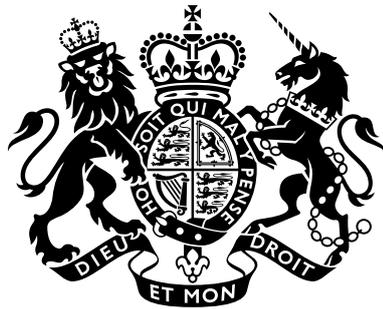


Office for
**Budget
Responsibility**

Economic and fiscal outlook

October 2021



Office for Budget Responsibility: Economic and fiscal outlook

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

October 2021



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ISBN 978-1-5286-2940-9

CCS1021486854 / E02682272 10/21

Printed on paper containing 75% recycled fibre content minimum

Produced by the APS Group.

Printed in the UK by HH Associates Ltd on behalf of the Controller of Her Majesty's Stationery Office.

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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 October 2021 Budget and Spending Review. The forecasts presented in this document represent the collective view of 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.

We have been greatly supported in our work by the staff of the OBR, who have demonstrated enormous flexibility and fortitude in the face of the demands placed on them over the past 18 months. We are, once again, 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 and Industrial Strategy, the Ministry of Justice, the Home Office, the Department for Transport, 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.

While the UK seems to be through the worst of the pandemic, the ongoing rollout of the vaccine and boosters, the risk of vaccine-escaping variants, and the longer-term behavioural legacy of the pandemic remain key considerations for our economic and fiscal forecasts. We have therefore 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 Department of Health and Social Care, the Joint Biosecurity Centre, 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 its economic and fiscal implications. As ever, we retain sole responsibility for all the assumptions in the *EFO*.

We have also held useful discussions with our expert advisory panel, the Bank of England, National Institute for Economic and Social Research, Institute for Fiscal Studies, Resolution Foundation, Institute for Government, International Monetary Fund, and the Centre for Cities about their views on economic and fiscal developments. In particular, we discussed emerging views and evidence on the extent of any medium-term economic scarring as a result of the pandemic, and the channels through which it might be felt. We are very grateful for these discussions, which allowed us to test our own analysis and emerging judgements (although these were not shared with our stakeholders given their market sensitive nature).

The publication date for our forecast was announced on 29 July, well in advance of the required ten weeks notice. Prior to that announcement, the Chancellor requested that we finalise our pre-policy measures fiscal forecast significantly earlier than usual to provide him with more time to complete the multi-year Spending Review negotiations as well as the Budget policy package. This followed the precedent set for the November 2015 Spending Review, the previous multi-year exercise. Specifically, the Chancellor requested more time between the pre-measures fiscal forecast being finalised and the deadline for him to decide on the (usually small) subset of measures that would cause movements in our economy forecast (and therefore needed to be finalised earlier than the full final 'scorecard' that includes all Budget and Spending Review measures). In previous forecasts this has on average been a two to three working day window.

The process for setting the forecast timetable is determined by the requirements of the *Memorandum of Understanding between the Office for Budget Responsibility, HM Treasury, the Department for Work & Pensions and HM Revenue and Customs (MoU)*. It requires the OBR to "consult and agree with the Treasury, DWP and HMRC the scope, timetable and process for delivery of the forecast". In practice, agreeing the timetable requires all parties to balance the competing objectives of: (i) providing the Government with a stable pre-measures forecast against which to make Budget policy decisions and plan public spending; and (ii) incorporating the most up-to-date data possible about the economic and fiscal position. The Chancellor's request for additional time to conclude the Spending Review negotiations alongside the Budget was discussed by signatories of the MoU within this context. Following those discussions, a proposal for a 10-day window was put to the joint OBR-HMT-HMRC-DWP Forecast Liaison Group that formally agreed the forecast timetable on 5 August.

That proposal reflected consideration of the data releases that would not be incorporated in the pre-measures forecast (such as possible GDP revisions in the Quarterly National Accounts release on 30 September), as well as the general risks associated with the likelihood of subsequent developments in the economy, financial markets, and other news that might be material for the forecast. At the point we agreed the forecast timetable, the ONS had already published (on 28 July) indicative estimates of historical revisions that would feature in Blue Book 2021 for the period from 1997 to 2019. That release did not cover the period of the pandemic (2020 onwards), so did not discuss the upward revisions to recent growth rates that appeared in the subsequent Quarterly National Accounts release.

The indicative Blue Book estimates suggested that the level of nominal GDP would be revised up materially, while upward revisions to recent average nominal GDP growth would be modest. The upward revision to the level of nominal GDP would not in itself affect our fiscal forecast because it is simply offset in a correspondingly lower effective tax rate. And given the upward revisions to recent nominal GDP growth were both modest and declining over time, we did not think this would have a significant impact on our fiscal forecast, which benefits from much more timely receipts data. The risks associated with the Quarterly National Accounts were therefore judged to be acceptable, and the data were not included in our pre-measures forecast.

The 10-day window after closing the pre-measures fiscal forecast also created sufficient time to produce an additional provisional post-measures economy forecast, using an interim list of policy measures provided by the Treasury. Given the large size of the policy package, this allowed us to investigate its effects on our economy forecast as thoroughly as possible, to refine our judgements

on the economic impact of the package and individual policy measures, and to ensure that our final economy and fiscal forecasts are consistent. It also meant that the Chancellor was able to refine his final Spending Review plans and Budget policies to ensure that they were consistent with meeting his new fiscal rules with a degree of headroom with which he was content once the consequences of his policy measures for the economy had been factored into our fiscal forecasts.

In order to finalise our pre-measures fiscal forecast to that timetable, we needed to finalise our pre-measures economy forecast materially earlier than normal. Our pre-measures economy forecast has typically closed around 14 working days before the date of publication (and 16 days in context of the 2015 Spending Review). Financial market data (such as interest rate expectations) are finalised earlier still as they provide inputs to the initial phase of a forecast round. For this forecast the pre-measures economy forecast was closed 24 working days ahead of the Budget and Spending Review.

In the event that there is significant news for our economy or fiscal forecasts in the period after they are closed to new data, we commit to reporting the likely implications for the forecast and the Chancellor's fiscal objectives in the associated *EFO* (or at the associated press conference if the news arrives after our documents have been printed). For example, in our March 2021 *EFO* we noted that the increase in interest rates in the period after the forecast was closed would – all else equal – have been sufficient to place underlying debt back on a rising path (breaking one of the Chancellor's fiscal 'principles' that framed that Budget). And at the press conference for our July 2015 *EFO* we reported a change in public sector pay policy that we had been informed about too late to include in the *EFO* itself.

The 30 September Quarterly National Accounts release also included upward revisions to cumulative GDP growth between the fourth quarter of 2019 and the second quarter of 2021 that were not known, and whose effects could not have been anticipated when the forecast timetable was agreed. However, the Quarterly National Accounts were not the only, nor the most significant, piece of forecast-relevant news over the past four weeks. Other developments since we closed the pre-measures economy forecast on 24 September, including energy price rises, increased evidence of supply bottlenecks, and shortages in key occupations, are likely to weigh on the recovery over the next few months, offsetting the upward revisions to outturn data. The sharp rise in energy prices and associated rise in inflation prospects and interest rate expectations since we closed our pre-measures economy forecast (and that we would have been unable to capture even under a normal forecast timetable) are, though, fiscally material.

We set out the potential implications of these developments for our assessment of the economic and fiscal outlook – and prospects for the Chancellor meeting his fiscal objectives – where relevant in this *EFO*. They show that there has been largely offsetting news in respect of real GDP (positive in the first half of 2021, but negative more recently) with neutral implications for our fiscal forecast. And news in respect of interest rates (higher) and prospects for inflation (also higher) is fiscally unfavourable, but not by a sufficient margin to eliminate the Chancellor's headroom against his new fiscal rules.

The *MoU* that governs the forecast timetable was last revised in March 2017, shortly after Parliament passed the current *Charter for Budget Responsibility*. It must be reviewed by signatories within three months of an update to the *Charter*, so with a revised draft *Charter* being presented to Parliament

alongside this Budget, that review will commence immediately. The previous *MoU* review was confined to government stakeholders involved in the forecast process. In this case, to inform our input into the review the OBR will seek the views of all stakeholders (including Parliament and the public) on how the forecast process, and other issues governed by the *MoU*, can be improved to safeguard the performance of our statutory duties (“to examine and report on the sustainability of the public finances” and to do so “objectively, transparently and impartially”¹) – and to ensure they strike the right balance between our equally important responsibilities of: (i) providing the Government with a stable basis for making fiscal policy decisions; and (ii) providing Parliament and the public with an up-to-date understanding of the economic and fiscal implications of those decisions. This review will also provide an opportunity to address a key recommendation of the OECD’s recent external review of the OBR that ambiguities in the forecast process and timetable should be removed.

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 March 2021. The early Budget date and additional time at the end of the process for the Chancellor to finalise policy meant this round needed to take place much earlier than usual. Indeed, with departments being asked to produce the first round of the fiscal forecast over the summer, we brought forward the initial economy forecast to 30 July so that analysts would not need to cancel leave plans at the end of what had already been an intensive 16 months. As this was 18 working days after publication of our 2021 *Fiscal risks report*, the first economy forecast round was necessarily largely a mechanical update to take on the latest data and did not incorporate updated judgements about the outlook for potential output or other key forecast parameters (such as the labour share of income). This economy forecast was sent to the Chancellor on 30 July.
- 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 over the summer. Given the mechanical nature of the updated economy forecast, this round was used to identify key forecast issues to be resolved in future rounds. This forecast was sent to the Chancellor on 1 September, highlighting several key issues that would cause revisions in subsequent rounds.
- In parallel with preparing this initial fiscal forecast, we reviewed the latest evidence on all aspects of potential output that would form the basis of our revised judgement about medium-term pandemic-induced scarring of real GDP. As a result, we were able to inform the Chancellor alongside the initial fiscal forecast on 1 September that we would be revising down our judgement on the degree of economic scarring left by the pandemic in subsequent forecast rounds. At this stage, our judgement was provisional and open to being revised again in later rounds as we completed our discussions with external stakeholders. In the event, those discussions revealed a range of views that we considered to be broadly supportive of our

¹ See Sections 4 and 5 respectively of the 2011 Budget Responsibility and National Audit Act.

provisional judgement, which therefore became our final judgement for this forecast and is detailed in Chapter 2.

- As the process continued, we identified further key judgements that we would need to make to generate our full economy forecast. Where we thought it would be helpful, we commissioned analysis from the relevant analysts 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 6 September which incorporated the provisional change to our scarring judgement.
- On 7 September the Chancellor confirmed that the Budget and Spending Review would be delivered alongside our latest forecast, the date for which he had set on 29 July.
- The second economy forecast provided the basis for a further round of fiscal forecasts. This involved an intensive round of discussions with the officials producing them in order to resolve issues identified in the initial round, as well as undertaking normal scrutiny of proposed changes in forecasting methodology and to assess the forecast implications of recent tax and spending outturns. As has been necessary since the onset of the pandemic, this involved greater reliance on top-down sense-checks to test the plausibility of raw outputs from forecast models. In many cases, the BRC requested changes to methodology and/or the interpretation of recent data. We provided the final version of this second fiscal forecast to the Chancellor on 20 September and met him to discuss the emerging forecast on 21 September.
- Concurrently, we scrutinised the costing of tax and spending measures announced since the March 2021 forecast. As usual, the BRC requested further information and/or changes to almost all the draft costings prepared by departments.
- We then produced a third economy and fiscal forecast, in which we finalised our judgement on the scale and composition of pandemic-related economic scarring, took on the latest data, and incorporated judgements embodied in our fiscal forecast. The economy forecast was sent to the Treasury on 24 September and included financial market data based on the average over the ten working days to 15 September. The final pre-measures fiscal forecast was finalised and sent to the Chancellor on 1 October.
- We used the additional time between this forecast and the deadline for confirming economically significant policy decisions to produce a fuller assessment of the effects of a provisional policy package than has been possible in previous forecasts. We were provided with details of the provisional policy decisions with a potential wider impact on the economy forecast on 7 October, which were taken through the full suite of economic and fiscal forecast models to produce a fourth fiscal forecast on 13 October. The additional iteration allowed the Treasury to consider the implications of these policy measures on our economy and fiscal forecasts and to advise the Chancellor on them to inform his final policy package.
- In line with the agreed timetable, on 15 October 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 to the Treasury on 19 October and a

near-final fiscal forecast on 20 October. All final policy decisions were provided by the Treasury on 21 October and our forecast was then finalised on 22 October.

- The Chancellor wrote to us on 17 October to confirm the fiscal rules within which the Government delivered the Budget and Spending Review and requesting that we assess the Government against these rules in this *EFO*. The new fiscal rules are set out in a draft *Charter for Budget Responsibility* published alongside the Budget. We have assessed the Government against both these proposed new rules and the previous rules that remain in force until the revised *Charter* is approved by Parliament. We were provided with a provisional draft of the revised *Charter* on 18 October and a final draft on 24 October.
- 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 22 October. 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 26 October.

During the forecasting period, the BRC held 36 scrutiny and challenge meetings with officials from other departments, in addition to numerous further meetings at staff level, in addition to 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 22 October.

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 place 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. Following this *EFO*, we have also asked our non-executive members to undertake a review of the decision-making process around the forecast timetable for this Budget to inform the forthcoming review of the *MoU*. The review and its recommendations will be published.

