022-23. Of course, to the extent that calls on the reserve increase because departments have to use their allocated budgets to absorb inflation or pay pressures, it would not be available to meet other calls on the reserve that tend to occur each year. 18
- 3.91 The balance of these factors has led us to revise down underspending (and revise up actual spending) by £2.8 billion in 2022-23, by £2.0 billion in 2023-24 and by an average of £1.5 billion a year thereafter. This also brings RDEL underspending back to its historical average of 0.8 per cent of limits more quickly than assumed in October.
- 3.92 As Chart 3.12 shows, the combination of significant upward revisions to our inflation forecast since October and the modest downward revisions to our assumptions about underspending leaves cumulative real growth in departmental resource spending lower than in our October forecast. This is particularly so when spending is deflated by CPI inflation

¹⁸ During the Afghanistan and Iraq wars, the Treasury also maintained a 'special reserve' to meet associated costs, with annual amounts in excess of the main reserve put aside for war related costs in the 2010 Spending Review.

rather than the GDP deflator. On that CPI basis it is £15.0 billion lower in 2022-23 and £16.1 billion lower by 2026-27 than was the case when those plans were set. Based on the GDP deflator, the modest increase in cash spending means real spending is £2.3 billion higher in 2022-23 but it is £6.2 billion lower by 2026-27.

Chart 3.12: Growth in real departmental resource spending (2021-22 to 2026-27)



Note: Excludes covid related spending and 2021 Spring Statement policy measures not directly impacting departmental budgets. Source: OBR

Departmental capital spending from 2022-23 onwards

October (and are little changed since they were set in the March 2020 Budget). The increase in plans relates to the Government's bailout of Bulb Energy (with £1.2 billion of funding to cover operating losses also provided in 2021-22 as part of the Supplementary Estimates process). We have revised down CDEL spending in 2022-23 by £2.0 billion as we anticipate this year's supply bottlenecks spilling over to affect delivery capacity into next year. Even so, CDEL spending next year is forecast to rise by 24 per cent relative to 2021-22, thanks to bottlenecks easing and upward pressure from higher inflation on project costs. These changes are partly offset by revisions to the path of Scottish Government capital spending. There is a high degree of uncertainty around these forecasts, with risks in both directions. Capital spending in 2023-24 and beyond is little changed from our October forecast, rising from £99.8 billion in 2023-24 to £108.0 billion by 2026-27, increasing by 2 per cent a year in real terms and remaining stable as a share of GDP.

Table 3.19: Departmental resource spending: changes since March 2020 and October 2021

	£ billion							
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
PSCE in RDEL and Scottish Government	nt current	AME						
March 2020 forecast	373.3	396.9	413.3	430.6	449.2			
October 2021 forecast	476.5	445.3	435.5	444.7	456.5	475.0	493.2	
March 2022 forecast	476.5	447.3	445.6	447.3	459.0	477.7	495.3	
Relative to March 2020 forecast	103.3	50.4	32.3	16.6	9.7			
of which:								
Underlying changes	-1.5	-2.9	3.4	2.4	1.9			
Effect of Government decisions	104.8	53.3	28.9	14.2	7.8			
Relative to October 2021 forecast	0.0	2.0	10.1	2.6	2.4	2.6	2.1	
of which:								
Underlying changes	0.0	-4.5	3.4	2.4	1.9	2.0	2.0	
Effect of Government decisions	0.0	6.5	6.7	0.2	0.5	0.6	0.1	
of which:								
Scorecard measures	0.0	0.0	6.7	0.1	0.5	0.6	0.2	
Non-scorecard measures	0.0	7.2	0.1	0.0	0.0	0.0	0.0	
OBR underspend response	0.0	-0.7	0.0	0.0	0.0	0.0	0.0	

Table 3.20: Departmental resource spending limits and assumed spending: changes since March 2020 and October 2021

	£ billion							
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
March 2020 forecast								
Limits	343.0	365.2	380.0	396.0	413.0			
Assumed underspend	-3.2	-3.9	-4.1	-4.3	-4.4			
Actual spending	339.8	361.3	375.9	391.8	408.6			
October 2021 forecast								
Limits	465.0	419.6	404.8	411.5	422.3	438.7	455.4	
Assumed underspend	-30.4	-13.5	-7.2	-5.8	-4.8	-5.0	-5.2	
Actual spending	434.5	406.0	397.6	405.8	417.5	433.7	450.3	
March 2022 forecast								
Limits	465.0	426.8	411.4	411.7	422.5	438.9	455.2	
Assumed underspend	-30.4	-21.8	-4.5	-3.7	-3.4	-3.5	-3.6	
Actual spending	434.5	405.0	407.0	408.0	419.1	435.4	451.6	
Change since March 2020								
Limits	122.0	61.6	31.4	15.7	9.5			
Assumed underspend	-27.2	-17.9	-0.4	0.6	1.1			
Actual spending	94.8	43.7	31.1	16.3	10.5			
Change since October 2021								
Limits	0.0	7.2	6.7	0.2	0.2	0.2	-0.2	
Assumed underspend	0.0	-8.2	2.8	2.0	1.4	1.4	1.5	
Actual spending	0.0	-1.0	9.4	2.2	1.6	1.7	1.3	

Table 3.21: Departmental capital spending: changes since March 2020 and October 2021

	£ billion									
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
PSGI in CDEL and Scottish Government capital AME										
March 2020 forecast	75.9	87.6	92.2	97.3	100.8					
October 2021 forecast	77.2	83.1	91.9	99.7	99.8	104.4	108.4			
March 2022 forecast	77.1	74.3	91.2	99.8	99.9	104.4	108.0			
Changes in actual spending										
Relative to March 2020 forecast	1.3	-13.3	-1.0	2.4	-1.0					
Relative to October 2021 forecast	-0.1	-8.8	-0.6	0.1	0.0	0.0	-0.3			
of which:										
Underlying changes	0.0	-0.4	-1.6	0.1	0.0	0.0	-0.2			
Effect of Government decisions	0.0	-8.4	1.0	0.0	0.0	0.0	-0.1			

Box 3.4: Pressures on the NHS and associated public spending risks

The NHS is the largest single item of public spending in the UK, and has been placed under extraordinary pressure as a result of the pandemic, both as a result of Covid-related activity and also the knock-on effects of that for other health services. Historically, some of the largest policy-related revisions to our public spending forecasts have related to health spending, from the £20 billion a year increase announced by Prime Minister Theresa May in June 2018 to the £13 billion a year increase announced by the Chancellor in last year's Spending Review. This latest increase in funding arrives at a time where several indicators point to intense pressures across the health service, despite pandemic-related activity having eased somewhat.

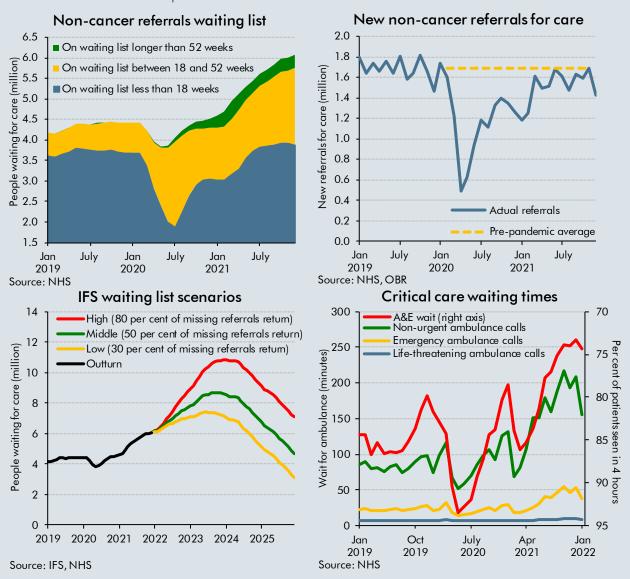
Referrals for non-urgent care indicate significant increases in both numbers of people waiting, and the time spent waiting for care. The top-left panel of Chart E shows that in January 2019, of the 4.2 million people waiting for care, less than 0.1 per cent had been waiting over a year, with 13.2 per cent waiting between 18 and 52 weeks. As of December 2021, the number waiting for care had risen to 6.1 million, while the share of those waiting more than a year had risen to 5.1 per cent (a hundred-fold increase), with 31.0 per cent waiting between 18 and 52 weeks. Staffing pressures have also been apparent, with vacancies increasing from 15,900 in January 2019 to a peak of 22,900 in July 2021.

The number of people on the waiting list is likely to understate the true pressure on non-urgent 'elective' care. As the top-right panel shows, new referrals for care dropped off sharply from February 2020 as the pandemic shifted NHS priorities and individuals' behaviour. Although referrals rebounded in 2020, they are still yet to recover to pre-pandemic levels (as shown by the dashed line in the top-right panel), let alone reflect any catching-up of the backlogs that built up during the pandemic. The scale of these is uncertain, but in its February 2022 publication, Delivery plan for tackling the COVID-19 backlog of elective care, the NHS estimates that over 10 million patients who might otherwise have come forward for treatment did not. The extent to which these are caught up in the coming years will influence how the NHS waiting list evolves.

In the plan for tackling this backlog, the NHS outlines ambitions (rather than targets) to reduce waiting times: that by August 2022 nobody will be waiting more than two years; by April 2023

nobody will be waiting more than 18 months; by March 2024 nobody will be waiting more than 65 weeks; and that by March 2025 there will be nobody waiting more than a year. The Institute for Fiscal Studies (IFS) has considered various scenarios for waiting lists to achieve these ambitions (reproduced in the bottom-left panel).^a Each scenario assumes a different share of the missing referrals comes forward for care: 30 per cent (low), 50 per cent (middle), and 80 per cent (high). Even in the low scenario, waiting lists continue to increase until June 2023, when they peak at 7.4 million, and only fall below current levels in September 2024. In the middle scenario they peak at 8.7 million in October 2023, while in the high scenario they peak at 10.8 million in December 2023 and never fall below the December 2021 level.

Chart E: Indicators of pressures on the NHS



As well as the pressures seen in elective care, critical care waiting times have risen significantly. The bottom-right panel shows waiting times for ambulances by degree of urgency,^b and the percentage of A&E patients seen within four hours (where the stated target is 95 per cent). For A&E patients, this has fallen from around 85 per cent pre-pandemic to less than 75 per cent in late 2021. Response times for ambulances have slowed significantly across all categories relative

to their 2019 averages: at their peaks in late 2021 they had slowed by 30 per cent for life-threatening calls (category 1); by 133 per cent for emergency calls (category 2); and by 155 per cent for non-urgent calls (category 4).

To the extent that such pressures – or indeed broader pressures from pay and inflation – were accommodated in higher budget allocations, that would represent a risk to our forecasts. The IFS has found that in the almost 40 years between the 1982 Autumn Statement and the 2015 Spending Review, there have only been two occasions when health spending has risen by less than was originally planned.^c Initial real terms spending plans suggested average annual growth of 2.7 per cent, but in outturn this growth was 4.1 per cent. Resource spending plans set at the 2021 Spending Review were consistent with average real annual growth of 3.8 per cent in the NHS between 2021-22 and 2024-25, broadly in line with this historical average. Revisions to our GDP deflator forecast since October mean that the real growth rate consistent with our latest forecast is 3.3 per cent. So despite the £13 billion increase to NHS funding at the 2021 Spending Review, policy risks from NHS spending could well still remain to the upside.

- ^a Institute for Fiscal Studies, The NHS backlog recovery plan and the outlook for waiting lists, 2022.
- ^b Category 1T and Category 3 have been omitted due to close alignment with Category 1 and Category 2, respectively.
- ^c Institute for Fiscal Studies, An ever-growing NHS budget could swallow up all of this week's tax rise, leaving little for social care, 2021.

Welfare spending

- 3.94 Total welfare spending in our forecast refers to AME spending on social security and tax credits. Around half is subject to the Government's 'welfare cap', which excludes the state pension and those payments most sensitive to the economic cycle. We discuss performance against the cap in Chapter 4. The different pandemic-related income support schemes for employees and the self-employed are not treated as welfare spending in the public finance statistics (they are instead treated as subsidies to employers), so are discussed separately in the next section. But in an economic sense they performed a similar role in effect creating more generous, though temporary, benefit systems to support people through lockdowns.
- 3.95 At £245 billion, welfare spending is forecast to fall by £0.6 billion (0.3 per cent) in 2021-22, following a large rise of £18.3 billion (8.1 per cent) in 2020-21. This would represent the first fall in nominal welfare spending since modern records began in 1948-49. This is partly thanks to a fall in unemployment from 4.8 per cent on average in 2020-21 to 4.2 per cent on average in 2021-22, reducing working-age caseloads. In addition, the ending of the £20 a week uplift to universal credit (UC) in October 2021 lowers UC expenditure by £2.2 billion over the second half of the year, and is only partly offset by the increase in UC generosity from the higher work allowances and a lower taper rate from late-November onwards (at a cost of £0.7 billion in 2021-22).
- 3.96 Beyond 2021-22, welfare spending is forecast to grow by 4.6 per cent a year on average, mainly due to inflation and earnings growth pushing up benefits uprating and the state

¹⁹ DWP's published *Benefit expenditure and caseload* tables show cash falls in spending in 2003-04 and 2013-14 but these are both due to changes in coverage: child benefit moved from DWP to HMRC in 2003-04 and council tax benefit was transferred to local authorities and no longer classified as welfare spending from 2013-14.

pension triple lock. This effect does not kick in until 2023-24, since uprating in 2022-23 was fixed according to the 3.1 per cent rate of CPI inflation recorded in September 2021 (including for the state pension via the one-year 'double lock' policy). Uprating is set to be particularly high in 2023-24 when CPI-linked uprating will raise most benefits by 7.5 per cent (rather than the 3.9 per cent we expected in October) thanks to much higher inflation in September 2022. This means that the year-on-year rise in welfare spending in 2023-24 of £20.5 billion is larger than the pandemic-driven £18.3 billion increase in 2020-21.

3.97 Alongside inflation and earnings growth, increases in welfare spending across our forecast are driven by: first, higher benefit caseloads (both in pensioner benefits as a result of the ageing population and in working-age benefits due to pandemic-related increases in labour market inactivity); and second, increased generosity of UC relative to pre-pandemic levels (due to the reduced taper rate and increased work allowances announced in October). By the forecast horizon in 2026-27, welfare spending is 10.5 per cent of GDP – 0.4 per cent of GDP higher than its 2019-20 pre-pandemic level (although well below the 2020-21 spike to 11.5 per cent of GDP, and even further below the 15.1 per cent of GDP in that year with spending on the CJRS and SEISS factored in too).

Table 3.22: Total welfare spending

	£ billion									
	Outturn	Forecast								
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
Pensioner spending ¹	113.6	117.2	123.1	133.7	140.5	146.6	151.5			
UC and legacy equivalents ²	80.4	74.9	71.7	75.8	79.4	81.8	84.9			
Disability benefits ³	24.8	25.9	28.2	32.2	34.9	37.0	39.4			
Child benefit	11.5	11.4	11.6	12.3	12.5	12.4	12.4			
Other benefits ⁴	15.1	15.3	16.2	17.4	18.4	19.1	19.8			
Total welfare spending	245.4	244.7	250.3	270.8	284.6	296.0	306.7			
of which:										
Inside welfare cap	123.4	123.9	124.7	132.6	137.4	140.2	143.8			
Outside welfare cap	122.0	120.8	125.5	138.2	147.2	155.8	162.9			

¹ Pensioner spending includes pensioner housing benefit, pension credit, state pension expenditure and winter fuel payments.

3.98 Relative to our March 2020 forecast, welfare spending is significantly higher in all years, with the £17.8 billion upward revision in 2024-25 larger than that at the height of the pandemic in 2020-21 (£14.1 billion), when pandemic-related income support schemes helped to lower unemployment and therefore dampened growth in working-age benefit caseloads. Revisions in the earlier years of the forecast are thanks to increased spending on UC and its predecessors, driven by higher near-term unemployment and labour market inactivity increasing caseloads, and pandemic-related welfare policy decisions. Revisions in later years are dominated by higher CPI inflation (particularly in 2023-24) resulting in increased uprating across most working-age and pensioner benefits. Uprating costs would have been higher still had the triple lock operated as normal in 2022-23. Spending on UC

² UC and legacy equivalents includes personal tax credits, housing benefit (excluding the pensioner part), income-related and contributory employment and support allowance, income support and income-based and contributory jobseeker's allowance.

³ Disability benefits includes disability living allowance, personal independence payment, and attendance allowance.

⁴ Other benefits includes all Northern Ireland social security expenditure.

- and disability benefits has also been revised up due to a pandemic-related rise in health-related caseloads (see Box 2.4 on broader trends in labour market inactivity).
- 3.99 **Relative to our October 2021 forecast**, spending has been revised down this year and next, but has then been revised up by an average of £5.6 billion a year from 2023-24 onwards. These revisions reflect:
 - Uprating increases across all benefits due to higher inflation and earnings growth. This raises spending by an average of £10.1 billion a year from 2023-24 onwards, primarily driven by the inflation spike this year which leaves the level of prices higher in all future years. Higher CPI inflation raises spending by an average of £6.5 billion a year, while inflation and earnings-driven increases raise pensioner spending by an average of £3.7 billion a year via the triple lock.
 - Lower caseloads in UC and its predecessors partly offset the uprating increase. The 'intensive work search' caseload in UC has been revised down reflecting the latest outturn data, which will at least partly have been driven by lower unemployment, which reduces spending by £0.7 billion a year from 2022-23 onwards. Faster-than-expected falls in legacy benefit caseloads and the correction of a double-counting error in our legacy benefits modelling each reduce spending by around £2 billion a year from 2022-23 onwards.
 - Evidence of elevated levels of fraud and error in universal credit in 2020-21 suggests it accounted for a greater share of spending in outturn than we had previously assumed. As we expect those very high levels to subside, the path of fraud and error costs is higher but more downward-sloping than we assumed in our October forecast. On a pre-measures basis, this lowers growth in spending from the latest observed outturn by £0.6 billion a year on average from 2022-23 onwards. DWP is also recruiting significantly greater numbers of staff to address the greater volume of fraud and error. This is expected to reduce spending by a further £0.6 billion a year on average. These assumptions and some associated policy measures are detailed in Annex A.
 - Other revisions include updating our mortality and births assumptions in line with the latest ONS population projections. The ONS revised up mortality relative to its previous projections, but to a level slightly lower than our October forecast had assumed in the short term. This increases spending by £0.5 billion in 2022-23, but by just £0.1 billion by 2026-27. The ONS revised fertility down significantly, which reduces spending by £0.8 billion by the forecast horizon, thanks to lower spending on maternity benefits, UC and child benefit.

Table 3.23: Welfare spending: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total welfare spending							
March 2020 forecast	231.2	237.8	246.8	256.9	266.8		
October 2021 forecast	245.4	246.7	254.0	267.1	278.5	289.9	300.3
March 2022 forecast	245.4	244.7	250.3	270.8	284.6	296.0	306.7
Changes since March 2020	14.1	6.9	3.5	13.9	17.8		
of which:							
Forecast changes	6.2	1.7	4.2	17.1	21.8		
Universal credit ¹	6.7	3.8	1.0	4.6	6.5		
Pensioner spending ²	-1.1	-2.2	1.6	6.9	7.8		
Disability benefits ³	0.5	0.6	1.7	4.5	6.0		
Other benefits ⁴	0.1	-0.5	-0.1	1.1	1.5		
Direct effect of Government decisions	8.0	5.2	-0.7	-3.2	-4.0		
Changes since October 2021	-0.1	-2.0	-3.7	3.7	6.1	6.1	6.4
of which:							
Benefit uprating	0.0	0.0	-0.1	8.4	10.7	10.5	11.0
Lower UC and legacy caseload	0.0	-1.8	-4.5	-5.2	-4.7	-4.7	-4.8
Fraud and error forecast revision	0.0	0.0	-0.4	-0.5	-0.6	-0.7	-0.8
ONS mortality projections	0.0	0.3	0.5	0.3	0.2	0.1	0.1
ONS fertility projections	0.0	0.0	-0.3	-0.4	-0.5	-0.6	-0.8
Other forecasting changes	-0.1	-0.5	1.5	1.8	2.0	2.6	2.9
Direct effect of Government decisions	0.0	0.1	-0.4	-0.7	-1.0	-1.1	-1.3

¹ UC includes legacy equivalents, personal tax credits, housing benefit (excluding the pensioner part), income-related and contributory employment and support allowance, income support and income-based and contributory jobseeker's allowance.

Pandemic-related income support schemes: CJRS and SEISS

- 3.100 The coronavirus job retention scheme (CJRS) and self-employment income support scheme (SEISS) closed in September 2021. At the time of our October forecast, we had near-final data for SEISS and early indications of September for the CJRS. The latest estimate of total spending on SEISS grants is £64 million higher than assumed in our October forecast (thanks to late back-dated claims received by HMRC). The latest estimate for spending on the CJRS in 2021-22 is £36 million lower than we forecast in October, but £205 million higher overall thanks to backdated claims in respect of 2020-21. In total, the CJRS cost £69.3 billion and the SEISS cost £28.1 billion with 10.8 million individuals benefiting at some point from the CJRS, and 2.9 million individuals receiving SEISS grants.
- 3.101 As Chapter 2 describes, the withdrawal of CJRS support had seemingly no impact on unemployment, suggesting it was remarkably successful in supporting viable job matches between employers and employees. There has, however, been a marked rise in inactivity during the pandemic, which suggests that much of its labour market legacy may be in the form of lower participation rates, especially among older workers. In Box 3.5, we use HMRC's administrative data to track labour market outcomes for 1.2 million 'employments' that were still furloughed in September 2021.

² Pensioner spending includes pensioner housing benefit, pension credit, state pension expenditure and winter fuel payments.

³ Disability benefits includes disability living allowance, personal independence payment, and attendance allowance.

⁴ Other benefits includes child benefit and all Northern Ireland social security expenditure.

Box 3.5: What happened to furloughed employees after the CJRS closed?

The coronavirus job retention scheme (CJRS) was conceived, developed and opened for business within a matter of weeks from lockdown first being imposed in March 2020. At a final gross cost of £69.3 billion, its aim was to provide a bridge that would allow employers to maintain job matches with their employees until their sales recovered. It was extended several times until its final end date of 30 September 2021, which was beyond the point at which public health restrictions with a significant effect on economic activity had been lifted. With unemployment today at roughly the same level as it was pre-pandemic, and with little sign of it having risen as the CJRS closed, the scheme looks to have exceeded all predictions, including ours, regarding its likely success in avoiding the persistent high unemployment that has followed other recessions.

To provide a window on how people that were still on furlough in the final month of the CJRS have fared in the labour market, we asked HMRC to analyse its administrative data on both the furlough scheme and real-time information (RTI) from the PAYE income tax system to gauge the extent to which having been on furlough affected subsequent labour market outcomes. This analysis covers 894,300 'employments' furloughed at any point in September 2021. Their status in the RTI data in January 2022 was then compared to that of employments that were not furloughed in September. That allows us to abstract from normal churn in the labour market that sees individuals switching employers or moving into self-employment or out of work.

The analysis shows that by January, 19.2 per cent of furloughed employments (171,700) were no longer with the employer that furloughed them, whereas 7.6 per cent of non-furloughed employments were no longer with the same employer. That gives an 'excess' separation rate of 11.6 per cent or 103,800 employments relative to what would have happened if rates had been identical across the two groups – i.e. that those furloughed in September were more likely to leave their employers than those not furloughed. People may have moved to another job, into self-employment, or into either unemployment or inactivity. Only the former can be tested using the RTI data, which show that 96,800 (45 per cent) of employees included in this analysis who were on furlough in September 2021 and who left their original employer had employment with another employer in January.^c In total, 90 per cent of employees that were still on furlough in September 2021 were on a payroll (whether original or another employment) in January 2022.

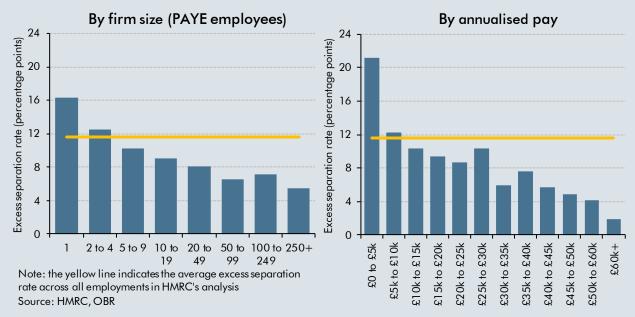
But of course, some of that excess separation is likely to represent catch-up job moves after a period of furlough-induced hiatus, with the CJRS effectively holding all those remaining on it until the end of the scheme in the same job while those non-furloughed were experiencing normal labour market churn. There is evidence of this in the data: looking back to May 2021 and comparing the total separation rate experienced by the non-furlough September population between then and January 2022 with that of the furloughed population, the excess separation rate in January for those furloughed in September falls to 2.6 percentage points. This reflects essentially no movement in employment within the furlough group between May and September, followed by a big initial post-furlough separation rate broadly making up for that hiatus (11.2 per cent of those furloughed in September left their original employer in October), after which monthly separation rates for the furlough and non-furlough populations have been similar, although somewhat greater in the furlough population.

While the simple September-onwards excess separations rates are therefore capturing a combination of both 'true' excess separations and delayed churn, they remain a useful lens through which to view different experiences by firm size and by pay:

- By firm size. Variation by firm size (measured in number of PAYE employees) is striking, with simple excess separation rates roughly three times higher for the smallest firms than for the largest. By September, more than half the furlough population in this analysis came from firms with fewer than 10 employees (508,000 employments) a proportion that had risen steadily in the final months of the CJRS.
- By monthly pay. Variation by pay is even more striking, with simple excess separation rates by January 2022 for those on the lowest monthly pay more than 11 times higher than those on the highest pay. This could reflect the relatively low cost to employers of maintaining furlough payments to employees that worked few hours meaning they did so despite little prospect of the job continuing beyond furlough. In this analysis, a third of furlough employments in September were on pay equivalent to less than £10,000 a year (308,300 employments) and almost two-thirds on less than £20,000 a year (582,400).

We also asked HMRC to analyse the data by sector and by age of employee, but the results were less striking, with excess separation rates uneven across sectors and age groups.

Chart F: Excess separation rates by firm size and pay in furloughed employments



^a This dataset and analysis were produced by HMRC, and consist of a subset of the total employments on furlough in September 2021. Only employments with a monthly pay frequency, and those that had at least one payment on furlough between 6 April 2021 and 5 May 2021, were included. Therefore, the CJRS population used in this analysis will have experienced essentially zero job movement in the four months to September. By contrast, the control non-CJRS population of 18.6 million employments will have experienced job moves throughout the baseline period from May to September 2021. The number of employments is broadly equivalent to a number of jobs, and therefore differs from the number of individuals because people can have more than one job with more than one employer, therefore counting as two or more employments in the HMRC data.

^b This is a simple comparison; employee characteristics of the control group were not matched to the characteristics of the furlough group, so some differences in outcomes may come from the compositional differences between the groups.

^c HMRC analysis of labour market outcomes to January 2022 of individuals on the CJRS. For an individual to be included in this analysis, PAYE real-time information data needed to indicate that the individual was on payroll with an employment from which they were on furlough in September 2021.

Pandemic-related loan guarantee schemes

- 3.102 The Government has provided guarantees on several pandemic-related loan schemes: the Bounce Back Loan Scheme (BBLS); Coronavirus Business Interruption Loan Scheme (CBILS); Coronavirus Large Business Interruption Loan Scheme (CLBILS); and the Recovery Loan Scheme (RLS). The fiscal costs of these arise from two sources: (i) the proportion of the loans extended that are written off by lenders (the 'loss rates', which are in turn a factor of the proportion of loans that default and the loss-given-default rate for those that do default); and (ii) the proportion of these losses that are covered by the Exchequer. The ONS has determined that the cost of these expected guarantee claims should be recorded in the year that the guarantees are extended rather than when the defaults actually occur and associated cash payments are made. In this forecast we have revised the total expected cost of guarantee claims downwards. The ONS is likely to use the BEIS annual report as the data source to reflect revisions in the official data, and as the next set of departmental accounts will be for 2021-22 we expect the change to be recorded in that year.
- 3.103 The ONS had so far captured £20.9 billion of future guarantee claims in 2020-21, with a further £0.7 billion for loans taken out in 2021-22. However, the British Business Bank's latest estimates (based on data available as at end-September 2021) suggest total claims from lenders across all loan schemes will be £5.3 billion lower than previously predicted, primarily as a result of the improved economic outlook and an almost halving of the proportion of loans assumed to have been taken out fraudulently (from 14.9 per cent to 7.5 per cent). Recording this revision in 2021-22 means that instead of recording costs of £0.7 billion for expected future guarantee claims, we record a gain of £4.4 billion (i.e. negative spending) in that year. Relative to our October forecast, the cost recorded in 2021-22 is £5.1 billion lower than expected, with the revision to loss rates offset very slightly by the volume of new loans issued in 2021-22 being modestly higher than expected.

Table 3.24: Loan guarantee schemes: expected losses

	£ billion								
	Outturn			Fore	ecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27		
October 2021 forecast	20.9	1.4	0.5	0.2	0.0	0.0	0.0		
Discount rate classification		-0.8	-0.5	-0.2					
October 2021 forecast restated	20.9	0.7	0.0	0.0	0.0	0.0	0.0		
March 2022 forecast	20.9	-4.4	0.0	0.0	0.0	0.0	0.0		
Like-for like change since October	0.0	-5.1	0.0	0.0	0.0	0.0	0.0		
of which:									
Revised loan volumes		0.2							
Revised loss rates		-5.3							
of which:									
Repayments in full		-0.6							
Macroeconomic forecast		-1.9							
Revised fraud loss estimate		-2.7							

²⁰ When recording cash flows related to the schemes, in this forecast we have moved to recording the unwinding of the discount rate applied to the guarantee claims as debt interest rather than capital spending, in line with the ONS's classification practice.

Locally financed current expenditure

- 3.104 We forecast spending by local authorities by projecting their various sources of income including grants from central government together with local sources, such as council tax, retained business rates and trading income and the extent to which they then overspend or underspend that income by varying their reserves or borrowing. Our forecast therefore encompasses spending financed by grants, which is mostly in DELs, and locally financed expenditure, which is in AME. Table 3.25 focuses on locally financed current expenditure. Further detail is available in supplementary tables on our website.
- 3.105 We expect locally financed current expenditure to rise by £2.9 billion (7 per cent) in 2021-22, followed by an increase in 2022-23 of £14.2 billion (32 per cent) taking total locally financed current spending to £57.9 billion. This strong growth reflects the end of business rates holidays, that had shifted the financing of local spending to central government grants paid out to replace local authorities' lost business rates revenue. Spending then increases more modestly over the remainder of the forecast.
- 3.106 Comparing our latest forecast to previous forecasts:
 - Relative to March 2020, locally financed spending was £14.1 billion lower in 2020-21 and £11.3 billion lower in 2021-22, thanks largely to the business rates holidays and other reliefs that reduced local sources of financing. It is then expected to be an average of £2.4 billion a year higher from 2022-23 to 2024-25, thanks to council tax rises and because we expect local authorities to spend some of the excess reserves that have built up during the pandemic.
 - Relative to October 2021, locally financed spending in 2020-21 has been revised down by £8 billion, as local authorities underspent relative to the grant financing they had been provided and reserves came in £6.7 billion higher than expected. In 2021-22 there has been a further large downward revision of £7.8 billion to local authorities' total current expenditure. This is made up of a large drop in retained business rates of £5.6 billion (projected from the latest statistics on various business rates relief packages, shifting spending from local authorities to central government), along with a further £2.2 billion addition to reserves. From 2022-23 onwards, some of these additions to reserves are assumed to be spent, with an increased use of reserves of £1.0 billion in 2022-23, falling to £0.3 billion in 2024-25. This would still leave reserves higher than our October forecast across the medium term.