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

The Budget Responsibility Committee



Sir Charles Bean



Andy King

1 Executive summary

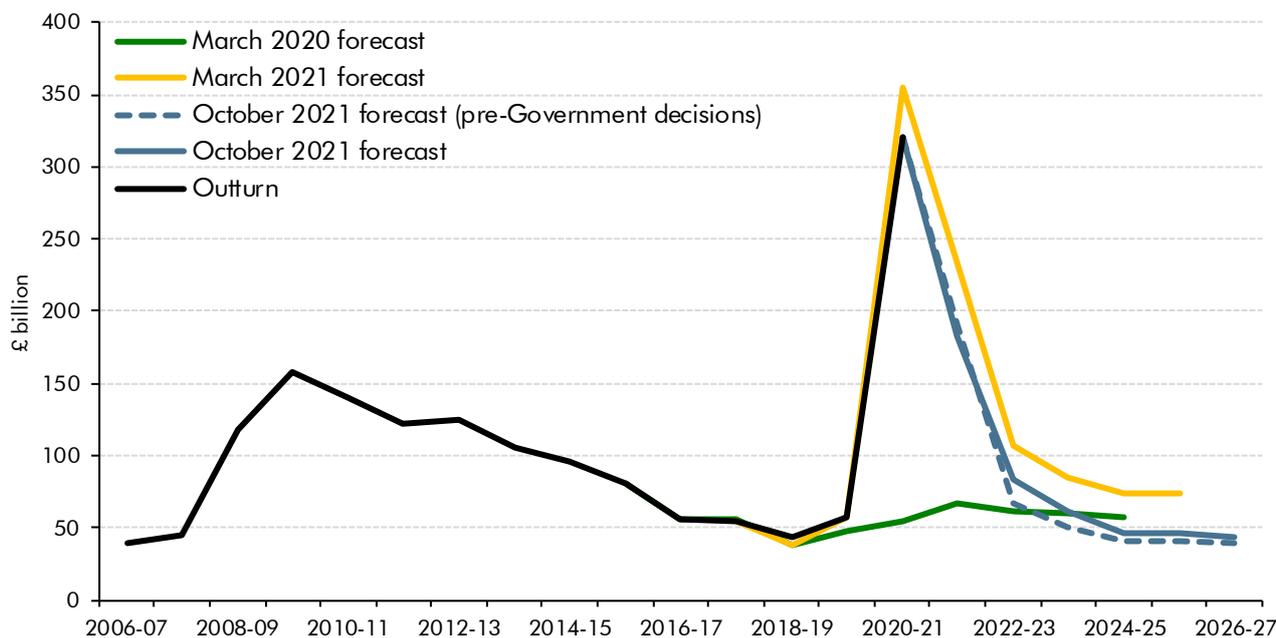
Overview

- 1.1 The successful vaccine rollout has allowed the economy to reopen largely on schedule, despite continuing high numbers of coronavirus cases. The vaccines' high degree of effectiveness, combined with consumers' and businesses' surprising degree of adaptability to public health restrictions, has meant that output this year has recovered faster than we expected in March, boosting tax revenues in the process. The stronger economic recovery has also helped to reduce the fiscal cost of pandemic-related support to below our March forecast. The economy is now expected to grow by 6.5 per cent in 2021 (2.4 percentage points faster than we predicted in March), and unemployment to rise only modestly to 5¼ per cent this winter (1¼ percentage points lower than March), which helps the budget deficit to almost halve to £183 billion in 2021-22 (£51 billion lower than March).
- 1.2 But the strength of the rebound in demand in the UK and internationally has led it to bump up against supply constraints in several markets. In the UK, these supply bottlenecks have been exacerbated by changes in the migration and trading regimes following Brexit. Energy prices have soared, labour shortages have emerged in some occupations, and there have been blockages in some supply chains. These can be expected to hold back output growth in the coming quarters, while raising prices and putting pressure on wages. We expect CPI inflation to reach 4.4 per cent next year, with the risks around that tilted to the upside. News since we closed our forecast would be consistent with inflation peaking at close to 5 per cent next year. And it could hit the highest rate seen in the UK for three decades.
- 1.3 Over the medium term, we have revised up real GDP as we now expect post-pandemic scarring of potential output to be 2 per cent – rather than the 3 per cent we assumed in March. Uncertainty around this judgement remains large, however, with limited evidence as yet regarding how smoothly furloughed workers will be reabsorbed into employment, whether those workers who became inactive or left the country during the pandemic will re-enter the labour force, and how fully shortfalls in capital investment, innovation, and the acquisition of skills will be made up. With inflation also higher and more persistent, we have revised up nominal GDP – the key driver of tax revenues – by 4.1 per cent in 2025-26 relative to March, boosting our pre-measures revenue forecast by 4.5 per cent in that year. While higher inflation also boosts public spending, overall our pre-measures forecast for borrowing is lower by £38 billion a year on average relative to our March forecast.
- 1.4 Against the backdrop of an improved underlying fiscal outlook, the Government has announced a significant discretionary increase in both the tax burden and the size of the post-pandemic state. In particular, the October 2021 Budget and Spending Review delivers:

- **A further net tax rise** amounting to £16.7 billion a year by 2026-27, more than explained by the introduction of a health and social care levy of 1.25 per cent on employees, employers and the self-employed, which raises £18.2 billion by 2026-27, and is only partly offset by tax cuts, principally the freezing of fuel duty for the twelfth year in succession at a cost of £1.6 billion a year. Together with the £31.5 billion in corporate and personal tax increases announced in the March 2021 Budget, and the improved underlying fiscal outlook, these measures raise the tax burden from 33.5 per cent of GDP before the pandemic to 36.2 per cent of GDP by 2026-27, its highest since the early 1950s. Taking his March and October Budgets together, the Chancellor has raised taxes by more this year than in any single year since Norman Lamont and Ken Clarke's two 1993 Budgets in the aftermath of Black Wednesday.
- **A large and sustained increase in public spending** amounting to £22.9 billion a year in 2026-27, comprising a £25.0 billion increase in departmental resource spending and a £3.0 billion boost to universal credit, which is only partly offset by £6.7 billion saved by the temporary move from a triple to double lock for the state pension. Of the roughly £30 billion on average added to departmental budgets in each year of the Spending Review, around half goes directly from the new levy to health and social care with the other half undoing the £18 billion of unspecified cuts to pre-pandemic spending totals made in the last two fiscal events. Together with underlying forecast changes, these discretionary increases take public spending from 39.8 per cent of GDP before the pandemic to 41.6 per cent of GDP in 2026-27, the largest sustained share of GDP since the late 1970s.

1.5 Taking account of both forecast and policy changes announced since March, borrowing falls back below £100 billion next year, declining more slowly thereafter to stabilise at around £44 billion (1.5 per cent of GDP) in the medium term. This leaves borrowing lower in every year than we forecast in March, and down £27 billion in 2025-26 thanks to the £33 billion improvement in the pre-measures fiscal outlook being only partly offset by a net fiscal loosening that declines to £6 billion by that point (Chart 1.1).

Chart 1.1: Public sector net borrowing



Source: ONS, OBR

- 1.6 The improvement in the fiscal outlook is sufficient to enable the Chancellor to meet his fiscal target of getting underlying debt falling as a share of GDP by the third year of our forecast (2024-25 in this one). This new fiscal mandate is codified in a revised draft *Charter for Budget Responsibility* published alongside the Budget, which also includes supplementary targets for balancing the current budget within three years and capping public investment and welfare spending over different periods. All these new targets are set to be met too. Finally, the *Charter* identifies additional measures of debt affordability and public sector balance sheet performance that will guide the Chancellor's management of fiscal policy. In our central forecast, underlying debt falls by 0.6 per cent of GDP in 2024-25, the current budget is in surplus by 0.9 per cent of GDP, public investment averages 0.3 per cent of GDP below its cap, and welfare spending is £2.8 billion below its effective cap. These margins are all well below the historical average three-year ahead forecast error for the current balance of 2.3 per cent of GDP and for the change in debt of 3.8 per cent of GDP.

Economic outlook

Developments since March

- 1.7 The latest vintage of data suggests that the first wave of the pandemic led to a 25 per cent fall in GDP from January 2020 to its trough in April, followed by a strong but fitful recovery over the remainder of last year as public health restrictions were successively loosened and then tightened. In our March forecast, we expected the January 2021 lockdown to cause output to fall by 4.7 per cent in that month, before progressively recovering as the vaccine was rolled out and restrictions eased. In fact, output fell by only 2.4 per cent in January, as consumer spending and business activity proved, once again, more adaptable to the restrictions than we anticipated. From this higher starting level of output, the rollout of the

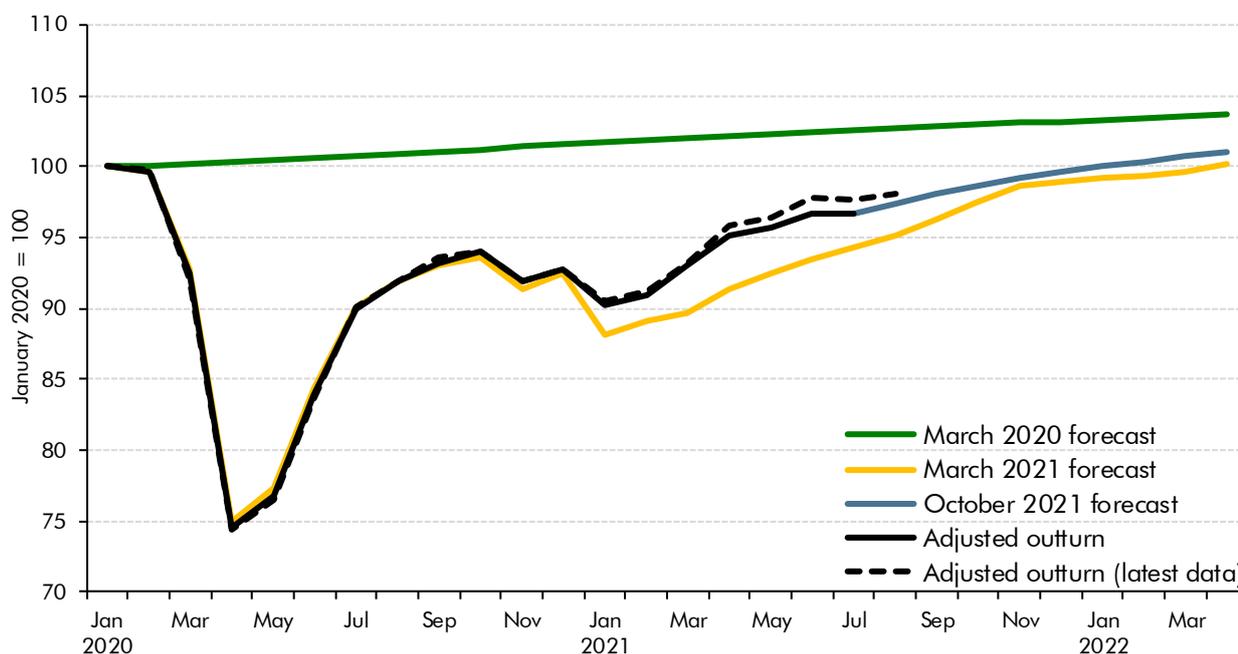
vaccines and lifting of public health restrictions unleashed a stronger than expected rebound in demand that took output to 1.1 per cent below its pre-pandemic peak in August 2021, rather than the 4.9 per cent shortfall we had expected in our March forecast.

- 1.8 The labour market has also proved more resilient than we assumed in March. The reopening of the economy has drawn 3.2 million workers off furlough since March, leaving only 1.3 million on the coronavirus job retention scheme (CJRS) at its closure in September, 0.7 million fewer than we had expected in March. Payroll employees reached record levels at 29 million in September, while the latest estimate for the unemployment rate covering the three months to August has fallen to 4.5 per cent, well below our March forecast of 5.2 per cent for the third quarter. And the demand for labour remains buoyant, with record levels of vacancies (over 1.1 million in the three months to September). Average weekly earnings growth was 7.2 per cent in the three months to August and, while a large part of that reflects unusually depressed earnings a year earlier and compositional effects, there are signs that tightness in some parts of the labour market is boosting wage pressures.
- 1.9 After remaining well below target during most of the pandemic, CPI inflation has risen sharply in recent months, as the rebound in demand here and abroad has run up against supply constraints. Inflation reached 3.1 per cent in September, up from a low of 0.3 per cent in November 2020. Part of the recent increase can be attributed to the arithmetical effect on the annual comparison of unusually low prices a year ago. The rise also reflects increases in global commodity prices, which have raised fuel price inflation in particular. In addition, bottlenecks have emerged in several international product markets and there have been signs of shortages in some domestic markets too, adding to inflation pressures.

Near-term economic outlook

- 1.10 There are indications that the pace of recovery has begun to slow in recent months, with the three-month on three-month GDP growth rate easing from 5.5 per cent in June to 2.9 per cent in August. We expect the pace of growth to continue moderating over the remainder of the year and into next, as supply bottlenecks persist, fiscal support (including the CJRS and £20 a week uplift in universal credit) is withdrawn, and the colder weather drives up coronavirus case numbers and other seasonal infections. Moderating growth also reflects the fact the economy had largely reopened by mid-summer, so leaving fewer further opportunities for 'bounce-back' growth. Nevertheless, GDP is still expected to grow by 6.5 per cent in 2021 and to regain its pre-pandemic level around the turn of the year, some months earlier than we expected in March (Chart 1.2).