²¹ This is due to delayed receipt of local authority outturn data, which appeared as a National Accounts adjustment (NAA) in our October 2021 forecast rather than within locally financed current expenditure. This change has no effect on total TME, with NAAs being revised up by an equivalent amount in this forecast.

Table 3.25: Locally financed current expenditure: changes since March 2020 and October 2021

				£ billion			
	Outturn			Fore	cast		
	2020-21	2021-22	2022-23			2025-26	2026-27
March 2020 forecast	55.0	55.1	56.9	58.6	60.1		
October 2021 forecast	48.9	51.6	56.1	60.3	62.6	62.3	64.4
March 2022 forecast	40.9	43.7	57.9	61.3	63.6	62.7	64.8
Changes since March 2020	-14.1	-11.3	1.0	2.8	3.5		
Underlying forecast	-7.5	-10.0	-0.8	-0.2	-0.1		
of which:							
Council tax	0.3	-0.2	-0.1	-0.1	-0.1		
Retained business rates (England)	-0.3	-5.9	-0.1	0.3	0.2		
Devolved business rates ¹	-1.3	-1.4	-0.6	0.0	0.0		
Net use of current reserves	-5.3	-2.3	0.9	0.5	0.1		
Other	-0.9	-0.3	-0.9	-0.8	-0.4		
Effect of Government decisions	-6.7	-1.3	1.8	3.0	3.6		
Changes since October 2021	-8.0	-7.8	1.8	1.1	1.0	0.4	0.4
Underlying forecast	-8.0	-7.7	1.6	1.0	0.9	0.3	0.3
of which:							
Retained business rates (England)	-0.7	-5.6	0.1	-1.1	-0.8	0.8	0.8
Net use of current reserves	-6.7	-2.2	1.0	0.5	0.3	0.0	0.0
Other	-0.6	0.1	0.5	1.6	1.4	-0.5	-0.5
Effect of Government decisions	0.0	-0.1	0.2	0.1	0.1	0.1	0.1

¹ Includes the decision by the Scottish and Welsh Governments to provide business rates relief for hospitality, retail and leisure, which are included in the underlying changes as they are not a UK Government decision.

Locally financed and public corporations' capital expenditure

- 3.107 Locally financed capital expenditure is measured net of capital spending by authorities' housing revenue accounts (HRAs) and Transport for London's (TfL's) subsidiaries in both cases, these are treated as public corporations in the National Accounts. We therefore group locally financed and public corporations' capital expenditure together, abstracting from any switches between the two sectors. All of these forecasts are net of asset sales, forecasts for which are available in supplementary tables on our website.
- 3.108 Locally financed capital expenditure is expected to fall by £4.6 billion (21 per cent) in 2021-22, reflecting outturn data for the first half of the year and an assumption that spending will be affected by the same supply bottlenecks that have hit central government capital projects. Some persistence in such bottlenecks means it then increases only slightly in 2022-23 (by £0.7 billion or 3.8 per cent), taking total spending to £18.0 billion, still down around a quarter on the pre-pandemic spending levels in 2019-20. There are then steady increases in capital spending over the remainder of the forecast.
- 3.109 Compared with previous forecasts, revisions to locally financed capital expenditure reflect:
 - Relative to March 2020, spending has been revised down by an average of £3.2 billion a year, with the bulk of this occurring between 2021-22 and 2024-25. This is

largely the result of lower spending financed by prudential borrowing, where the effect of the pandemic on commercial property markets and the effect of policy measures to tighten borrowing criteria have led us to revise down spending.

• Relative to October 2021, spending was £0.9 billion higher than previously estimated in 2020-21, but has been revised down £1.4 billion in 2021-22. The latter reflects the latest quarterly data and our assumptions about supply bottlenecks reducing capital spending. This continues into 2022-23, with a £1.1 billion downward revision to spending. Higher TfL capital spending explains a £1.0 billion upward revision to 2023-24, with small changes thereafter. Spending from 2023-24 to 2025-26 is reduced by cash flows between central government and the Bank of England related to the Asset Purchase Facility as its gilt holdings are run down. These transfers are within the public sector and so neutral for public spending and for PSNB.

Table 3.26: Locally financed and public corporations' capital expenditure: changes since March 2020 and March 2021

				£ bi	illion		
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	22.3	21.6	22.3	21.9	22.4		
October 2021 forecast	21.0	18.8	19.1	19.0	19.5	20.0	20.6
March 2022 forecast	21.9	17.3	18.0	19.0	18.1	16.8	20.2
Changes since March 2020	-0.5	-4.3	-4.3	-2.9	-4.2		
Underlying forecast	-2.1	-4.1	-4.1	-2.7	-4.1		
of which:							
Prudential borrowing (non-TfL, non-HRA)	2.5	-3.2	-1.9	-1.9	-1.7		
Own-financed TfL capital spending	-2.1	-0.4	-1.2	0.1	-0.8		
Useable capital receipts	-1.3	-0.2	-0.9	-0.9	-0.9		
Other	-1.2	-0.4	0.0	0.0	-0.6		
Effect of Government decisions	1.6	-0.2	-0.2	-0.2	-0.2		
Changes since October 2021	0.9	-1.4	-1.1	0.0	-1.4	-3.2	-0.4
Underlying forecast	0.9	-1.5	-1.1	0.0	-1.4	-3.2	-0.4
of which:							
Prudential borrowing (non-TfL, non-HRA)	0.9	-1.0	-0.3	-0.5	-0.6	-0.6	-0.6
Own-financed TfL capital spending	0.1	-0.1	-0.4	1.0	0.3	0.4	0.2
Other	-0.1	-0.3	-0.4	-0.5	-1.1	-3.0	0.0
Effect of Government decisions	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Central government debt interest

3.110 Central government debt interest spending (net of Asset Purchase Facility, or APF, savings) has been revised up significantly across the forecast. It more than doubles from £23.6 billion in 2020-21 to £53.5 billion this year, peaks at £83.0 billion in 2022-23 (nearly twice the level we forecast in October), and then falls back to an average of £47.9 billion across the rest of the forecast. The initial spike and subsequent fall reflect the temporary spike in RPI inflation that also subsequently subsides. This affects accrued spending in respect of index-linked debt, with Bank and gilt rate rises also increasing debt interest in the later years of the forecast. (Higher RPI inflation has little effect on cash payments to bond holders, with

- the cash cost to government largely hitting the principal value of the bonds at the point of redemption often decades into the future. This is one reason why the cash deficit has fallen even faster than headline borrowing (as described in Box 3.6).)
- 3.111 The £83.0 billion peak in debt interest in 2022-23 is the highest level of central government debt interest spending (net of the APF) as a share of GDP since 1988-89 (and the highest in cash terms on record). This would make it the fourth largest discrete item of public spending in 2022-23 after the National Health Service, the state pension and education. It is also our largest forecast-to-forecast revision to debt interest on record, and comes on top of the £16.2 billion upward revision for that year between our March and October 2021 forecasts.
- 3.112 Comparing our latest forecast to previous ones, revisions reflect:
 - Relative to March 2020, debt interest was lower in 2020-21 despite the level of debt rising sharply. This was primarily due to Bank Rate cuts and to lower inflation than previously forecast. This then reverses, with debt interest £15.8 billion higher in 2021-22 and £45.2 billion higher in 2022-23 (on a like-for-like basis)²² than we forecast pre-pandemic, largely as a result of far higher RPI inflation (adding £21.2 billion and £37.6 billion to debt interest in 2021-22 and 2022-23 respectively).
 - Relative to October 2021, the 2022-23 peak in debt interest is over £41 billion higher than forecast, with debt interest £9.3 billion a year higher on average across the rest of the forecast. Again, this primarily reflects the spike in RPI inflation, which adds £10.6 billion and £31.5 billion to debt interest in this year and next. Towards the end of the forecast, higher interest rates drive the upward revisions, adding nearly £4 billion a year on average to debt interest from 2023-24 onwards.
- 3.113 In addition to the impact of higher inflation on index-linked gilts, the higher path for Bank Rate, and a correspondingly lower debt interest 'saving' on conventional gilts purchased with Bank reserves and held in the APF, is a material source of medium-term upward revision. Overall, the changes in the net interest margin on the APF compared to our October forecast increase debt interest by £0.5 billion this year, £7.6 billion in 2022-23, and £9.9 billion in 2023-24, before declining to £3.9 billion by 2026-27. Given higher Bank Rate, the APF 'saving' on debt interest falls to just £0.9 billion in 2023-24, compared to the £10.1 billion saving forecast in October, so only a modest further rise in Bank Rate would turn this into an additional debt interest cost. These changes are affected little by the passive unwinding of APF gilt holdings starting somewhat earlier than assumed in our October forecast. ²³ Debt interest is also marginally lower (by £0.2 billion a year from 2024-25 onwards) due to the Bank's decision to unwind the APF's corporate bond holdings too (although this is outweighed by a corresponding decrease in interest receipts on those corporate bonds recorded within the receipts forecast, meaning the total effect on PSNB is

²² These like-for-like comparisons remove the effect of the reclassification of corporate bond interest receipts within the APF (and a double-counting error relating to this reclassification in our October 2021 forecast), as well as the movement of the discounting unwind on pandemic loan guarantee claims from capital spending to debt interest between this forecast and October 2021.

²³ The passive unwinding of gilts within the APF begins in March 2022, two and a half years earlier than assumed in our October *EFO*. This results in the APF being £36.5 billion smaller on average from 2022-23 onwards than we assumed in October, as there are a few redemptions in the early years of the period in which gilt redemptions are no longer being reinvested.

an increase of £0.6 billion a year). The impact of declining APF gilt holdings remains fiscally small, particularly compared to the Bank Rate impacts described above.

Table 3.27: Central government debt interest net of the APF: changes since March 2020 and October 2021

				£ billion			
	Outturn			For	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Restated March 2020 forecast ¹	34.5	37.7	37.8	37.2	36.7		
Restated October 2021 forecast ²	22.4	41.9	41.9	38.8	37.2	38.4	39.7
March 2022 forecast	23.6	53.5	83.0	50.6	46.7	46.9	47.3
Like-for-like changes since March 2020	-10.8	15.8	45.2	13.4	10.0		
of which:							
Interest rates		-2.8	1.3	3.9	5.5		
Inflation		21.2	37.6	1.5	0.3		
Financing and other		4.3	2.6	1.0	-0.7		
Asset Purchase Facility		-6.9	3.7	7.0	5.0		
Like-for-like changes since October 2021	1.2	11.6	41.1	11.8	9.5	8.5	7.6
of which:							
Interest rates		0.2	2.5	3.3	3.5	3.9	4.1
Inflation		10.6	31.5	0.3	0.1	1.3	1.1
Financing and other		0.3	-0.5	-0.9	-1.1	-1.2	-0.9
Asset Purchase Facility		0.5	7.5	9.2	6.9	4.5	3.2
of which:							
Interest rates		0.5	7.6	9.9	7.8	5.4	3.9
Quantitative tightening		0.0	-0.1	-0.7	-0.9	-0.9	-0.6
Memo: Assumptions for gilts held in the Asset Purch	ase Facility						
March 2020	435	435	435	435	435	435	
October 2021	774	875	875	837	762	680	637
March 2022	774	847	838	800	724	644	603

¹ March 2020 forecast is restated to remove the reclassification set out in our October EFO, which moved corporate bond interest payments from debt interest to receipts.

Public service pensions

3.114 Spending on public service pensions consists of:

- Net payments by unfunded public service pension schemes, which include central
 government pay-as-you-go schemes and the locally administered police and
 firefighters' scheme. Our forecast covers gross expenditure on pensions in payment,
 less employer and employee contributions received. (Departments' spending on
 employer contributions is included in RDEL.) A breakdown of spending and income for
 the major schemes can be found in the supplementary tables on our website.
- Funded public sector pension schemes, which are classified as public corporations in the public sector finances. This includes funded schemes with largely public sector

² October 2021 forecast is restated to include the unwinding of the discounting effect on write-offs associated with pandemic-related loan guarantee schemes, as set out in the section relating to this forecast above and also a forecasting error related to APF reclassifications.

- members (notably the Local Government Pension Scheme), and also the Pension Protection Fund (PPF) and the National Employment Savings Trust (NEST).
- 3.115 Relative to our March 2020 forecast, net public service pensions are slightly up in 2021-22 and 2022-23 by £0.6 billion, but are significantly higher in 2023-24 and 2024-25 (by £3.6 billion and £5.0 billion a year, respectively). This is due to a combination of higher inflation, the addition of McCloud remedy payments, the unwinding of delayed retirement experienced in some schemes, and a correction identified in our October 2021 forecast.
- 3.116 Relative to our **October 2021 forecast**, spending in respect of unfunded schemes has been revised down by an average of £0.1 billion a year. Higher CPI inflation raises spending on pensions in payment by £1.3 billion a year on average, which is more than offset by stronger pay growth increasing scheme income by an average of £1.8 billion a year. Funded public sector schemes are little changed from our October 2021 forecast.

Student loans

- 3.117 When student loans are issued, the public finances record an amount of spending equal to the expected portion of the loan that will ultimately not be repaid. Spending has been revised down significantly in this forecast relative to our October 2021 forecast due to a mixture of modelling and policy changes. It is now £10.5 billion in 2021-22, £2.9 billion in 2022-23 and then averages £9.8 billion over the remainder of the forecast.
- 3.118 As regards our pre-measures forecast, the largest change stems from the Department for Education (DfE) refining its long-term graduate earnings model. These changes have brought down predicted lifetime earnings, which is expected to lower repayments and so increase spending as a higher proportion of loans would be written off. This increases spending by around £1.1 billion a year over the forecast, and raises the 'RAB' charge (the net present value of the estimated cost to government of future write-offs) for Plan 2 and 3 loans by 6.1 percentage points. The key element of the modelling changes has been to shift from using self-reported survey data to more accurate HMRC outturn data, with more details to be published by DfE in due course.
- 3.119 In February 2022, the Government announced a package of reforms to the terms of student loans for existing and particularly for new borrowers. Changes included freezing maximum tuition fees, lowering the repayment thresholds, and extending the repayment terms for new borrowers to 40 years. The net effect is to increase substantially the proportion of loan outlays that recipients are expected to repay over their lifetimes, with the effects on all aspects of the public finances detailed in Box A.1. The impact on spending is to reduce it by £2.2 billion in 2021-22 and £10.0 billion in 2022-23 (when effects related to existing borrowers are accrued) and by an average of £4.4 billion a year from 2023-24 onwards (due to effects related to new borrowers that accrue when loan outlays take place).

Other AME spending

- 3.120 The main changes to other AME spending items since our October 2021 forecast include:
 - The £150 council tax rebate for properties in bands A to D is expected to cost £2.7 billion in 2022-23. This is £0.2 billion less than the Government has allocated for the scheme because it is likely that some households that do not pay by direct debit, and therefore will not receive the rebate automatically, will not come forward to receive it. The assumptions underpinning this figure are set out in Annex A.
 - National Accounts adjustments (NAAs). NAAs were £7.4 billion higher in 2020-21 outturn than assumed in our October 2021 forecast, which mainly relates to local authorities' self-financed current expenditure outturn (as discussed above) and is neutral for TME. Revisions thereafter are modest.
 - Tax litigation. We have revised expected costs down by £1.9 billion in 2021-22 compared to our October 2021 forecast, which largely reflects delays to payments that are now unlikely to begin to be made until 2022-23.
 - Company and other tax credits have been revised up by an average of £1.3 billion a year. This largely relates to the high-end TV company tax credit a relief provided to productions with costs of more than £1 million per broadcast hour of television. In our October forecast, the average growth in company and other tax credits over 2022-23 to 2026-27 was 9 per cent a year; we have now revised this up to 11 per cent a year. This is lower than the 21 per cent average annual growth seen over the past five years in outturn, but still sees the cost of the high-end TV company tax credit rising from £0.3 billion in 2019-20 to £1.6 billion in 2026-27.

Deficit aggregates

3.121 Our central forecast for the budget deficit – 'public sector net borrowing' (PSNB) – is the difference between the forecasts for receipts and expenditure set out in the preceding sections of this chapter. In this section we discuss our latest forecast for the path of borrowing, and how it has changed since our March 2020 and October 2021 forecasts. We also consider other deficit and expenditure aggregates – the current budget balance, cyclically adjusted measures of the headline and current budget balance, the primary balance and public sector net investment – many of which feature in the Government's array of current fiscal targets and indicators, as well as those of previous administrations.

Public sector net borrowing

Summary of the borrowing forecast

3.122 Borrowing peaked at a peacetime high of 15.0 per cent of GDP (£321.9 billion) in 2020-21. We expect it to fall sharply to 5.4 per cent of GDP (£127.8 billion) in 2021-22 and then to 3.9 per cent of GDP (£99.1 billion) in 2022-23. From 2023-24 onwards, as a share of

GDP the deficit falls below both its pre-pandemic level in 2019-20 and our pre-pandemic forecast from March 2020. Borrowing declines more slowly in 2024-25, and only very slightly thereafter to reach 1.1 per cent of GDP (£31.6 billion) by the end of the forecast period. This means it is 1.4 per cent of GDP lower than it was before the pandemic in 2019-20 and reaches what would be its lowest level since 2001-02.

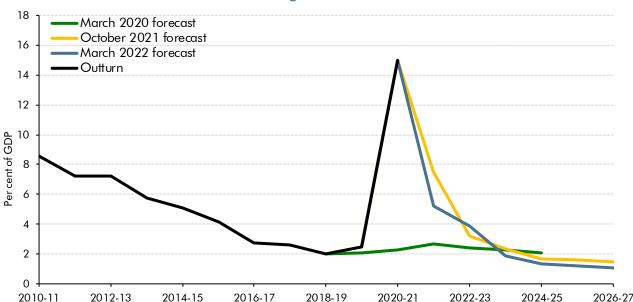


Chart 3.13: Public sector net borrowing

Note: We have increased the GDP denominator in forecast years for our previous forecasts by the upward revision to 2020-21 nominal GDP in the recent Quarterly National Accounts data. This is to enable like-for-like comparisons with our March 2022 forecast. Source: ONS, OBR

Changes since March 2020

- Relative to our March 2020 pre-pandemic forecast, borrowing was much higher in 2020-21, but is much less so in 2021-22 and 2022-23, and is actually expected to be lower in 2023-24 and 2024-25 (the final two years of that forecast). The £267.1 billion upside surprise in 2020-21 reflects pandemic-related policy measures driving a large rise in spending, coupled with weaker tax receipts as result of the sharp drop in output. That excess drops to £61.2 billion in 2021-22 (due to continued pandemic-related fiscal support, particularly in the first half of the year) and then £37.7 billion in 2022-23. But borrowing drops to £10.0 billion below our pre-pandemic forecast in 2023-24 and to £21.4 billion below in 2024-25. This reflects a stronger forecast for tax receipts in the medium term (up £68.2 billion by 2024-25) due to both net tax rises announced since the pandemic struck and underlying strength in receipts, which more than offsets a smaller upward revision to the medium-term path of spending.
- 3.124 The sources of these differences from our March 2020 forecast include (Table 3.28):
 - Underlying forecast differences added £97.1 billion to borrowing in 2020-21, and add an average of £23.1 billion a year thereafter. The composition of the addition to borrowing changes materially over time. The pandemic's adverse effect on tax bases is

most important in 2021-22, whereas receipts are higher than predicted from 2022-23 onwards thanks to the recovery of nominal tax bases and higher effective tax rates. Debt interest raises borrowing from 2021-22 onwards (due to higher RPI inflation in the near term and higher Bank Rate and gilt rates in the medium term), whereas non-interest spending is initially lower but more than explains higher borrowing in 2023-24 and 2024-25 (largely reflecting higher welfare spending as a result of higher inflationand earnings-driven uprating across most benefits).

- The direct effect of policy decisions announced since our March 2020 forecast added £220.6 billion to borrowing in 2020-21, largely reflecting pandemic-related spending measures. This fell to £75.4 billion in 2021-22 and falls further to £18.9 billion in 2022-23, as pandemic-related support measures end but the cost of catch-up spending on public services and faster growth in underlying spending begins. Recent measures to support households with energy bills contribute £11.2 billion to borrowing in 2022-23. The net effect of policy measures then reduces borrowing in 2023-24 and 2024-25, reflecting three large tax rises that were announced last year: raising the main rate of corporation tax, freezing income tax thresholds, and introducing the new health and social care levy. Their yield is only partly offset by the NICs primary threshold rise and the 1p cut to the basic rate of income tax announced in this Spring Statement, which together cost £10.3 billion in 2024-25.
- The indirect effect of policy decisions reduced borrowing by £50.6 billion in 2020-21, largely due to the significant boost to receipts from measures that protected private-sector incomes relative to the fall in GDP.²⁴ This effect diminishes thereafter to reach £5.0 billion by 2024-25, as fiscal policy tightens in the medium term and so provides a declining boost to receipts via its effects on nominal GDP and the major tax bases.

²⁴ This indirect effect has been calculated top-down rather than via our standard practice of comparing pre- and post-measures economy forecasts to calculate the fiscal consequences of differences between them – as described in our October 2021 *EFO*.

Table 3.28: Public sector net borrowing: changes since March 2020

	£ billion							
	Out	urn	~ Dillion	Fore	cast			
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25		
March 2020 forecast	47.2	54.8	66.6	61.5	60.2	57.9		
March 2022 forecast	55.1	321.9	127.8	99.1	50.2	36.5		
Difference	7.8	267.1	61.2	37.7	-10.0	-21.4		
of which:								
Underlying differences 1		97.1	13.5	31.7	20.4	27.1		
of which:								
Receipts		112.9	17.9	-17.1	-19.6	-16.2		
Debt interest spending		-10.6	10.5	36.9	7.3	6.7		
Other spending		-5.2	-14.9	11.9	32.7	36.5		
Direct effect of policy decisions ²		220.6	75.4	18.9	-20.9	-43.5		
of which:								
Pandemic crisis response		229.7	77.9	0.8	0.7	0.4		
of which:		0.0	0.0	0.0	0.0	0.0		
Public services		95.2	47.0	-0.1	-0.3	0.0		
Support for households		79.1	21.6	1.2	1.0	0.4		
Support for businesses		55.4	9.3	-0.2	0.0	0.0		
Non-crisis response		-9.0	-2.5	18.1	-21.6	-43.8		
of which:								
Spending decisions		0.6	0.6	0.6	0.6	0.6		
Receipts decisions		0.6	9.6	-2.3	-32.4	-43.7		
Indirect effects of decisions		-50.6	-27.7	-12.9	-9.4	-5.0		

Note: This table uses the convention that a negative figure means a reduction in PSNB i.e. an increase in receipts or a reduction in spending will have a negative effect on PSNB.

Changes since October 2021

- 3.125 Relative to our October 2021 forecast, we have revised down borrowing in 2021-22 by a very substantial £55.2 billion. The largest contribution to that comes from receipts outperforming our forecast (and the economy) in recent months (Box 3.1). Non-interest spending has been materially lower than forecast too, with further large underspends against departmental budgets, but debt interest spending has been much higher (thanks to higher RPI inflation). New policy measures further reduce borrowing by £4.2 billion, in part due to departmental budgets being reduced in this year's Supplementary Estimates.
- 3.126 Borrowing has then been revised up in 2022-23 as the upward revision to debt interest spending peaks (alongside the peak in RPI inflation) and the cost of tax cuts and support for households with energy and fuel bills adds to borrowing. These effects outweigh the benefit of upward revisions to our pre-measures receipts forecast and upfront recording of the long-term fiscal savings associated with student loans reforms announced in February (see Box A.1). From 2023-24 onwards, borrowing has been revised down by an average of £11.3 billion a year thanks to underlying strength in receipts that is only partly offset by higher debt interest spending and by medium-term tax giveaways.

¹ Includes classification changes.

² The cost of policy decisions announced up to and including at Spending Review 2021 has been adjusted to include signficant updates to estimates via the usual recosting process.

- 3.127 Table 3.29 details the sources of these revisions. It shows that underlying forecast differences reduce borrowing by an average of £16.3 billion a year between 2021-22 and 2026-27. Tax receipts are higher in all years, which reduces borrowing by an average of £35.3 billion a year, over half of which reflects upward revisions to income tax and corporation tax. Spending has been revised up in each year from 2022-23 onwards by an average of £25.4 billion a year. This is largely due to higher debt interest spending, which has been revised up by a maximum of £41.3 billion in 2022-23 and by £15.9 billion a year on average. Non-interest spending is also higher from 2023-24 onwards by an average of £12.2 billion a year, largely due to the effect of higher uprating on welfare spending.
- 3.128 The direct effect of policy decisions on borrowing is uneven across the forecast period:
 - The package of measures to support households with energy and fuel bills in 2022-23 (including various rebates and the temporary 5p fuel duty cut), plus raising the primary NICs threshold (and other small, non-student loans measures), cost £19.4 billion. Two-thirds of the cost of these giveaways is offset by the upfront recording of long-term fiscal savings associated with existing student loans, which generates a significant one-off reduction in borrowing of £11.2 billion this year.
 - In 2023-24, measures have a modest effect. The cost of raising the NICs threshold is largely offset by the ongoing savings from student loans reforms from this year onwards relating to those issued to new borrowers that will be repaid for 40 years rather than 30, and with a lower earnings threshold at which repayments start. The new tax on energy bills that claws back the cost of the rebate also takes effect.
 - From 2024-25 onwards, new policy measures add modestly to borrowing by an average of £2.6 billion a year. Cuts to personal taxes cost £10.4 billion a year on average, as the 1p cut to the basic rate of income tax takes effect on top of the rise in the primary NICs threshold. This is partially offset by the continuing £1.2 billion a year raised on energy bills, while DWP and HMRC compliance measures (largely via the recruitment of more staff) reduce borrowing by an average of £1.2 billion a year. Savings on new student loans continue to increase each year, averaging £6.0 billion in the final three years of the forecast period. The Government has also raised departmental spending totals modestly in the years beyond the current Spending Review period (2025-26 and 2026-27).
- 3.129 The **indirect effects** of measures announced since October is small and uneven across the forecast period, reflecting the modest boost to output and receipts from the discretionary fiscal easing (whose effect is largest in 2022-23) and the modest additions to debt interest and welfare spending from slightly higher inflation (whose effect is more persistent).²⁵

²⁵ As a consequence of needing to reopen our pre-measures forecast alongside factoring in policy measures in a single forecast round, this indirect effect has also been calculated top-down rather than via our standard practice of comparing pre- and post-measures economy forecasts to calculate the fiscal consequences of differences between them.

Table 3.29: Public sector net borrowing: changes since October 2021

	£ billion						
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
October 2021 forecast	319.9	183.0	83.0	61.6	46.3	46.4	44.0
March 2022 forecast	321.9	127.8	99.1	50.2	36.5	34.8	31.6
Difference	2.0	-55.2	16.1	-11.4	-9.8	-11.5	-12.4
of which:							
Underlying differences ¹		-50.9	10.0	-12.5	-14.1	-15.4	-15.0
of which:							
Receipts		-37.4	-30.1	-33.8	-36.9	-37.7	-35.9
Welfare spending		-2.0	-3.3	4.3	6.3	6.4	6.9
Debt interest spending		13.1	41.3	12.0	9.8	8.8	7.8
Other spending		-24.6	2.1	5.0	6.7	7.1	6.2
Direct effect of policy decisions		-4.2	8.3	0.6	3.6	2.9	1.2
of which:							
Energy cost support		1.2	12.2	-1.2	-1.2	-1.2	-1.2
Personal tax cuts		0.0	6.3	6.1	10.3	10.5	10.6
Student loans reforms		-2.3	-11.2	-3.8	-4.8	-6.1	-7.0
Other measures		-3.1	0.9	-0.4	-0.6	-0.3	-1.1
Indirect effects of decisions		0.0	-2.1	0.5	0.7	1.0	1.3

Note: This table uses the convention that a negative figure means a reduction in PSNB i.e. an increase in receipts or a reduction in spending will have a negative effect on PSNB.

Other deficit and expenditure aggregates

- 3.130 Cyclically adjusted public sector net borrowing (CAPSNB) estimates the underlying or 'structural' level of borrowing by removing the impact of the economic cycle. In other words, it is the level of borrowing if the output gap were zero. The 1.5 per cent positive output gap in our central forecast implies CAPSNB of £143.7 billion (6.1 per cent of GDP) in 2021-22, somewhat higher than headline PSNB. But the output gap closes by 2026-27, bringing CAPSNB in line with headline PSNB from that point onwards.
- 3.131 The current budget deficit is the difference between current expenditure and receipts in each year and is equal to PSNB excluding borrowing to finance net investment spending. It is the subject of one of the Chancellor's new supplementary fiscal targets. The profile is similar to PSNB, initially falling sharply from a post-World War II high of £250.2 billion in 2020-21 to move into surplus in 2023-24, with surpluses becoming progressively larger thereafter and reaching £40.6 billion (1.4 per cent of GDP) in 2026-27.
- 3.132 The cyclically adjusted current balance (CACB) is the current balance we would see if the output gap were zero. As with the current balance this moves from a deficit of £246.9 billion (11.5 per cent of GDP) in 2020-21 to a surplus in 2023-24, with that surplus then gradually increasing to £40.4 billion (1.4 per cent of GDP) in 2026-27.

¹ Includes classification changes.

- 3.133 The **primary balance** refers to the difference between non-interest receipts and non-interest spending. This measure gives an idea of the underlying fiscal position by removing non-discretionary debt interest spending. The primary deficit falls sharply in 2022-23 from £78.5 billion to £26.7 billion before moving into surplus in 2023-24, with the surplus reaching £6.0 billion (0.2 per cent of GDP) by 2026-27.
- 3.134 Public sector net investment (PSNI) is the difference between gross capital spending and depreciation and represents the change, in cash terms, in the public sector's net capital stock. PSNI increases from 1.6 per cent of GDP in 2021-22 to 2.2 per cent of GDP in 2022-23, and remains relatively stable thereafter.

Balance sheet aggregates

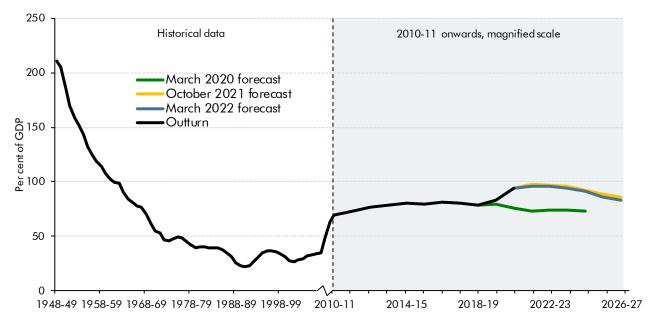
Generating our balance sheet forecasts

- 3.135 We forecast several measures of the public sector balance sheet to help illustrate the sustainability of the public finances and elucidate the impact of financial transactions not captured in the headline measure of borrowing. For more than two decades, the Government's headline balance sheet measure has been public sector net debt (PSND). PSND is the stock equivalent of the public sector net cash requirement (PSNCR) and captures those financial liabilities recognised as 'Maastricht debt liabilities' (a narrower measure than all financial liabilities) and those financial assets held by public entities that are deemed to be 'liquid' (i.e. that could be sold readily and quickly for cash).
- 3.136 Starting from our forecast for the accrued measure of the deficit (PSNB) we produce forecasts of changes in the cash level of PSND in three steps:
 - First, we adjust for timing effects to arrive at a cash equivalent of the items that make
 up PSNB. Timing effects occur when, as is often the case, estimates of accrued revenue
 and spending are not recorded at the same point as the associated cash transactions.
 - Second, we forecast the other financial transactions that do not contribute to PSNB but do alter the government's cash needs. These include loans and repayments between the public and private sectors, sales or purchases of financial assets, and various Bank of England schemes. Combining these with the timing effects in step one allows us to move from PSNB to an estimate of the PSNCR.
 - Third, we forecast the valuation effects on relevant liability and liquid asset holdings recognised in PSND and (when necessary) the impact of classification changes that reconcile the PSNCR with the year-on-year change in PSND.
- 3.137 We use similar approaches to forecast three other balance sheet measures PSND excluding the Bank of England, public sector net financial liabilities (PSNFL) and public sector net worth (PSNW). In each case we start from the relevant balance sheet and deficit measures and add other elements as required.