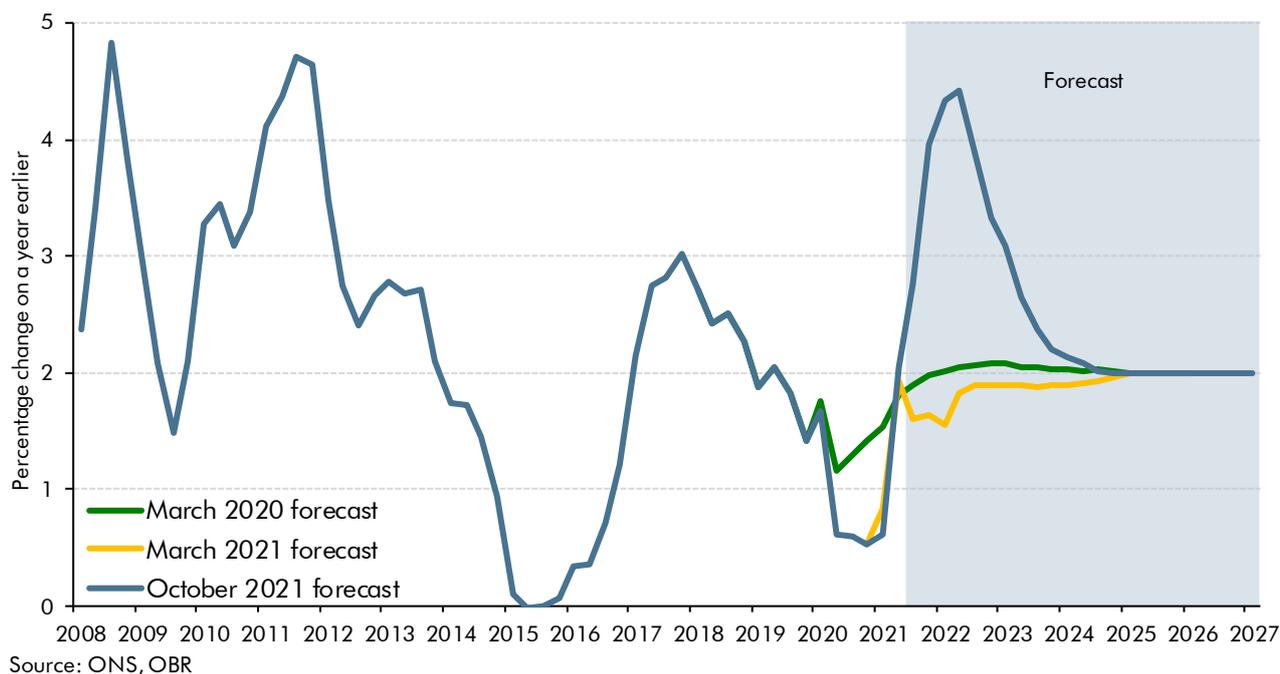
Chart 1.2: Monthly real GDP outturns and near-term forecast



Source: ONS, OBR

- 1.11 CPI inflation is expected to continue to rise, peaking at 4.4 per cent in the second quarter of 2022, 2.6 percentage points higher than in our March 2021 *EFO* forecast. The increase mainly reflects higher utility prices, with the Ofgem energy price cap having increased by 12 per cent in October. We assume that the sharp rise in wholesale gas prices already evident when we closed our forecast to new information will result in another increase in the price cap in April 2022. Inflation is also boosted slightly over the next couple of years by the discretionary fiscal loosening announced in the Budget and Spending Review. The near-term spike in inflation next year is expected to be relatively short lived, with inflation returning to the 2 per cent target in 2024, as energy prices stabilise, supply bottlenecks ease, and a modest tightening in monetary policy counteracts the extra stimulus from the fiscal package.

Chart 1.3: CPI inflation



Medium-term economic prospects

1.12 The success of the vaccine rollout and the Government's coronavirus support schemes has significantly reduced the potential long-run damage to the UK economy from the pandemic. Government support to businesses has helped keep insolvencies around a third below their pre-pandemic average, though they have ticked up in recent months. And the CJRS and self-employment income support scheme (SEISS) have helped preserve employment in the sectors hit hardest by the pandemic. The unexpectedly strong bounce back in activity also means that the unemployment rate is now projected to peak at just 5¼ per cent, 1¼ percentage points less than we forecast in March (equivalent to nearly half a million fewer people looking for work).

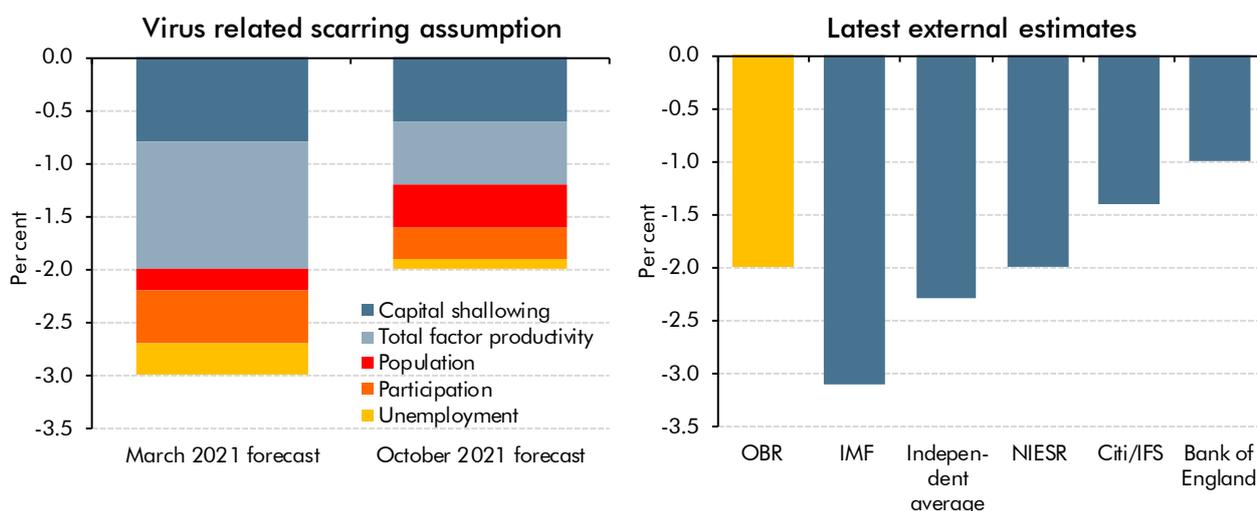
1.13 Reflecting these developments, emerging research, and discussions with outside experts, we have scaled down our estimate of the long-term 'scarring' effect of the pandemic on potential output from 3 to 2 per cent. As summarised in Chart 1.4, these revisions are broadly in line with the latest estimates of other independent forecasters and reflect revisions to our judgements in three areas:

- The **labour supply** component has been revised down from 1.0 to 0.8 per cent. This reflects the net effect of an increase in the population component on the back of higher mortality and lower net inward migration, which is more than offset by reduced contributions from participation and structural unemployment that reflect the recent strong labour market outturns.
- The **capital shallowing** component has been lowered from 0.8 to 0.6 per cent. Investment during the pandemic fell less than the ONS initially estimated and we have revised up our forecast in the medium term. However, even after the upward revision,

the gross capital stock is still 1.6 per cent lower in the medium term compared with our pre-pandemic March 2020 forecast. And permanent changes in the sectoral and spatial distribution of economic activity as a result of the pandemic may require some additional scrapping of existing capital assets.

- The **total factor productivity** component has been lowered from 1.2 to 0.6 per cent, reflecting several considerations. First, government support schemes have limited the damage to corporate balance sheets. Second, investment in intangibles appears to have held up significantly better than investment in tangible capital during the pandemic. Third, the UK's relative position in attracting foreign direct investment, an important driver of innovation, appears to have improved this year. Finally, some recent analysis of business survey data points to a potential boost to productivity from the closing of less productive firms.

Chart 1.4: Pandemic-related scarring assumptions



Note: IMF and Independent average are calculated as the differences between the pre-pandemic and latest projections of GDP up to 2024 in the IMF's *World Economic Outlooks* and the averages in the HM Treasury's *Forecasts for the UK economy* publications.
Source: Bank of England, HM Treasury, IFS, IMF, OBR

1.14 Growth this year has been largely driven by the rebound in consumer spending as restrictions were removed. As we move into next year, quarterly consumption growth drops back to historically more normal rates, although annual growth next year remains high because of the depressed level of spending in the first part of this year. But business spending then picks up the baton, in part on the back of the investment super-deduction announced in the March 2021 Budget. And the fiscal stimulus announced in this Budget provides further support to output over the next two years, adding 0.4 per cent to the level of GDP in 2022-23 and 0.3 per cent in 2023-24. Overall GDP growth next year is 6.0 per cent (though again that high figure largely reflects the weakness in output this year) but annual growth returns to more normal rates, falling to 2.1 per cent in 2023 and 1.3 per cent in 2024, as the boost to output from the fiscal loosening fades and as the super-deduction ends. It then settles at 1.7 per cent at the forecast horizon, with consumption, investment, and government spending providing steady contributions to growth.

1.15 Reduced scarring of potential output over the medium term, coupled with higher inflation in the short term, means that the level of *nominal* GDP is 4.2 per cent higher in 2025 than in our March 2021 forecast. The composition of the upward revision to nominal GDP is also relatively tax rich as:

- The largest contribution on an income basis is from higher labour income, the most important tax base. This reflects reduced scarring, higher whole economy inflation and a higher labour share, with the level of labour income revised up 5.0 per cent in 2025 compared to our March 2021 forecast.
- The largest contribution on an expenditure basis comes from consumer spending, the second most important tax base, where the level in 2025 has been revised up by 5.0 per cent.

1.16 The latest Quarterly National Accounts, released after our pre-measures forecast closed, revised up cumulative real GDP growth since the pre-pandemic peak by 1.1 percentage points (as shown in Chart 1.2 above). But other developments since our forecast closed – including higher energy prices, increased evidence of supply bottlenecks, and shortages in key occupations – are likely to weigh on the recovery over the next few months, offsetting the upward revisions to outturn data. Our judgement is that the news since our forecast was closed is likely to have had broadly offsetting consequences for near-term real GDP such that our forecast remains broadly on track. Furthermore, we judge that the news sheds no meaningful additional light in either direction on our medium-term scarring judgement.

Table 1.1: Overview of the economy forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2020	2021	2022	2023	2024	2025	2026
Output at constant market prices							
Gross domestic product (GDP)	-9.8	6.5	6.0	2.1	1.3	1.6	1.7
GDP per capita	-10.2	6.3	5.6	1.7	1.0	1.3	1.4
GDP levels (2020=100)	100.0	106.5	112.8	115.2	116.7	118.6	120.6
Output gap	-0.4	0.9	0.6	0.5	0.1	0.0	0.0
Expenditure components of real GDP							
Household consumption	-10.9	4.7	9.8	1.3	1.7	1.3	1.0
General government consumption	-6.5	14.7	2.0	1.5	1.2	1.7	2.1
Business investment	-10.2	-2.4	15.7	4.7	-0.8	4.8	5.8
General government investment	3.5	14.7	-2.1	6.5	-1.0	1.1	1.8
Net trade ¹	0.8	-0.8	-2.5	0.3	0.1	-0.1	-0.2
Inflation							
CPI	0.9	2.3	4.0	2.6	2.1	2.0	2.0
Labour market							
Employment (million)	32.5	32.2	32.6	33.0	33.2	33.3	33.4
Average earnings	1.2	5.0	3.9	3.0	2.2	2.9	3.5
LFS unemployment (rate, per cent)	4.6	4.9	4.8	4.3	4.2	4.2	4.2

¹ Contribution to GDP growth.

Fiscal outlook

Developments since March

- 1.17 Borrowing reached a peacetime record of £320 billion (15.2 per cent of GDP) in 2020-21, but was £35 billion (1.7 per cent of GDP) lower than we estimated in March. Almost a third of that difference reflected greater underspending of departmental resource budgets by £10.5 billion (notably in respect of the NHS Test and Trace programme). The remaining two-thirds largely reflected a combination of lower expected losses on pandemic-related loan guarantees (£6.3 billion); lower costs of pandemic-related income support schemes (£1.7 billion); and upside surprises to receipts from a more resilient economy (£8.9 billion).
- 1.18 This stronger fiscal performance continued into this fiscal year, with borrowing expected to almost halve to £183 billion in 2021-22, £51 billion lower than we forecast in March. Four-fifths of this downward revision (£44 billion) reflects higher receipts as the economy has rebounded more strongly than we forecast, with receipts so far this year recovering faster still. Lower spending contributes the remaining £8 billion to the downward revision, which is more than explained by departments continuing to underspend by unusually large amounts relative to their resource and capital budgets (£11.7 billion), and the CJRS and SEISS again costing less than expected (£7.3 billion). Partly offsetting this underspending is the sharp rise in debt interest spending (revised up £15.0 billion since March) due to the spike in RPI inflation in the second half of the year. Taking account of the latest information, we now estimate the total cost of the Government's pandemic-related rescue measures to have been £315 billion, of which around half went to public services, 30 per cent went to households and 20 per cent went to businesses.

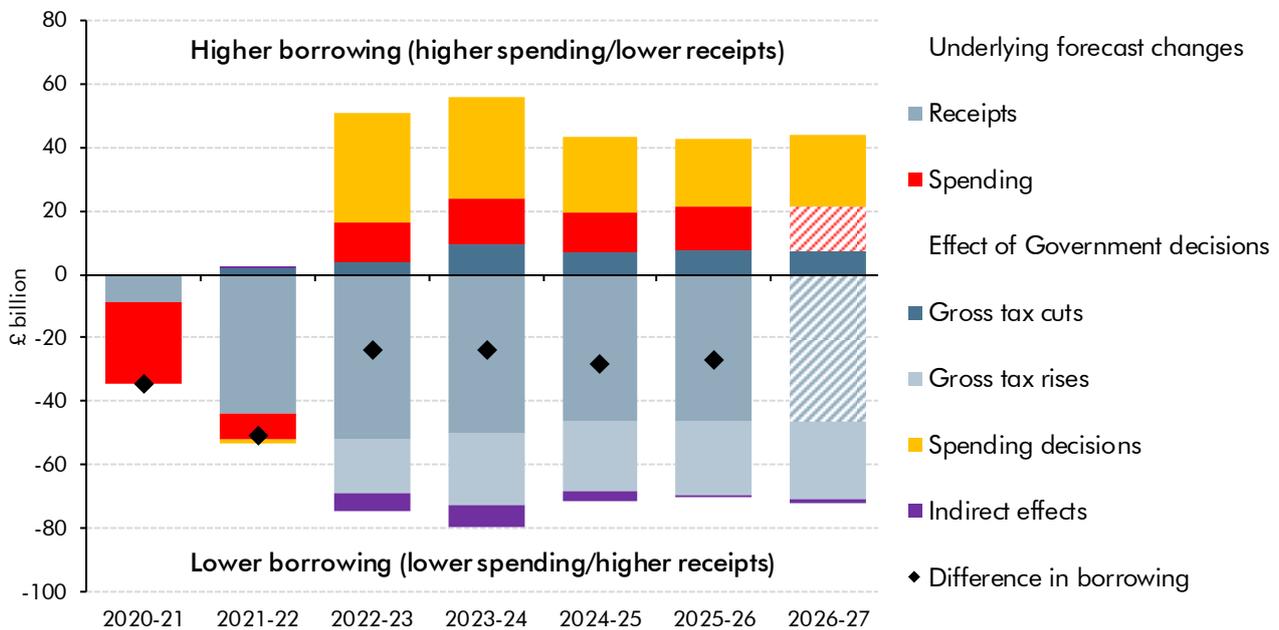
Fiscal prospects

- 1.19 The stronger underlying fiscal position this year, coupled with higher nominal GDP over the medium term, provided the Chancellor with significantly more fiscal room for manoeuvre going into his first three-year Spending Review – which he increased further through net tax rises. Chart 1.5 shows that over the Spending Review period (2022-23 to 2024-25):
- **Forecast changes** reduce borrowing relative to our March forecast by around £35 billion a year over the Spending Review period, with growth and inflation increasing receipts by around £50 billion a year but also pushing up spending on welfare, debt interest, and other items by around £15 billion a year.
 - On top of this pre-measures windfall, the Chancellor has **announced net tax rises** from next year that raise a further £15 billion a year relative to our March forecast, most notably in the form of the new health and social care levy announced in September.
 - With an extra £50 billion a year of additional resources to deploy in this Budget and Spending Review, the Chancellor has **increased spending** by around £30 billion a year – with about half going directly from the new levy into the NHS and social care

budgets and half undoing the £18 billion of cuts to pre-pandemic departmental spending totals pencilled in at the March 2021 Budget.

- **Other measures** largely offset, with over £2 billion increasing the generosity of universal credit and £2 billion freezing fuel and other duties, while switching to inflation uprating of state pensions for a year saves around £6 billion.
- The Chancellor keeps the remaining £20 billion a year in extra revenue to **reduce borrowing** (which is given an added boost of £5 billion a year by the stimulative effect of the fiscal easing).

Chart 1.5: Changes to public sector net borrowing since March 2021



Note: Since 2026-27 was beyond the forecast horizon in March 2021, the hashed bars are indicative of underlying forecast changes for that year and equate to 2025-26 forecast changes.
 Source: ONS, OBR

1.20 Overall, borrowing falls sharply next year as pandemic support rolls off, more than halving again to £83.0 billion (3.3 per cent of GDP), before declining more gradually to reach £44.0 billion (1.5 per cent of GDP) in 2026-27. This leaves borrowing at the forecast horizon 1.0 per cent of GDP lower than it was before the pandemic in 2019-20, and at a level that would be the lowest for 25 years. Relative to our pre-pandemic March 2020 forecast, borrowing is £116.4 billion higher this year, but the upward revision declines quickly to take borrowing £11.6 billion below our pre-pandemic forecast in 2024-25. This reflects the £46.6 billion effect of the Government’s subsequent policy decisions (and their indirect effects) by 2024-25 more than offsetting pandemic-related scarring and other effects that add £35.0 billion to borrowing in that year (Table 1.2).

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		
March 2021 forecast	354.6	233.9	106.9	85.3	74.4	73.7	
October 2021 forecast	319.9	183.0	83.0	61.6	46.3	46.4	44.0
Difference since March 2020	265.2	116.4	21.5	1.4	-11.6		
of which:							
Underlying differences ¹	95.6	57.9	21.1	28.6	35.0		
Direct effect of Government decisions ²	220.2	86.1	11.2	-17.3	-40.8		
Indirect effect of Government decisions	-50.6	-27.7	-10.8	-10.0	-5.7		
Difference since March 2021	-34.7	-50.9	-23.9	-23.8	-28.1	-27.3	
of which:							
Underlying differences ¹		-51.6	-39.4	-35.2	-33.6	-32.7	
Direct effect of Government decisions		-0.2	21.1	18.6	8.4	6.0	6.1
Indirect effect of Government decisions		0.9	-5.5	-7.1	-3.0	-0.6	-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 Includes classification changes.

² The cost of policy decisions announced up to and including at SB21 has been adjusted to include significant updates to estimates via the usual recosting process.

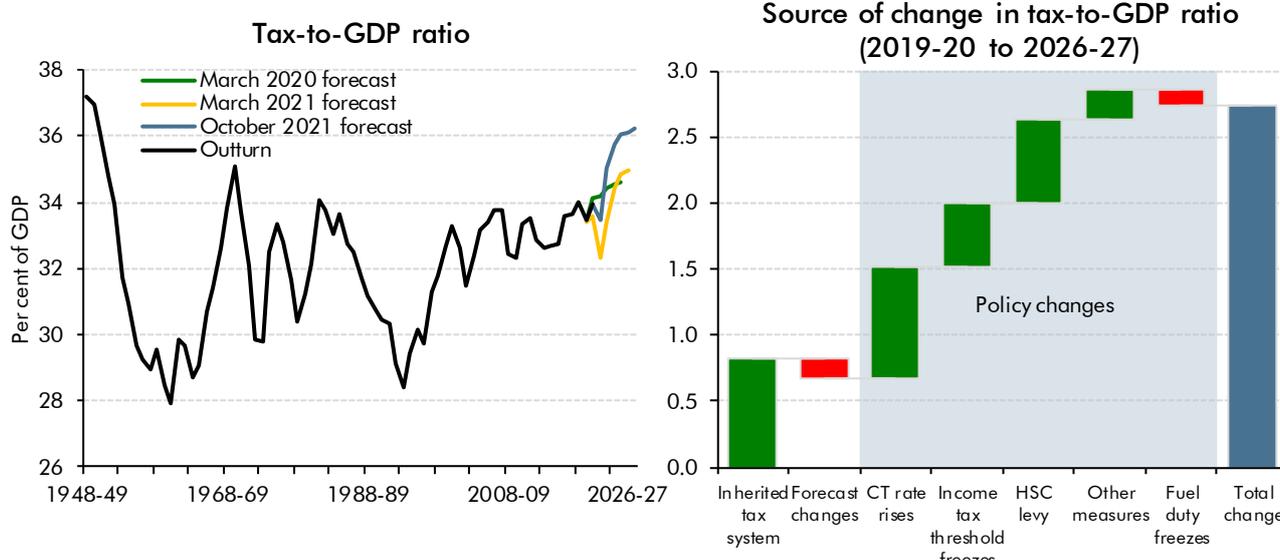
The tax burden

1.21 Stronger and more tax-rich growth, coupled with the tax rises announced over the last two Budgets, raise the tax burden from 33.5 per cent of GDP recorded before the pandemic in 2019-20 to 36.2 per cent of GDP by 2026-27 – its highest level since late in Clement Attlee’s post-war Labour Government in the early 1950s.¹ Alongside a modest increase reflected in the plans the Chancellor inherited in March 2020, this 2.7 percentage point increase in the tax take is largely thanks to the combined effects of three tax rises announced by this Chancellor:

- **Increases in the main rate of corporation tax** to 25 per cent from April 2023 onwards, as a result of the cancelling of the cut from 19 to 17 per cent at the March 2020 Budget and then raising the rate from 19 to 25 per cent at the March 2021 Budget. These together raise £25.7 billion (0.9 per cent of GDP) a year by 2026-27.
- The five-year **income tax personal allowance and higher rate threshold freeze** from the March 2021 Budget, which raises £13.9 billion (0.5 per cent of GDP) by 2026-27.
- September’s announcement of a new **health and social care levy** of 1.25 per cent on employees, employers and the self-employed directly raises £18.2 billion (0.6 per cent of GDP) by 2026-27 (although net of its effect on wages it raises £15.0 billion).

¹ This refers to the National Accounts measure of taxes and National Insurance contributions.

Chart 1.6: Taxes as a share of GDP and sources of change since March 2020

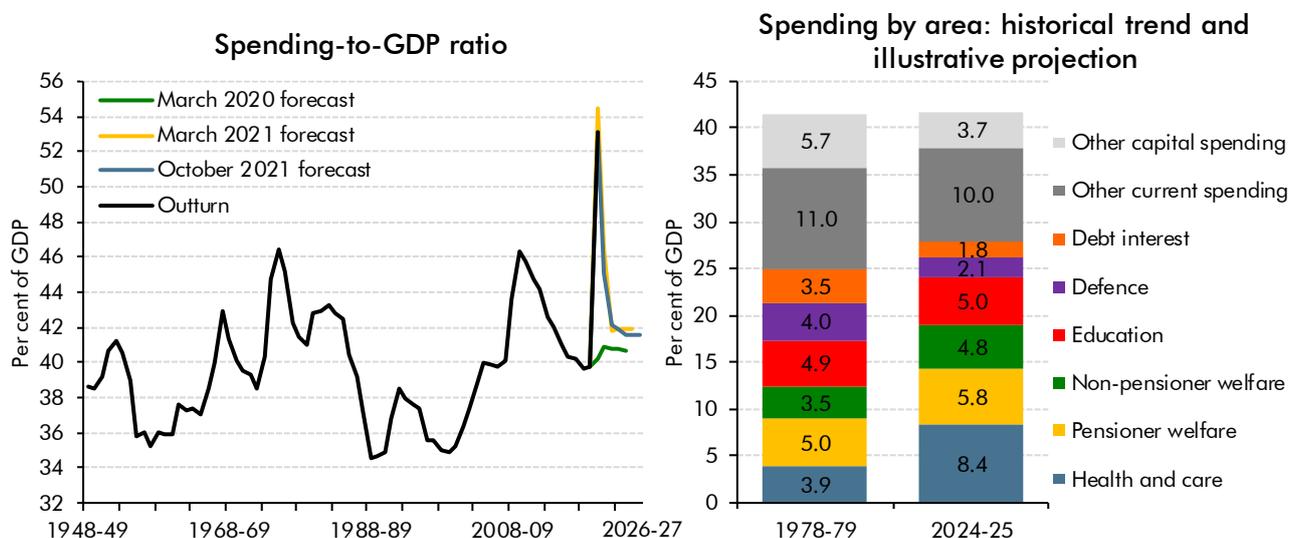


Note: Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the National Accounts tax-to-GDP ratio by 0.8 per cent of GDP across the forecast. This would still leave the tax-to-GDP ratio at its highest since 1951.
Source: ONS, OBR

The size and shape of the state

1.22 The Chancellor uses around half of the improved underlying picture and increase in tax revenue relative to our March forecast to permanently increase the size of the post-pandemic state. Public spending falls back sharply from its peacetime high of 53.1 per cent of GDP in 2020-21 to 45.1 per cent this year and to 42.1 per cent next year as pandemic-related support comes to end. However, spending stabilises at 41.6 per cent of GDP from 2024-25 onwards, 0.9 per cent of GDP higher than in our March 2020 forecast, and the highest sustained level since the late 1970s. The composition of the post-pandemic state in the final year of the Spending Review reflects how our society and our world have changed in the intervening half a century. Spending on health, social care and pensioner welfare has grown by two-thirds as a share of GDP since the late 1970s, from 8.9 to 14.2 per cent of GDP, as society ages. Spending on debt interest and defence has almost halved as a share of GDP in that time reflecting falling interest rates and the end of the Cold War. By contrast, capital spending on housing, transport, and other infrastructure is lower than in the late 70s, although gross public investment (including that on health and other areas) reaches 5.0 per cent of GDP, its highest sustained level for 40 years.

Chart 1.7: Spending as a share of GDP and change in the composition of spending



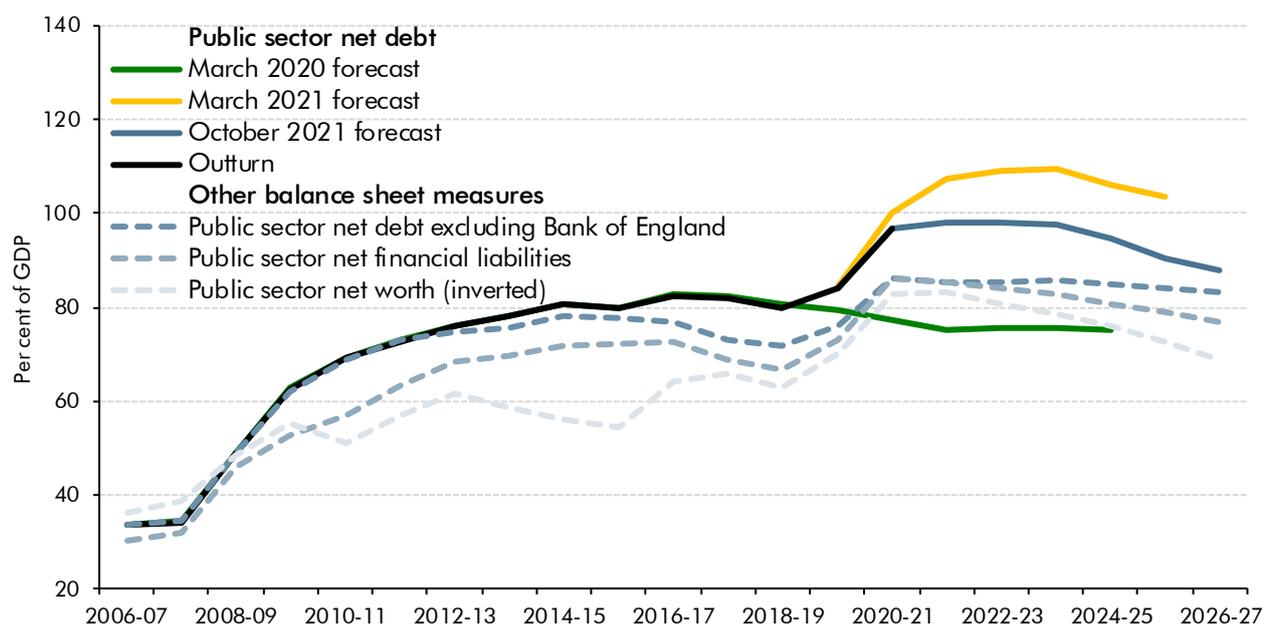
Note: Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the spending-to-GDP ratio by 1.0 per cent of GDP across the forecast.