Summary of our debt forecast

3.138 Headline PSND (including the Bank of England) rises by 1.6 per cent of GDP this year to reach a peak of 95.6 per cent of GDP, its highest level since 1962-63, having increased by 15.6 per cent of GDP over the preceding two years as a result of the pandemic (Chart 3.14). The total 17.1 per cent of GDP rise over those three years is 1.2 percentage points smaller than we forecast in October, and less than two-thirds of the pandemic-related rise in debt that we forecast in March 2021. It is also over a third smaller than the 28.4 per cent of GDP rise in debt in the two years that followed the financial crisis. Debt is forecast to peak as a share of GDP this year, before falling across the forecast to reach 83.1 per cent of GDP in 2026-27. Debt has been revised down compared to our October forecast in all years, by 2.7 per cent of GDP this year and by larger amounts thereafter rising to 4.8 per cent of GDP in 2026-27. Even so, the debt-to-GDP ratio in 2024-25 is 16 percentage points higher than in our pre-pandemic March 2020 forecast.

Chart 3.14: Public sector net debt



Note: We have increased the GDP denominator in forecast years for our previous forecasts by the upward revision to 2020-21 nominal GDP in the recent Quarterly National Accounts data. This is to enable like-for-like comparisons with our March 2022 forecast. Source: ONS, OBR

3.139 The 12.4 percentage point fall in the debt-to-GDP ratio between its peak in 2021-22 and the end of the forecast period is dominated by the declining contribution of the Bank of England, which falls by 9.8 per cent of GDP. This primarily reflects the winding down of the portfolio of loans held within the Bank's Term Funding Scheme, which reduces debt by £188 billion over the course of the forecast, as well as the impact of the reduction in gilt stocks held in the Asset Purchase Facility and thus the reserves that were created to purchase them (recorded in Table 3.32 below).

²⁶ Due to the denominator for PSND being nominal GDP centred around the end of the fiscal year, the sharp fall in GDP at the start of the 2020-21 fiscal year raised the debt-to-GDP ratio at the end of 2019-20. It is therefore more meaningful to compare the difference between the end of 2018-19 and 2020-21 when considering the impact of the pandemic on the debt-to-GDP ratio.

Changes since March 2020

3.140 Relative to our pre-pandemic March 2020 forecast, debt is between 16 and 21 per cent of GDP higher between 2020-21 and 2024-25 (Table 3.30). The majority of this is the result of upward revisions to the cash level of debt, which add an average of 20 per cent of GDP to debt from 2021-22 to 2024-25. This is predominantly the result of a cumulative £335 billion upward revision to borrowing by 2024-25 (split roughly equally between the cost of pandemic-related support measures and underlying forecast revisions). Financial transactions have also increased debt by over £190 billion in 2024-25 compared to our March 2020 forecast, primarily reflecting the introduction of the Bank of England's 'Term Funding Scheme with additional incentives for SMEs' (TFSME).

Table 3.30: Public sector net debt: changes since March 2020

	Per cent of GDP								
	Outturn		Forec	ast					
	2020-21	2021-22	2022-23	2023-24	2024-25				
March 2020 forecast	77.4	75.0	75.4	75.6	75.3				
March 2022 forecast	94.0	95.6	95.5	94.1	91.2				
Difference	16.5	20.5	20.0	18.5	16.0				
of which:									
Change in nominal GDP ¹	2.6	-0.1	-1.5	-1.9	-2.1				
Change in cash level of net debt	13.9	20.6	21.5	20.4	18.0				
			£ billion						
March 2020 forecast	1,818	1,828	1,900	1,970	2,032				
March 2022 forecast	2,134	2,330	2,453	2,516	2,533				
Difference	316	502	553	547	501				
of which:									
Underlying forecast revisions	148	278	285	274	263				
Public sector net borrowing	97	111	142	163	190				
Financial transactions	72	211	186	163	131				
Valuation changes	10	-12	-13	-20	-26				
Outturn	-31	-31	-31	-31	-31				
Effect of Government decisions	168	224	268	272	238				
Affecting public sector net borrowing	170	218	224	193	145				
Affecting financial transactions	-2	6	44	79	93				
¹ Non-seasonally adjusted GDP centred end-March.									

Changes since October 2021

- 3.141 Relative to our October 2021 forecast (Table 3.31), debt is lower as a share of GDP in all years, by amounts rising from 2.6 per cent of GDP in 2020-21 to 4.8 per cent of GDP by 2026-27. This is in part due to upward revisions to nominal GDP in outturn (thanks to revisions in the 2021 Blue Book) that increases the denominator, and so reduces the debt-to-GDP ratio by an average of 1.8 percentage points across the forecast. Lower cash levels of debt play a progressively larger role across the forecast thanks largely to a £96 billion downward revision to cumulative borrowing in our pre-measures forecast.
- 3.142 Government policy decisions since October partly offset these pre-measures improvements, adding £44 billion to debt by 2026-27. Temporary support for households with the rising cost of energy bills and petrol prices adds £13 billion to debt in 2022-23 but only £9 billion

by 2026-27 as some of the cost is clawed back, whereas personal tax cuts add £44 billion to debt by 2026-27. The student loans reforms that reduce borrowing materially over the medium term have only a limited effect on debt because the cash savings they generate will happen beyond the forecast horizon. Other measures, including the indirect effects of fiscal easing on GDP, subtract £5 billion in 2026-27.

Table 3.31: Public sector net debt: changes since October 2021

	Per cent of GDP						
	Outturn			Fore	ecast		
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
October 2021 forecast	96.6	98.2	97.9	97.8	94.7	90.5	88.0
March 2022 forecast	94.0	95.6	95.5	94.1	91.2	85.8	83.1
Difference	-2.6	-2.7	-2.4	-3.7	-3.4	-4.7	-4.8
of which:							
Change in nominal GDP ¹	-2.6	-1.0	-1.4	-2.1	-2.2	-2.1	-1.9
Change in cash level of net debt	-0.1	-1.6	-1.0	-1.7	-1.2	-2.7	-2.9
				£ billion			
October 2021 forecast	2,136	2,369	2,479	2,561	2,567	2,546	2,567
March 2022 forecast	2,134	2,330	2,453	2,516	2,533	2,469	2,480
Difference	-1	-40	-25	-45	-34	-77	-87
of which:							
Underlying forecast revisions	-1	-38	-40	-64	-61	-112	-131
Public sector net borrowing	2	-49	-39	-52	-66	-81	-96
Financial transactions		18	3	-6	13	-21	-23
of which:							
Bank of England		13	2	-7	12	-20	-20
Loan guarantee schemes		3	-1	-2	-2	-2	-3
Other accruals adjustments		2	2	3	3	1	0
Valuation and classification changes		-4	0	-2	-5	-7	-9
Outturn	-3	-3	-3	-3	-3	-3	-3
Effect of Government decisions		-2	14	19	27	35	44
Energy measures		1	13	12	11	10	9
Personal tax cuts		0	6	12	23	33	44
Student loan reform		0	0	0	-1	-2	-4
Other measures and indirect effects		-3	-5	-5	-6	-5	-5
¹ Non-seasonally adjusted GDP centred end-March							

Year-on-year change in PSND

- 3.143 Tables 3.32, 3.33 and 3.34 detail our forecast for year-on-year changes in PSND, and how this differs from our March 2020 and October 2021 forecasts. These tables break down the calculation of net debt into 'financial transactions' used to convert the accrued deficit into the cash deficit (the net cash requirement) and then any other changes (termed valuation changes) that bridge between the cash requirement and the change in debt.
- 3.144 RPI inflation increases government's accrued liabilities with regard to index-linked gilts (ILGs) and has done so considerably in this forecast. This annual 'uplift' is recorded in the deficit as accrued debt interest, so both PSNB and PSND increase by the same value. But the cash consequences of this uplift are not realised until the date of redemption, so they do not

affect the PSNCR until then.²⁷ In order to capture these different effects appropriately, within financial transactions we remove the annual accrued uplift on the entire stock of ILGs that is recorded in PSNB and replace it with the cash consequences of redemptions of those ILGs falling due in each of the next five years that affect the PSNCR. Then in the valuation effects we add back the uplift to get to the impact that is recorded in PSND. For simplicity we look through these ultimately PSND-neutral adjustments in the analysis in this section.

- 3.145 Table 3.32 shows that PSND rises by £398.3 billion in the four years to 2024-25, driven largely by a cumulative £313.7 billion of government borrowing, but also by the expansion of the Bank's TFS by £89.9 billion this year. PSND then falls by £52.4 billion in the final two years for the forecast, more than explained by a £151.8 billion fall in TFS loans. Comparing this forecast to previous ones:
 - Relative to our pre-pandemic forecast in March 2020 (Table 3.33), year-on-year increases in debt are much larger in 2021-22 (by £186.1 billion) reflecting higher borrowing and the extension of the TFS, and up by a smaller margin in 2022-23 (by £51.1 billion). They are then slightly smaller than forecast in 2023-24 and down by a larger margin of £45.9 billion in 2024-25, as TFS loans start to be repaid.
 - Relative to our October 2021 forecast (Table 3.34), with the exception of 2022-23 and 2024-25, the year-on-year increase in debt is lower across all years. These downward revisions largely reflect lower cumulative borrowing, overlaid by uneven effects due to revisions to the pace at which TFS loans have been taken up and are then repaid later in the forecast period. In 2022-23, the upward revision largely relates to index-linked gilts.

²⁷ The impact on cash interest payments is not zero, but given very low nominal coupons on almost all index-linked gilts, the impact of the uplifted value of the gilts on cash payments in 2022-23 is less than £0.2 billion more than October.

Table 3.32: Sources of year-on-year changes in public sector net debt

	£ billion							
			Fore					
	2021-22	2022-23			2025-26	2026-27		
Year-on-year change in PSND (a+b+c+d)	195.3	123.7	62.9	16.4	-63.8	11.4		
Public sector net borrowing (a)	127.8	99.1	50.2	36.5	34.8	31.6		
Financial transactions (b)	64.2	-11.2	18.8	-1.0	-93.5	-26.7		
of which:								
DEL net lending	3.7	3.6	1.8	2.4	2.4	2.5		
Help to Buy outlays	2.5	2.7						
Other DEL	3.1	1.5	2.2	3.0				
DEL beyond current Spending Review					3.0	3.1		
Allowance for shortfall	-1.9	-0.6	-0.4	-0.6	-0.6	-0.6		
Other government net lending	10.8	18.4	10.6	12.0	12.9	13.5		
Student loan outlays ¹	11.4	19.9	12.6	14.0	15.9	17.6		
Student loan repayments ²	-3.3	-4.0	-4.3	-4.7	-5.4	-6.2		
Scottish Government	0.5	0.5	0.2	0.2	0.2	0.2		
UK Infrastructure Bank	0.1	0.2	0.6	1.2	1.7	1.9		
UK Export Finance	0.7	1.3	1.3	1.3	0.3	-0.1		
Other AME	3.3	2.8	2.7	2.7	2.7	2.4		
Help to Buy repayments	-1.9	-2.3	-2.5	-2.6	-2.5	-2.2		
Sales or purchases of financial assets	-3.9	-3.2	-3.4	-3.2	-3.2	0.0		
NatWest Group	-3.2	-3.2	-3.2	-3.2	-3.2	0.0		
UKAR asset sales and rundown	-0.7	0.0	-0.2	0.0	0.0	0.0		
Other sales	0.0	0.0	0.0	0.0	0.0	0.0		
Bank of England schemes	100.1	-11.4	-6.8	-28.4	-108.9	-38.0		
Term Funding Scheme	89.9	0.0	0.0	-36.1	-111.8	-40.0		
Other effects	10.2	-11.4	-6.8	7.7	2.9	2.0		
Cash flow timing effects	-46.4	-18.6	16.7	16.1	3.3	-4.7		
Student loan interest ²	2.3	5.6	7.7	4.7	4.7	5.4		
Corporation tax	-1.6	1.8	9.7	5.1	2.3	0.9		
Other receipts	-16.7	7.4	4.7	4.9	5.2	5.3		
Funded public pension schemes	-4.6	-4.9	-5.1	-4.9	-4.7	-4.9		
Index-linked gilt uplift ³	-34.7	-41.5	-7.6	0.0	-8.8	-15.3		
Other gilt accruals	8.0	7.6	7.8	8.1	7.8	7.6		
Guarantee schemes write offs	3.8	8.1	3.3	1.2	0.5	0.0		
Other expenditure	-3.0	-2.7	-3.7	-3.0	-3.6	-3.6		
Public sector net cash requirement (a+b)	192.0	87.9	69.0	35.5	-58.7	4.9		
Valuation effects (c)	3.3	35.8	-6.1	-19.1	-5.2	6.6		
of which:								
Gilt premia	-8.0	-5.4	-12.0	-11.3	-11.1	-6.7		
Asset Purchase Facility gilt premia	-3.3	-0.1	-1.7	-7.7	-2.9	-2.0		
Index-linked gilts uplift ³	34.7	41.5	7.6	0.0	8.8	15.3		
International reserves	-20.1	-0.3	0.0	0.0	0.0	0.0		
ONS statistical changes (d)	0.0	0.0	0.0	0.0	0.0	0.0		

¹ This records the non-spending part of outlays, the remainder is recorded as capital transfers.

² Cash payments of interest on student loans are included within 'Student loan repayments', as we cannot easily separate them from repayments of principal. To prevent double counting, the 'student loan interest' timing effect removes all accrued interest.

³ This reconciliation to the public sector net cash requirement does not affect public sector net debt.

Table 3.33: Public sector net debt profile: changes since March 2020

_		£ billio		
_		Foreca	st	
	2021-22	2022-23	2023-24	2024-25
Year-on-year change in PSND (a+b+c+d)	186.1	51.1	-6.5	-45.9
Public sector net borrowing (a)	61.2	37.7	-10.0	-21.4
Financial transactions (b)	124.6	-21.9	12.6	-13.7
of which:				
DEL net lending	-0.6	-0.9	-0.2	0.4
Help to Buy outlays	0.3	0.2		
Other DEL	0.4	-1.1	-0.4	
DEL beyond current Spending Review				0.4
Allowance for shortfall	-1.3	0.0	0.2	0.0
Other government net lending	3.5	11.4	5.1	7.2
Student loan outlays ¹	1.4	9.4	1.5	2.5
Student loan repayments ²	0.9	0.6	0.7	0.7
Scottish Government	-0.4	-0.4	-0.7	-0.7
UK Infrastructure Bank	0.1	0.2	0.6	1.2
UK Export Finance	-0.7	0.1	8.0	1.1
Other AME	2.1	1.3	1.9	2.2
Help to Buy repayments	0.1	0.1	0.2	0.2
Sales or purchases of financial assets	-0.3	0.9	0.2	0.1
NatWest Group	0.4	1.0	0.1	0.1
UKAR asset sales and rundown	-0.7	0.0	0.0	0.0
Other sales	0.0	0.0	0.0	0.0
Bank of England schemes	163.5	-11.4	-6.8	-28.4
Term Funding Scheme	153.3	0.0	0.0	-36.1
Other effects	10.2	-11.4	-6.8	7.6
Cash flow timing effects	-41.5	-21.9	14.4	7.0
Student loan interest ²	-0.9	1.8	3.2	-0.2
Corporation tax	-4.0	-0.1	8.0	3.5
Other receipts	-21.9	3.4	0.1	0.6
Funded public pension schemes	-2.6	-2.9	-3.1	-2.8
Index-linked gilt uplift ³	-20.8	-34.5	1.8	3.0
Other gilt accruals	3.6	2.6	2.4	2.4
Guarantee schemes write offs	3.8	8.1	3.3	1.2
Other expenditure	1.4	-0.3	-1.3	-0.7
Public sector net cash requirement (a+b)	185.7	15.8	2.6	-35.1
Valuation effects (c)	0.4	35.3	-9.1	-10.7
of which:				
Gilt premia	0.0	2.1	-4.8	-2.7
Asset Purchase Facility gilt premia	-0.1	-0.9	-2.2	-4.8
Index-linked gilts uplift ³	20.5	34.3	-2.1	-3.3
International reserves	-20.1	-0.2	0.0	0.0
ONS statistical changes (d)	0.0	0.0	0.0	0.0

¹ This records the non-spending part of outlays, the remainder is recorded as capital transfers.

² Cash payments of interest on student loans are included within 'Student loan repayments', as we cannot easily separate them from repayments of principal. To prevent double counting, the 'student loan interest' timing effect removes all accrued interest.

³ This reconciliation to the public sector net cash requirement does not affect public sector net debt.

Table 3.34: Public sector net debt profile: changes since October 2021

	£ billion							
			Fore					
	2021-22	2022-23		2024-25	2025-26	2026-27		
Year-on-year change in PSND $(a+b+c+d)$	-38.2	14.2	-19.2	10.5	-42.9	-10.0		
Public sector net borrowing (a)	-55.2	16.1	-11.4	-9.8	-11.5	-12.4		
Financial transactions (b)	10.3	-35.2	-2.7	25.4	-27.9	3.8		
of which:								
DEL net lending	-0.3	0.0	0.0	0.0	0.0	0.0		
Help to Buy outlays	-0.3	-0.6						
Other DEL	0.3	0.6	0.0	0.0				
DEL beyond current Spending Review					0.0	0.0		
Allowance for shortfall	-0.3	0.0	0.0	0.0	0.0	0.0		
Other government net lending	1.9	8.8	1.4	3.0	4.5	5.2		
Student loan outlays ¹	1.3	9.5	1.6	2.3	3.5	4.4		
Student loan repayments ²	0.2	-0.1	-0.1	-0.2	-0.3	-0.4		
Scottish Government	0.1	0.0	0.0	0.0	0.0	0.0		
UK Infrastructure Bank	0.0	-1.1	-1.1	-0.6	0.0	0.8		
UK Export Finance	-0.6	-0.1	0.2	0.9	0.6	0.2		
Other AME	1.0	0.8	1.0	0.7	0.8	0.2		
Help to Buy repayments	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1		
Sales or purchases of financial assets	-0.4	-0.2	-0.2	-0.2	-0.2	0.0		
NatWest Group	-0.2	-0.2	-0.2	-0.2	-0.2	0.0		
UKAR asset sales and rundown	-0.2	0.0	0.0	0.0	0.0	0.0		
Other sales	0.0	0.0	0.0	0.0	0.0	0.0		
Bank of England schemes	12.9	-11.4	-8.5	19.3	-32.4	0.0		
Term Funding Scheme	12.9	0.0	0.0	19.5	-32.4	0.0		
Other effects	0.0	-11.4	-8.5	-0.2	0.0	0.0		
Cash flow timing effects	-3.8	-32.3	4.6	3.4	0.2	-1.4		
Student loan interest ²	-0.2	1.4	2.2	-0.4	-0.4	-0.3		
Corporation tax	-0.5	-1.2	-0.6	-0.4	-0.3	-0.5		
Other receipts	1.7	-0.3	0.7	1.4	1.0	1.0		
Funded public pension schemes	1.0	1.5	0.5	0.2	-0.1	-0.1		
Index-linked gilt uplift ³	-10.4	-29.3	2.5	2.7	1.3	-0.2		
Other gilt accruals	0.0	-0.2	-0.3	-0.2	-0.2	-0.3		
Guarantee schemes write offs	3.3	-4.5	-0.5	0.0	-0.4	-0.4		
Other expenditure	1.4	0.2	0.0	0.1	-0.5	-0.5		
Public sector net cash requirement (a+b)	-44.8	-19.0	-14.1	15.6	-39.5	-8.7		
Valuation effects (c)	6.6	33.2	-5.0	-5.1	-3.4	-1.3		
of which:								
Gilt premia	0.0	4.3	-2.5	-2.6	-2.2	-1.5		
Asset Purchase Facility gilt premia	-5.4	0.0	0.0	0.2	0.0	0.0		
Index-linked gilts uplift ³	10.4	29.3	-2.5	-2.7	-1.3	0.2		
International reserves	1.5	-0.4	-0.1	0.0	0.0	0.0		
ONS statistical changes (d) This records the non-spending part of outlaws the rem	0.0	0.0	0.0	0.0	0.0	0.0		

¹ This records the non-spending part of outlays, the remainder is recorded as capital transfers.

² Cash payments of interest on student loans are included within 'Student loan repayments', as we cannot easily separate them from repayments of principal. To prevent double counting, the 'student loan interest' timing effect removes all accrued interest.

³ This reconciliation to the public sector net cash requirement does not affect public sector net debt.

Loans and repayments

3.146 Government net lending to the private sector generally declines over the forecast period as increasing outlays on new student loans are offset by increasing repayments on the growing stock of those loans. However, primarily as a result of the student loans reforms announced by the Government in February 2022, accruals adjustments relating to student loan outlays have been revised up by £9.5 billion in 2022-23 and an average of £3.0 billion a year across the rest of the forecast compared to October (largely relating to 'stripping out' the accrued savings from repayment threshold freezes and extended loan terms that will increase cash repayments decades into the future, as set out in Box A.1). There are also more modest impacts on adjustments relating to repayments and interest receipts. Changes to the long-term earnings model used to forecast student loan repayments (see paragraph 3.118) have the opposite effect, increasing accrued spending by an average of £1.1 billion a year, but having no impact on medium-term cash flows, with opposite effects on accruals adjustments because they too affect cash flows over the long term.

Sales and purchases of financial assets

3.147 The Government plans to sell its remaining NatWest Group shares (formerly RBS) over the five years to 2025-26. This policy is unchanged since our previous forecast but the sale value has been revised up, reflecting the increased share price, and reduces debt by £0.2 billion more per year relative to our October forecast. These sales have raised £9.8 billion so far, while reducing the Government's total shareholding in NatWest from a peak of 84.4 per cent in December 2009, to 50.9 per cent of shares as of 11 February 2022.²⁸

Bank of England schemes

- 3.148 The 'Term Funding Scheme with additional incentives for SMEs' was introduced in response to the pandemic, so it did not feature in our March 2020 forecast, which assumed that loans issued under the original TFS (introduced in August 2016) would be repaid by 2021-22. In fact, the introduction of the new scheme resulted in many lenders repaying TFS loans while also taking out TFSME loans, in effect rolling funding into the new scheme.
- 3.149 Since our previous forecast in October, we have revised the profile of TFS lending to reflect the latest outturn data. The scheme closed at the end of October at a final size of £193 billion, £13 billion larger than we assumed in our October forecast due to a significant spike in lending in the final weeks that it was open. This has resulted in a corresponding shift in the profile of the repayment of loans in the final years of the forecast as the loans reach their four-year maturity. We make similar assumptions to October about how many of the loans take advantage of options to extend to six or ten years, which results in £5 billion of loans still outstanding at the end of the forecast.
- 3.150 As discussed in the debt interest section above, our forecast also includes assumptions on the impact of 'quantitative tightening' on the public sector balance sheet, including the passive running down of gilts held in the APF from March 2022 and running down the APF's (much smaller) stock of corporate bonds by the end of 2023.

²⁸ NatWest Group, Equity ownership statistics.

Cash payments on guarantees and other timing effects

3.151 Abstracting from the uplift on index-linked gilts (for which there is an offsetting valuation effect), timing effects increased the PSNCR by £6.7 billion more in 2021-22 than we expected in October, while reducing it by an average of £0.5 billion a year across the rest of the forecast. Of this, the downward revision to expected future cash pay-outs on government guaranteed loan schemes combined with the lower write-offs recorded in spending account for the bulk of timing effects this year. The majority of this relates to the £5.1 billion downward revision to accrued spending in respect of loans issued in 2020-21 that we expect to be recorded in 2021-22.

Valuation effects

- 3.152 Valuation effects (excluding the uplift on index-linked gilts, where the effects on PSNB and PSND are the same, with only PSNCR affected differently) have been revised down by £3.8 billion in 2021-22 compared to our October forecast, then up by £3.9 billion in 2022-23, and then down by an average of £2.2 billion a year thereafter. This is driven by:
 - A decrease in gilt premia that increases debt next year, reflecting much lower total
 issuance. Higher gilt premia then lowers debt across the rest of the forecast, reflecting
 a higher proportion of index-linked gilts which are generally issued at a higher
 premia than conventional gilts in total gilt issuance.
 - An increase in the value of the **foreign exchange reserves** in 2021-22 driven by an increase in the UK's allocation of IMF Special Drawing Rights.²⁹
 - Changes to the difference between purchase and redemption value of the stock of gilts held by the Asset Purchase Facility as the scheme runs down.

Alternative balance sheet aggregates

- 3.153 PSND includes only a limited range of debt and debt-like liabilities and an even smaller range of liquid financial assets, meaning it provides only a partial picture of the public sector balance sheet. Alternative metrics often do a better job than PSND of reflecting the true state of the government finances and so avoiding 'fiscal illusions', although none is perfect. We forecast three: PSND excluding the Bank of England, public sector net financial liabilities, and public sector net worth:³⁰
 - PSND excluding the Bank of England (PSND ex BoE) removes the uneven effects across years caused in particular by the TFS, whose acquisition of illiquid assets (the TFS loans, which are not netted off PSND) are funded by the issuance of central bank reserves (a form of debt that is captured in PSND). This measure is the subject of the Government's fiscal mandate (discussed in Chapter 4). Compared to headline debt, PSND ex BoE peaks one year earlier in 2020-21 and falls in 2021-22, before rising by

²⁹ As described in our October 2021 *EFO*, IMF SDRs are in effect both an asset and liability of the Government, but only the liquid asset is recorded in PSND, so this reflects something of a 'fiscal illusion'.

³⁰ See Ebdon, J., and F. Khatun, OBR Working Paper No.16: Forecasting the balance sheet: public sector net worth, October 2021.

- 1.0 per cent of GDP in 2022-23. It then falls steadily (by 0.9 per cent of GDP a year on average) from 2023-24 to 2026-27 to reach 79.8 per cent at the forecast horizon. As the TFS and APF wind down the gap between the two measures of debt including and excluding the Bank falls from 13.1 per cent of GDP in 2021-22 to just 3.3 per cent in 2026-27.
- Public sector net financial liabilities (PSNFL) provides a more comprehensive picture of the financial balance sheet by capturing all financial assets held by the public sector (liquid and illiquid) and a wider range of liabilities (notably for funded pension schemes). In doing so, it provides a more transparent picture of the effect of the creation, acquisition, or sale of financial assets such as loans and equities. PSNFL peaks at just 0.1 per cent of GDP below PSND ex BoE in 2020-21, then declines faster to stand 5.9 per cent of GDP lower by 2026-27. The increasing gap between the two measures over that period reflects the net acquisition of illiquid financial assets from government lending (notably student loans), increases in the value of equity holdings, and differences between cash and accruals recording of debt interest and taxes. Reforms to student loans that mean a greater proportion of them is expected to be repaid have increased the value of these loans to the government as recorded in PSNFL, improving PSNFL relative to PSND by more than £30 billion by 2026-27.
- Public sector net worth (PSNW), the broadest statistical measure of the balance sheet, also reflects the value of real non-financial assets that governments own and invest in, and the liabilities of unfunded pension schemes that are not captured in PSNFL. Because it is a measure of net assets rather than net liabilities, it is shown as the negative of net worth in Chart 3.15 and is therefore comparable with the other balance sheet measures of net liabilities. PSNW reaches a trough of minus 80.8 per cent of GDP in 2020-21 and then rises in all years to reach minus 65.9 per cent of GDP in 2026-27. This improvement is 10.9 per cent of GDP greater than the drop in PSND ex BoE and 5.1 per cent of GDP greater than the drop in PSNFL. Relative to PSNFL, this faster improvement is more than explained by growth in non-financial assets, including as a result of the flow of public sector net investment, which is partially offset by increases in unfunded pension liabilities.

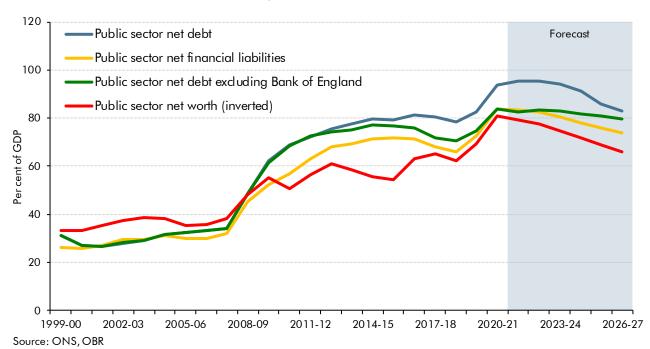


Chart 3.15: Four measures of the public sector balance sheet

3.154 As well as an improving path for net worth, Chart 3.16 shows that we expect the balance sheet to shrink for both assets (down 9 per cent of GDP in 2026-27 relative to 2020-21) and liabilities (down 24 per cent). Assets become increasingly dominated by the stock of non-financial assets and the equity assets of pension funds, both of which remain relatively constant as a share of GDP while other asset classes decline. On the liability side the sharp decline in the size of the Bank of England's balance sheet leaves the composition of liabilities more concentrated in government bonds and pension liabilities.

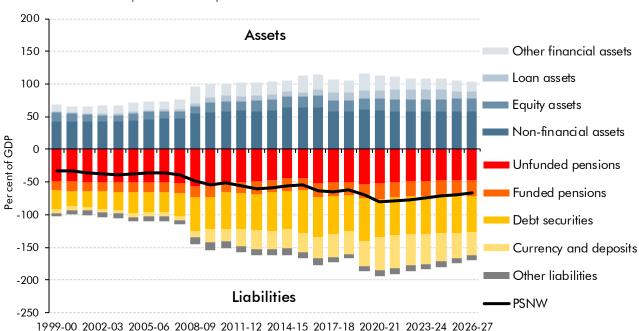


Chart 3.16: Composition of public sector net worth

Source: OBR

Central government net cash requirement

- 3.155 The central government net cash requirement (CGNCR) is a key determinant of the government's overall net financing requirement. Table 3.35 reconciles CGNCR with PSNCR by removing transactions associated with local authorities and public corporations. It also removes transactions relating to Bradford & Bingley (B&B), Northern Rock Asset Management (NRAM) and Network Rail, to produce 'CGNCR ex', which the Treasury uses as the basis for the Debt Management Office's financing remit.
- 3.156 PSNCR has a very uneven profile, largely a result of the issuance and repayment of loans under the Bank of England's TFS. By contrast, the CGNCR has a more even profile, falling relatively steadily from £109.2 billion this year to £43.1 billion by 2026-27. We have revised the CGNCR down by £48.3 billion in 2021-22 since October, which contributes to an even larger £131.2 billion downward revision compared to our March 2021 forecast. The sources of this large revision are explored in Box 3.6.