Source: Bank of England, DHSC, DWP, HMT, IFS, ONS, OBR

The public sector balance sheet

- 1.23** Lower borrowing over the forecast period means that public sector net debt is now forecast to peak below 100 per cent of GDP at 98.2 per cent this year. It remains broadly stable in 2022-23 and 2023-24, before falling by larger amounts thereafter to reach 88.0 per cent of GDP in 2026-27. By 2024-25 debt is still over 19 per cent of GDP above its pre-pandemic level but 11.5 per cent of GDP lower than we forecast in March, thanks largely to the improved borrowing outlook. The pace at which debt falls towards the end of the forecast is flattered by the winding down of the Bank of England's Term Funding Scheme. On an underlying basis, excluding the Bank, debt peaked at 86.1 per cent of GDP last year and is expected to fall slightly this year thanks to the strong rebound in nominal GDP. But it rises again in 2022-23 and 2023-24, when it peaks again at 85.7 per cent of GDP, before falling more gradually from 2024-25 onwards.
- 1.24** Broader measures of the public balance sheet follow a lower path than narrow measures of public debt and they fall more quickly over the forecast period. This reflects the fact that some debt accumulation during that period finances the acquisition of public sector assets and that the value of some assets is forecast to rise. This is the case for public sector net financial liabilities, which covers all liabilities and all financial assets (so reflects the assets associated with student loans, for example). It is even more so for public sector net worth (which includes non-financial assets too), which we forecast for the first time in this EFO.

Chart 1.8: Public sector net debt and other balance sheet measures



Source: ONS, OBR

Table 1.3: Overview of the fiscal forecast

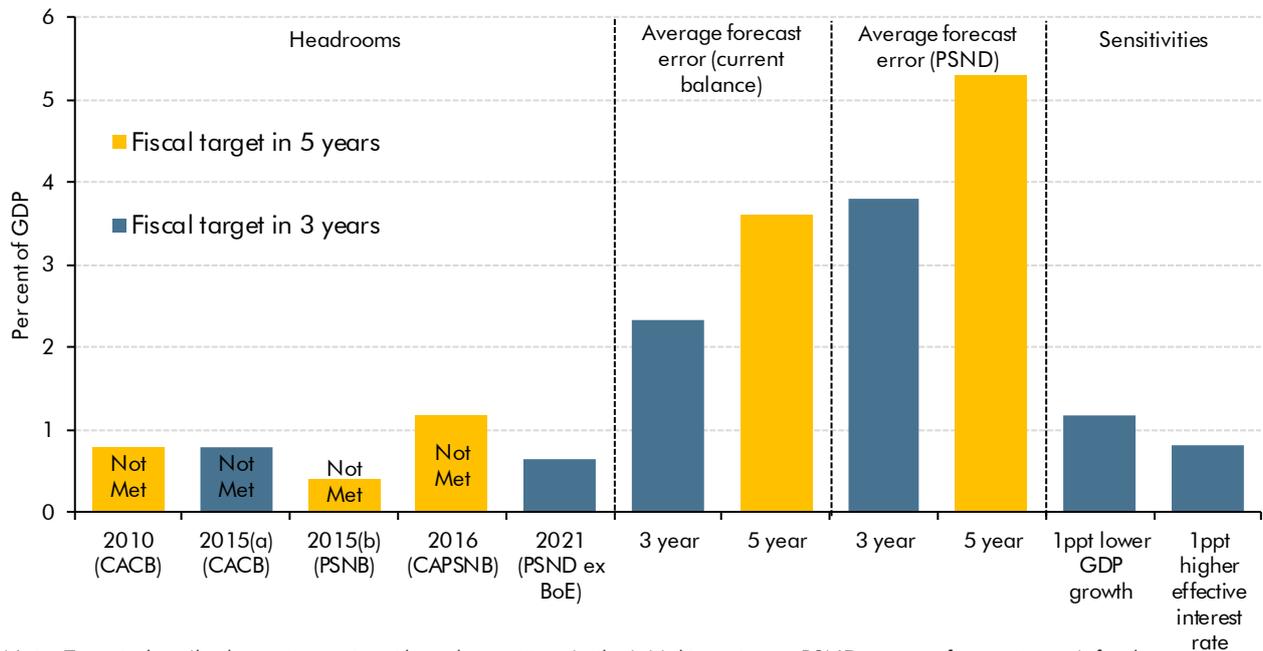
	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Revenue and spending							
Public sector current receipts	37.9	37.2	38.8	39.6	39.8	39.9	40.0
Total managed expenditure	53.1	45.1	42.1	41.9	41.6	41.6	41.6
Deficit: Current supplementary targets and previous fiscal mandate measures							
Current budget deficit	11.8	5.3	0.6	-0.5	-0.9	-1.0	-1.1
Public sector net investment	3.5	2.6	2.7	2.9	2.7	2.7	2.7
Public sector net borrowing	15.2	7.9	3.3	2.4	1.7	1.7	1.5
Cyclically adjusted net borrowing	15.1	8.3	3.9	2.7	1.8	1.7	1.5
Debt: Current fiscal mandate and previous supplementary target measure							
Public sector net debt ex BoE	86.1	85.2	85.4	85.7	85.1	84.2	83.3
Public sector net debt	96.6	98.2	97.9	97.8	94.7	90.5	88.0
£ billion							
Revenue and spending							
Public sector current receipts	795.3	862.0	962.4	1,020	1,061	1,102	1,148
Total managed expenditure	1,115	1,045	1,045	1,081	1,108	1,148	1,192
Deficit: Current supplementary targets and previous fiscal mandate measures							
Current budget deficit	247.3	122.9	15.8	-12.5	-25.1	-28.1	-32.9
Public sector net investment	72.7	60.1	67.2	74.1	71.4	74.5	76.9
Public sector net borrowing	319.9	183.0	83.0	61.6	46.3	46.4	44.0
Cyclically adjusted net borrowing	316.7	191.2	96.1	69.7	48.4	46.5	44.0
Debt: Current fiscal mandate and previous supplementary target measure							
Public sector net debt ex BoE	1,905	2,055	2,164	2,245	2,307	2,368	2,430
Public sector net debt	2,136	2,369	2,479	2,561	2,567	2,546	2,567

Performance against the Government's fiscal targets

- 1.25 The Government has published a draft update to the *Charter for Budget Responsibility* proposing a new set of fiscal targets. These include a revised fiscal mandate and three supplementary targets. Once approved by Parliament, they will replace those in the existing *Charter*, in which the near-term targets expired in 2020-21. In our central forecast, all four of the new targets are more likely to be met than missed, but by relatively modest margins.
- 1.26 The new fiscal mandate is:
- 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. In the current target year of 2024-25 the rule is met by a margin of 0.6 per cent of GDP (£17.5 billion).
- 1.27 The three supplementary targets are:
- To balance the **current budget** by the third year of the rolling forecast period. The target is met by a margin of 0.9 per cent of GDP (£25.1 billion) in 2024-25.
 - To ensure that **public sector net investment** does not exceed 3 per cent of GDP on average over the rolling five-year forecast period. In our forecast, it averages 2.7 per cent of GDP, and remains below the cap by 0.3 per cent of GDP (£7.3 billion a year) on average.
 - To ensure that a subset of **expenditure on welfare** is contained within a predetermined cap and margin set by the Treasury (the 'welfare cap'). The welfare cap has been reset in line with our central forecast, so is met by £2.8 billion due to the 2 per cent headroom that the cap affords.
- 1.28 Although the Chancellor is expected to meet his mandate and supplementary targets in our central forecast, the headroom he has left himself (Chart 1.9) is small relative to:
- **The headroom sought by previous Chancellors.** The Chancellor's headroom against debt falling in 2024-25 is smaller than the headroom George Osborne gave himself when setting his first fiscal mandate in 2010 and smaller than Philip Hammond gave himself in 2016, but is larger than George Osborne gave himself when setting his second fiscal mandate in 2015. None of these previous mandates were met.
 - **Typical forecast errors.** Headroom of 0.6 per cent of GDP in three years' time is only a sixth of the size of the average three-year-ahead forecast error in respect of the year-on-year change in the debt-to-GDP ratio over the past 23 years of official Treasury and OBR fiscal forecasts.
 - **Sensitivities to individual determinants of the public finances.** With both tax and spending totalling around 40 per cent of GDP, modest changes in either could easily wipe out the Chancellor's headroom. For every 1 percentage point shortfall in GDP,

1.2 per cent of GDP would be subtracted from headroom. And for every 1 percentage point rise in interest rates at all maturities, 0.8 per cent of GDP would be lost. The salience of the latter sensitivity is brought home by the rise in market expectations for Bank Rate on average across 2024-25 since we closed our forecast, which has taken them to 0.3 percentage points above our forecast. Combined with news about inflation and energy prices since we closed the forecast, we estimate that the Chancellor’s headroom has already been reduced by £1.9 billion.

Chart 1.9: Headroom against fiscal targets at introduction relative to typical forecast errors and fiscal sensitivities



Note: Targets described as met or not met based on outturn in the initial target year. PSND average forecast error is for the year-on-year change as a percentage of GDP. Sensitivities show the change in the proposed fiscal mandate headroom in 2024-25. Source: OBR

2 Economic outlook

Introduction

2.1 This chapter describes:

- our assumptions relating to the **coronavirus pandemic** (from paragraph 2.3);
- other conditioning assumptions in respect of **fiscal and monetary policy, and asset prices** (from paragraph 2.9);
- our latest assessment of the possible **economic scarring** caused by the pandemic (from paragraph 2.23), including the potential economic implications of the behavioural changes it has induced (Box 2.2);
- **near-term developments** and **the outlook for real GDP** over the short and medium term (from paragraph 2.42);
- the associated paths for the **expenditure components of GDP** and for the **property market** (from paragraph 2.55);
- the outlook for the **labour market** (from paragraph 2.74);
- the prospects for **inflation** (from paragraph 2.86);
- the associated paths for **nominal GDP** (from paragraph 2.94) and **sectoral balances** (from paragraph 2.99); and
- how our economic forecast compares with a range of recent **external forecasts** (from paragraph 2.101).

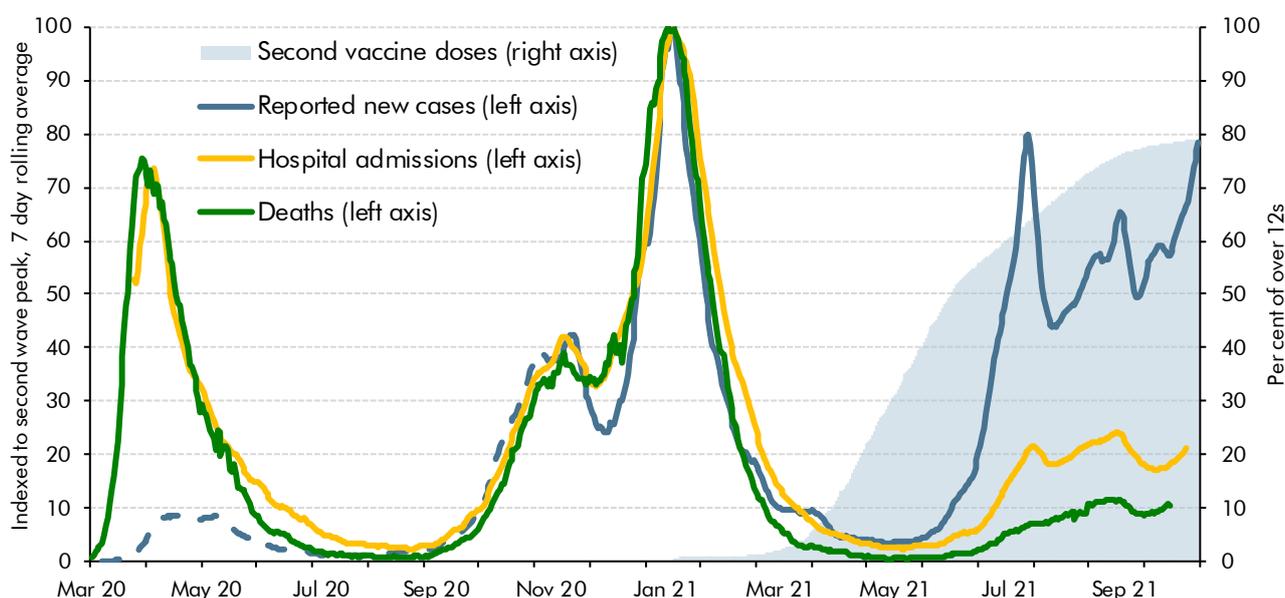
2.2 In the Foreword to this document we set out the timetable that was followed in producing the forecasts presented here. We finalised our pre-measures economy forecast on 24 September, based on financial market prices covering the 10 days to 15 September. This was earlier than usual in order to give the Chancellor a stable base on which to make decisions for the Budget and multi-year Spending Review. This means that our economy forecast does not incorporate data contained in the Quarterly National Accounts release on 30 September, any of the data released in October (covering monthly GDP, inflation and labour markets), or the latest developments in energy and financial markets. Our judgement is that news since our forecast was closed is likely to have had broadly offsetting consequences for near-term real GDP (with revisions to output growth during the pandemic raising it, but subsequent news pointing to a slowing in momentum), such that our forecast

from the first half of next year is broadly on track. We also do not believe that this news has a material bearing on our assessment of the medium-term scarring of real GDP resulting from the pandemic. Throughout the chapter we note where the latest news differs from specific elements of our forecast.

Pandemic assumptions

2.3 Since our March forecast, the course of the pandemic, vaccine rollout, and associated public health restrictions have unfolded broadly as we expected, with positive developments on the vaccine balancing more adverse news concerning the Delta variant. As reported in Table 2.1, the speed of vaccine rollout and their effectiveness in preventing hospitalisations and deaths surpassed initial expectations. Public health restrictions were lifted in line with the Government’s Roadmap, with the exception of Step 4 (lifting of remaining restrictions on hospitality, nightclubs, and large events) which was delayed four weeks to 19 July – a delay that was probably of little economic or fiscal consequence. This was partly counterbalanced by the arrival of the more transmissible Delta variant, which meant case numbers remained elevated through the summer and autumn, though the successful vaccine rollout has limited the associated rise in hospitalisations and deaths (Chart 2.1).

Chart 2.1: Coronavirus cases, hospitalisations, deaths, and vaccines



Note: Second wave peak is the maximum between 1 December 2020 and 31 March 2021. Hospital admissions are advanced by 3 days, and deaths by 15 days. Dashed line denotes artificially low case numbers driven by lower testing rates, before testing capacity increased by 31 October 2020.

Source: GOV.UK, OBR

Table 2.1: Developments against epidemiological assumptions in March 2021 EFO

Assumption	News since March 2021	Outcome compared to central assumption in March 2021
Pace of vaccine rollout	↑	All adults were offered a first dose by 19 July, 12 days earlier than assumed.
Vaccine take-up	—	Take-up has been broadly in line with the central assumption, of 95% for ages 80+, 85% for 50-80, and 75-85% for under 50s.
Effectiveness of vaccines	↑	Vaccination estimated to be 92-96% effective against hospitalisation, at the top of the assumed range of 80-98%.
Vaccine transmission impact	—	Vaccination estimated to be 62-73% effective against infection (and therefore transmission), in line with the assumed 60-94%.
New variants	↓	None assumed, but Delta is more transmissible (vaccination is 7-14ppts less effective at preventing infection with Delta than Alpha).
Duration of immunity	↓	No waning immunity modelled (although it was expected). Recent studies suggest some waning efficacy; boosters are being offered.
Seasonality of infections	—	Seasonal pattern thought likely but not modelled. Winter still thought to cause rising infections; by how much remains unclear.
Precautionary behaviour	↑	Some waning assumed, but evidence for compliance beyond restrictions; 82% surveyed in October reported mask-wearing.
New treatments/therapeutics	—	No highly impactful new treatment since March, as assumed, but promising early trials for antiviral treatments create upside risk.

Key:

- Broadly as expected
- ↑ Better than expected
- ↓ Worse than expected

2.4 Despite the ending of most legal restrictions, voluntary social distancing has remained elevated relative to pre-pandemic levels. In early October, adults had around 3 daily contacts compared to a pre-pandemic average of nearly 11,¹ while 39 per cent of adults reported that they always or often maintained social distancing when meeting people outside their household. This summer's 'pingdemic', which at its peak in the fortnight from 7 July saw nearly 1.3 million people asked to self-isolate by the NHS Covid-19 app, also slowed the recovery in social mixing and constrained labour supply. The impact of self-isolation should be smaller in the future, as the Government has relaxed regulations such that only the unvaccinated will need to isolate after contact with an infected person, while school bubbles and associated isolation requirements have also ended.

2.5 Infections are likely to rise over the autumn and winter as indoor mixing increases, but the UK is in a considerably better position to cope with relatively high case numbers than this time last year due to the vaccine programme. The latest ONS survey estimated that in the last week of August, 93.6 per cent of the population in England had antibodies from either vaccines or natural immunity, compared to 10 per cent in December 2020, as the Alpha variant was taking hold.² In addition, booster vaccines for the over-50s and younger adults with health conditions, assuming rapid rollout and high uptake, are expected to help

¹ Recent daily contact data from Jarvis, C. et al., *CoMix study - Social contact survey in the UK*, September 2021; pre-pandemic average from Mossong, J. et al., *Social Contacts and Mixing Patterns Relevant to the Spread of Infectious Diseases*, March 2008.

² ONS, *Coronavirus (COVID-19) latest insights: Antibodies*, October 2021.

counteract waning immunity and so limit further hospitalisations and deaths. The Government's Autumn and Winter Plan therefore implies relatively few legal restrictions, with the contingency Plan B requiring the reimposition of only relatively modest additional restrictions in order to keep hospital admissions under control.³ In line with the Government's plan, in our central forecast we assume that higher case numbers lead to either a modest tightening of public health restrictions or an increase in voluntary social distancing. This is assumed to be enough to limit the pressure on the NHS sufficiently to avoid another national lockdown.

- 2.6 In the medium term, coronavirus is most likely to circulate in the population as an endemic disease. The most recent studies suggest that current vaccines reduce household transmission of the virus by 40 to 50 per cent.⁴ The virus will thus continue to cause infections, but the protection conferred by the combination of vaccinations, boosters, or having had a previous infection mean fewer people should get seriously ill or die. Higher resistance and better treatments are likely to result in relatively limited adverse impacts on mortality, concentrated among the aged and the clinically vulnerable (as with existing respiratory viruses).
- 2.7 However, there remains considerable uncertainty about the post-pandemic outlook. If novel vaccine-resistant variants result in continued risk of serious illness among a significant proportion of the population, tighter public health restrictions and greater voluntary social distancing may be necessary, with a more lasting impact on the economy. And, as discussed in Box 2.2, the pandemic may also have lasting impacts on wider behaviours, for example in respect of working practices, consumption patterns, international travel, and supply chain management, which could leave their own economic legacy.
- 2.8 The risks around the epidemiological outlook in the UK are skewed to the downside. The key downside risk lies in the emergence of a vaccine-resistant variant, or one that requires vaccine modification, which might require the reintroduction of stricter public health restrictions while the modified vaccines were developed, manufactured, and deployed. In the shorter term, more rapidly waning vaccine immunity and a stronger than expected seasonal spike in coronavirus and other infections could lead to more rapidly rising hospitalisations over the winter, which could, in turn, require the temporary reintroduction of restrictions. The effective rollout of a vaccine booster programme should help to mitigate this risk.

Key economy forecast assumptions

- 2.9 Other, more conventional, conditioning assumptions are needed to produce our economic forecasts. As mandated by Parliament, we base our forecasts on the Government's current stated policies on taxes, public spending, and financial transactions. We also normally base our forecasts for interest rates on those implied by market prices shortly before the forecast is finalised. But, as outlined below, on this occasion we have departed from this practice in

³ HM Government, *COVID-19 Response – Autumn and Winter Plan 2021*, September 2021.

⁴ Harris, R. et al., *Effect of Vaccination on Household Transmission of SARS-CoV-2 in England*, August 2021.

order to reflect the discretionary fiscal easing announced in the October 2021 Budget and Spending Review. We also make assumptions about the outlook for the world economy, including the UK's major trading partners, which are informed by the IMF's latest forecasts.

Fiscal policy

- 2.10 The pandemic prompted an unprecedented peacetime fiscal expansion. Relative to pre-pandemic plans, £229 billion of public spending was added in 2020-21 alone, as the Government responded to the increased pressures on the health services and provided support to households and businesses while activity was constrained. As of July 2021, the UK had offered higher levels of discretionary fiscal support than 14 of 20 other advanced economies.⁵ Considerable support remains in place in 2021-22.
- 2.11 The overall fiscal stance underpinning our forecast is characterised by a sharp tightening between 2021-22 and 2024-25 as pandemic-related fiscal support is withdrawn – the structural deficit falls from 8.3 to 1.8 per cent of GDP over those three years. This profile is dominated by previously announced policy measures and developments that flow from our pre-measures economy forecast. The contribution of discretionary fiscal policy measures announced in the Budget and Spending Review has been to loosen the fiscal stance materially in 2022-23 (by 0.8 per cent of GDP) and then by diminishing amounts thereafter (reaching 0.2 per cent of GDP in 2026-27). This reflects large rises in departmental spending that are only partly financed by tax increases, including the introduction of a new health and social care levy that was announced on 7 September.
- 2.12 Box 2.1 summarises how our economic forecast has been affected by all the policy measures announced since our March 2021 forecast, including in this Budget and Spending Review. Chapter 3 and Annex A describe the corresponding fiscal impacts. Further detail about individual Budget measures is set out in the Treasury's documents.

Box 2.1: 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 the fiscal policy measures over and above their immediate effect on demand, through raising 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 somewhat tighter monetary policy response in order to keep inflation at its 2 per cent target.

Overall, the Budget increases the level of GDP in 2022-23 by 0.4 per cent, with growth slightly weaker thereafter as the direct effect of discretionary easing fades. Our estimate of the fiscal impulse excludes the cost of raising the overseas aid budget back to 0.7 per cent of gross national income that is likely to have negligible impact on domestic demand. One risk to our estimates is that the prevalence of labour shortages and supply bottlenecks could mean that the

⁵ IMF, *Database of Fiscal Policy Responses to Covid-19*, October 2021.

effect of the Budget on output could be less than usual, with more of the effect felt in higher inflation instead.

As increased activity adds to inflationary pressure and the full extent of discretionary easing is unlikely to have been anticipated by market participants when we closed our pre-measures interest rate forecast on 15 September, we have incorporated into our post-measures forecast an additional monetary policy response above that reflected in the path of market expectations for Bank Rate. This takes Bank Rate up to 0.75 per cent by the fourth quarter of 2023, 0.2 percentage points above our pre-measures forecast assumption in that quarter, and it remains at that level thereafter. This is consistent with inflation returning to the target in the medium term based on our post-measures forecast (see paragraph 2.15).

The temporary **increase in NICs** followed by its replacement by the new health and social care levy leaves labour supply unchanged, with income and substitution effects assumed to offset. While the statutory incidence of employer NICs and the equivalent element of the levy is on businesses, we assume the economic incidence of the tax is passed through entirely to lower real wages in the medium term, with 80 per cent of the increase passed through to workers via lower nominal wages and 20 per cent to consumers via higher prices. The pass-through does not take place immediately, however, with firms absorbing 20 per cent of the cost in lower profits in the first year. This leaves nominal earnings 0.5 per cent lower and prices 0.1 per cent higher from 2023-24 onwards.

We have made several other adjustments to our economy forecast for the measures announced in this Budget:

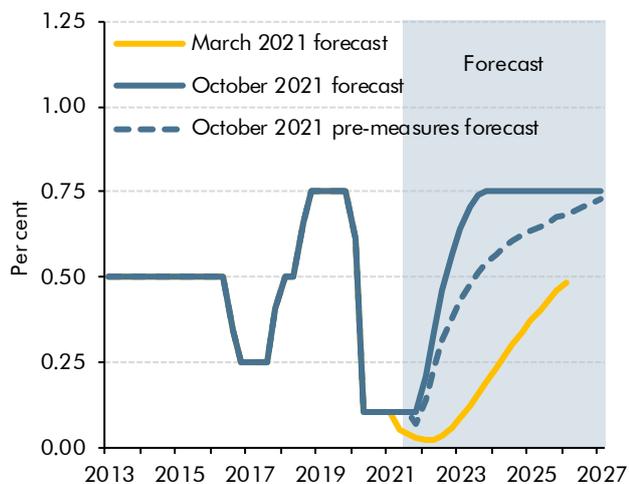
- The discretionary fiscal easing and the pass-through of higher payroll tax costs push up **CPI inflation** in 2022 and 2023, although the customary fuel and alcohol duty freezes offset these effects in 2022. That leaves the price level up 0.3 per cent at the forecast horizon. On top of this, the latest rises in the council tax adult social care precept increase **RPI inflation** by less than 0.1 percentage points a year from 2022-23 to 2024-25.
- We assume that the effect of measures to boost **business investment** (via the latest temporary increase to the annual investment allowance and a reduction in the bank surcharge) is small in the context of the super-deduction that was announced in March, and as such makes no material difference to the path of business investment.
- We have not made an adjustment in the economy forecast for the **universal credit taper rate reduction and the increase in work allowances**. These changes can be expected to increase the labour supply of those affected – with evidence suggesting the most significant effects are likely to be in bringing non-working mothers into the labour market (either lone parents or second earners in couples).⁹ But any induced employment among these groups is likely to be at relatively low numbers of hours a week and at relatively low hourly pay, so while they could be material to the incomes of affected households, we judge that they are negligible relative to the economy as a whole.

⁹ Resolution Foundation, *Back in Credit? Universal Credit after Budget 2018*, November 2018.