Table 3.35: Reconciliation of PSNCR and CGNCR

	£ billion								
	Forecast								
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
Public sector net cash requirement (NCR)	192.0	87.9	69.0	35.5	-58.7	4.9			
of which:									
Local authorities and public corporations NCR	90.2	-6.2	-4.5	-29.9	-113.7	-37.7			
Central government (CG) NCR own account	101.8	94.2	73.6	65.4	55.0	42.6			
CGNCR own account	101.8	94.2	73.6	65.4	55.0	42.6			
Net lending within the public sector	7.6	0.8	1.0	1.1	1.1	1.1			
CG net cash requirement	109.4	95.0	74.6	66.5	56.1	43.7			
B&B, NRAM and Network Rail adjustment	-0.2	-0.6	-0.2	0.1	-0.3	-0.6			
CGNCR ex. B&B, NRAM and Network Rail	109.2	94.3	74.4	66.6	55.8	43.1			

Box 3.6: Why has government cash borrowing fallen so dramatically in 2021-22?

We forecast many different measures of government borrowing. The headline measure of public sector net borrowing or 'PSNB' covers the entire public sector (including central government, local authorities, and public corporations including the Bank of England) and is measured on an accruals basis (which focuses on when a transaction occurs rather than when the cash is paid over). An important narrow measure we forecast is 'CGNCR ex', which covers only central government borrowing and is measured on a cash basis, so it reflects the cash government needs to raise to conduct its affairs in a given year. The Treasury uses this measure as the basis for the Debt Management Office's (DMO's) financing remit – the gilts and Treasury bills issued each year to service those cash needs and bridge the gap between cash inflows and outflows.

CGNCR ex has come in much lower than expected this year. Our latest forecast for 2021-22 is £48.3 billion below our October forecast and £131.2 billion below our March 2021 forecast. That large shortfall has resulted in more gilts being issued than are necessary to finance this year's cash deficit, leading to a build-up of cash reserves at the DMO that reduces the amount of gilts that will need to be issued next year to cover the 2022-23 cash deficit.

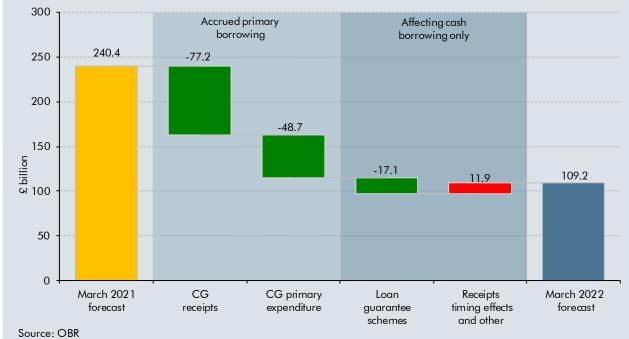
Our latest forecast for CGNCR ex in 2021-22 is £109.2 billion, which is 55 per cent lower than our forecast from a year ago and down 67 per cent on the post-war peak it reached in 2020-21. Roughly two-thirds of the CGNCR revision comes from changes that also affect PSNB and one-third from differences between the two measures. In total the revision since March 2021 is £25.1 billion larger for CGNCR ex than for PSNB, with £23.9 billion coming from the inflation driven uplift on index-linked gilts that affects PSNB in-year but only hits cash measures of the deficit over many decades as those gilts are redeemed.

So how did cash borrowing this year come to surprise us by such a large margin? Abstracting from higher accrued spending on index-linked gilts, Chart G shows that:

- Central government accrued receipts have been revised up by £77.2 billion. This reflects both a stronger economic rebound than predicted in March 2021, but also growth in receipts outperforming growth in nominal GDP for the reasons discussed in Box 3.1.
- Central government accrued primary (non-interest) expenditure has been revised down by £48.7 billion. This largely relates to overestimates of departmental spending (due to large underspends against plans set by the Treasury) and welfare spending (as unemployment has been considerably lower than forecast).
- Cash outlays associated with calls on pandemic loan guarantee schemes have been close
 to zero so far, in contrast to the £17.1 billion this year assumed in our March 2021
 forecast. In part this reflects loan repayment holidays subsequently introduced by the
 Chancellor that will have postponed some loan defaults, but it also reflects significant
 downward revisions to the total size of write-offs expected (see paragraph 3.102).
- Receipts timing effects and other factors offset £11.9 billion of the downward revision. In
 particular, a reduction in the share of student loan outlays recorded as spending reduces
 accrued borrowing with an offsetting upward revision in timing effects. This is partly offset
 by cashflow timing effects associated with stronger cash receipts over and above the effect

of stronger accrued receipts. The remainder includes differences in financial asset sales and other central government net lending, as well as other, smaller differences between the cash and accrued forecasts.

Chart G: CGNCR ex revisions between March 2021 and March 2022 forecasts



^a The 'ex' in its name refers to the exclusion of transactions relating to Bradford & Bingley, Northern Rock Asset Management and Network Rail, which are classified as parts of central government but do not affect the Debt Management Office's financing remit.

Financing and the balance sheet

- 3.157 The Government has revised its financing remit for 2021-22, issued a remit for 2022-23, and given us indicative estimates of the level of NS&I and Treasury-bill financing over the forecast period. Due to a much lower net cash requirement than we previously forecast in 2021-22 (see Box 3.6), the Debt Management Office is expected to have over-financed by £46.6 billion this year, which will result in lower gilt issuance in 2022-23. The Government also plans to increase the stock of Treasury bills by £23.2 billion in 2022-23, largely restoring the stock to levels that prevailed before Treasury bills were run down to accommodate this year's lower cash needs. This further reduces the need for gilts sales in 2022-23. Net of redemptions, the 2022-23 remit plans for an increase in the gilt stock of £17.8 billion, which would be the lowest year of net gilt sales in two decades.
- 3.158 From 2023-24 to 2025-26, financing needs are higher than in 2021-22 or 2022-23 as higher redemptions outweigh a falling cash requirement. In 2026-27 gross financing falls to £112.5 billion close to the pre-pandemic 2018-19 level. Financing returns to being dominated by gilt issuance from 2023-24 onwards. In line with the remit set out in the Treasury's March 2022 Debt management report, which removes the policy of reducing the

proportion of gilt issuance accounted for by index-linked gilts, we assume that the proportion remains at the 15.0 per cent planned for 2022-23.³¹

Table 3.36: Total gross financing

	£ billion								
	Forecast								
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
Central government net cash requirement ¹	109.2	94.3	74.4	66.6	55.8	43.1			
Gilt redemptions	79.3	107.1	117.0	117.8	126.2	69.4			
Change in DMO cash position ²	-58.8	-46.6	0.0	0.0	0.0	0.0			
Total gross financing	129.7	154.8	191.3	184.4	182.0	112.5			
of which:									
Conventional gilts	168.5	105.0	155.2	149.3	147.3	88.8			
Index-linked gilts	26.3	19.9	29.4	28.3	27.9	16.8			
Treasury bills	-23.2	23.2	0.0	0.0	0.0	0.0			
NS&I	4.0	6.0	6.0	6.0	6.0	6.0			
Other central government	0.8	0.7	0.8	0.8	0.8	0.9			

¹ Excluding Northern Rock, Bradford and Bingley, and Network Rail.

- 3.159 The consequences of the Treasury's financing remit and Bank's APF gilt holdings being run down show up in the composition of public sector net debt shown in Table 3.37. In total, debt liabilities fall by 15.7 per cent of GDP between 2020-21 and 2026-27, with 7.4 per cent coming from a shrinking of the Bank of England's balance sheet and 6.2 per cent from a reduction in conventional gilts. The index-linked gilt issuance assumptions outlined above and our RPI inflation forecast result in a small decline in index-linked gilts as a per cent of GDP, but they remain fairly constant as a share of all gilts.
- 3.160 On the asset side, the 4.9 per cent of GDP decline in assets from 2020-21 to 2026-27 is a result of several factors. In particular, central government is expected to run down the excess cash stocks that have resulted from over-financing over the past year. And other asset classes are relatively flat in nominal terms (for example, reflecting our assumption that local authorities will not continue adding to reserves) and so decline as a share of GDP.

² Change in Debt Management Office cash position.

³¹ Assuming the unallocated portion of the remit is split proportionally across gilt classes.

Table 3.37: Composition of public sector net debt

	Per cent of GDP ¹									
	Outturn	Forecast								
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27			
Public sector debt liabilities, ex BoE (a)	96.6	95.1	93.5	92.4	91.0	89.7	88.2			
Central government	96.9	95.4	93.8	92.8	91.4	90.1	88.6			
of which:										
Conventional gilts	62.0	61.5	59.0	58.7	58.1	57.2	55.8			
Index-linked gilts	20.0	20.7	21.0	20.6	20.1	19.8	19.9			
Treasury bills	2.3	1.2	2.0	1.9	1.9	1.8	1.7			
NS&I	8.9	8.4	8.2	8.1	8.1	8.0	7.9			
Other central government	3.8	3.6	3.5	3.4	3.3	3.3	3.2			
Local government ²	1.0	1.0	0.9	0.9	0.9	0.9	0.8			
Public corporations ex BoE ³ (b)	-1.3	-1.3	-1.2	-1.2	-1.2	-1.2	-1.2			
Public sector liquid assets, ex BoE ² (c)	12.7	12.6	10.0	9.5	9.1	8.8	8.4			
Central government	10.1	9.8	7.5	7.2	7.0	6.8	6.5			
of which:										
Reserves	5.7	6.2	5.9	5.7	5.5	5.3	5.2			
Other central government	4.4	3.6	1.6	1.6	1.5	1.4	1.4			
Local government ²	1.5	1.9	1.7	1.6	1.5	1.4	1.3			
Public corporations ex BoE ³	1.1	1.0	0.8	0.7	0.7	0.6	0.5			
Public sector net debt ex BoE (a-c=d)	83.9	82.5	83.5	82.9	81.9	80.9	79.8			
BoE gross debt liabilities (e)	11.8	14.5	13.3	12.4	10.4	6.0	4.4			
of which:										
Due to quantitative easing	5.9	5.4	4.6	4.1	3.7	3.4	3.2			
Due to the Term Funding Scheme	4.5	7.9	7.5	7.2	5.6	1.6	0.2			
Due to other activities	1.3	1.2	1.2	1.1	1.1	1.1	1.0			
BoE liquid assets (f)	1.7	1.4	1.3	1.3	1.1	1.2	1.1			
BoE net debt (e-f=g)	10.1	13.1	12.0	11.2	9.3	4.9	3.3			
Public sector net debt (PSND)(d+g)	94.0	95.6	95.5	94.1	91.2	85.8	83.1			
Memo: general government gross debt (a-b)	97.9	96.3	94.7	93.7	92.3	90.9	89.4			
1 Non-seasonally adjusted GDP centred end-March	h									

¹ Non-seasonally adjusted GDP centred end-March.

Contingent liabilities

3.161 As usual, we have asked the Treasury to identify any changes to future contingent liabilities since our previous forecast. According to its dedicated reporting system nine have been approved, and seven have 'gone live' with an estimated maximum exposure of £2.3 billion for those that have been quantified. The bulk of this total relates to government guarantees on World Bank lending (worth \$1 billion), and two government indemnities relating to nuclear decommissioning (that total nearly £1.4 billion). Expected losses for the seven schemes that have 'gone live' since October, where quantified, amount to just £38.8 million. These figures only capture the quantified liabilities reported in this time period, with two of the live contingent liabilities approved recorded as having potentially 'unlimited' exposure – including an indemnity relating to software used by the Department for

 $^{^{\}rm 2}$ Net of debt liabilities / liquid assets held by central government.

³ Net of debt liabilities / liquid assets held by central and local government.

³² See 'Enhancing the UK's Nuclear Third Party Liability Framework', statement by Greg Hands, 16 December 2021.

Fiscal outlook

- Education and indemnities extended to administrators following Bulb Energy's insolvency (the direct fiscal implications of which are described in Annex A).
- 3.162 It is worth noting that this is a 'flow' measure of newly created government contingent liabilities, and tells us little about the existing 'stock' of liabilities the Government is currently exposed to and their associated economic and fiscal risks. The array of government-guaranteed loans issued during pandemic alone has given rise to in a maximum liability exposure that currently stands at £87.8 billion, with expected losses of £18.0 billion. We report on these in Annex B.

Table 3.38: Fiscal aggregates: central forecast

	Per cent of GDP, unless otherwise stated								
	Outt	urn	Forecast						
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
Receipts and expenditure									
Public sector current receipts (a)	36.7	37.0	38.0	39.3	40.1	40.0	40.0	40.1	
Total managed expenditure (b)	39.1	52.1	43.4	43.2	42.0	41.3	41.2	41.1	
of which:									
Public sector current expenditure (c)	34.9	46.2	39.5	38.7	37.0	36.6	36.5	36.4	
Public sector net investment (d)	1.9	3.4	1.6	2.2	2.7	2.5	2.5	2.5	
Depreciation (e)	2.3	2.5	2.3	2.3	2.3	2.3	2.3	2.3	
Legislated fiscal mandate and supplemental	entary tar	get							
Cyclically adjusted net borrowing	2.5	14.9	6.1	4.4	1.9	1.3	1.3	1.1	
Public sector net debt ¹	82.7	94.0	95.6	95.5	94.1	91.2	85.8	83.1	
Budget 2020 fiscal targets									
Current budget deficit (c+e-a)	0.6	11.7	3.8	1.7	-0.8	-1.2	-1.3	-1.4	
Debt interest to revenue ratio (per cent)	3.7	2.4	5.6	7.6	3.6	3.5	3.4	3.3	
Other deficit measures									
Public sector net borrowing (b-a)	2.4	15.0	5.4	3.9	1.9	1.3	1.2	1.1	
Cyclically adjusted current budget deficit	0.7	11.5	4.5	2.1	-0.9	-1.2	-1.3	-1.4	
Primary deficit	1.1	14.2	3.3	1.1	0.5	0.0	-0.1	-0.2	
Cyclically adjusted primary deficit	1.2	14.0	4.0	1.5	0.4	0.0	-0.1	-0.2	
Financing									
Central government net cash requirement	2.5	15.8	4.6	3.8	2.8	2.4	2.0	1.5	
Public sector net cash requirement	0.8	15.8	8.1	3.5	2.6	1.3	-2.1	0.2	
Alternative balance sheet metrics									
Public sector net debt ex. Bank of England	74.6	83.9	82.5	83.5	82.9	81.9	80.9	79.8	
Public sector net financial liabilities	72.6	83.8	83.3	82.6	80.6	78.1	75.9	73.9	
International Comparisons									
General government net borrowing	2.6	15.3	5.7	3.8	1.8	1.4	1.4	1.0	
Cyclically adjusted GGNB	2.7	15.1	6.3	4.2	1.7	1.3	1.4	1.0	
	£ billion								
Current budget deficit	13.1	250.2	89.5	42.7	-21.9	-31.6	-36.2	-40.6	
Public sector net investment	41.9	71.8	38.3	56.4	72.0	68.1	71.0	72.2	
Public sector net borrowing	55.1	321.9	127.8	99.1	50.2	36.5	34.8	31.6	
Cyclically adjusted net borrowing	56.8	318.6	143.7	109.9	48.6	35.6	35.3	31.7	
Cyclically adjusted current budget deficit	14.8	246.9	105.4	53.5	-23.5	-32.5	-35.7	-40.4	
Public sector net debt	1,793	2,134	2,330	2,453	2,516	2,533	2,469	2,480	
Net debt interest	29.9	18.5	49.3	72.4	37.0	36.8	37.5	37.6	
Non-interest receipts	805.3	772.2	875.2	956.2	1014.8	1,058	1,098	1,141	
Memo: Output gap (per cent of GDP)	0.1	-0.3	1.5	0.3	-0.2	0.0	0.0	0.0	
¹ Debt at end March; GDP centred on end March.									

Risks and uncertainties

- 3.163 The fiscal outlook presented in this chapter needs to be considered in the context of the elevated risks to economic and fiscal prospects at present. In Chapter 4 we illustrate two of the most pressing current risks to the outlook, namely:
 - The Covid pandemic, where cases have been rising recently in both the UK and globally. We set out an alternative downside scenario for the future course of the pandemic in which a new vaccine-escaping variant emerges next winter, which drives a short, sharp reduction in economic activity and a rise in borrowing that peaks at 1.2 per cent of GDP in 2023-24 (assuming the Government delivers fiscal support proportionate to the economic impact of previous waves of infection). A modest degree of additional medium-term economic scarring leaves borrowing around 0.3 per cent of GDP higher in 2026-27. Successful vaccines have significantly reduced the risks from a resurgence of infections, but this source of uncertainty clearly remains.
 - The Russian invasion of Ukraine and its impact on energy and equity prices, inflation, real incomes and GDP, and thus the public finances. The evolving situation means markets have remained volatile since our forecast closed to new data on 2 March, so a downside energy market scenario in Chapter 4 illustrates the fiscal impacts of a more adverse position for energy and financial markets in the near term than is assumed in our central forecast. This leaves borrowing 0.2 per cent of GDP higher in 2022-23 and 0.3 per cent of GDP higher on average from 2023-24 onwards relative to our central forecast. This additional hit reflects the costs of even higher inflation hitting real household incomes and spending, plus its direct effects on debt interest and the impact of lower equity prices on receipts, while North Sea revenues are boosted further. But the fiscal damage is contained to the next couple of years, since markets currently expect energy prices to fall back sharply. There is huge uncertainty around how long the invasion, sanctions, and the associated disruption to world energy markets will last. A more sustained increase in global energy prices could have larger medium-term fiscal consequences if it resulted in lower potential output in a net energy importing economy like the UK. And as our past EFOs and Fiscal risks reports have shown, growth in potential output is the key determinant of medium-term fiscal prospects.
- 3.164 Beyond these two major sources of near-term risk, there are a number of other significant risks to our forecasts. Some of these relate to the rise in energy prices and more inflationary economic outlook in general while others relate to the implementation of stated policy:
 - Wholesale energy prices have risen even faster than is reflected in the 54 per cent rise in the energy price cap in April, delivering a further **squeeze on energy providers'** cashflows (at least for those that are not hedged). This risks further insolvencies that could require government intervention. The Government has so far committed £2.2 billion to maintain the operations of Bulb Energy (as described in Annex A).

- The further increase in the energy price cap in October (assumed to be over 40 per cent in our forecast as a result of the latest wholesale price rises) could create pressure for further support to households later in the year, despite the NICs and fuel duty cuts that have been announced in the Spring Statement. The IFS recently estimated that "To achieve the level of protection" for households' living standards that the Chancellor was aiming for in February, "he would need to spend something like another £12½ billion on top of the £9 billion outlay already committed."³³
- The Government could also come under pressure to support businesses facing high energy costs, with the non-domestic sector accounting for 58 per cent of total electricity consumption in the UK in 2020.³⁴ Businesses' energy costs are not subject to a price cap and they will not benefit from February's package of support.
- The large shortfall in benefit uprating relative to CPI inflation in 2022-23 and the lag between high inflation being felt in household budgets and being reflected in benefit awards. Almost all benefits will increase by last September's CPI inflation rate of 3.1 per cent this April, but inflation has already risen to 5.5 per cent in January, and is forecast to peak at 8.7 per cent in the final quarter of 2022. It averages 8.0 per cent in 2022-23 as a whole, which is 4.9 percentage points higher than April's uprating. If the April 2022 uprating of benefits were 4.9 percentage points higher, protecting their real value, welfare spending in 2022-23 would be around £12 billion higher. Our forecast assumes that benefit rates will rise by 7.5 per cent in April 2023 and a further 3.4 per cent in April 2024. It is not until then that the October 2022 energy prices rises will be fully reflected in benefits, since they are uprated using the rate of CPI inflation from the previous September, just before changes in the energy price cap take effect. By that stage, energy prices in our forecast have fallen back.
- The planned 8p increase in the fuel duty rate in late March 2023, reversing the temporary 5p cut and reinstating RPI-linked indexation (a Government policy that has been stated but not implemented for over a decade). This RPI+5p rise adds £3.6 billion to receipts in 2023-24, but would raise pump prices by around 6 per cent overnight on 24 March 2023, and would represent the first time any Government has raised fuel duty in cash terms since 1 January 2011.
- The pressure of higher inflation on departmental budgets set in October's Spending Review. Upward revisions to GDP deflator growth and CPI inflation in 2022-23 imply pressure of between £5.4 billion and £17.2 billion on RDEL budgets, although the ability to absorb some pressures by allowing real pay to fall in the public sector (as happened through much of the 2010s), existing procurement contracts, and a large centrally held reserve to draw on, mean these figures are likely to overstate the true scale of pressure. But this would create additional pressures on public service delivery that could generate further pressure on spending in the future. Enduring geopolitical tensions might also generate pressure to increase the Ministry of Defence's budget from the 1.8 per cent of GDP it averages between 2022-23 and 2024-25.

³³ Institute for Fiscal Studies, Heightened uncertainty and the spectre of inflation hang over the Spring Statement, March 2022.

³⁴ BEIS, Subnational Electricity and Gas Consumption Statistics, December 2021.

- 3.165 There are also more conventional sources of fiscal risk that could have adverse consequences over and above our central forecast. These include:
 - **Productivity growth** is the most important driver of all the major tax bases. And while higher energy prices represent the latest risk to medium-term productivity, risks to the economic outlook from the unusually weak productivity growth that followed the financial crisis, the implications of Brexit for trade intensity and productivity, and the degree of scarring imparted by the pandemic have not gone away. In broad terms, every percentage point that productivity growth underperforms our forecast would translate into a 1.2 per cent loss of receipts (£14.1 billion in 2026-27).
 - The risk of another recession. The impact of the invasion of Ukraine on financial markets has dampened the near-term growth outlook and heightened recession risks. More generally, history suggests there is roughly a one-in-two chance of a recession in any five-year period and that the typical recession adds 10 per cent of GDP to debt.³⁵
 - The cost of government debt. Debt costs have been revised up sharply in the near term in this forecast (by over £40 billion, 1.6 per cent of GDP, in 2022-23), and materially thereafter (by £9.3 billion a year on average). This reflects higher inflation in the near term and higher interest rates throughout. It is a reminder of how sensitive debt servicing costs have become to changes in inflation and Bank Rate over the past decade as debt has risen as a share of GDP and the proportion of it paying short-term interest rates has risen sharply as a result of quantitative easing.
 - Policy risks. Beyond the inflation-related policy risks detailed above, there are other areas where government policy could raise borrowing above our central forecast. For example, Box 3.4 outlines the pressures on NHS services and the historical tendency to top up budget settlements each year, while in Annex A we note the Chancellor's asyet-unspecified desire to cut taxes on business investment. Longer-term pressures come from the Government's commitment to achieve net zero carbon emissions by 2050.
 - The persistence of the tax-rich composition of economic activity apparent in tax receipts this year. We have assumed that around four-fifths of the £19.6 billion upside surprise in effective tax rates in 2021-22 (detailed in Box 3.1) will endure through our forecast. If that fraction were half the size, receipts would be £8.2 billion lower in 2026-27 and the tax-to-GDP ratio 0.3 percentage points lower.

³⁵ In our 2019 Fiscal risks report, we noted that there had been seven recessions in the previous 63 years, or one every nine years on average. International and historical evidence suggests that a typical recession could add around 10 per cent to the debt-to-GDP ratio (see, for example, IMF, Analyzing and Managing Fiscal Risks—Best Practices, June 2016).

4 Performance against the Government's fiscal targets

Introduction

4.1 This chapter:

- sets out **the Government's fiscal targets** and assesses their likelihood of being met on current policy under our central forecast (from paragraph 4.2); and
- considers uncertainty around our fiscal forecast and the risks to the Government meeting its fiscal rules based on historical patterns of shocks of different types, variations in key macroeconomic and fiscal determinants, and alternative scenarios for key forecast judgements (from paragraph 4.17).

The fiscal targets

- 4.2 The Charter for Budget Responsibility requires the OBR to judge whether the Government has a greater than 50 per cent chance of meeting its fiscal targets under current policy. The Charter has been updated several times in recent years as governments have revised their fiscal targets. The latest version was approved by Parliament in January 2022.
- 4.3 The Charter sets out four fiscal targets:
 - A 'fiscal mandate' that requires public sector net debt excluding the Bank of England
 as a percentage of GDP to be falling by the third year of the rolling forecast period
 (currently 2024-25).
 - A supplementary target that requires **the current budget** to be balanced, also by the third year of the rolling forecast period.
 - An expenditure cap that requires **public sector net investment** not to exceed 3 per cent of GDP on average over the rolling five-year forecast period.
 - A second expenditure cap that requires **welfare spending** (excluding the state pension and payments most closely linked to the economic cycle) to be contained within a predetermined cap and margin set by the Treasury.
- 4.4 The Charter also includes a clause stating that, in the event of a significant adverse shock to the UK economy, the Treasury will temporarily suspend all the fiscal targets and make a statement to Parliament. At each subsequent Budget, the Chancellor would be required to

- update Parliament on the Government's plan for lifting the temporary suspension of the fiscal rules. The Treasury has not invoked this escape clause at this Spring Statement.
- 4.5 The Charter also identifies a broader set of indicators that the Treasury will consider in its management of fiscal policy but for which no explicit targets are set. These include:
 - Wider public sector balance sheet metrics beyond the narrower debt measure that is targeted in the fiscal mandate, including public sector net financial liabilities and overall public sector net worth.
 - Debt affordability metrics that look at the cost of servicing that debt and its sensitivity to changes in the economic outlook.

The implications of our central forecast

- 4.6 In our central forecast, the fiscal mandate and all three supplementary targets are each more likely to be met than missed in the target year or target period (Table 4.1). The rolling three-year ahead targets for falling debt and the current balance are also each met a year early in 2023-24. The targets are met with varying degrees of headroom:
 - The target for the debt-to-GDP ratio (excluding the Bank of England) to be falling by 2024-25 is met by a margin of 1.0 per cent of GDP (£27.8 billion), up from 0.6 per cent of GDP (£17.5 billion) in our October forecast. As the fiscal mandate is a rolling target, the target year will move on to 2025-26 in our next forecast. In this forecast, debt also falls by 1.0 per cent of GDP (£28.1 billion) in that year.
 - The target to balance the **current budget** in 2024-25 is met by a margin of 1.2 per cent of GDP (£31.6 billion), up from 0.9 per cent of GDP (£25.1 billion) in October. The target year for achieving current balance will also move forward a year in our next forecast. In this one, the surplus in 2025-26 is 1.3 per cent of GDP (£36.2 billion).
 - Public sector net investment (PSNI) averages less than 3 per cent of GDP over the forecast (by £13.8 billion a year on average, up from £7.3 billion a year in our October forecast). In our latest forecast, PSNI averages 2.5 per cent of GDP, down from 2.7 per cent in our October 2021 forecast.
 - The **welfare cap** is on course to be met by £5.3 billion, a £2.6 billion larger margin than in our October 2021 forecast.

Table 4.1: Performance against the Government's fiscal targets

		Per cent of	GDP	£ billio	n
		Forecast	Margin	Forecast	Margin
Year-on-year change in public sector n	et debt exclu	uding the Bank	of England in	2024-25	
March 2020 forecast		-0.2	0.2		5.7
October 2021 forecast	Met	-0.6	0.6		17.5
March 2022 pre-measures forecast	Met	-1.3	1.3		34.9
March 2022 forecast	Met	-1.0	1.0		27.8
Current budget surplus in 2024-25					
March 2020 forecast		8.0	0.8	21.2	21.2
October 2021 forecast	Met	0.9	0.9	25.1	25.1
March 2022 pre-measures forecast	Met	1.5	1.5	41.3	41.3
March 2022 forecast	Met	1.2	1.2	31.6	31.6
Public sector net investment average ov	er the five-y	ear forecast			
March 2020 forecast		2.9	0.1		2.7
October 2021 forecast	Met	2.7	0.3		7.3
March 2022 pre-measures forecast	Met	2.7	0.3		8.8
March 2022 forecast	Met	2.5	0.5		13.8
Welfare cap: specified welfare spending	g in 2024-25	5			
October 2021 forecast	Met			138.3	2.8
March 2022 forecast	Met			137.4	5.3

Changes in headroom against fiscal targets

Debt falling and current balance

4.7 There are several factors contributing to the greater headroom to the debt falling and current balance targets relative to our October forecast (Chart 4.1). Factors increasing headroom include the underlying forecast improvements described in Chapter 3 – notably the upward revisions to tax receipts, only partly offset by inflation-driven increases in debt interest and welfare spending. These outweigh the cost of various policy giveaways in the Spring Statement, notably raising the National Insurance contributions primary threshold to match the income tax personal allowance from July and cutting the basic rate of income tax from 20 to 19 per cent from April 2024. On a pre-measures basis, headrooms against the debt and current balance targets were, respectively, £17.4 billion and £16.2 billion higher than in October. The Chancellor has therefore used two-fifths of the additional debt target headroom and three-fifths of the additional current balance headroom to finance the medium-term personal tax cuts in this Spring Statement. This is higher than the fiscal responses of previous Chancellors, who have typically spent about a third of any upside surprise (see Chapter 8 of our 2019 Fiscal risks report (FRR)).

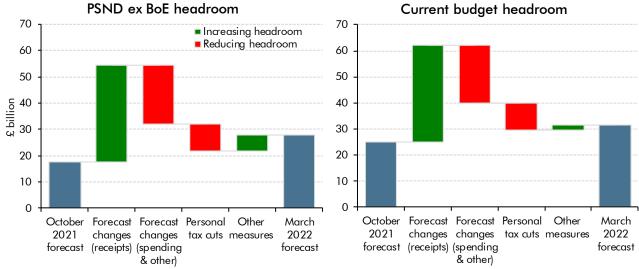


Chart 4.1: Fiscal target headrooms in 2024-25: latest forecast versus October 2021

Source: OBR

Investment cap

4.8 The headroom on the investment cap that applies between 2022-23 and 2026-27 has been revised up from £7.3 billion a year in our October forecast to £13.8 billion a year. This extra headroom partly reflects upward revisions to nominal GDP, which increase the denominator in the targeted ratio. Net investment in cash terms has also been revised down by an average of £5.1 billion a year, largely as a result of the student loans reforms announced in February, which reduce the share of loans that are expected to be written off in the future and therefore the transfers recorded upfront in accrued capital spending.

Welfare cap

4.9 The latest welfare cap was set in March 2020 but was increased at the October 2021 Budget (by £11.6 billion) – as has happened frequently since it was first introduced in 2014. Spending is on course to be £2.6 billion below the cap and £5.3 billion below the cap plus margin in the target year of 2024-25, with the latter an increase from the £2.8 billion margin in our October forecast. This £2.6 billion improvement might seem surprising when spending subject to the cap has been revised up by £3.2 billion in 2024-25 relative to our October forecast. But that is because of the 'inflation adjustment' that in effect raises or lowers the welfare cap to reflect the consequences of inflation surprises for the uprating of benefits subject to the cap. In this forecast it has in effect raised the cap by £6.0 billion as a result of the energy price-driven inflation described in Chapter 2.

Table 4.2: The welfare cap and margin

	£ billion							
	Outturn		Fored	cast				
	2020-21	2021-22	2022-23	2023-24	2024-25			
Welfare cap					138.3			
Pathway	126.6	126.9	129.8	134.9				
Margin (per cent)	0.0	0.5	1.0	1.5	2.0			
Margin	0.0	0.6	1.3	2.0	2.8			
Welfare cap and pathway plus margin	126.6	127.5	131.1	136.9	141.1			
Latest forecast and update on performance against cap and pathway								
March 2022 forecast	123.4	123.9	124.7	132.6	137.4			
Inflation adjustment	0.0	0.0	0.0	-4.5	-6.0			
Scottish welfare block grant adjustment	3.2	3.3	3.6	4.1	4.4			
March 2022 forecast after adjustments	126.6	127.2	128.3	132.2	135.8			
Difference from:								
Cap and pathway	-0.1	0.3	-1.5	-2.7	-2.6			
Cap and pathway plus margin	-0.1	-0.3	-2.8	-4.7	-5.3			
Memo: cumulative percentage point change in								
preceding September (Q3) rates of inflation since our	0.0	0.0	0.0	4.0	5.3			
October forecast.					1 0001			

Note: The inflation adjustment is negative for future years as inflation is higher in forecast years than forecast in our October 2021 EFO. This takes the effect of the change in inflation out of the spending forecast.