Monetary policy

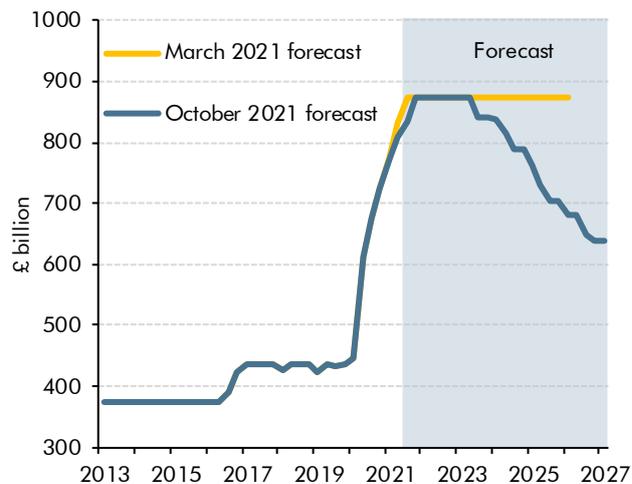
- 2.13 At the onset of the pandemic in March 2020, the Monetary Policy Committee (MPC) reduced Bank Rate from 0.75 to 0.1 per cent, where it has since remained. We used our usual approach to constructing our *pre-measures* forecast and assumed that Bank Rate would follow the path implied by market prices around the time the forecast was closed, specifically the average over the 10 working days to 15 September. These were consistent with a gradual rise to 0.73 per cent by the first quarter of 2027 (up from 0.48 per cent at the forecast horizon in our March 2021 forecast).
- 2.14 Much of the substantial medium-term fiscal loosening announced in this Budget is likely to have been unanticipated at the point that we finalised our *pre-measures* forecast, and therefore not fully reflected in market prices. To deliver a coherent forecast, it is important that the assumed path for Bank Rate is compatible with inflation meeting the 2 per cent target over the medium term. In our *pre-measures* forecast, output was broadly in line with potential once immediate bottlenecks in energy and product markets had eased and extra labour was released onto the market following the closure of the coronavirus job retention scheme (CJRS). It was thus also consistent with inflation meeting the target in the medium term. Adding the substantial fiscal easing announced at this Budget meant that was no longer the case in our *post-measures* forecast, with output running above potential over the first half of the forecast period, so that inflation was more likely to exceed the target.
- 2.15 So, following the approach adopted in our March 2020 forecast, which also included a substantial and unanticipated fiscal loosening, in our *post-measures* forecast we bring forward some of the monetary policy tightening anticipated by market participants, with Bank Rate reaching 0.75 per cent in the fourth quarter of 2023 and remaining at that level thereafter (Chart 2.2). On average, it is some 12 basis points higher over the forecast period than in our *pre-measures* forecast, which we judge to be sufficient to attenuate the output gap and return inflation to target in the medium term. After our *post-measures* forecast closed, market participants' expectations of Bank Rate rose even further, largely reflecting a global increase in inflation expectations. Therefore, our *post-measures* Bank Rate forecast takes us closer to, but still on average 37 basis points below, where market expectations were on 21 October.
- 2.16 During the pandemic, the MPC announced further quantitative easing, with purchases totalling £450 billion, taking the total stock of corporate and UK government bond purchases to £895 billion. The MPC has announced that it will stop replacing maturing gilts once Bank Rate reaches 0.5 per cent and may commence sales once it reaches 1.0 per cent. In our *pre-measures* forecast, the 0.5 per cent threshold was passed in the third quarter of 2023, whereas in our *post-measures* forecast it is passed in the fourth quarter of 2022. The resulting 'quantitative tightening' lowers the stock of assets held in the Asset Purchase Facility to £637 billion by the forecast horizon (Chart 2.3). The 1.0 per cent threshold that could trigger active sales is not reached in our forecast, though it is surpassed in the market interest rate expectations prevailing on 21 October (from the third quarter of 2022).

Chart 2.2: Bank Rate



Source: Bank of England, Bloomberg, DMO, OBR

Chart 2.3: Stock of APF gilt assets

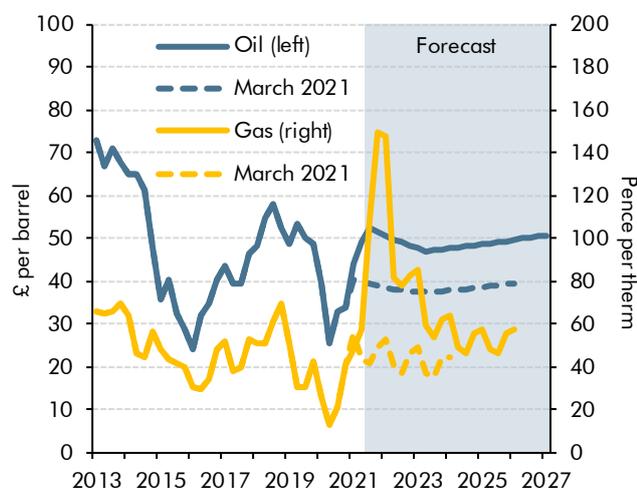


Exchange rate and commodity prices

2.17 Energy prices have risen sharply since our March 2021 forecast. Oil and gas prices fell at the onset of the pandemic but rebounded alongside the recovery in global activity. In recent months, supply bottlenecks have also emerged, resulting in sharp increases in the price of natural gas in particular. The rise in UK gas prices partly reflects international developments, including low gas reserves in Europe, an inelastic supply of natural gas from Russia, and very high demand in China (mainly for liquid gas). There are also several UK-specific factors, such as outages at some nuclear stations, unusually low levels of wind power, and diminished reserves following the closure of the Rough storage facility. For both commodities, our forecast is conditioned on an average futures curve taken over the 10 working days to 15 September, resulting in average oil and gas prices of £51 a barrel and 149 pence per therm respectively in the fourth quarter of 2021. Prices have continued to rise beyond this point, standing at £62 a barrel (up 20 per cent) and 229 pence per therm (up 54 per cent) respectively on 22 October.

2.18 The sterling effective exchange rate has been volatile in 2021 and has appreciated slightly since our March forecast. It settles 2.9 per cent higher than we forecast in March. We assume it remains unchanged in nominal terms over the forecast period, reflecting the similarity of yield curves at home and abroad (Chart 2.5)

Chart 2.4: Oil and gas prices



Source: Bank of England, Datastream, OBR

Chart 2.5: Sterling effective exchange rate



World economy

- 2.19 The outlook for global growth has improved since March, reflecting positive vaccine news and further fiscal loosening in major economies. Our world economy forecast is broadly consistent with the IMF's *World Economic Outlook* (WEO), the latest edition of which was published on 12 October. This incorporated recent good news about the rollout of vaccines in advanced economies and widespread easing of public health restrictions, as well as the consequent emergence of supply bottlenecks and higher input prices in many countries.
- 2.20 Global output is expected to increase by 5.9 per cent in 2021, 0.4 percentage points higher than anticipated in March. That leaves output in 2021 up 2.6 per cent on 2019. The continuing rollout of vaccines and easing of restrictions has boosted growth expectations for many major economies. We now expect US GDP to grow by 6.0 per cent in 2021, 1.0 percentage points higher than in March, largely reflecting the \$1.9 trillion *American rescue plan act* which was passed by Congress in March of this year. Euro area GDP is expected to increase by 4.8 per cent in 2021, 0.6 percentage points higher than forecast in March.
- 2.21 World trade has also fared better than expected in March, with demand for goods remaining strong, particularly consumer durables and medical goods. Services trade is expected to recover more slowly than goods trade as border restrictions ease and tourism begins to pick up. World trade volumes are expected to rebound by 9.9 per cent in 2021, 1.8 percentage points more than expected in March. UK export markets have also fared better than previously thought in 2021, and we expect growth of 9.1 per cent (a 1.2 percentage point upward revision).

Table 2.2: Global GDP and trade growth

	Percentage change on a year earlier						
	Outturn	Forecast					
	2020	2021	2022	2023	2024	2025	2026
GDP							
Euro area	-6.5	4.8	4.3	2.2	1.7	1.4	1.4
US	-3.4	6.0	5.2	1.9	1.3	1.4	1.6
World	-3.1	5.9	4.9	3.7	3.5	3.4	3.3
Trade							
UK export markets	-8.3	9.1	6.0	4.6	3.5	3.3	3.2
World	-8.1	9.9	6.8	4.4	3.8	3.6	3.5

2.22 Over the medium term, global GDP growth, including in the UK's two biggest trading partners, the US and euro area, is expected to return to rates prevailing before the pandemic, although we still expect most countries to experience a degree of 'scarring' to the level of GDP relative to pre-pandemic trajectories. The IMF's estimate of scarring to world GDP between 2019 and 2024 now stands at 3.8 per cent, down 2.5 percentage points lower than their October 2020 forecast.⁶ World trade and UK export markets also recover to a somewhat lower level than their pre-virus trends, both down around 1 per cent in 2024 relative to our March 2020 forecast.

Potential output and economic scarring

2.23 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, the excess (shortfall) of demand relative to supply would tend to lead to rising (falling) inflation.

2.24 Our baseline projection for potential output, before accounting for the impact of the virus, is provided by our pre-pandemic forecast of March 2020. In that forecast, we assumed that potential output growth would rise from 1.2 per cent in 2020 to 1.6 per cent in 2024. This was driven by a modest pick-up in hourly productivity growth from 0.8 per cent in 2020 – similar to the unusually low rates seen since the financial crisis – to 1.3 per cent in 2024 – still somewhat below the average rates seen before the financial crisis. This was partly offset by a gradual decline in the participation rate as a result of population ageing and slight rise in equilibrium unemployment due to the higher National Living Wage.

2.25 Since the start of the pandemic, a key assumption underpinning our medium-term economic forecast has been the extent to which the pandemic has done lasting damage to the path of

⁶ This shortfall, which the IMF calculates as the difference between its current and pre-crisis forecasts in 2024 is concentrated in emerging market and developing economies (excluding China), where scarring reaches 5.5 per cent. In advanced economies, output exceeds the trend path by 0.9 per cent, driven by favourable outcomes in the US, where fiscal loosening has already led the US to surpass the level assumed in the IMF's pre-crisis forecasts. The IMF's estimate of UK scarring is essentially unrevised at 3.1 per cent.

potential output – also known as ‘scarring.’ This scarring effect can come from the pandemic’s adverse impact on the size of the future labour force, the capital stock, and the level of total factor productivity. In our November 2020 *EFO*, our central forecast assumed scarring (defined as the shortfall in potential output relative to the pre-pandemic trajectory at the five-year forecast horizon) of 3 per cent. This represented the mid-point of a range of plausible assumptions running from zero to 6 per cent. We retained that assumption for our central forecast in our March 2021 *EFO*, noting at that point that there were reasons both to reduce scarring (due to less damage to the capital stock than feared) and to increase it (due to evidence of greater than expected outward net migratory flows).

2.26 Since March 2021, the successful rollout of highly effective vaccines has permitted the reopening of most sectors of the economy, while the Government’s pandemic support policies appear to have been largely effective in preserving viable jobs and businesses. Accordingly, we no longer regard scarring outcomes as large as 5 or 6 per cent as likely. Moreover, there is a growing body of evidence and analysis regarding the likely impact of the pandemic on potential output through the three broad channels identified above, providing a better picture of potential scarring effects.⁷

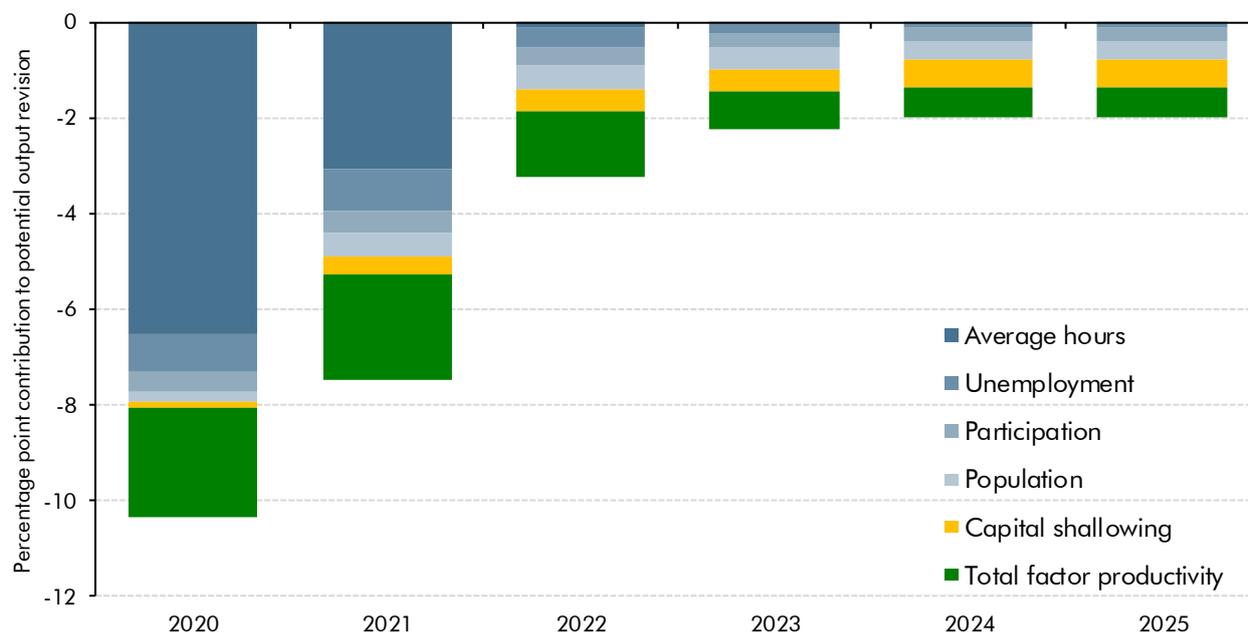
2.27 In preparing our latest assessment of the likely degree of scarring resulting from the pandemic, we have taken account of this evidence as well as drawing on input from independent researchers, our expert advisory panel, and economists across Government. While considerable uncertainties remain, we regard the balance of risks to have shifted and have revised down our central scarring judgement from 3 per cent to 2 per cent. Table 2.3 provides a decomposition of this revised scarring estimate into its constituent parts, with a comparison against our earlier assumptions, while Chart 2.6 depicts its profile over the forecast period. We will continue to keep our scarring judgement and our overall forecast for potential output under review in the light of future developments. The remainder of this section provides a more detailed account of how we arrived at our revised scarring judgement, broken down into its labour, capital, and total factor productivity components, as well as comparisons with the latest scarring estimates of external forecasters.