Broader fiscal indicators

4.10 The Charter commits the Treasury to monitoring a broader set of indicators that provide a more comprehensive picture of the public sector balance sheet and consider the affordability of the stock of public debt.

Broader measures of the public sector balance sheet

- 4.11 In our October 2021 Economic and fiscal outlook (EFO), we expanded the existing suite of balance sheet measures that we forecast public sector net debt (PSND), public sector net debt excluding the Bank of England (PSND ex BoE) and public sector net financial liabilities (PSNFL) to include public sector net worth (PSNW), the broadest statistical measure of the balance sheet. The Charter names all four as balance sheet indicators to be monitored by the Treasury with the aim of strengthening them over time.
- 4.12 As shown in Chart 3.14 in Chapter 3, all four metrics are on improving paths in the later years of this forecast, with PSNW improving faster than PSNFL (as non-financial assets build up), which in turn improves faster than PSND ex BoE as illiquid financial assets, notably equity holdings of pension funds and student loans, increase. The reforms to student loans (leading to a net acquisition of illiquid financial assets) increase the value of the student loans stock in 2021-22 and increase the pace at which these assets build up thereafter.

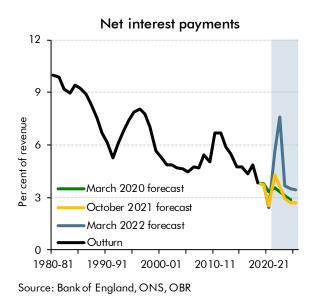
The affordability of public debt

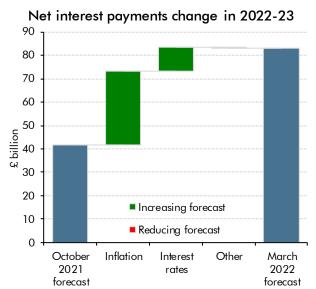
4.13 While the stock of public sector net debt has doubled as a share of GDP since the start of the century, the cost of servicing that debt remains close to historic lows for most of our

forecast period after the initial surge of inflation subsides. This is because the interest rates paid on that debt have fallen so much over this period that total interest payments on debt more than halved from 5.3 per cent of revenue in 2000-01 to 2.4 per cent of revenue in 2020-21. As discussed in our 2021 FRR, this fall in interest rates has been a global phenomenon that has unfolded over decades, albeit with two pronounced drops in the wake of the 2008 financial crisis and during the 2020 pandemic.

4.14 Despite interest rates remaining historically low, net interest costs as a percentage of revenue and GDP have been revised up in all years relative to our October forecast, and most notably in 2021-22 and 2022-23 (the left panel of Chart 4.2). In this forecast, these ratios peak at 7.6 per cent of revenue (2.9 per cent of GDP) in 2022-23, their highest levels since 1997-98 and up by 4.0 percentage points of revenue (1.5 percentage points of GDP) compared to October. As detailed in Chapter 3, these upward revisions are largely explained by the spike in RPI inflation, which affects accrued spending on index-linked debt, and (to a much lesser extent) by higher market expectations for Bank Rate and gilt rates on other aspects of debt interest (the right panel of Chart 4.2). But this has little immediate impact on actual cash payments to bond holders in 2022-23, which instead occur at the point of redemption. The spike in the debt-interest-to-revenue ratio in 2022-23 demonstrates the heightened sensitivity of the public finances to sudden changes in inflation and interest rates, as highlighted in both the 2021 FRR and previous EFOs.

Chart 4.2: Debt-interest-to-revenue ratio and forecast revisions since October





Dashboard of broader fiscal indicators

4.15 The broader fiscal indicators identified in the *Charter* are not formal targets, so we do not assess performance against them. Instead, to facilitate monitoring, Table 4.3 presents those that feature in our forecast in a dashboard that shows: first, their levels and how these compare with the median that prevailed from 1967-68 to 2006-07 (the four decades preceding the financial crisis before debt ratcheted higher as a result of it); and second, whether they are improving or deteriorating in each year of the forecast.

4.16 The dashboard shows that the balance sheet (stock) measures are all currently in a much worse position across the forecast than the pre-2007 median (the sea of red in the top part of the top panel), while the debt affordability (flow) measures remain at historic lows (the sea of green below) – except in the years to 2022-23 when inflation pushes up debt interest. Both are generally on an improving path (the shift from red and orange towards yellow and green over time in the bottom panel), although the improvements to affordability metrics slow over time and flatten off by the end of our forecast. By historical standards, the fall in the fiscal mandate metric of PSND excluding the Bank of England from 2023-24 onwards is a little slower than the pre-2007 median pace of decline.

Table 4.3: Dashboard of balance sheet and fiscal affordability indicators

	Pre-2007	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
	median	Lev	el (per ce	nt of GDP,	unless oth	erwise stat	ed)
Balance sheet metrics							
PSND	36.3	95.6	95.5	94.1	91.2	85.8	83.1
PSND ex BoE	36.3	82.5	83.5	82.9	81.9	80.9	79.8
PSNFL	31.6	83.3	82.6	80.6	78.1	75.9	73.9
PSNW (inverted)	-12.4	79.4	77.6	74.9	71.9	69.0	65.9
Debt affordability metrics							
Net interest costs	2.8	2.1	2.9	1.4	1.4	1.3	1.3
Net interest costs (per cent of revenue)	7.9	5.6	7.6	3.6	3.5	3.4	3.3
	_	Yeo	ar-on-year	change (p	ercentage	point of G	DP)
Balance sheet metrics							
PSND	-1.4	1.6	-0.1	-1.4	-2.8	-5.4	-2.7
PSND ex BoE	-1.4	-1.4	1.0	-0.6	-1.0	-1.0	-1.1
PSNFL	-1.4	-0.4	-0.8	-2.0	-2.5	-2.2	-2.0
PSNW (inverted)	0.5	-1.5	-1.8	-2.7	-3.0	-2.9	-3.1
Debt affordability metrics							
Net interest costs	-0.1	1.2	0.8	-1.5	-0.1	0.0	0.0
Net interest costs (per cent of revenue)	-0.2	3.2	1.9	-3.9	-0.2	-0.1	-0.1

Note: Pre-2007 median is from 1967-68 to 2006-07 in levels. For year-on-year changes, medians are from 1968-69. Values are coloured depending on the pre-crisis decile they lie in. PSNW has been inverted to facilitate comparisons with the other three metrics.

Recognising uncertainty

4.17 The succession of shocks that the UK and global economies have faced since the start of the century has underscored the importance of understanding the risks and uncertainties around a central forecast. The OBR is required to assess whether the Government has a better than evens chance of meeting its fiscal targets, which we do by producing a median forecast relative to which the outturn is equally likely to be higher or lower than predicted. In every EFO, we illustrate the uncertainty around our central forecasts using fan charts, sensitivity analysis, and alternative scenarios. The large revisions to the pre-measures fiscal forecast since our October EFO further highlight the importance of such analysis, as do the continued challenges in understanding the economic and fiscal position in the face of Brexit, the Covid pandemic, and most recently the Russian invasion of Ukraine.

- 4.18 We use several analytical tools to illustrate the risks around our central forecast, including:
 - fan charts that reflect the chances of shocks of different sizes (through stochastic simulations drawing on historical experience) to illustrate the uncertainty around our assessment of the probability of the Government meeting its fiscal targets;
 - sensitivity analysis that illustrates the vulnerability of the Government's debt-to-GDP ratio and current balance targets to changes in key forecast outcomes including growth, inflation, and interest rates; and
 - **alternative scenarios**, which explore the economic and fiscal implications of an adverse shock to one or more of our central forecast assumptions, in this case concerning both the future path of the pandemic and global energy prices.

Fan charts

- 4.19 Our October *EFO* included, for the first time, fan charts based on stochastic simulations to assess the likelihood of the Government meeting its fiscal targets. We have since published a working paper that detailed our methodology and its merits. This approach has now replaced our previous historical forecast error approach as our chosen means for producing fan charts and estimating the probability of the fiscal targets being met.
- 4.20 This probabilistic approach, which is widely used in academic research and by several other official bodies including the International Monetary Fund, offers us greater flexibility in how we calibrate the degree of uncertainty; allows us to derive fan charts for stock variables, such as the debt-to-GDP ratio, and for new fiscal indicators not previously forecast; and allows us to calculate the joint probability of multiple events or conditions occurring together. It also allows us to draw on much longer historical time series to capture more past shocks although the largest shocks are now relatively recent ones: the pandemic and the financial crisis. The approach works by generating a very large number (thousands) of simulations that are each driven by randomly selected shocks drawn from those that have been experienced in the past. The output can then be used to evaluate metrics of interest, such as the proportion of the simulations in which some target criterion is satisfied.
- 4.21 Chart 4.3 shows the probability distribution around our forecast of PSND excluding the Bank of England and Chart 4.4 shows the same for the current budget deficit. They show a 58 per cent chance of underlying debt falling in 2024-25 and a 66 per cent chance of the current budget being in surplus in that year (chances that are up from 54 and 61 per cent respectively in our October forecast). These are broadly in line with the headroom obtained by previous Chancellors where the probability of meeting the fiscal mandate has typically been in a range from 60 to 70 per cent.² There is also a 50 per cent chance of debt as a percentage of GDP being lower in 2026-27 than it was in 2021-22 but only a 26 per cent chance of it being lower than the pre-pandemic 2018-19 position at that point. The charts also show how exceptional was the scale of the shock experienced in 2020-21.

¹ Steel, D., OBR Working Paper No.17: Evaluating forecast uncertainty with stochastic simulations, December 2021.

² The probability of meeting the fiscal mandate has been within this range on 12 of the 24 occasions that we have assessed performance – and on 12 of 21 occasions when excluding the three in which pre-pandemic targets for 2020-21 remained in force.

4.22 The improvements in the chance of meeting each fiscal target since October are more than explained by revisions to our pre-measures forecasts. The medium-term fiscal giveaway in the Spring Statement – almost entirely explained by cuts to personal taxes – reduces the chance of meeting these targets by 2 and 4 percentage points for the fiscal mandate and the supplementary target respectively.

Chart 4.3: Fan chart for PSND excluding the Bank of England

Note: The solid dark blue line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands, with 20 per cent of the distribution outside the fan.

Source: OBR

2018-19

2020-21

2022-23

2024-25

2026-27

2016-17

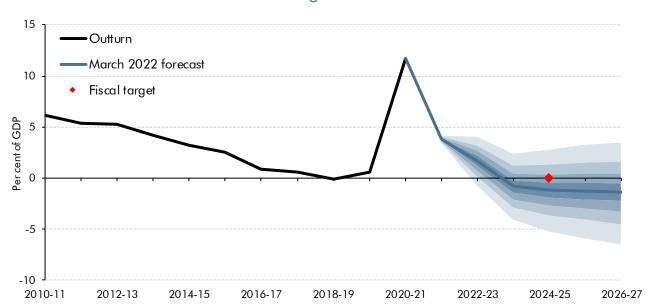


Chart 4.4: Fan chart for the current budget deficit

2014-15

2012-13

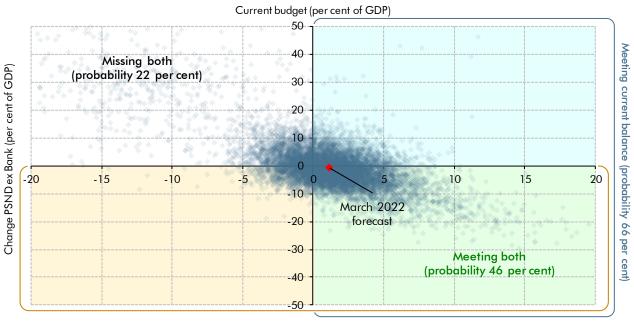
2010-11

Note: The solid dark blue line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands, with 20 per cent of the distribution outside the fan.

Source: OBR

4.23 We can also use this approach to show the combined probability of meeting both these targets in 2024-25, as implied by the fraction of simulations in which debt falls as a share of GDP and the current budget is in balance or surplus. Chart 4.5 plots all the different simulation values for the current budget and change in underlying debt in 2024-25, where the darker the area the more simulations point to that outcome. The bottom two quadrants show the simulations in which PSND is falling (58 per cent of the total), the two quadrants on the right show those in which the current budget is in surplus (66 per cent), and the bottom-right quadrant shows the simulations in which both targets are met at the same time (46 per cent of the total). This shows that while both targets are met in our central forecast (the red diamond), on average across all the simulated futures there are more occasions (54 per cent) when one or both targets are missed than when both are met.

Chart 4.5: The joint probability of meeting the fiscal mandate and supplementary current balance target in 2024-25



Source: OBR

Meeting PSND falling (probability 58 per cent)

Sensitivities

- 4.24 In this section we illustrate how sensitive the central forecast is to changes in individual parameters and judgements, and what would need to happen to them to reduce the headroom against different targets to zero. We consider:
 - The sensitivity of the change in the debt-to-GDP ratio (excluding the Bank of England) to changes in the primary deficit, nominal GDP growth, the effective interest rate on government debt, and inflation.
 - The **sensitivity of the current balance** to changes in the level of GDP, interest rates, inflation, departmental current spending (RDEL), and the effective tax rate.

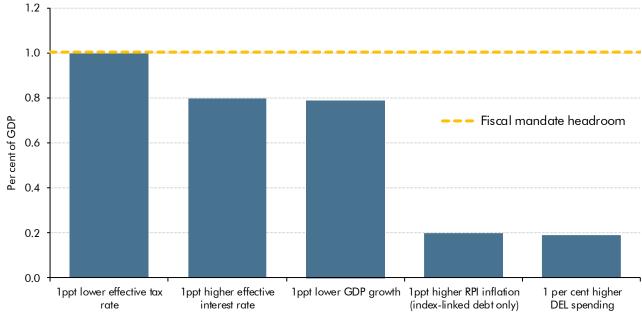
4.25 On our website we publish ready-reckoners that show how elements of the public finances could be affected by changes in some key determinants. These are stylised exercises that reflect the typical impact of changes in individual variables on spending and receipts as embodied in our forecast models. The actual impact of any of the changes we consider will depend on other factors such as the state of the economy at the time and the reaction of other policymakers, notably the Monetary Policy Committee. The ready-reckoners themselves are also subject to significant uncertainty, particularly in the context of the recovery from the pandemic, which has necessitated more judgement to be applied to the raw outputs of the forecast models than is usual.

The change in the debt-to-GDP ratio

- 4.26 We use ready-reckoners to calibrate several possible adverse surprises relative to our central forecast that would be sufficient to negate the 1.0 per cent of GDP year-on-year fall in debt (excluding the Bank of England) in 2024-25. It could fall to zero if:
 - The **primary deficit** were 1.0 per cent of GDP larger in 2024-25. This is around half the size of our average three-year ahead forecast error for current borrowing. As noted below for the current budget deficit, relatively modest differences in the key determinants of borrowing would be sufficient to cause such a change.
 - Nominal GDP growth were 1.3 percentage points lower. This is 0.2 percentage points smaller than our average three-year ahead forecast error.
 - Effective interest rates were 1.3 percentage points higher. This would take the effective interest rate on government debt close to levels seen in 2012-13, but still well below the rate that prevailed before the financial crisis.
 - RPI inflation was 5.1 percentage points higher through its effect on increasing accrued interest on index-linked gilts alone. This is 0.6 percentage points less than the upward revision we have made for RPI inflation in 2022-23 relative to our October 2021 forecast. Of course, as we can see in our central forecast, an inflation shock of this magnitude would have wider implications for the economy and public finances than are captured by a simple 'all else equal' sensitivity calculation like this.
- 4.27 Chart 4.6 compares the headroom against the fiscal mandate with unit changes in key forecast outcomes in the target year of 2024-25. From largest to smallest, it shows that:
 - A 1 percentage point fall in the economy-wide effective tax rate would be almost sufficient to wipe out the headroom by lowering tax receipts and increasing borrowing by 1 per cent of GDP.
 - A 1 percentage point rise in **effective interest rates on government debt** would also deliver a relatively large hit by adding 0.8 per cent of GDP to public spending.

- A 1 percentage point shortfall in **nominal GDP growth** in that year would deliver a similarly large hit, by reducing receipts and adding to borrowing, while also delivering a less positive contribution from denominator growth to the change in the debt ratio.
- Headroom is less sensitive to a 1 percentage point rise in **RPI inflation** (since this only acts on around a quarter of outstanding debt that is inflation-linked).
- Headroom is less sensitive still to a 1 per cent rise in total departmental spending (since that would be equal to a 0.2 per cent of GDP rise in public spending).

Chart 4.6: Sensitivity of fiscal mandate headroom to changes in selected variables 1.2



Note: Sensitivities show the change in the proposed fiscal mandate headroom in 2024-25. Source: OBR

The current budget deficit

- 4.28 Our central forecast has the current budget in surplus by 1.2 per cent of GDP in 2024-25. Our ready-reckoners suggest this could fall to zero if:
 - Potential GDP were 2.3 per cent lower. This would be roughly equivalent to the pandemic-related scarring assumed in our central forecast, or roughly half as large as the trade-intensity-related hit to potential productivity as a result of Brexit. But it would be much smaller than the cumulative shortfall in potential output relative to prefinancial crisis expectations that emerged during the post-crisis decade.
 - Effective interest rates on central government debt were 1.3 percentage points higher.
 - **RPI** inflation was 5.8 percentage points higher than expected in 2024-25 causing an increase in accrued interest on index-linked gilts.

- Departmental current spending were £31.6 billion higher. This compares to a rise of £38.9 billion in 2024-25 announced in the March 2020 Budget and a rise of £24.5 billion in that year announced in October's Budget and Spending Review.
- The **effective tax rate** were 1.2 percentage points lower. This would be equivalent to around a third of the 3.3 percentage point rise in the tax-to-GDP ratio between 2019-20 and 2026-27 in our central forecast.

Scenarios

- 4.29 While the Chancellor's headroom against his fiscal targets broadly gives him a similar amount of room for manoeuvre as previous Chancellors have given themselves, few of these fiscal targets were actually met, and the level of uncertainty surrounding our forecast is elevated at present after a series of global shocks in the first quarter of this century. In Chapter 3 we outline an array of global and domestic risks, including several policy risks associated with decisions in this Spring Statement, that could push the public finances off course. Here we consider two alternative scenarios for key conditioning assumptions that underpin our central forecast. The current focus is naturally on the implications of the Russian invasion of Ukraine and global energy prices, but the future course of the pandemic remains a significant risk too. We therefore consider:
 - a Covid downside scenario in which a new vaccine-escaping variant of the virus emerges next winter; and
 - an **energy market downside scenario** that assumes global energy prices return closer to the peaks seen in the aftermath of the ongoing Russian invasion of Ukraine.

Covid downside scenario

- 4.30 The pandemic was the largest shock to the UK economy in a century. While successful vaccines have enabled much of our economic lives to return to normal, the emergence of new vaccine-escaping Covid variants remains a key downside risk. In the first two years of the pandemic, the UK has seen four major waves of infections caused by different variants and public health experts have warned that Omicron is unlikely to be the last.³ In our central forecast, we have not assumed any economically significant waves beyond Omicron. We have therefore constructed a Covid downside scenario that assumes:
 - A **health impact** broadly between the Alpha and Omicron waves,⁴ with the variant emerging in winter 2022-23.
 - The variant is as contagious as Omicron, but causes more severe illness and requires
 existing vaccines to be adapted, then manufactured and rolled out.

³ For example, see New and Emerging Respiratory Virus Threats Advisory Group, Long term evolution of SARS-CoV2, February 2022.

⁴ Our scenario is similar to the 'Scenario 3: Central Pessimistic' in Scientific Advisory Group for Emergencies, Viral Evolution Scenarios, February 2022.

- Adapting vaccines takes three to four months, then new vaccines are rolled out to the majority of the adult population in around three months.⁵ The first wave of infections is likely to have peaked before the adapted vaccines can be rolled out, but they help limit the health impact of the following winter's second wave to half as bad as the first.
- A fall in mobility that is broadly between the Alpha and Omicron waves, due to a
 combination of additional public health restrictions and greater voluntary social
 distancing, that eases by the end of the first quarter of 2023 as infections fall.
- The **GDP** impact of this fall in mobility is calibrated to 2021 outturns rather than 2020, to reflect the adaptation of the economy to public health restrictions during the pandemic.⁶ Greater adaptation would further lessen the economic impact.
- Government fiscal support is proportionate to the economic impact of previous waves of infections.
- 4.31 Under these assumptions, GDP falls 3.5 per cent in the first quarter of 2023, then recovers from the second quarter as infections fall and the vaccine is rolled out. The second wave of infections causes GDP to fall by 1.8 per cent in the first quarter of 2024, around half as bad as the first wave. Sectors most affected by previous waves, such as transport, travel and hospitality, drive the fall in GDP. In the medium term, there is an additional 1 percentage point scarring to potential output compared to our central forecast (Chart 4.7). The additional scarring is caused by lower labour supply (for example due to greater long-term sickness) and a larger fall in productivity (for example because firms face further production inefficiencies from continuing to operate under the pandemic).

⁵ We assume a similar rollout pace to booster vaccines in final quarter of 2021, which reached around 60 per cent of those aged 12 and over in three months.

⁶ See Box 2.5 of our March 2021 EFO.

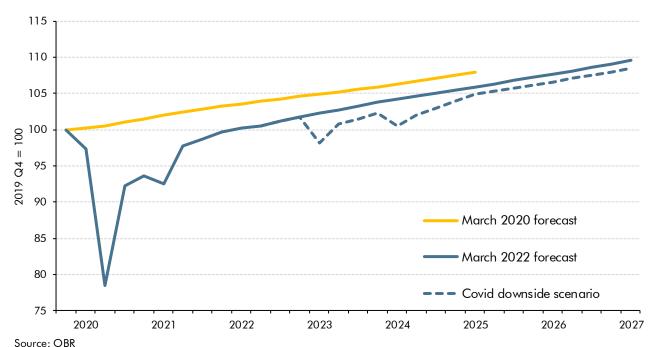


Chart 4.7: Real GDP in the Covid downside scenario

4.32 The scenario increases borrowing by 0.8 per cent of GDP in 2022-23 and by 1.4 per cent of GDP in 2023-24 relative to our central forecast, falling to 0.3 per cent above the central forecast by 2026-27. The effect in 2022-23 is mostly due to the assumption of discretionary fiscal support to combat the wave that is proportionate to the fall in GDP. Tax receipts move broadly in line with GDP (with some delayed effect due to the time lags in self-assessment payments). But spending as a share of GDP remains higher than our central forecast in every year due to the 1 per cent scarring of nominal GDP, which raises spending as a share of GDP in 2026-27 by 0.4 percentage points. Debt is 3.6 per cent of GDP higher by 2026-27, largely as a result of higher cumulative borrowing, as well as the smaller denominator.

4.33 Despite the higher paths for borrowing and debt, both fiscal targets continue to be met. Headroom against the current budget balance target is reduced by £16 billion in 2024-25, but it actually increases by £17 billion against the falling debt target in that year (Chart 4.8). This counterintuitive result is due to faster growth of nominal GDP in the period that provides the debt denominator for the target,⁷ as it recovers from the shock in the previous years. This illustrates the sensitivity of this target to the quarterly path of output.

⁷ The denominator for the debt-to-GDP ratio is March-centred, non-seasonally-adjusted nominal GDP, whereas the denominator for net borrowing and the current balance is financial year, non-seasonally adjusted nominal GDP. This means that while for the latter, the quarters relevant for the target year (2024-25) are the second quarter of 2024 to the first quarter of 2025 (the same as the actual financial year), for debt they are the fourth quarter of 2024 to the third quarter of 2025. See also Box 4.1 of our March 2016 EFO.

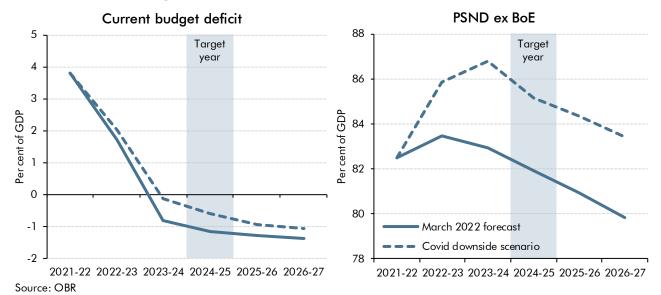


Chart 4.8: Fiscal targets in the Covid downside scenario

Energy market downside scenario

- 4.34 The rapidly changing geopolitical situation means energy and financial markets have remained volatile since our forecast closed to new market data on 2 March. Since then, changing market participants' expectations for the scale of disruption caused by Russia's invasion of Ukraine and the international response have driven energy prices higher and then back closer to the levels assumed in our central forecast. Our energy market downside scenario illustrates the economic and fiscal impacts of a more adverse position in energy and financial markets than is assumed in our central forecast. It is based on the highest levels of current and future oil and gas prices in the first three weeks of the invasion, when expectations of disruption to global energy markets were greatest. Even at this point, gas and oil prices were expected to fall back sharply next year, so this remains a short-term shock scenario with no material consequences for medium-term potential output.
- 4.35 Our central economy and fiscal forecasts are based on energy and financial market prices averaged over the five working days from 24 February to 2 March which encompassed the first week of the invasion. At that point the front-month wholesale gas price stood at £2.94 a therm and the spot oil price at \$104 per barrel, 72 and 32 per cent higher than at the start of the year. Equity prices had fallen by 1.8 per cent relative to the preceding week. However, at their post-invasion peak, front-month gas price at the close of market trading reached £5.40 a therm and the oil price \$130 a barrel (Chart 4.9). Our energy market downside scenario is based on these peak prices over the two days between 7 and 8 March.

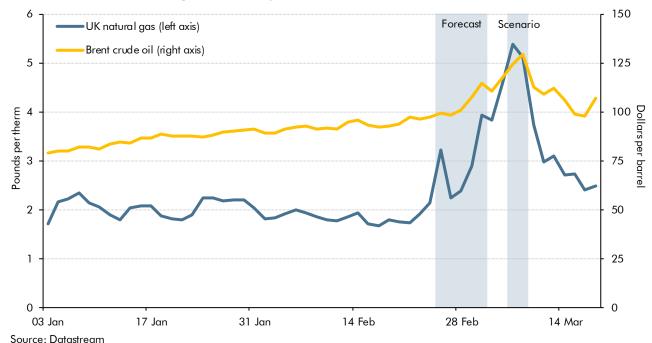


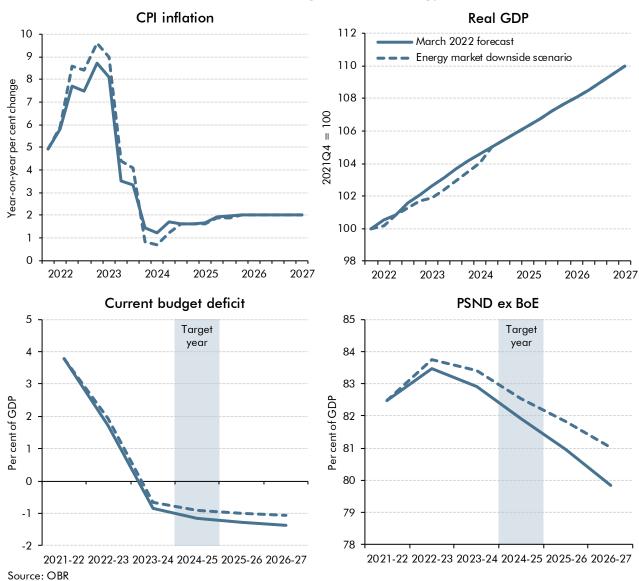
Chart 4.9: Wholesale gas and oil prices in 2022

- 4.36 These higher short-term gas and oil prices would raise the peak in inflation later this year beyond the 40-year high reached in our central forecast. In the energy market downside scenario, CPI inflation peaks around 1 percentage point higher than in our central forecast at almost 10 per cent. But reflecting the temporary nature of the assumed disruption to global energy markets, even sharper percentage falls in future energy prices than assumed in our central forecast would take inflation further below the 2 per cent target beyond the near term, dropping below 1 per cent in late 2023 and early 2024.
- 4.37 We complete the economic outlook in this scenario by applying a similar approach to that outlined in Box 2.2 in Chapter 2, which sets out how the economic impact of the invasion is transmitted via higher energy prices. The effect on inflation reflects both direct and spillover effects of higher energy prices; and higher inflation reduces real incomes, spending and GDP. The fiscal consequences of the scenario reflect both the direct impacts of energy and financial market prices, as well as these economic impacts.
- 4.38 As shown in Chart 4.10, the main implications of this scenario relative to our central forecast would be:
 - **CPI inflation** would peak at 9.6 per cent at the end of this year, around 1 percentage point higher than in our central forecast.
 - **Real GDP** would be a further 0.8 per cent weaker at its lowest point, reflecting the pass-through of higher inflation to lower real consumer spending.
 - Real household disposable incomes would be 1.9 per cent lower at their lowest point.

 Over 2022-23 as a whole, real incomes would fall 2.4 per cent, 0.5 percentage points

- more than in our central forecast. This estimate approximates the cushioning effect on disposable incomes from changes in income tax payments and welfare payments.
- Public sector net borrowing would be £5.9 billion higher in 2022-23 (thanks largely to even higher RPI inflation hitting debt interest on inflation-linked gilts) and £7.1 billion higher on average from 2023-24 onwards (as the boosts to North Sea revenues from higher gas and oil prices and to emissions trading scheme revenues from higher carbon prices are outweighed by lower capital gains tax receipts, higher debt interest payments from higher gilt rates, and higher costs of the triple lock).
- Headroom against the fiscal targets would be modestly lower dropping from £27.8 billion to £23.5 billion in respect of the fiscal mandate for public sector net debt excluding the Bank of England and from £31.6 billion to £24.7 billion in respect of the supplementary target for the current budget. These small differences reflect the fact that the fiscal consequences of the shock have largely passed by the target year.

Chart 4.10: Inflation, GDP and fiscal targets in the energy market downside scenario



A Policy measures

Overview

- A.1 Our Economic and fiscal outlook (EFO) forecasts incorporate the expected impact of the policy decisions announced in each Budget or other fiscal statement, and all other policies announced since our previous forecast. In the run-up to each one, the Government provides us with draft estimates of the cost or gain from each policy measure it is considering. We discuss these with the relevant experts and then suggest amendments as necessary. This is an iterative process where individual measures can go through several stages of scrutiny. After this process is complete, the Government chooses which measures to announce and which costings to include in its main policy decisions scorecard. For these scorecard costings we choose whether to certify them as 'reasonable and central', and whether to include them or alternative costings of our own in our forecast. We also include the effects of policy decisions that do not appear on the scorecard.
- A.2 The policy process in the run-up to this *EFO* was influenced by the Russian invasion of Ukraine, which required us to reopen our pre-measures forecast in the final round and meant policymakers' focus shifted to the international response as well as the implications of higher energy prices for the cost of living in the UK. Even so, the costings process worked reasonably efficiently, with information generally being provided in as timely a manner as practicable and requests for additional information mostly being met promptly too. We have certified all but two tax and AME measures announced since October as reasonable and central. The two uncertified costings relate to:
 - The punitive tariffs on selected imports from Russia and Belarus that were announced on 15 March as part of the international response to the invasion, estimates for which understandably were not available in time to complete a scrutiny process.
 - The **zero rate of Class 2 NICs** for self-employed individuals with profits between the small profits threshold and the lower profits limit. The costing for this measure was received several days after the agreed deadline, leaving insufficient time for scrutiny.
- A.3 In both instances we have used the Treasury's estimate in this forecast and will revisit the costings in our next forecast. A third measure, the 5 pence cut in fuel duty, was certified despite the final decision on it coming too late for its effects on inflation to be correctly reflected in our final economy forecast (see Chapter 2). This estimate was certified because the late change to the policy did not affect the previously certified costing methodology.

A.4 Table A.1 summarises the direct and indirect effects of the Government's policy decisions. Table A.2 reproduces the Treasury scorecard alongside our subjective assessment of the uncertainty around each costing. Table A.3 provides the costings and uncertainty assessments of non-scorecard measures.¹

Policy announcements

The March 2022 Spring Statement

- A.5 Our forecast incorporates the fiscal implications of all policy measures announced since October 2021. Their effect is largely the result of three major packages: (i) a set of energy cost measures that smooth the impact of pre-invasion energy price rises on household bills and of more recent petrol price rises for motorists, but recoup some of that support over time; (ii) a set of reforms to student loans that forms part of the Government's response to the 2019 Augar Review; and (iii) a pair of personal tax cuts in income tax and NICs that gives back just over a quarter² of the sums raised via income tax threshold freezes and the NICs rate rise that were announced last year and take effect in April. The overall impact of policy decisions is largely the sum of these three packages, amounting to a material fiscal giveaway to households in the medium term, whose cost is partly offset by long-term fiscal savings from the student loans reforms that are recorded upfront in borrowing.
- A.6 The net effect of all policy measures announced since October raises borrowing by £8.3 billion in 2022-23, and an average of £2.1 billion a year thereafter. The largest fiscal giveaways are this year's temporary support for energy and fuel costs and the personal tax cuts that take effect from this July (for NICs) and from April 2024 (for income tax). The largest fiscal takeaway comes from the long-term savings on student loans, which reduce borrowing for the Government in every year of the forecast, but for affected students the costs will be borne over a period of decades. In thinking about the economic impact of measures announced since October, it is therefore helpful to strip out the effects of student loans reforms on borrowing. On that basis, fiscal policy has been eased by £19.4 billion in 2022-23 (0.8 per cent of GDP), and by an average of £7.5 billion (0.3 per cent of GDP) a year from 2023-24 onwards a material medium-term fiscal easing.
- A.7 Table A.1 presents the direct and indirect effects of new policy announcements since October. The **energy cost support** measures provide £13.4 billion of support, mostly in 2022-23, just under half of which is recouped between 2023-24 and 2027-28. There are three components to the package:
 - On 3 February the Government responded to the 54 per cent rise in Ofgem's price
 cap on domestic energy bills through a mixture of rebates and discounts on household
 bills. This includes a council tax rebate of £150 in April, available to around 80 per
 cent of households (those in bands A to D) and a £200 energy bill discount in October
 for all domestic electricity customers. In addition, a discretionary fund totalling £144

¹ A full breakdown of each costing is available in the online supplementary scorecard that we publish alongside this *EFO*. Our online *Policy measures database* also includes these breakdowns, as well as costings from previous fiscal events.

² This captures changes to income tax, NICs (including employer NICs) and the health and social care levy over the five years from 2022-23 to 2026-27, including the recosting of policies, as set out in Table A.5.

million will be made available to local authorities, with an extra £40 million to finance setting up the scheme. This amounts to £8.9 billion of support for household energy bills in 2022-23. From 2023-24 onwards, the discount on bills will be clawed back via **a new charge applied to household energy bills** for five years. This will be levied at a rate of close to £40 a year, raising £1.2 billion a year, with the rate set to precisely recoup the estimated £6.0 billion distributed via the discount in October.³

- The Government has reduced fuel duty by 5 pence for a single year from 23 March 2022, at a cost of £2.4 billion in 2022-23. This marks the first change in the duty rate since April 2011 (when it was cut by a penny) despite successive Governments stating every year since 2010 that default policy is to increase rates by RPI inflation. The current policy which we must use as the basis of our forecast is to reverse the rate cut in 12 months' time and revert to increasing it by RPI inflation, which currently implies an 8 pence rise to protect fuel duty revenue from 2023-24 onwards.
- The Government's **bailout of Bulb Energy** incurs a £1.2 billion cost in 2021-22 and a further £1.0 billion in 2022-23, to cover the company's operating losses. Given the volatility in global energy markets, there remains uncertainty around the final cost.
- A.8 The second main element of the policies in this Spring Statement are two significant cuts to personal taxes costing £6.3 billion in 2022-23 rising to £10.4 billion a year on average from 2024-25 onwards:
 - The Government has met its 2019 manifesto commitment to **raise the primary** threshold for employee NICs and the lower profits limit for self-employed NICs to the level of the income tax personal allowance. This will take effect from July of this year, raising the two NICs thresholds from £9,880 to £12,570. This is a tax cut for almost 30 million workers equivalent to around £290 over a full year (and £220 in 2022-23). It costs £6.3 billion in 2022-23 and by diminishing amounts until 2025-26, with the profile reflecting the personal allowance being frozen until 2025-26, whereas absent this measure the NICs thresholds were due to be uprated by CPI inflation each year.
 - A 1 percentage point cut in the basic rate of income tax from 20 to 19 per cent, from April 2024. This is the first change to the basic rate in 15 years (when it was cut from 22 to 20 per cent). It also benefits around 30 million taxpayers by an average of £170 a year. It costs an average of £5.8 billion a year from 2024-25 onwards.
- A.9 On 24 February the Government announced a package of **student loans reforms** that lower borrowing by £2.3 billion in 2021-22, £11.2 billion next year, and an average of £5.4 billion a year over the remaining years of the forecast. The accounting for student loans in the public finances is complex. In effect, the reforms amount to the equivalent of an income tax rise for most existing and new students over their working lives. This reflects, first, repayment thresholds being frozen for existing borrowers and lowered for new borrowers (equivalent to freezing or reducing the income tax personal allowance), and second, the

 $^{^{3}}$ All customers will be liable for the new charge, so levying it at precisely £40 would be expected to raise more than the cost of the discount due to growth in the number of households from year to year.

extension of loan terms from 30 to 40 years for new borrowers (equivalent to imposing a 9 percentage point marginal income tax rise for a period of up to a decade for those affected, three decades into the future). The long-term fiscal savings from these changes are accrued upfront and therefore reduce borrowing in the medium term. The full fiscal effects of these measures on both borrowing and debt are set out in Box A.1.

A.10 The **indirect effects** of measures announced since October are small and uneven across the forecast period, reflecting the modest boost to output and receipts from the discretionary fiscal easing (whose effect is largest in 2022-23) and the modest additions to debt interest and welfare spending from slightly higher inflation (whose effect is more persistent).⁴

Table A.1: Total effect of Government decisions since October 2021

			£ bil			
			Fore			
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total effect of Government decisions	-4.2	6.1	1.2	4.3	3.9	2.5
of which:						
Direct effect of scorecard policies	-2.2	8.4	0.6	3.5	2.8	1.1
Direct effect of non-scorecard policies	-2.1	-0.1	0.0	0.1	0.1	0.1
Indirect effect of Government decisions	0.0	-2.1	0.5	0.7	1.0	1.3
Direct effect of scorecard policies	-2.2	8.4	0.6	3.5	2.8	1.1
of which:						
Receipts	-0.1	8.1	3.6	8.0	8.7	8.7
of which:						
NICs: increase in thresholds	0.0	6.5	6.2	5.1	4.6	4.8
Income tax: 1p basic rate cut	0.0	0.0	0.0	5.0	5.7	5.6
Fuel duty: 5p cut	0.0	2.4	0.0	0.0	0.0	0.0
Energy bills clawback	0.0	0.0	-1.2	-1.2	-1.2	-1.2
Student loans reforms	-0.1	-0.8	-1.2	-0.7	-0.6	-0.6
Resource DEL and Scottish AME	0.0	6.7	0.1	0.5	0.6	0.2
of which:						
£200 energy bills discount	0.0	6.0	0.0	0.0	0.0	0.0
Capital DEL and Scottish AME	0.0	1.0	0.0	0.0	0.0	-0.1
of which:						
Bulb Energy bailout	0.0	1.0	0.0	0.0	0.0	0.0
AME spending (excluding Scottish)	-2.1	-7.4	-3.2	-5.1	-6.5	-7.6
of which:						
Student loans reforms	-2.2	-10.3	-2.6	-4.1	-5.5	-6.4
£150 council tax rebate	0.0	2.9	0.0	0.0	0.0	0.0
Direct effect of non-scorecard policies	-2.1	-0.1	0.0	0.1	0.1	0.1
of which:						
Spending decisions	-2.1	-0.1	-0.1	-0.2	-0.2	-0.2
of which:						
Bulb Energy bailout	1.2	0.0	0.0	0.0	0.0	0.0
Tax decisions	0.0	0.0	0.2	0.3	0.3	0.3
Note: This table uses the convention that a positive	sign implies ar	n increase in b	orrowing.			

⁴ As a result of needing to reopen our pre-measures forecast alongside factoring in policy measures in a single forecast round, this indirect effect has been calculated top-down rather than via our standard practice of comparing pre- and post-measures economy forecasts to calculate the fiscal consequences of differences between them.

A.11 Table A.2 reproduces the Treasury scorecard alongside our subjective assessment of the uncertainty around each costing.

Table A.2: Treasury scorecard of policy decisions and OBR assessment of the uncertainty of costings

				£mi	llion ¹			
	Head ²	2021-22	2022-23			2025-26	2026-27	Uncertainty
Helping with the cost of living and supporting			LULL LU	2020 24	2024 20	2020 20	2020 27	
businesses								
National Insurance: increase annual Primary								
1 Threshold and Low er Profits Limit to £12,570 from July 2022	Tax	0	-6,250	-5,960	-4,855	-4,330	-4,495	Medium
National Insurance: zero rate Class 2 payments for those with profits between £6,725 and £12,570	Tax	0	-65	-100	-100	-95	-95	
Income Tax: reduce basic rate from 20% to 19% from April 2024 ³	Tax	0	0	0	-5,335	-6,055	-5,975	Medium-Low
Fuel Duty: reduce main rates of petrol and diesel by								
4 5p per litre, and other rates proportionately, for 12 months	Tax	-45	-2,385	0	0	0	0	Low
5 Energy bills support package	Spend	0	-9,050	+1,195	+1,195	+1,195	+1.195	Medium-High
6 Household Support Fund	Spend	0	-500	0	0	0	0	N/A
VAT: expanding the VAT relief for energy saving	Opona	Ü		Ü	Ü	Ü	Ü	
materials from April 2022	Tax	0	-45	-50	-60	-60	-65	Medium-High
8 Employment Allow ance: increase from £4,000 to £5,000	Tax	0	-425	-420	-425	-435	-440	Medium-Low
Business Rates: bring forward implementation of	Tax	0	-40	*	0	0	0	Medium
green reliefs by one year								
Tackling fraud and supporting compliance	T	. 0.5	. 455	. 055	.045	. 445	. 500	Marathura I Bada
10 HMRC: investment in compliance	Tax	+85	+455	+855	+815	+415	+530	Medium-High
11 DWP: investment in compliance	Spend	+5	+55	+290	+570	+580	+780	High
Previously announced policy decisions and								
mechanical changes to spending assumption								
12 Spending assumption: mechanical update in line with forecast	Spend	0	0	0	0	-15	+545	N/A
Student finance: changes to fee caps, loan terms and								
13 eligible courses - upfront accrual of impacts (not	Spend	+2,285	+11,150	+3,805	+4,845	+6,095	+7,035	Medium
cash) over the lifetime of loans ⁴								
Memo: impact on public sector net debt - net								
impact of changes on cash outlays and cash repayments over the forecast period		0	+115	+385	+825	+1,005	+1,065	
VAT: delay implementation of penalty reform by 9 months to January 2023	Tax	0	-5	-70	-45	-5	-5	Medium
Income Tax Self Assessment: January 2022 one	Tax	-5	-10	-5	0	0	0	Medium
month late filing and payment penalty waiver	_							
16 Tariff changes since Autumn Budget 2021	Tax	-15	-60	-55	-55	-55	-55	
Income Tax and National Insurance: one year	_		40	•			•	
17 extension to the exemption for employer-reimbursed coronavirus antigen tests	Tax	0	-10	0	0	0	0	Medium
Updating regulations for derivatives used to hedge								
18 foreign exchange risks in share transactions from April 2022	Tax	0	+10	+5	0	-5	-5	Medium-High
19 Special Administration Regime: Bulb Energy	Spend	0	-1,005	0	0	0	0	N/A
20 Statutory Sick Pay: extension to rebate scheme	Spend	-35	0	0	0	0	0	Medium-Low
Goodwin Case (case on discrimination in Teachers'	•							
Pension Scheme)	Spend	-60	-140	-75	-50	-50	-50	High
Student finance: eligibility for those relocating from 22 Afghanistan under the Afghan Citizens Resettlement Scheme	Spend	0	*	*	*	-5	-5	Medium
Scheme								

	West Yorkshire, South Yorkshire and North of Tyne borrow ing pow ers	Spend	-10	-40	0	0	0	0	Medium
24	Operational measures to manage constraints within the Personal Independence Payment assessment system	Spend	-30	-55	0	0	0	0	Medium-Low
	Total policy decisions ⁵		+2,175	-8,415	-585	-3,500	-2,825	-1,105	
	Memo: Total policy decisions excluding Higher Education reform package		-110	-19,565	-4,390	-8,345	-8,920	-8,140	
	a/w Total manding nation designs		-130	-10 725	±1 /110	⊥1 715	+1,705	+2.465	
	o/w Total spending policy decisions		-130	-10,733	Ŧ1, Ŧ 10	Ŧ1,1 10	Ŧ1,100	72,700	

^{*}Negligible

Policy decisions not on the Treasury scorecard

A.12 Our forecasts include the effect of 10 policy decisions that the Treasury has chosen not to present on its scorecard (Table A.3).

Less than complete take-up of the £150 council tax rebate

- A.13 The Government has allocated £2.9 billion of funding to pay for its £150 council tax rebate (Table A.1). This amount is based on the offer being universally taken up. Our forecast assumes that there will be less than complete take-up. As the Treasury has recorded the £2.9 billion of funding on its scorecard, we have recorded the difference as a non-scorecard costing. It reflects the fact that, while for direct debit payers the rebate is deducted automatically, for others it relies on them being contacted by their council and "invited to make a claim". The overall level of take-up therefore depends on the proportion that pay via direct debits and the take-up among other council tax payers.
- A.14 Based on a subset of councils for which information was available, we have assumed that two-thirds of council tax payers use direct debit. To determine take-up among the remainder, who through necessity or choice have not provided their local authority with their bank details, we have considered several factors that might influence take-up:
 - The value of the payment. Evidence from take-up rates across a variety of benefits and other schemes would suggest that a one-off £150 payment might be consistent with a take-up rate of less than 50 per cent.⁶
 - The economic context. The cost of living squeeze and the high degree of publicity around this measure suggest that a higher take-up rate is likely in this instance.

¹ Costings reflect the OBR's latest economic and fiscal determinants.

² Many measures have both tax and spend impacts. Measures are identified as tax or spend on the basis of their largest impact.

³ Non-dividend income

⁴ Under the methodology announced by the Office for National Statistics in December 2018, the extension of loans to students is seen as a combination of lending and government expenditure, where the latter represents the estimated proportion that is not expected to be repaid in future. These PSNB savings reflect that we now expect a greater proportion to be repaid over the full length of the loans, which reduces the amount recorded as government expenditure up front. The PSNB savings do not translate into an equivalent reduction in Public Sector Net Debt in the scorecard period, because the effects on debt will be spread over the life of the loans, as cash paid out or repaid in each year.

⁵ Totals may not sum due to rounding.

⁵ Gov.uk, Support for energy bills - the council tax rebate 2022-23: billing authority guidance, 16 March 2022.

⁶ See Figure 4.2 in OBR Briefing Paper No.6: Policy costings and our forecast, March 2014.

- Past precedent. While no directly equivalent measures provide a clear precedent to draw from, recent local authority administered Covid support measures led to significant amounts of allocated funds being returned to central government, for example by around 20 per cent for business support grants.
- A.15 Weighing up all these factors, we assume 80 per cent take-up among those that do not use direct debit. This implies that around 7 per cent of the total £2.9 billion spending allocation will not be paid out to eligible households, amounting to £0.2 billion (see Table A.3).
- A.16 The remaining non-scorecard measures are:
 - The special administration regime for **Bulb Energy** is discussed above. The 2021-22 cost of the Government's intervention is shown in Table A.3, while the 2022-23 support is contained within the Treasury's scorecard (Table A.2).
 - The Supplementary Estimates for 2021-22 were laid in March 2022. The changes that are not on the Treasury scorecard include a reduction in capital DEL budgets of £9.6 billion and an increase in resource DEL budgets of £7.1 billion, the latter with an associated underspend of £0.7 billion. The impact of other non-scorecard DEL spending is shown in Table A.2.
 - Welsh rates of income tax: modelling adjustment, relating to the 1 per cent cut in the basic rate of income tax. This is a modelling adjustment to accommodate the fact that the UK Government's decision to cut the basic rate of income tax by 1 per cent applies only to the UK portion of income tax rates, and not the Welsh rates of income tax.
- A.17 There are several measures that are fiscally neutral:
 - BBC licence fee settlement. On 17 January, the Government announced that the BBC licence fee will be frozen at £159 for two years, after which it will rise with CPI inflation. The licence fee generates around £3.75 billion a year in receipts, which is around 90 per cent of the BBC's total income. The freeze represents a reduction in income of around £250 million a year after 2022-23, which we expect to result in an equivalent reduction in BBC spending, making the measure fiscally neutral.
 - **Devolution of cold weather payments.** From April 2022, the cold weather payment benefit will be fully devolved to Scotland. The devolution of this benefit is a close-to-neutral switch for our forecast as it replaces DWP AME with Scottish Government AME.
 - Additional council tax referendum principles. The Greater London Authority (GLA) and several fire authorities have requested changes to the council tax referendum principles that were agreed at Spending Review 2021 to allow them to increase their council tax levels further (by 22.7 per cent for the GLA and by 3.5 per cent for the fire authorities). This increases council tax and the local authority spending that it finances equally.

- Energy bills support: discretionary fund. The £144 million local authority funding relating to the Government's energy support package is described above. Table A.3 shows an accounting impact in 2021-22, with central Government spending in RDEL being offset by lower local authority spending in AME. The overall net cost of the measure, the £144 million, is included in 2022-23 in Table A.2.
- A.18 Two initiatives that do not appear on the scorecard and that are not factored into our forecasts relate to recent announcements about refugees from Ukraine. They are:
 - The Homes for Ukraine scheme, which was launched on 14 March and allows UK sponsors to host a named Ukrainian or Ukrainian family in their home. The Government is offering a payment of £350 a month for up to 12 months to hosts that provide accommodation. The payments are expected to be delivered via local authorities, who will receive DEL funding from either the reserve or via reprioritisation.
 - The Ukrainian Families Scheme, which was launched on 4 March, and allows
 Ukrainians and immediate family members to join a UK-based family member. They
 are to be granted leave to remain for three years, will be eligible for benefits, and will
 be able to seek and take up employment. By 18 March, 8,600 visas had been issued.

It is too early to make a reasonable estimate on the numbers of refugees that are likely to arrive into the UK and enter either scheme, or therefore the resulting fiscal impact. For now, we note these as fiscal risks and will return to them in our next forecast.

A.19 On 28 January the Government published draft legislation for a new temporary 'public interest business protection tax' that aims to deter the owners of energy suppliers from realising the value of energy derivative contracts and then letting their businesses fail and enter special measures. The tax will be levied at 75 per cent of the adjusted value of assets that are realised in this way, subject to conditions. We have assumed that the deterrent effect of the tax will prevent such activity taking place, so it will not raise any revenue.

Table A.3: Costings for policy decisions not on the Treasury scorecard and OBR assessment of the uncertainty of costings

£ million								
	Head	2021-2220	022-23 20	023-242	024-252	025-26 20	026-27	Uncertainty
Council tax rebate: non-take-up	Spend	0	195	0	0	0	0	Medium-High
Bulb Energy bailout	Spend	-1160	0	0	0	0	0	N/A
Supplementary Estimates	Spend	2490	0	0	0	0	0	N/A
Assumed underspend	Spend	720	0	0	0	0	-10	N/A
Other DEL spending	Spend	0	-60	-40	20	20	15	N/A
Income tax: Welsh adjustment	Tax	0	0	0	-120	-125	-130	Medium-Low
Fiscally neutral measures								
BBC licence fee: freeze	Tax	0	-35	-235	-255	-255	-260	Medium-Low
	Spend	0	35	235	255	255	260	
Council tax: referendum	Tax	0	75	80	80	85	85	Medium-Low
principles	Spend	0	-75	-80	-80	-85	-85	
Energy bills support:	RDEL	-145	0	0	0	0	0	Medium-High
discretionary fund	AME	145	0	0	0	0	0	
Cold weather payments:	Spend	neg	neg	neg	neg	neg	neg	Medium
devolution								
Direct effect of Government de	cisions	2,055	135	-35	-100	-105	-125	

Note: This table uses the convention that a negative sign implies a loss to the Exchequer (and is therefore an increase in PSNB).

Scottish Government policy decisions

- A.20 Our UK public finances forecasts are also affected by decisions taken by the devolved administrations. These can affect UK-wide taxes, such as income tax and NICs, or those that have been fully devolved, such as the Scottish land and buildings transaction tax (LBTT). Since October the Scottish Government has announced the following measures that have been reflected in this forecast:⁷
 - Scottish higher-rate income tax threshold freeze. The Scottish Government has announced that the higher-rate threshold for Scottish non-savings, non-dividend income tax will be frozen in cash terms at £43,662 in 2022-23 instead of rising in line with CPI inflation. It is then assumed to increase with CPI inflation from 2023-24 onwards. The measure is expected to raise an average of £140 million a year.
 - Scottish non-domestic rates. The Scottish Government has set the poundage rate for 2022-23 at 49.8p. This increases the tax rate on a property's rateable value to the level that applied in 2019-20, reversing the rate cut that was in place during 2020-21 and 2021-22. It therefore represents a rate cut relative to the poundage having increased with CPI inflation. Rates are assumed to rise in line with CPI inflation thereafter. The measure is expected to cost around £40 million a year over the forecast period. The Scottish Government has also introduced a 50 per cent relief for the retail, hospitality and leisure sectors, to apply for the first quarter of 2022-23, to succeed the reliefs in place for these sectors during 2021-22. We expect this to cost £55 million in

⁷ For more information see our *Devolved taxes and spending forecasts*, published alongside this *EFO* and available on our website. The effects detailed here need to be considered alongside the fiscal consequences set out in the Treasury's fiscal framework agreements with the Scottish and Welsh Governments respectively, which set out the methodology by which block grant adjustments are made.

- 2022-23. The cost of these measures will be centrally funded by the Scottish Government, and so we have assumed that there will not be an impact on local authority spending as a result.
- Two new Scottish social security measures. First, the Scottish child payment is being doubled, from £10 to £20 a week, from April 2022. Inflation-linked uprating has been brought forward from April 2023 to December 2022 and eligibility is being extended from children aged under 6 to those aged under 16 by the end of 2022. Second, from April the cold weather payment scheme will be devolved and replaced by a 'low income winter heating assistance' scheme. The new benefit provides an annual £50 payment to all eligible low-income households, irrespective of the weather. Scottish social security spending is contained within our wider forecast of Scottish Government AME, so in effect this is treated as a reallocation of spending within that overall AME amount. As such, it has no effect on our forecast for UK-wide public sector net borrowing. We discuss the devolution of cold weather payments above.

Table A.4: Costings for Scottish Government policy decisions

		£ million					
	Head	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Scottish Government policy decisions							
Income tax: higher-rate threshold freeze	Receipts	0	-135	-130	-135	-140	-145
Non-domestic rates: 2022-23 poundage	Receipts	0	40	45	40	40	45
Non-domestic rates: 50 per cent RHL relief	Receipts	0	55	0	0	0	0
Implications for Scottish Government spending		0	-95	-45	-40	-40	-45
Direct effect of Scottish Government decisions		0	-135	-130	-135	-140	-145

Note: This table uses the convention that a positive sign implies an increase in borrowing. These costings are included in our premeasures forecast, with the post-measures forecast only accounting for policy decisions by the UK Government.

Policy costings and uncertainty

- A.21 In order to be transparent about the potential risks to our forecasts, we assign each certified costing a subjective uncertainty rating, shown in Tables A.2 and A.3. These range from 'low' to 'very high'. In order to determine the ratings, we assess the uncertainty arising from each of three sources: the data underpinning the costing; the complexity of the modelling required; and the possible behavioural response to the policy change. We take into account the relative importance of each source of uncertainty for each costing. The full breakdown that underpins each rating is available on our website. It is important to emphasise that where we see a costing as particularly uncertain, we see risks lying to both sides of what we nonetheless judge to be a reasonable and central estimate.
- A.22 Using this approach, we have judged two measures to have 'high' or 'very high' uncertainty around the central costing. Together, these represent 6 per cent of the scorecard measures by number, or 8 per cent of the tax and AME measures we have certified (as we do not certify the cost of DEL spending measures). They represent 6 per cent of certified measures by absolute value.⁸

⁸ The absolute value refers to the magnitude of the costing irrespective of whether it is an Exchequer cost or a gain.

Personal tax measures

- A.23 The Chancellor has announced two significant cuts to personal taxation in this Spring Statement. He has:
 - Fulfilled a Conservative Party manifesto commitment from 2019 by raising the NICs primary threshold and lower profits limit to £12,570 from July 2022, aligning it with the income tax personal allowance. This alignment is maintained across the forecast period, so that the threshold is frozen in cash terms until 2025-26, from when it rises with CPI inflation. Almost 30 million taxpayers stand to benefit, at an average gain of £290 a year. The measure costs £6.3 billion in 2022-23 but the cost declines to £4.6 billion in 2026-27 due to the thresholds being frozen in cash terms, whereas they were due to rise with CPI inflation each year in the pre-measures baseline.
 - Reduced the basic rate of income tax from 20 per cent to 19 per cent, from April 2024. This costs the Exchequer an average of £5.8 billion a year between 2024-25 and 2026-27. This will benefit around 30 million taxpayers that gain an average of around £170 a year. Scottish income taxpayers will only gain from the reduction in the income tax due on savings income since decisions about rates on non-savings, non-dividend income in Scotland have been fully devolved to the Scottish Government.
- A.24 These changes amount to a personal tax giveaway that rises to £10.6 billion in 2026-27. This reverses just over a quarter (28 per cent) of the aggregate yield from the personal tax rises that were announced during 2021. Table A.5 shows that our latest estimate for the combined yield in 2026-27 from the income tax threshold freezes and the introduction of the health and social care levy is £37.2 billion, giving a net tax increase after the measures announced in the Spring Statement of £26.6 billion (0.9 per cent of GDP) in that year.

Table A.5: Personal tax policy costings

		£ billion							
		Forecast							
	Announcement	2022-23	2023-24	2024-25	2025-26	2026-27			
Income tax: threshold freezes	March 2021	-2.9	-10.4	-15.5	-18.0	-18.8			
Health and social care levy ¹	October 2021	-17.2	-17.2	-17.4	-17.8	-18.4			
NICs: increase in thresholds	March 2022	6.3	6.1	5.0	4.4	4.6			
Income tax: 1p basic rate cut	March 2022	0.0	0.0	5.3	6.1	6.0			
Total		-13.8	-21.6	-22.6	-25.4	-26.6			

Note: This table uses the convention that a positive sign implies an increase in borrowing.

A.25 The two costings are relatively low uncertainty, since the they use high-quality HMRC administrative data and established models, with only marginal behavioural responses.

¹ In 2022-23, the health and social care levy measure is an increase in NICs rates, before the levy is introduced.

⁹ The measure does have an impact in Wales, which has a different system of devolved income tax. It reduces the UK Government-specific portion of income tax in Wales from 10 to 9 per cent, leaving the Welsh portion unchanged. The overall basic rate in Wales is therefore reduced in line with the basic rate in England and Northern Ireland.

Box A.1: The fiscal impact of student loans reforms

On 24 February 2022 the Government announced a raft of changes to the working of the higher education student loans system in England.^a These 'Plan 2' loans represent the majority of student loan outlays in the UK (86 per cent in 2021-22). The Government also announced consultations into further potential changes to: focus financing on "high class provision"; reintroduce student number controls; and implement minimum entry requirements. Together these changes form part of the Government's response to the 2019 Augar Review.^b

We will analyse the long-run impacts of these changes in our Fiscal sustainability and risks report this summer. In this box we summarise the main reforms, explain their impacts on the complex accounting for student loans, and show the overall impact on our latest five-year forecast.

The changes affect the system in four distinct ways:

- Freezing maximum tuition fees until academic year 2024-25 before reverting to rising by RPIX inflation.^c By reducing higher education funding via the loan system this saves the Government money upfront and by reducing the amount owed by students it also reduces repayments in the longer term. But in the medium term, repayments are little affected since they are determined by graduates' incomes rather than how much they owe.
- Reducing interest rates for new borrowers to equal RPI inflation (rather than up to RPI plus 3 per cent) with effect from 2023-24. This reduces the rate at which student debt rises due to accruing interest. The effect in the medium term is limited though as the 'prevailing market rate cap' is assumed to be in place for many borrowers up to 2024-25.
- Lower repayment thresholds. Thresholds for existing borrowers are kept at £27,295 to 2024-25 (the impact on our forecast includes an announcement on 2022-23 levels on 28 January) and then rise by RPI. For new borrowers, thresholds are reduced to £25,000 in 2023-24 and then held constant until 2026-27, and then also rise by RPI. These changes increase cash receipts modestly in the medium term, but this builds steadily over time ensuring much larger repayments over the life of the loans.
- Extending repayment terms to 40 years for new borrowers. This has no cash effect in the medium term, but by extending the repayment period from 30 to 40 years it increases lifetime repayments from borrowers that would have had loan balances written off after 30 years under the terms that will still apply to existing borrowers. In effect, affected borrowers will now pay a higher rate of income tax for their entire working lives.

Overall, reducing fees and interest rates reduces the total liabilities accrued by students. But by lowering repayment thresholds and extending the repayment term by a decade, borrowers in aggregate will pay a much larger share of the accrued liabilities reducing the share ultimately written off and borne by government. In terms of our fiscal forecast, this reduces the share of English loan outlays recorded as expenditure from 61 per cent in 2021-22 to 34 per cent in 2026-27. In terms of the 'RAB charge' recorded in the Department for Education's accounts in respect of future write-offs, this reduces it from 57 to 37 per cent in 2026-27.

The recording of student loans in the public finances is complex. Total outlays are divided so that the share that is expected to be repaid (including both principal and interest) is recorded as a

loan and the stock of these loans accrues interest, whereas the portion that will not be repaid is recorded as expenditure at the time the loan is made. As borrowers' lifetime repayments increase and the total owed decreases, the transfer portion on new loans is lower, which reduces public sector net borrowing (PSNB) by amounts that rise to £6.6 billion in 2026-27 (Table A). The value to the Government of existing loans also improves (by £10.6 billion, thanks largely to lowering the repayment threshold). This is reflected in the public finances as a capital transfer received in 2021-22 and 2022-23 as the respective legislation is enacted. The stock of student financing counted as loan assets, rather than expenditure, therefore increases by £32 billion (1.1 per cent of GDP) by 2026-27 due to these changes. This larger stock of outlays treated as loans outweighs lower interest rates accruing on them to mean interest receipts are also higher.

Table A also sets out the changes to the cash flows that reduce public sector net debt (PSND) due to lower outlays (from lower fees) and higher repayments (from lower repayment thresholds). PSND is reduced by modest amounts that total £3.7 billion by 2026-27. It also shows the reductions to PSNB from lower transfers to students and higher interest receipts, which are dominated by the implications of lower repayment thresholds. The PSNB effects total £35.1 billion over the same period – a much larger impact than that on debt, which reflects the fact that these represent the upfront accrual of substantial effects on distant future cash flows. The accruals adjustments show how the difference between PSNB and PSND is bridged in the public finances. These policies therefore affect all the flow and stock aggregates recorded in Chapter 3.

Table A: Fiscal impacts of policy changes to the student finance system

			£ bil	lion		
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Annual change in PSND (a)	0.0	-0.1	-0.4	-0.8	-1.1	-1.2
of which:						
Cash outlays (b)	0.0	0.0	-0.1	-0.3	-0.5	-0.5
Cash repayments (c)	0.0	-0.1	-0.3	-0.5	-0.6	-0.8
PSNB (d)	-2.3	-10.8	-3.7	-5.0	-6.2	-7.1
of which:						
Transfers from new lending (e)	-0.3	-1.4	-2.6	-4.2	-5.6	-6.6
Transfers from existing lending (f)	-1.9	-8.6	0.0	0.0	0.0	0.0
Interest receipts (g)	-0.1	-0.8	-1.1	-0.8	-0.6	-0.6
Accruals adjustments (a-d)	2.3	10.7	3.3	4.2	5.1	5.9
of which:						
Outlays (b-e-f)	2.2	10.0	2.5	3.9	5.2	6.1
Repayments (c)	0.0	-0.1	-0.3	-0.5	-0.6	-0.8
Interest receipts (-g)	0.1	0.8	1.1	0.8	0.6	0.6

^a Department for Education, Higher education policy statement & reform consultation, February 2022.

^b Independent panel report to the review of post-18 education and funding, May 2019.

^c Since 2017-18 the Government's default indexation assumption for the maximum tuition fee is that it should rise with RPIX inflation each year. However, fees have actually been frozen in every year since. This is therefore just the latest in many freezes.

^d RAB charge changes are for the impact of the main reform package on English Plan 2 loans.

DWP fraud and error

- A.26 The Spring Statement policy package includes a £960 million cumulative increase in DWP's DEL settlement to support new compliance interventions to counter fraud and error (F&E) and to boost recoveries through debt enforcement. Collectively the measures are forecast to generate £3.2 billion of savings over five years, thereby reducing our forecast for overall welfare spending by an average of 0.5 per cent a year between 2022-23 and 2026-27.
- A.27 The fiscal consequences of compliance measures tend to be highly uncertain, although these largely consist of recruiting more staff to address F&E, so are not subject to the very high uncertainty associated with measures that seek to alter non-compliant behaviours. A key uncertainty in this instance relates to the baseline level of F&E prior to these interventions in particular, whether and how the spike in recorded F&E during the pandemic would have subsided in their absence.
- A.28 Table A.6 shows that the overall rate of F&E in universal credit (UC) rose from 9.4 per cent of spending in 2019-20 to 14.5 per cent in 2020-21, driving a £3.8 billion increase in net overpayments. Results from DWP's administrative F&E survey suggest that this sharp rise was entirely driven by very high overpayment rates for new UC claimants that joined the caseload following the onset of the pandemic. The rate of overpayments for the pre-Covid caseload in 2020-21 was actually unchanged at 9.4 per cent, whereas overpayments to the Covid caseload are estimated to have been a remarkable 25.6 per cent. This is close to HMRC's estimated tax gap for small businesses that pay self-assessed income tax one of the highest tax gaps across the entire tax system. It implies that nearly a fifth of the £19.8 billion rise in total UC expenditure in 2020-21 was from increased F&E.
- A.29 The unusually high F&E rates in the Covid caseload were mainly focused in self-employed UC claims, which were affected by several easements in the UC system, while also being affected by the scale and timing of self-employment income support scheme (SEISS) payments and other fiscal support measures. Rates of F&E were also high in respect of capital rules that withdraw entitlement for those with savings in excess of £16,000. The rise in F&E within UC led to an overall increase in DWP F&E from 2.4 per cent of total spending in 2019-20 to 3.9 per cent in 2020-21. We have assumed that UC F&E rates would have fallen halfway back to pre-pandemic levels by 2026-27 in the absence of new measures, as the economy normalises in particular for lower-income self-employed workers.
- A.30 The DEL funding will mainly be used to recruit significant numbers of additional staff by December 2024, which generates uncertainty around delivery timelines, including how quickly staff can be recruited, trained and become fully productive. Overall, we assign this costing a 'high' uncertainty rating.

Table A.6: Universal credit fraud and error estimates

	£ billion (pe	er cent)
	2019-20	2020-21
Total UC expenditure	18.4	38.2
Total overpayments of which:	1.7 (9.4)	5.5 (14.5)
Pre-Covid caseload		2.4 (9.4)
Covid caseload		3.1 (25.6)

Tariffs on selected Russian and Belarusian imports

- A.31 The Government has announced its intention to impose a punitive 35 percentage point increase in the tariff rate for certain imported goods from Russia and Belarus, following the Russian invasion of Ukraine. The measure, which is contained within 'Tariff changes since Autumn Budget 2021' on the Treasury's scorecard, will affect imports that include raw materials, heavy machinery, luxury goods, art and antiques, consumer products, and beverages. There are two main sources of uncertainty:
 - The tax base, or the existing value of affected imports, based on grossed up 2021-22 outturn data, is around £1.2 billion. However, it seems very likely that the tax base for the measure will be significantly lower, with individuals and companies voluntarily shifting away from Russian and Belarusian products. The costing assumes this significantly lowers the pre-measure tax base.
 - The behavioural response to the tariff increase itself. The price increases are significant, for example around £2.50 (around 16 per cent) for a typical bottle of Russian vodka. Based on standard elasticities this would imply a large drop in demand. The speed and degree of response will partly depend on the current set of import contracts and the ability of importers to shift quickly to alternative suppliers, which will be subject to the existing UK Global Tariff rates.

The costing for this measure was, understandably, submitted too late for us to scrutinise and certify as reasonable and central, so we will return to it in our next forecast.

Goodwin pensions ruling

A.32 The Goodwin legal case successfully challenged that the disparities in rights to survivors' benefits in the Teachers' Pension Scheme (TPS) were discriminatory. While this measure primarily affects the TPS and NHS pension schemes, it also requires all relevant public service pension schemes to make corrective remediation payments. There is significant uncertainty around the data underpinning the costing, which relates only to the TPS, though this is the scheme that is most advanced in delivering remediation payments. The lack of data necessitates a relatively simple top-down modelling approach that relies on several hard-to-verify assumptions, including the scheme-level projection of remediation payments, which relies solely on the limited experience of the TPS. The tax consequences are also subject to some uncertainty. We assign this costing a 'high' uncertainty rating.

¹⁰ Gov.uk, Mrs Linda Goodwin v The Secretary of State for Education: 1308506/2019 - Judgment by Consent, 30 June 2020.

Update on previous measures

A.33 We cannot review and re-cost all previous measures at each fiscal event (the volume being too great), but we do look at any where the original (or revised) costings are under- or over-performing, and at costings that were identified as particularly uncertain.

The cost of pandemic-related support measures

Overall cost and breakdown

- A.34 The cumulative cost of the Government's pandemic-related support measures has been revised down to £310.7 billion from the £316.6 billion we estimated in October. There is no straightforward definition of a pandemic-related support measure, so we decided to draw a line at the March 2021 Budget, such that new policies announced since then have not been added to our running total. This means revisions to the estimated cost of this response since March 2021 largely reflect updates to estimates of the cost of previously announced interventions.¹¹ Table A.7 shows the main changes since October, which include:
 - A £6.7 billion downward revision to the expected cost of **government-guaranteed loan schemes**, with £5.9 billion of that reduction being recorded in 2021-22 but largely relating to loans issued in 2020-21. The loans are guaranteed by government, so any guarantees called by lenders generate a cost to the Exchequer. In this forecast we have revised down expected loss rates, due to the improved economic outlook and fewer fraudulently claimed loans. These changes are described in Chapter 3.¹²
 - The net cost of the **coronavirus job retention scheme (CJRS)** has been revised up by £0.5 billion. Around a third of the increase is due to the latest outturn data on the AME cost of furlough payments, while two-thirds reflects a lower estimate of the amount of tax that is due on those payments. The gross AME cost of the CJRS is £69.3 billion.¹³
 - Net costs relating to the fourth and fifth round of grants for the **self-employment** income support scheme (SEISS) have been revised up £0.3 billion from October. This is almost entirely due to revising down the tax that will be collected on those grants, largely reflecting the most recent outturn data from self-assessed income tax returns. The gross cost across all five grants is £28.1 billion.¹⁴
 - The **VAT deferral and new payment scheme (NPS)** is expected to cost £0.2 billion less than we estimated in October. The main impact of this measure, which provides

¹¹ We do, however, include extensions of previously announced measures that are deemed to provide pandemic-related rescue support. There were two such examples in our October 2021 *EFO*, and a further two in this *EFO*.

¹² Costs associated with the Recovery Loan Scheme (RLS) do not feed into these totals but are included in the overall estimate of loan guarantee schemes in Chapter 3. The RLS has not been grouped with the direct response to the pandemic but rather, as its name implies, as part of the recovery package that followed the rescue phase of the fiscal policy response.

¹³ Payments to furloughed employees are subject to tax (mainly PAYE income tax and NICs), so the net cost includes the receipts that are recouped from CJRS grants. This net fiscal cost presentation is therefore different to the gross AME costs presented in Chapter 3. Although the scheme has ended, HMRC expects a very small number of late claims, so the total is close to but not yet completely final.

¹⁴ SEISS grants are taxable, so the net cost includes the subsequent recovery via income tax and NICs. Since this is paid via self-assessment its impact will tend to be a year later than the grant it relates to. This net fiscal cost presentation differs from the gross AME costs reported in Chapter 3.

taxpayers who defer their VAT payments with the option to pay the deferred liability in instalments, is on the timing of cash receipts. It only affects accrued receipts to the extent that some of the deferred payments ultimately go unpaid. The change in the cost is due to more deferred VAT being repaid than previously expected, which in turn reduces the amount going into debt and the amount that eventually goes unpaid.

- The cost of the extension to the stamp duty holiday on residential property transactions up to £500,000 from March 2021 to 30 June 2021 has been revised up £0.1 billion, reflecting the latest data.
- The cost of **other measures** has increased by £0.2 billion, which is almost entirely due to an increase in the cost of the **homeworking allowance**. This tax relief existed prior to the pandemic, so it is only the cost of the April 2020 increase in the flat weekly rate, from £4 to £6, that we include here. The measure was announced just prior to the pandemic and was initially estimated to cost around £2 million a year. In our November 2020 forecast we increased that to an average cost of around £20 million a year between 2020-21 and 2025-26, and we have now revised it up again. It is now estimated to have cost around £85 million in 2020-21 and an average of £40 million a year between 2021-22 and 2026-27. The rise in cost is driven by a huge increase in the number of claimants from 20,000 in 2019-20 to 3.2 million in 2020-21. While we assume numbers will decline from this peak, we expect them to remain materially higher than pre-pandemic levels in the medium term.

Table A.7: Recostings of pandemic-related support measures

				£ billion			
				Forecast			
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Total cost of pandemic-related support i	measures,	, successi	e forecas	ts			
November 2020 (£338.4bn total)	1.8	280.0	52.7	1.9	0.7	0.7	0.5
March 2021 (£346.2bn total)	1.8	249.9	93.3	-0.1	0.8	0.4	-0.1
October 2021 (£316.6bn total)	1.7	228.9	83.8	1.0	0.9	0.4	-0.2
March 2022 (£310.7bn total)	1.7	229.4	77.9	0.8	0.7	0.4	-0.2
of which:							
Public services (£141.9bn total)	0.0	95.2	47.0	-0.1	-0.3	0.0	0.0
CJRS (£54bn total)	1.7	45.7	6.6	0.0	0.0	0.0	0.0
Business rates/ grants (£31.3bn total)	0.0	22.3	7.3	1.6	0.0	0.0	0.0
SEISS (£24bn total)	0.0	18.7	6.0	-0.8	0.0	0.0	0.0
Loan guarantees (£16.5bn total)	0.0	20.9	-4.4	0.0	0.0	0.0	0.0
Welfare measures (£15.6bn total)	0.0	7.9	4.7	1.4	0.8	0.5	0.3
Other measures (£27.4bn total)	0.0	18.6	10.5	-1.3	0.2	-0.1	-0.5
Difference to October	0.0	0.5	-5.9	-0.2	-0.2	0.0	0.0
of which:							
Loan guarantees	0.0	0.0	-5.9	-0.5	-0.2	0.0	0.0
CJRS	0.0	0.6	-0.1	0.0	0.0	0.0	0.0
SEISS	0.0	0.0	0.1	0.2	0.0	0.0	0.0
VAT: new payment scheme	0.0	-0.2	0.0	0.0	0.0	0.0	0.0
SDLT holiday	0.0	0.0	-0.1	0.0	0.0	0.0	0.0
Other measures	0.0	0.1	0.0	0.0	0.0	0.0	0.0

Note: This table uses the convention that a positive sign implies an increase in borrowing.

Totals for previous forecasts have been restated since our October EFO to correct an omission.

Totals include a small amount that relates to costs in 2026-27.

A.35 Chart A.1 shows that, of the £310.7 billion total cost:

- almost half (£141.9 billion) relates to spending on public services, largely health;
- around a guarter (£78.0 billion) is the net cost of the CJRS and SEISS;
- around 15 per cent (£47.8 billion) is due to the three largest business support schemes
 business rates relief, business grants and the government-guaranteed loan schemes;
- around 5 per cent (£15.6 billion) relates to the benefits system; and
- 9 per cent (£27.5 billion) comes from the **remaining support measures**, including the temporary 5 per cent VAT rate for badly affected sectors, the residential property stamp duty holiday, and the Chancellor's 'eat out to help out' scheme.

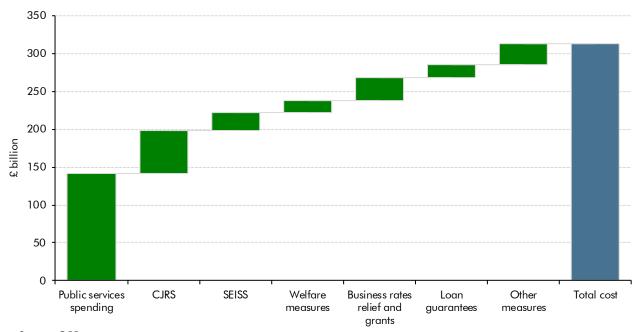


Chart A.1: The cost of pandemic-support measures

Source: OBR

Fraud, error and misuse of pandemic-related schemes

- A.36 The largest pandemic-related support measures evolved from policy development to delivery at great pace. They were designed to deliver support rapidly, in the knowledge that this would limit the extent to which checks could be put in place to prevent misuse but would ensure support reached people and businesses in need as quickly as possible. To the extent that it was possible, we aimed to factor this in when scrutinising costings of these measures. Misuse or fraud can affect their cost in several ways some loans will have been taken up with no intention of repaying, raising the cost of calls on guarantees; some CJRS and SEISS grants will have been claimed fraudulently, providing support to those who did not need it; and new claims will have been made for universal credit that did not meet eligibility criteria. To the extent that the sums involved can subsequently be recovered, the eventual cost of measures would be less than the initial cost recorded as payments were made.
- A.37 The Government recognised at the time that its pandemic-related support schemes were designed primarily to provide rapid financial assistance to affected businesses and individuals, and that this urgency generated risks around the potential for fraud and error.

 Initial audited estimates of the cost of non-compliance are now available and have begun to be scrutinised.

 The 2020-21 annual reports from DWP, HMRC and BEIS report combined expected fraud and error losses of £15.7 billion (see Chart A.2).

 This is a considerable sum, amounting to around 5 per cent of the total cost of pandemic-related support set out

¹⁵ For example, when announcing Bounce Back Loans in April 2020, the Chancellor stated that, "Today, we're announcing a new loan scheme. A simple, quick, easy solution for those in need of smaller loans. [...] There will be no forward-looking tests of business viability; no complex eligibility criteria; just a simple, quick, standard form for businesses to fill in."

¹⁶ See, for example, Public Accounts Committee, HMRC Performance in 20220-21, February 2022.

¹⁷ See fraud estimates for CJRS, SEISS and Eat Out To Help Out in *HMRC annual report and accounts:* 2020 to 2021, November 2021; estimates for universal credit fraud in *DWP annual report and accounts* 2020 to 2021, July 2021; and fraud relating to loan guarantees in *BEIS annual report and accounts* 2020 to 2021, November 2021.

above.¹⁸ But it is a sum that should be considered against the potential economic costs from delivering support more slowly in order to target it more rigorously. Those potential costs cannot be quantified with any precision but, given the rapid rebound in activity and low levels of unemployment facilitated by these support measures, it is not unreasonable to think that they could have been far greater.

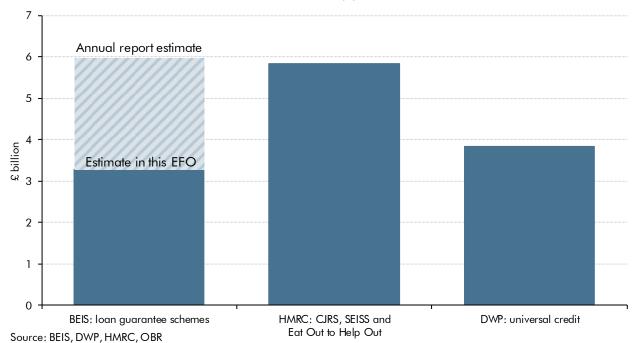


Chart A.2: Estimated fraud costs in Covid-support schemes

Policy delays

A.38 To certify costings as central, we need to estimate when – as well as by how much – measures will affect the public finances. As set out in previous EFOs, many policy measures do not meet the timetable factored into the original costings – even where we have required greater contingency margins before certifying them. This continues to pose a risk to our forecast. The one policy delay that we have been notified about since October is VAT penalties reform. This March 2021 Budget measure introduced a new regime for late payment and late submission penalties and was due to start in April 2021. It has now been delayed by nine months to January 2023 following delays related to HMRC's 'making tax digital' programme.

Update on other measures

Public service pensions remedy ('McCloud remedy')

A.39 In February 2021 the Government published its response to the 'Public service pension schemes: changes to the transitional arrangements to the 2015 schemes' consultation, also known as the 'McCloud remedy'. This set out how the Government would address the age

¹⁸ It is not particularly out of line with fraud and error rates on non-pandemic HMRC and DWP welfare support schemes.

- discrimination associated with the transitional protection that was offered to scheme members close to retirement, but not to younger scheme members.
- A.40 We included initial estimates of the impacts of this in our October forecast, but noted that the tax element which relates to changes in accrual rates between legacy and reformed schemes, and which affects, among other things, annual allowance (AA) charges¹⁹ was highly uncertain. Due to the retrospective change to pension accrual under the remedy, there will be some members that are due refunds from HMRC on previous charges, and others that might incur new or higher tax charges.
- A.41 In October, we included a simple top-down judgement on a single aspect of the tax costing, namely the potential level of AA refunds due to those members that might be automatically rolled back into legacy schemes. We estimated this would cost £150 million a year in 2023-24 and 2024-25. We have now updated the costing to include the income tax payable when members opt for different benefits at retirement, using more granular modelling from HMRC. This has reduced the cost in 2023-24 to just £10 million and switched the tax effect to a yield of £40 million a year between 2024-25 and 2026-27. This reflects an increase in income tax payable for members who receive higher benefits at retirement, as well as a small downward revision to AA refunds (based on HMRC advice that amended liabilities that are more than four years old cannot be repaid (or collected) through the tax system).
- A.42 The Government has committed to "provide tax-free compensation" and that members "will not bear the cost of [additional AA charges]" in the year of retirement if choosing reformed scheme rather than legacy scheme benefits. We have also been told that the Government will consult on the required tax legislation this summer, before laying the necessary tax regulations in September. For that reason, we have not adjusted the costing to incorporate tax that would otherwise be due in respect of either of these elements, though if that timetable is not met then we will revisit this issue as necessary in future forecasts.

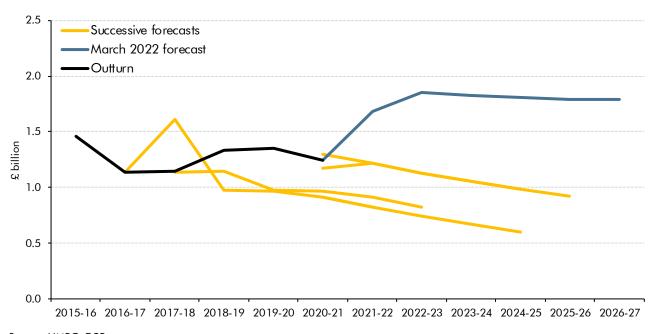
Pensions flexibility

- A.43 This Budget 2014 measure, also known as 'pensions freedoms', gave individuals with defined contribution pensions the flexibility to withdraw their funds from age 55, subject to tax paid at their marginal rate, rather than the 55 per cent charge that was in place prior to that. Chart A.3 shows that our forecasts have consistently underestimated the appetite to make use of this flexibility, with receipts outturn data repeatedly surprising on the upside.
- A.44 Outturn data from the first three quarters of 2021-22 show that withdrawals are once again on course to outstrip expectations and are up almost a fifth on the same period in 2020-21. As discussed in Box 2.4, the recent strength is likely to be linked to a pandemic-driven increase in the number of over-50s bringing forward their retirement plans and facilitating that with earlier access to their pension pots. This has led us to revise up our forecast of tax paid on the flexible drawing down of pensions funds significantly. We now expect receipts in 2021-22 to be £1.7 billion, up £0.4 billion on 2020-21 and £0.5 billion (39 per cent) higher than we expected in October. We have also revised up receipts from 2022-23

¹⁹ As well as changes in accrual rates, the tax element also relates to contribution rates and pension entitlement.

onwards by an average of £0.8 billion a year, as we assume that people will make use of earlier withdrawals to manage the rise in the cost of living this year, and that the steady-state level of withdrawals will be higher than we had previously assumed.

Chart A.3: Successive forecasts of tax receipts from the use of pensions flexibility



Source: HMRC, OBR

Home Office fees

- A.45 The receipts from three Home Office fees have increased to £3.1 billion in 2021-22, more than double the amount raised in 2017-18, when the third of the fees was introduced. This increase is due to some fee rises and to higher-than-expected demand, partially driven by their coverage extending to EEA nationals following the end of the Brexit transition period on 31 December 2020. The three are:
 - Visa fees, which are charges for UK visa applications that were first introduced in 2003 as a £155 fee for an indefinite leave to remain application. The fees have since been increased several times. For example the current cost of the fee for indefinite leave to remain is £2,389, 59 per cent higher than it was in 2016 (£1,500). Receipts from visa fees have increased by 29 per cent since 2017-18 and 87 per cent since 2015-16. These are expected to generate £1.5 billion of revenue in 2021-22, and £1.2 billion a year over the remainder of the forecast, in line with our migration forecast.
 - The immigration skills charge, which was introduced in April 2017 and is levied on companies and public sector bodies that employ skilled migrant workers from outside the UK. The level of the charge depends on both the size of the sponsoring organisation and the length of the worker's contract. For the first year, small or charitable sponsors will pay £364, while medium and large sponsors pay £1,000. The original costing expected £0.1 billion of receipts in 2021-22, whereas we are now

- forecasting three times that amount. In its first five years we expect the charge to have raised a total of £0.9 billion, 71 per cent higher than the original costing.
- The immigration health surcharge, which was introduced in 2015 and is payable upfront by individuals who come to live in the UK for more than six months. It was originally set as an annual payment of £200, which was increased to £400 in 2018 and then £624 at Budget 2020. During the pandemic the surcharge was relaxed for health care workers. Receipts this year have far outstripped the combined amounts expected in those costings. Indeed, the £1.3 billion forecast for 2021-22 is more than triple the revenue in 2019-20 (£0.4 billion). We are forecasting receipts from the surcharge to average £1.0 billion a year over the forecast period. We estimate that just over a quarter of the revenue is from public sector employers.²⁰

Other measures

A.46 Revisions to several other previous measures are worth noting:

- The UK Infrastructure Bank (UKIB) was launched last June to help deliver the National Infrastructure Strategy. It will provide loans, equity financing and guarantees to projects that contribute to the Government's 'net zero' and 'levelling-up' objectives. In this forecast we have revised down our forecast of UKIB outlays. Compared to the March 2021 costing, outlays are down from £0.7 billion to £0.1 billion in 2021-22, from £1.3 billion to £0.3 billion in 2022-23, and from £1.6 billion to £0.6 billion in 2023-24. Cumulatively between 2021-22 and 2025-26 outlays have been revised down 45 per cent from £6.6 billion to £3.6 billion. Much of this relates to the investment pipeline for UKIB activity that was assumed in the costing proving overly optimistic. The new profile builds up more slowly and reaches the levels assumed in the original costing by the final two years of the forecast. New ventures often take longer than expected to deliver, and we attempted to mitigate against such optimism bias when certifying this costing, but clearly did not go far enough.
- Reforms to the funding of adult social care. In our October EFO we set out an initial estimate of the long-term cost of the Government's September 2021 package of reforms to the funding of adult social care. This introduced an £86,000 cap to limit the amount individuals in England will be required to spend on their personal care over their lifetime, effective from October 2023. Any care costs incurred beyond the cap will be paid for by the local authority. On 17 November 2021, the Government announced that means-tested local authority support will not count towards the cap. This effectively increases both the amount of private contributions that will be required before the cap is reached, and the time period those contributions will need to cover. The Government estimates that this amendment will reduce the cost of the reforms by £0.9 billion a year from 2027-28 onwards.²¹ Under this system, individuals are still expected to pay for 'daily living costs' (for items unrelated to care, such as food, rent

²⁰ The Home Office collects the surcharge on behalf of the Department of Health and Social Care.

²¹ This is beyond the horizon of this forecast. We will consider the longer-term effects of these reforms in this summer's Fiscal sustainability and risks report.

- and utility bills) themselves. The Government has now confirmed the level of the daily living cost, which will not contribute towards the cap, will be £200 a week.²²
- Universal credit (UC): reduce the taper rate from 63p to 55p and increase work allowances by £500 a year. This measure, announced in October, reduces the rate at which UC payments are withdrawn, by 8p for every pound of a claimant's post-tax income earned above the work allowances. We estimated a £2.2 billion cost in 2022-23, rising to £3.0 billion by 2026-27. This has been revised down by £0.3 billion a year from 2022-23 onwards, reflecting lower take-up and fewer initial inflows than we expected. The estimated increase in the caseload to date is around 50,000, and we have lowered the overall expected increase from 350,000 a year to 140,000.
- Capital allowances: two-year 130 per cent super deduction. The enhanced superdeduction rates apply to unlimited new expenditure on qualifying plant and machinery within the two-year period from 1 April 2021 to 31 March 2023. The rates are several times more generous than the 18 and 6 per cent capital allowance rates that would otherwise have applied to expenditure on main- and special-rate assets respectively. This generates an Exchequer cost between 2020-21 and 2023-24, as investment decisions are brought forward and their costs expensed over a single year, rather than spanning several years. In this forecast we have revised down the cost over this fouryear period by £0.4 billion (1.5 per cent). The largest change is due to us revising down the extent to which the measure boosts business investment, from 10 per cent to 5 per cent (see Chapter 2). This lowers the four-year cost by £1.6 billion, though this is largely offset by an additional £1.2 billion from forecast changes relating to modelling improvements, including around the expenditure on cars. The measure raises yield in later years as the effect of bringing forward investment unwinds once the superdeduction is withdrawn. We now expect the three-year yield between 2024-25 and 2026-27 to be £0.1 billion (3.1 per cent) lower than we previously estimated.
- Extended loss carry back. This Spring Budget 2021 measure extends the period that trading losses from companies, partnerships and self-employed traders can be carried back and offset against income and corporation tax (CT) liabilities, subject to an annual £2 million cap.²³ It applies (for CT payers) for accounting periods ending between 1 April 2020 and 31 March 2022, enabling losses generated in those years to be used to offset liabilities in 2017-18 and 2018-19, in addition to 2019-20. Since the measure does not affect underlying liabilities, its impact is on the timing rather than the total amount of receipts, with an Exchequer cost in earlier years that is recouped in later years, as the impact unwinds. Outturn data suggest the stock of losses assumed in the original costing was an overestimate and, perhaps, that take-up of the measure has also been lower than expected. This has led us to revise down the cost between 2021-22 and 2022-23 (in cash terms) by £0.5 billion (60 per cent) and revise down the yield between 2023-24 and 2026-27 by a similar amount.

²² This is in 2021-22 prices and is a notional amount. Additional local authority support remains available for those unable to meet their daily living costs.

²³ Only the corporation tax element, which comprises the vast majority of the costing, has been updated.

Policy risks

- A.47 Parliament requires that our forecasts only reflect current government policy. As such, when the Government sets out 'ambitions' or 'intentions' we ask the Treasury to confirm whether they represent firm policy. We use that information to determine what should be reflected in our forecast. Where they are not yet firm policy, we note them as a source of risk to our central forecast. The full list of risks to this forecast and changes from previous updates is available on our website. Here we summarise risks that have changed materially since our October forecast and those that are new.
- A.48 Risks that have crystallised and are now reflected in our forecast include:
 - The Conservative Party's 2019 manifesto commitment to increase the NICs primary threshold and lower profits limit to £9,500 by April 2020 with an "ultimate ambition" to raise it to £12,500. The increase to £9,500 from April 2020 was implemented in the March 2020 Budget. In this Spring Statement, the threshold has been aligned with the income tax personal allowance (currently £12,570) from July 2022 onwards.
 - The 'Augar' review of post-18 education funding was launched in February 2018 and reported in May 2019. Among its recommendations were some with significant fiscal implications such as reducing the student fee cap to £7,500 a year and freezing it until 2022-23, and changes to repayment terms. The Government has now announced several reforms in response to the review that are discussed in Box A.1.
 - The **border operating model** sets out how and when the Government will implement and manage its customs and border control obligations since exiting the EU. Full customs controls have been in place since 1 January 2022, whereby traders must submit customs declarations for all goods exported from and imported into the UK (excluding those from Ireland). Safety and security declarations on importing certain products of animal and plant origin that were due to be introduced in October 2021 will be phased in between 1 July and 1 November 2022 under a revised timetable, to give agri-food producers time to adjust to the new system.
 - In July 2021, the Government published its response to what has become known as the 'Goodwin case'. As discussed above, we have reflected an initial estimate of the cost of this remediation in our latest forecast.
- A.49 Risks that have evolved or that are new since October include:
 - The Government's 21 July 2021 Command Paper stated its intention to renegotiate several aspects of the existing Northern Ireland Protocol to the UK-EU Withdrawal Agreement. In October, the European Commission responded with a new offer of bespoke arrangements in the areas of "food, plant and animal health, customs, medicines and engagement with Northern Irish stakeholders." The Government is in intensive discussions with the EU, with the aim of changing the Protocol. It aims to reach a positive outcome through negotiations, but there remains significant

- uncertainty around the longer-term operation of the Protocol. The Government has not ruled out unilateral measures via the Protocol's Article 16 safeguard mechanism.
- The **UK-New Zealand trade deal**, signed on 28 February, removes tariffs on all UK goods exported to New Zealand and all imports to the UK from New Zealand, subject to meeting 'rules of origin' requirements (though some agricultural products will "not be fully liberalised"). As the deal is unlikely to be ratified in Parliament until 2023, we have not yet included any impacts in our forecast, though the fiscal impacts are likely to be modest and economic impacts negligible in our five-year forecast horizon. New Zealand accounted for less than 0.2 per cent of total UK imports in 2019 and 2020. The Government's Impact Assessment of the deal estimates that it could raise the level of real GDP in 2035 by between 0.023 and 0.034 per cent.²⁴
- EU-UK legal case on customs fraud. In March 2022 the European Court of Justice (ECJ) ruled that "the United Kingdom has failed to fulfil its obligations under EU law by failing to apply effective customs control measures or to enter in the accounts the correct amounts of customs duties". ²⁵ This case relates to the undervaluation on import of textiles and footwear from China between November 2011 and October 2017 (as first noted in our March 2019 EFO). The Court's decision records that the ECJ continues to have jurisdiction in this case since legal proceedings started before the end of the transition period set out in the EU-UK withdrawal agreement. The fiscal consequence of the court ruling is contingent on the European Commission's recalculation of customs duties owed. The ECJ rejected the initial estimate of €2.7 billion and requested the Commission to account for the findings of the Court in their final estimate. We will include the impact of this once the final cost has been agreed.
- In addition, the Chancellor has set out his intention to cut taxes on business investment. In his Mais lecture on 24 February 2022, he said, "as I develop a business tax strategy for the years ahead, it seems likely to me that a priority will be to cut taxes on business investment" and also that "despite the UK's highly competitive headline corporation tax rates, the overall tax treatment provided for capital investment is much less generous than the OECD average... we need our future tax policy to be targeted and strategic". He has not yet specified how these will be achieved, so they have not been reflected in our forecasts. We will include the fiscal impacts of these policy aspirations when they translate into specific policy measures.
- A.50 The more inflationary environment creates broader risks in specific policy areas. Despite the fiscal support for household budgets delivered in the Spring Statement, pressure for more could build again if the energy price cap in October rises sharply. Similarly, having frozen fuel duty in cash terms for more than a decade, the Government's plans for an RPI+5p super-indexation of fuel duty next year are ambitious. Inflation also presents challenges in the welfare system, where benefits will fall in real terms in 2022-23, and has also eroded the real value of the departmental budgets set in cash terms in October's Spending Review.

²⁴ Department for International Trade, Impact Assessment of the Free Trade Agreement between the United Kingdom and Northern Ireland and New Zealand, February 2022.

²⁵ Court of Justice of the European Union, Press release no 42/22, March 2022.

B Major balance sheet interventions

Introduction

- B.1 For more than a decade, our *Economic and fiscal outlooks* (*EFOs*) have included our latest estimates of the direct costs associated with the major balance sheet interventions undertaken during and after the financial crisis. With the Government still owning a large proportion of NatWest shares, the process of exiting those interventions is still incomplete. This annex provides our latest report on the amounts subsequently recovered and the debt interest costs associated with financing the original interventions.
- B.2 The policy response to the pandemic also involved extensive use of the public sector balance sheet. In this instance, that was largely in the form of guarantees rather than loans and equity, which means initial cash outlays have been small but will rise over time (in contrast to the financial crisis, where the initial cash outlays were large but have been progressively recovered over time). The Government guaranteed many tens of billions of pounds worth of commercial loans to businesses through the Bounce Back Loan Scheme (BBLS); the Coronavirus Business Interruption Loan Scheme (CBILS); the Coronavirus Large Business Interruption Loan Scheme (CLBILS); and the Recovery Loan Scheme (RLS). Further contingent liabilities have been incurred via the Mortgage Guarantee Scheme (MGS), the Trade Credit Reinsurance (TCR) scheme and several other targeted schemes. The direct provision of convertible loans (i.e. loans that can be converted into equity shares at the borrower's request) to start-ups through the Future Fund (FF) involved upfront cash outlays.
- B.3 The direct costs of these interventions will only be known after several years as some companies default on loans and some start-ups fail. In this *EFO* we continue the running commentary on the net direct effects of these schemes on the public finances. At this stage, these are only a small proportion of the expected eventual costs, but the future cash flows out of the Exchequer as guarantees are called are expected to be significant.
- B.4 Our estimates of the net direct effect on the public finances of the balance sheet interventions in both the financial crisis and the pandemic do not attempt to compare them against counterfactuals in which the Government did not intervene. The costs of both crises would almost certainly have been far greater without the direct interventions to mitigate and socialise their economic impact.¹

¹ We discussed the fiscal implications of financial crises in Chapter 3 of our 2019 Fiscal risks report and the still-unfolding impact of the pandemic in Chapter 2 of our 2021 Fiscal risks report.

Financial crisis balance sheet interventions

- B.5 Table B.1 updates our estimate of the net direct effect on the public finances of the Government's interventions in the financial sector during the financial crisis and subsequent recession. In total, £136.7 billion was disbursed by the Treasury during and following the crisis. By end-January 2022, principal repayments and other fees received had amounted to £133.8 billion, up £2.2 billion from our October *EFO* update based on data at end-September 2021, reflecting further disposals of NatWest shares, and dividends received from both NatWest and UK Asset Resolution Limited (UKAR). This leaves a smaller net cash shortfall of £2.9 billion. A higher share price raised the value of the Treasury's NatWest Group shares to £14.5 billion,² up from the £13.0 billion recorded in our October *EFO*.
- B.6 If the Treasury were to sell its remaining shares at these values, it would realise an overall cash surplus on all the interventions undertaken during the financial crisis of £17.1 billion. This is an increase of £3.6 billion from our October estimate, mainly reflecting the improved net cash position and the higher NatWest share price. However, this cash surplus excludes the costs to the Treasury of financing these interventions. If all interventions are assumed to have been financed through gilts at prevailing market interest rates, the Treasury estimates that the additional debt interest costs would have amounted to £47.7 billion by January, mainly due to the costs associated with NatWest and UKAR.³ This cost is £1.2 billion larger than estimated in October, partly reflecting four more months servicing debt on interventions yet to be repaid or sold. Together this implies an overall net cost of £30.6 billion to the Government (2.0 per cent of 2008-09 GDP), £2.4 billion less than we estimated in October.
- B.7 On 26 February 2021 the Government announced that the final £5.2 billion sale of Bradford & Bingley plc (B&B) and NRAM Limited and their remaining mortgage assets and loan portfolios to a private consortium had been approved. The sale effectively ends UKAR's ownership of the legal entities of B&B and NRAM, their subsidiary companies, and their remaining assets, that were taken on in the financial crisis. Implementation took place in two stages: the first was the sale of the assets, which completed on 10 March 2021 and raised £4.5 billion; the second was the company sale, completed in October 2021 with proceeds of £0.7 billion. UKAR transferred the majority of proceeds to the Treasury via a dividend in July 2021; and will disperse further proceeds to the Treasury in March 2022.

² Based on an average of NatWest Group's share price for the five working days to 2 March, consistent with the other market-derived assumptions in our forecast.

³ The debt interest costs (or savings) associated with interventions that yield an overall deficit (or surplus) continue beyond the point the intervention itself has been wound up. This is the 'Exchequer financing' metric recorded in Table B.1.

⁴ HM Treasury, Government completes final £5 billion sale of Bradford and Bingley plc and NRAM Limited, February 2021.

Table B.1: Gross and net cash flows of financial sector interventions

	£ billion								
	Lloyds	NWG ¹	UKAR ¹	FSCS ¹	CGS ¹	SLS ¹	Other	Total	Change since October 2021 ²
Cash outlays	-20.5	-45.9	-44.1	-20.9	0.0	0.0	-5.3	-136.7	-0.1
Principal repayments	21.1	9.8	43.7	20.9	0.0	0.0	5.3	100.8	0.9
Other fees received ³	3.2	6.6	12.9	3.5	4.3	2.3	0.2	33.0	1.2
Net cash position	3.8	-29.5	12.5	3.5	4.3	2.3	0.2	-2.9	2.1
Outstanding payments	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0
Market value ⁴	0.0	14.5	5.4	0.0	0.0	0.0	0.0	19.9	1.5
Implied balance	3.8	-15.0	17.9	3.5	4.3	2.3	0.3	17.1	3.6
Exchequer financing ⁵	-4.6	-18.5	-14.8	-9.5	0.0	0.3	-0.6	-47.7	-1.2
Overall balance	-0.8	-33.5	3.1	-6.0	4.3	2.6	-0.3	-30.6	2.4
Memo: changes in overall balance since October 2021 ²	-0.1	2.1	0.7	-0.2	0.0	0.0	0.0	2.5	

¹ These are the Government's ownership of NatWest Group shares (previously RBS Group), UK Asset Resolution (UKAR), which manages holdings in Bradford & Bingley and Northern Rock Asset Management plc., the Financial Services Compensation Scheme (FSCS), Credit Guarantee Scheme (CGS), and Special Liquidity Scheme (SLS).

⁵ This can be split into financing while the intervention was open and after it closed (or after the final payment was received): Lloyds closed in May 2017, FSCS closed in October 2018, CGS closed in November 2012, SLS closed in April 2012 and UKAR closed in November 2021.

While open	-3.7	-18.5	-14.6	-7.6	0.3	0.0	-0.6	-44.7
After close	-0.9		-0.2	-1.9	-0.3	0.4		-2.9

Pandemic-related balance sheet interventions

- B.8 Table B.2 summarises the current financial position with respect to the Government's pandemic-related interventions as of end-September 2021 for loan guarantee schemes, and the most up-to-date data available in February 2022 for all other schemes. Taking each row in turn, it reports:
 - The maximum size reached by each scheme, which stands at an estimated £143.2 billion in total. This includes the maximum size reached in outturn for those schemes that are now closed, and forecasts for those that remain open. The £0.6 billion downward revision since our October EFO relates to downward revisions to the total value of the four loan guarantee schemes (CBILS, CLBILS, BBLS and RLS), which together account for £81.2 billion of the total. Revisions to the total sizes of these loan books consist of excluding loans that were offered but ultimately cancelled, net of a small number of loans that were extended after the cut-off for data included in our October EFO. The next largest contingent liability was the indemnity provided to the Bank of England's Covid Corporate Financing Facility (CCFF), which had a maximum size of £38.0 billion. However, given this facility was only open to investment-grade firms, expected write-offs and cash flows relating to this lending have always been negligible. We do not have a forecast for the maximum size of the Mortgage

² October 2021 EFO figures were consistent with end-September 2021 data.

³ NWG figure contains asset protection scheme and contingent capital facility fees. UKAR has dividends paid to HM Treasury.

⁴ UKAR is book value of equity, derived from its accounts as at 31 March 2021 published in July of that year.

Guarantee Scheme when it closes at end-December 2022, but the total value of mortgages covered by the scheme as of end-September 2021 stood at £1.2 billion.⁵

- The maximum gross contingent or actual liability associated with each scheme. This takes into account the extent to which the Government will cover losses when guarantees are called. For example, for the BBLS this is 100 per cent of the maximum size, whereas for the CBILS and CLBILS it is 80 per cent. The gross liability for all schemes amounts to £138.0 billion, of which £136.9 billion is contingent liability and is again dominated by the BBLS and the CCFF. The remaining £1.1 billion of the total relates to actual liabilities incurred to finance loans directly issued through the Future Fund. The £0.3 billion reduction in this figure since October flows from the downward revision to the maximum size of the four loan guarantee schemes.
- The latest gross contingent or actual liability as of the most recent data available for each scheme. This reflects loan repayments and other movements since each scheme peaked in size. It shows that while little has changed since the closure of most schemes, repayments have reduced the exposures associated with the loan guarantee schemes by £7.4 billion. More significantly, the latest liability relating to the CCFF in respect of currently outstanding commercial paper purchases through the scheme has declined by 97 per cent relative to its maximum size to stand at just £1.3 billion, reflecting the facility's function as a source of liquidity for larger firms, primarily over the short term and at the height of pandemic-related pressures.⁶
- Expected write-offs reflect our latest forecasts for write-offs over the lifetime of the schemes in cash terms. This amounts to £18.0 billion with expected write-offs dominated by the BBLS at £15.5 billion, thanks to both the large size of the scheme and the relatively high expected loss rate. Taken together this is a downward revision of £5.1 billion compared to our October EFO, reflecting a combination of factors that are set out in Table 3.24 in Chapter 3.7 Other schemes are structured in a way that makes them far less likely to incur losses to the Treasury. For example, the MGS provides mortgage lenders with a 95 per cent guarantee for only a portion of high loan-to-value mortgages (the part between 80 and 95 per cent loan-to-value), with the Government also receiving a commercial fee for the guarantee. A previous iteration of this scheme ran from 2013 to 2016 and covered 102,000 mortgages. It cost just £11.9 million (including both losses and its running costs), with that cost outweighed by the fees that were received from lenders.8
- Cash outlays to date reflect the sums paid out by the schemes so far. £3.5 billion in cash has been paid out to date, up £1.0 billion since our October EFO. The outlays relating to calls on guarantees remain small currently only £0.2 billion across the CBILS, BBLS and TCR schemes, compared to the £18.0 billion expected in total across the lifetime of all schemes. The largest component of these outlays instead relates to

⁵ HM Treasury, 2021 Mortgage Guarantee Scheme Quarterly Statistics, 17 February 2022.

⁶ See Bank of England, Results and usage data.

⁷ However, the value of total expected claims is not consistent with those presented in the table below – given a difference in presentation relating to discounting that adds £1.3 billion to expected claims presented in cash terms.

⁸ See UK Parliament, Question for HM Treasury on the Help to Buy Scheme, tabled on 30 March 2017.

payments to lenders to compensate them for the 12-month interest holiday offered at the start of loans issued under the BBLS and CBILS schemes at a cost of $\mathfrak{L}2.0$ billion. A further $\mathfrak{L}1.1$ billion relates to the initial outlays of convertible loans issued through the Future Fund (as detailed below).

- Cash received to date sits at just £0.7 billion (up £0.6 billion since our October EFO). The bulk of this relates to £0.4 billion received through the TCR scheme, and lender fees received in respect of CBILS loans (at £0.2 billion).
- Net cash outlays are therefore in deficit as of February 2022, at £2.7 billion (a £0.3 billion increase since our October *EFO*) primarily due to outlays in respect of the Future Fund, CBILS and BBLS, a figure that remains small in comparison to the size of expected future costs over the lifetime of these schemes.
- The only scheme where the Government's exposure takes the form of initial cash outlays that will be recovered (or not) over time is the Future Fund, in which it has issued £1.1 billion of convertible loans to 'innovative' small and medium-sized start-up enterprises during the pandemic. As of end-December, 265 of the 1,190 loans had been converted to equity stakes, with the Government now part-owner of entities ranging from a manufacturer of low-calorie soft drinks to the consortium that owns Bolton Wanderers Football Club. The eventual direct cost or benefit of the scheme will depend on both the extent to which loans are repaid and the extent to which equity stakes can eventually be sold to the private sector. Given the high-risk nature of investment in start-up businesses, it is likely that some equity stakes will be lost, but it is also possible that some will prove considerably more valuable than the initial cash loan outlay. Given this uncertainty, we have not attempted to forecast expected 'write-offs' relating to the scheme, so the table below instead records BEIS's latest published assessment of the loss in value relating to the Future Fund portfolio (which stood at £60 million as of end-March 2021, recorded in its 2020-21 Annual Report).

Table B.2: Gross and net cash flows of pandemic-related balance sheet interventions

	£ billion												
	Equity ¹		Guai	rantee s	chem	es ¹		Indemnities and insurance					Change
	FF	CBILS	CLBILS	BBLS	RLS	MGS	UKEF	CCFF	TCR	ERS	FTPR	Total	since October 2021
Scheme status ²	С	С	С	С	0	0	0	С	С	0	0		
Max. scheme size	2.3	26.1	5.0	47.1	3.0	-	10.0	38.0	10.0	0.8	0.8	143.2	-0.6
Max. gross liability	1.1	20.9	4.0	47.1	2.4	3.9	10.0	38.0	9.0	0.8	8.0	138.0	-0.3
Latest gross liability ³	1.1	18.5	3.3	43.0	2.2	0.3	8.6	1.3	9.0	0.1	0.4	87.8	-1.4
Expected write-offs ⁴	0.1	1.8	0.3	15.5	0.2	0.0	0.0	0.0	-	0.0	0.1	18.0	-5.1
Net cash outlays	1.1	1.0	0.0	1.0	0.0	0.0	-0.1	0.0	-0.2	0.0	0.0	2.7	0.3
of which:													
Received to date	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.4	0.0	0.0	0.7	0.6
Outlays to date	1.1	1.2	0.0	1.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	3.5	1.0
of which:													
Write-offs	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	-
Interest and other	1.1	1.1	0.0	0.9	0.0	0.0	0.0	0.0	0.2	0.0	0.0	3.3	-

These are the Future Fund (FF), Coronavirus Business Interruption Loan Scheme (CBILS), Coronavirus Large Business Interruption Loan Scheme (CLBILS), Bounce Back Loan Scheme (BBLS), Recovery Loan Scheme (RLS), Mortgage Guarantee Scheme (MGS), UKEF Temporary Covid Risk Framework (UKEF), Covid Corporate Financing Facilty (CCFF), Trade Credit Reinsurance (TCR), Events Reinsurance Scheme (ERS) and the Film and TV Production Restart scheme (FTPR).

² 'C' refers to closed schemes, while 'O' signifies that the scheme remains open.

³ Latest gross liability for CBILS, CLBILS and BBLS removes loans repaid in full, but does not reduce the total liability in line with monthly repayments made by borrowers.

⁴ Expected write-offs for CBILS, CLBILS and BBLS are presented as an estimated cash figure, as opposed to the discounted figures presented elsewhere. Future Fund figures relate to fair value losses recorded in BEIS Annual Accounts 2020-21, rather than write-offs.

C Pandemic-related economic scarring

Introduction

- GDP in the medium term and is, therefore, one of the most important drivers of our fiscal forecast. To produce it, we start with a projection for labour supply, constructed by combining estimates of (i) the size of the adult population, with (ii) the proportion of those who actively participate in the labour market, (iii) the equilibrium share of those participants who are able to find employment, and (iv) the equilibrium average hours worked. We then combine this labour supply forecast with a forecast for productivity per hour which is a function of (v) the capital stock per worker and (vi) the efficiency with which capital and labour are combined (total factor productivity or TFP). All six of these components of potential output have been disrupted in the near-term by the pandemic, but it is the pandemic's long-term legacy for each that matters for scarring.
- C.2 Since the onset of the pandemic, our forecast of potential output has assumed a level of economic scarring relative to a pre-pandemic baseline. Our pre-pandemic baseline is drawn from our March 2020 forecast, which assumed growth of potential output would rise from 1.2 per cent in 2020 to 1.6 per cent in 2024 (although we made an adjustment for unexpected strength in labour market participation before the pandemic hit). This slight rise in the growth of potential output reflected a modest pick-up in hourly productivity growth more than offsetting a gradual decline in the participation rate as a result of an ageing population, plus a small rise in structural unemployment due to the significant rise in the National Living Wage.
- C.3 Our November 2020 and March 2021 forecasts assumed that scarring would be 3 per cent of GDP, stemming from the pandemic's adverse impacts on the size of the future labour force, the capital stock, and TFP. But in our October 2021 Economic and fiscal outlook (EFO), we revised this down by 1 percentage point following a review of the evidence available at the time. In this forecast, we have retained our overall 2 per cent assumption for pandemic scarring, but reflecting the latest evidence, we have increased the contribution from reduced labour supply and decreased that from lower labour productivity (Table C.1).

Table C.1 Pandemic-related scarring to potential output

	Breakdown	Breakdown of virus-related scarring, per cent							
	March 2021	October 2021	March 2022						
Total scarring	3.0	2.0	2.0						
of which:									
Labour supply	1.0	0.8	1.2						
of which:									
Population	0.2	0.4	0.6						
Participation	0.5	0.3	0.6						
Unemployment	0.3	0.1	0.0						
Hourly productivity	2.0	1.2	0.8						
of which:									
Capital shallowing	0.8	0.6	0.5						
Total factor productivity	1.2	0.6	0.3						

Labour supply

- C.4 We have revised up the labour supply component of overall scarring to 1.2 percentage points from 0.8 percentage points in our October 2021 forecast. This reflects revised judgements in three areas:
 - a smaller adult population, resulting from lower net inward migration and higher mortality compared to our October forecast;
 - lower labour force participation, partly reflecting a recent rise in the proportion of the working-age population unable to work due to long-term ill health; and
 - a lower **structural unemployment rate**, partly due to lower-than-expected unemployment outturns following the end of the furlough scheme.

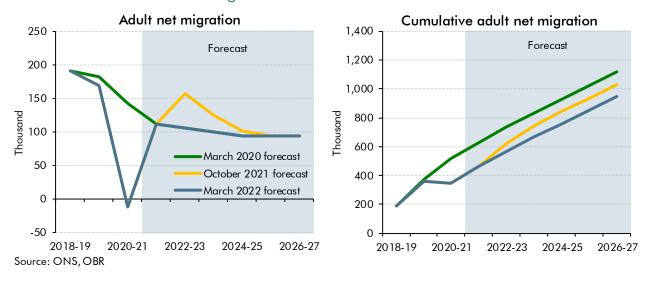
Population

C.5 We now expect the adult population to be 300,000 smaller at the forecast horizon than in our pre-pandemic March 2020 projection. A smaller population now contributes 0.6 percentage points to overall scarring compared with 0.4 percentage points (200,000 people) in our October 2021 forecast. Lower net migration accounts for 0.3 percentage points of the population-driven scarring to potential output, a shortfall of 170,000 compared to our March 2020 forecast. The remaining 0.3 percentage points is explained by 140,000 additional deaths relative to our March 2020 forecast. As these deaths are concentrated among older people who are less likely to be active in the labour market, their impact on the labour force is partly offset by a 0.2 percentage point compositional increase in whole-economy participation rates discussed in paragraph C.8, although we expect other participation factors to more than offset this compositional effect. Taking this downward revision to the total population and our unchanged overall scarring assumption together results in a small upward revision to real GDP per capita in the medium term relative to our October forecast.

C.6 Our increased estimate of scarring to the adult population since October is partly because we now assume that none of the 170,000 shortfall in net migration during the pandemic is made up over our forecast period, whereas in October we assumed that half (85,000) of the shortfall would be made up. This change has been driven by emerging evidence that most of the shortfall in net migration in 2020 was due to a fall in immigration rather than an increase in emigration,¹ and is therefore less likely to be recovered. This is because it seems less likely that forgone inward migrants will choose to come to the UK at a later date (especially in light of the post-Brexit migration regime that took effect in January 2021) than individuals who left the UK at the start of the pandemic and are more likely to have a legal right to return. We also have more excess deaths than in our October forecast as a result of the latest ONS population projections, which assume slightly higher mortality rates.

Uncertainties around this judgement are significant, both in terms of potential revisions to outturn data and to the future trajectory of net migration, and the mortality consequences of the pandemic.

Chart C.1: Successive net migration forecasts



Participation

- C.7 We expect there to be 400,000 fewer people in the labour force at the forecast horizon than was assumed in our pre-pandemic baseline. Of this, around 190,000 is due to a smaller population,² and 210,000 is accounted for by a higher inactivity rate among those of working age. The latter figure reflects our judgement that only around half of the increase in inactive individuals observed to date relative to our pre-pandemic forecast will return to the labour force by the forecast horizon.
- C.8 This is a more pessimistic view of the rebound in labour participation than our October 2021 forecast, where we expected three-quarters of those currently inactive to return. Evidence since October has shown that the rise in inactivity has been driven by an increase

¹ As discussed in our October 2021 *EFO*, the initial shortfall in net migration was calculated by analysing the revisions in the labour market data, where the elements that were not explained by excess deaths were assumed to be explained by shortfalls in net migration.

² As discussed above, the reason the 300,000 overall shortfall in population translates into a participation shortfall of 190,000 is the age composition of pandemic-related excess deaths, which were concentrated among older age groups less active in the labour market.

in the long-term sick and in those recorded in the 'other' category in the Labour Force Survey.³ As explained in Box 2.4 in Chapter 2, much of this increase in long-term sickness has been in older age groups and so may prove persistent. These factors more than offset excess deaths being concentrated among older people who are less likely to be active in the labour market. We have therefore increased the contribution to scarring from lower labour force participation to 0.6 percentage points, up from 0.3 percentage points in October.

Unemployment

C.9 We no longer expect the pandemic to increase the structural unemployment rate, so we have removed the 0.1 percentage point uplift assumed in October. The closure of the coronavirus job retention scheme (CJRS) in September did not result in a rise in unemployment, which continued to fall and reached 3.9 per cent in the three months to January 2022. Survey evidence suggests that the majority of those on furlough remained employed and only around 10 per cent became unemployed or inactive. This is supported by evidence from administrative data from the CJRS itself (see Box 3.5). Also while the share of long-term unemployed remains elevated, there are tentative signs that it has peaked, while measures of labour market mismatch, which had risen sharply during the pandemic, have now returned to earlier levels. However, high vacancies, which reflect the overall tight state of the labour market, may also be indicative of some remaining mismatch.

Capital stock

- C.10 We have lowered our estimate of the contribution of a smaller capital stock per hour worked (capital shallowing) to overall scarring from 0.6 to 0.5 percentage points. Our forecast for cumulative business investment from the first quarter of 2020 to the first quarter of 2025 is 8.2 per cent lower than in our pre-pandemic March 2020 forecast. This translates into a reduction of around 1.8 per cent (£95 billion) in the gross capital stock relative to March 2020, a 0.9 percentage point greater investment shortfall than we had forecast in October. But this is more than offset by the downward revision in labour supply (measured in total hours worked), so the capital stock per hour worked which determines capital's contribution to output is a little higher than in our October forecast.
- C.11 The latest data on the financial health of businesses which influences how much firms invest and how much capital is scrapped remain reassuring. Aggregate measures of company profitability suggest continued resilience. UK non-financial companies maintained a very steady real return on capital throughout the past few years and this has continued over the first three-quarters of 2021 (Chart C.2). The Bank of England's latest Financial Stability Report concluded that debt servicing remains affordable for most companies.⁶

³ Other reasons include people who (i) are waiting for the results of a job application, (ii) have not yet started looking for work, (iii) do not need or want employment, (iv) have given an uncategorised reason for being economically inactive, or (v) have not given a reason for being economically inactive.

⁴ 88 per cent of respondents who were furloughed in September remained in work in October, see: Resolution Foundation, *Post-Furlough Blues*, November 2021; ONS *BICS Survey* wave 42 edition, November 2021 suggested a figure of 87 per cent.

⁵ See Pizzinelli, C., and I. Shibata, Has COVID-19 Induced Labor Market Mismatch? Evidence from the US and the UK, January 2022, and Bank of England, Monetary Policy Report, February 2022.

⁶ Bank of England, Financial Stability Report, December 2021.

The corporate-debt-to-earnings ratio fell over 2021 and is now close to its pre-pandemic level, helped by debt repayments by large companies. This resonates with developments in our fiscal forecast too, where corporation tax receipts have been stronger than expected and losses expected on government-guaranteed loans have been revised down.

C.12 Rising interest rates do pose a risk to companies, especially to smaller businesses who are more reliant on bank funding, but the Government's Bounce Back Loans offer protection from this for the large numbers of small firms who have borrowed at a low fixed rate. Insolvencies have risen since government support was withdrawn, but this may partly reflect some catch-up from unusually low levels during the pandemic. The cumulative number of insolvencies over the past two years remains below pre-pandemic levels. Overall, the pandemic appears less likely to weigh on firms' ability to invest than we feared a year ago.

Services sector
—Manufacturing sector
—All firms

15

10

5

Chart C.2: Private non-financial corporations' net rate of return on capital

Total factor productivity

2001

2003

2005

2007

1999

1997

Source: ONS

C.13 We have reduced our estimate of the contribution of lower total factor productivity to scarring from 0.6 to 0.3 percentage points. A recently updated study using the Bank of England's Decision Maker Panel (DMP) survey data now suggests that pandemic-related scarring on TFP will be close to zero, compared with a previous estimate of 1 per cent. This reflects a greater unwind of the disruptive, but necessary, 'within-firm' adaptations to modes of operation that companies made in order to be Covid-secure. At the same time, firms should maintain the productivity-enhancing adaptations that were induced by the pandemic, such as accelerated digitalisation. Indeed, a recent investment intentions survey suggests digitalisation remains a high priority among large firms. This adds to earlier evidence that

2009

2011

2013

2015

2017

2019

2021

⁷ Bloom, N., et al., The impact of Covid-19 on productivity, February 2022.

⁸ Deloitte, UK CFO Survey Q4 2021, January 2022.

- suggested that allocative efficiency may have held up better than expected during the pandemic. OECD research concluded that job reallocation occurred towards more productive and digital firms, despite job retention schemes, due to "the nature of the shock i.e., one where being online and able to operate remotely were key".
- C.14 While we have judged the recent news to have been, on balance, positive, some scarring is still expected from this TFP channel. Moves to shorten supply chains and to hold larger inventories as a precaution against supply disruption will add to business costs. The disruption to education could also have long-lasting adverse effects for the skill levels of the affected cohorts. And while much of the impact may occur beyond our forecast horizon, there is early evidence pointing to a deterioration in the quality of jobs available to those leaving full-time education.¹⁰

Summary

C.15 Table C.2 summarises how the pandemic-related scarring assumptions described above correspond to the components of our potential output forecast. The scarring figures reflect the difference in the level of each component of potential output, relative to the March 2020 pre-pandemic figures, at the forecast horizon. The table shows the four elements of our potential labour supply forecast broken down into (i) the number of working-age adults in the country; (ii) the proportion of them participating in the labour market; (iii) the number of those that could find employment; and (iv) the average number of hours that they are willing and able to work; which, when combined, give the potential total number of hours worked. It also decomposes trend productivity per hour into contributions from (v) capital shallowing and (vi) TFP to arrive at total scarring of potential output of 2.0 per cent.

Table C.2 Pandemic-related scarring assumptions

	Units	Forecast	t vintage ¹	Scarring ¹		
	Offilis	March 2020	March 2022	Units	Per cent	
Working-age population, (a)	Million	54.8	54.5	-0.3	-0.6	
Trend participation rate, (b)	Per cent	63.8	63.4	-0.4	-0.6	
Trend participation, (c) = $a \times b$	Million	34.9	34.5	-0.4	-1.2	
Trend unemployment rate, (d)	Per cent	4.1	4.1	0.0	0.0	
Trend employment, (e) = $c \times (1-d)$	Million	33.5	33.1	-0.4	-1.2	
Trend average weekly hours worked (f)	Hour	32.0	32.0	0.0	0.0	
Total weekly hours worked, $(g) = e x f$	Million	1,070	1,057	-12.4	-1.2	
Capital shallowing ^{2,3}		1,257	1,154	-103.5	-0.5	
TFP ³					-0.3	
Trend productivity, output per hour (h)2	£ billion (2019 prices)	2,018	2,002	-16.3	-0.8	
Potential output, (i)= g x h	£ billion (2019 prices)	2,159	2,117	-42.3	-2.0	

¹ Value at the March 2020 EFO pre-pandemic forecast horizon from the second quarter of 2024 to the first quarter of 2025.

² In practice, trend productivity (h) depends on the gross capital stock per hour worked adjusted for its output elasticity multiplied by total factor productivity. But to present easily interpretable figures, the first two columns for capital shallowing show cumulative business investment. We use a smoothed version of average hours in this calculation to avoid short-term fluctuations in hours worked unduly affecting this channel's contribution to scarring.

³ Right-hand column shows contribution to scarring, rather than the per cent change in the level of this variable.

⁹ Andrews, D., A. Charlton, and A. Moore, COVID-19, Productivity and Reallocation: Timely evidence from three OECD countries, July 2021. ¹⁰ IFS, Inequality and the Covid crisis in the United Kingdom, January 2022.

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