Table 2.3: Pandemic-related scarring assumptions

	Breakdown of virus related scarring, per cent		
	October 2021	March 2021	Change
Total scarring	2	3	-1
<i>of which:</i>			
Labour supply, of which:	0.8	1.0	-0.2
Population	0.4	0.2	0.2
Participation	0.3	0.5	-0.2
Unemployment	0.1	0.3	-0.2
Hourly productivity, of which:	1.2	2	-0.8
Capital shallowing	0.6	0.8	-0.2
Total factor productivity	0.6	1.2	-0.6

⁷ For example, see Chapter 2: *After effects of the Covid-19 pandemic: Prospects for Medium-Term Economic Damage* of IMF, *World Economic Outlook*, April 2021.

Chart 2.6: Scarring decomposition relative to our March 2020 EFO



Source: OBR

Labour supply

2.28 We have revised down the labour supply component of the overall scarring assumption slightly from 1.0 to 0.8 per cent. As described in more detail below, this reflects a revised set of judgements concerning three of its elements:

- the overall **adult population**, where scarring has *increased* due to both higher mortality, mainly at older ages, and lower net migration during the pandemic;
- this is offset by lower scarring to **labour force participation** in line with better than expected labour market performance and the concentration of excess deaths amongst those with lower than average participation; and
- reduced scarring to the **structural unemployment rate** in light of stronger recent labour market conditions and the prospect of a lower peak in unemployment after the closure of the CJRS than had been expected in March 2021.

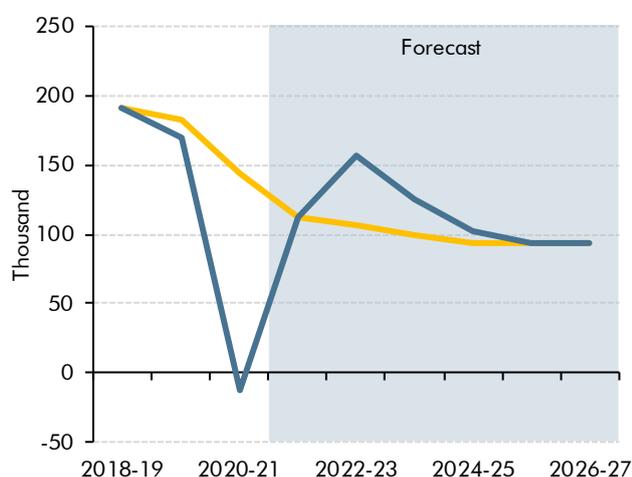
Population

2.29 Population scarring contributes 0.4 percentage points to our latest 2 per cent scarring estimate, 0.2 percentage points *more* than in March 2021. This is equivalent to a fall in the adult population of 200,000 relative to our March 2020 forecast, of which a little over half is attributable to excess deaths in the native population (115,000) while shortfalls in net migration (85,000) account for the rest.

2.30 Recent Labour Force Survey data based on information from HMRC’s Real Time Information (RTI) from PAYE tax records suggest that the adult population was around 0.5 per cent smaller in the second quarter of 2021 than incorporated in our March 2020 forecast. Of that, 0.2 percentage points can be explained by higher excess deaths,⁸ so we assume that the remaining 0.3 percentage points comes from shortfalls in net migration. Excess deaths therefore account for 0.2 percentage points of the total 0.4 percentage point contribution from population scarring at the forecast horizon.⁹

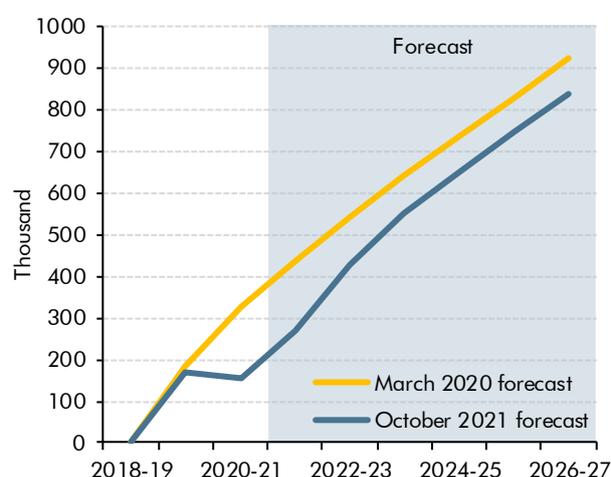
2.31 Lower net migration accounts for the remaining 0.2 percentage points of the population scarring. We estimate that 0.3 percentage points (around 170,000 people) of the 0.5 per cent decline in the population over the pandemic is associated with lower net migration.¹⁰ This may represent both migrant workers who returned home on account of the pandemic and foreign workers, who might otherwise have come, choosing not to. To reach our 0.2 percentage point contribution to population scarring from net migration, we then assume that half of this shortfall (85,000) in migration will be unwound over the first half of the forecast period as some of the ‘missing migrants’ return, and that underlying net migration returns to the 94,000 per year implicit in our March 2020 forecast by 2025-26 (Chart 2.7). The net effect of this is to reduce the population by 85,000 relative to our March 2020 forecast in the medium term, taking 0.2 percentage points off potential output (Chart 2.8). There are considerable risks both on the upside and downside to this judgement, both in terms of potential revisions to outturn data and the future trajectory of net migration.¹¹

Chart 2.7: Adult net migration



Note: Estimates are mid-year.
Source: ONS, OBR

Chart 2.8: Cumulative adult net migration



⁸ Comparing outturn data with deaths implicit in our March 2020 forecast (which was based on 2018-based ONS population projections).

⁹ 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 the 0.1 percentage point increase from higher whole-economy participation rates discussed in paragraph 2.32.

¹⁰ This relates to adult migrants. We have made the simplifying assumption that the proportion of adult net migration is unchanged from the 73 per cent implied in the ONS ‘zero net EU migration’ variant that underpinned our March 2020 forecast.

¹¹ For more discussion on the challenges in measuring net migration during the pandemic, see OBR, *Fiscal Risks Report*, July 2021.

Participation

- 2.32 Trend labour force participation contributes 0.3 percentage points to our latest scarring assumption, 0.2 percentage points less than in March 2021. Of this change, 0.1 percentage point relates to the concentration of pandemic-related deaths among the elderly (which reduces the denominator but not the numerator for the participation rate).
- 2.33 We nevertheless still expect some scarring of participation due to older workers retiring early and the health consequences of the pandemic. But considerable uncertainty remains over this. Older worker participation is still below pre-pandemic levels and over-55s accounted for a quarter of those still on furlough in the final months of the CJRS. Hence there remains a risk that more older workers may decide to retire earlier than is implicit in our scarring assumption.¹² Long-term physical and mental health consequences from the pandemic could also weigh on activity. On the positive side is the possibility that higher rates of home working may permit more people, such as those with caring responsibilities, to participate in the labour force.

Structural unemployment

- 2.34 We have also reduced our estimate of the impact of the pandemic on structural unemployment to 0.1 percentage points from 0.3 percentage points in March 2021. This reflects the stronger than expected labour market performance in recent months and the downward revision to our expectation of the near-term peak in unemployment after the CJRS closes. The number of people on the CJRS has fallen more than we expected in March, the unemployment rate has come in below expectations, and vacancies have reached a record high of 1.1 million. We now expect the unemployment rate to peak at 5¼ per cent compared to 6½ per cent back in March 2021. This relatively tight labour market reduces the risk that people will suffer long spells of unemployment that result in discouragement, skill atrophy, and greater difficulty in finding a job (so-called ‘hysteresis’ effects).
- 2.35 That said, we still expect a small increase in structural unemployment as a result of the pandemic. The share of unemployed people who are classified as long-term unemployed has continued to rise and is now at a five-year high of almost 30 per cent of the unemployed. There might also be lingering effects on unemployment arising from structural changes prompted by the pandemic (such as more working from home, less business travel and the shift to online retail (see Box 2.2) that require shifts in the spatial, occupational and sectoral distributions of employment, compounding the restructuring induced by Brexit.¹³

Capital shallowing

- 2.36 Our estimate of the scarring to productivity associated with capital shallowing has been lowered from 0.8 to 0.6 percentage points. The reduction of 0.2 percentage points partly reflects the upward revisions to ONS outturn data for business investment since the start of the pandemic. The Government’s support measures have so far also been successful in mitigating some of pandemic-related damage to corporate balance sheets. Reflecting this,

¹² Resolution Foundation, *A U-Shaped Crisis*, April 2021.

¹³ As discussed in Anayi, L., et al., *Labour market reallocation in the wake of Covid-19*, August 2021.

we have raised our business investment forecast a little in the second half of the forecast period. This means cumulative business investment is now 7.3 per cent lower than in our pre-pandemic March 2020 forecast – smaller than the 9.6 per cent shortfall that underpinned our March 2021 forecast. This translates into a reduction of around 1.6 per cent in the gross capital stock relative to March 2020 versus the 2.2 per cent reduction in the March 2021 forecast.

- 2.37 Our somewhat improved investment outlook in part reflects the success of government support policies, such as the CJRS, VAT deferrals and government-backed loans, in limiting the damage to corporate cash flows and balance sheets. The aggregate cash position of businesses has improved by 29 per cent and corporate debt only rose 6 per cent between the end of 2019 and the first quarter of 2021, less than might have been feared.¹⁴ This aggregate picture of improved corporate liquidity and a limited increase in indebtedness underpins the Bank of England’s Financial Policy Committee’s (FPC) judgement that there has been only a ‘moderate’ worsening in corporate sector debt vulnerability. That said, the FPC also flag ‘pockets of risk’ related to the highly uneven distribution of the rise in debt, with smaller firms accounting for around two thirds of the overall increase in corporate debt. Small to medium-sized enterprises (SMEs) in sectors more exposed to the pandemic have been particularly dependent on government support and faced average debt increases of more than a third compared with their pre-pandemic position. Hence while our broad judgement is that the scarring to companies’ ability to invest may not be as great as we feared last autumn, vulnerabilities amongst some SMEs remain a source of risk.

Total factor productivity

- 2.38 Our estimate of scarring to total factor productivity (TFP) has been lowered from 1.2 to 0.6 per cent since March, reflecting several considerations. First, as outlined above, the success of government support in limiting the damage to corporate balance sheets suggests that any ‘scarring’ of firms’ ability to innovate may not be as great as we feared last year. Second, investment in intangibles appears to have held up significantly better than investment in tangible capital during the pandemic.¹⁵ This, along with positive effects from new ways of working, could help limit the damage to TFP from the pandemic. Third, the UK’s relative position in attracting Foreign Direct Investment (FDI), an important driver of innovation, appears to have improved this year. A 2021 FDI survey suggests that the 12 per cent drop in FDI projects secured by the UK during the pandemic was significantly less than had been signalled by investor surveys last autumn.¹⁶
- 2.39 Our previous TFP scarring estimate focused on the drag on productivity from ‘within firm’ effects, as companies dealt with the higher costs and production inefficiencies associated with the pandemic. This could be compounded by a move to shorten supply chains and hold larger inventories as a precaution against supply disruption. Finally, greater home working and less intermingling could undermine innovation and knowledge sharing. While we still believe these effects to be important, some recent research has pointed to important

¹⁴ Bank of England Financial Policy Committee, *Financial stability in focus: the corporate sector and UK financial stability*, October 2021.

¹⁵ Haskell, J., *Will the pandemic scar the economy*, July 2021.

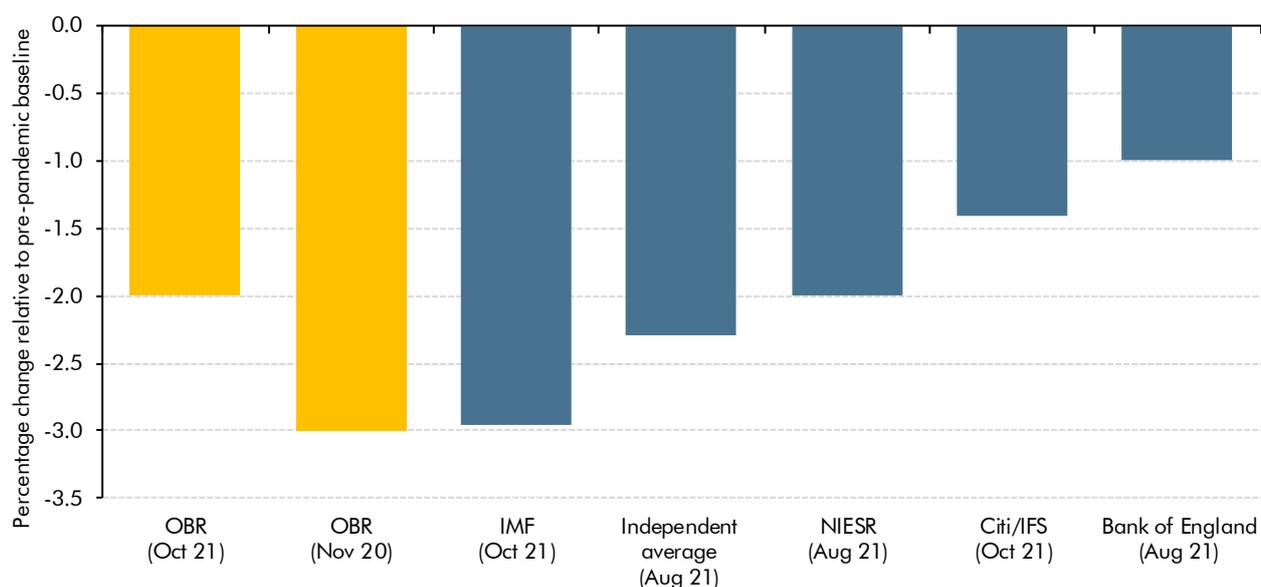
¹⁶ Ernst & Young, *UK attractiveness survey 2021*, June 2021.

offsets from ‘between firm’ effects as less productive firms close. External analysis of the Bank of England’s Decision Makers Panel (DMP) survey estimated that these ‘between firm’ effects could increase private sector TFP by around 0.5 per cent in the medium term.¹⁷

External estimates of scarring

2.40 Chart 2.9 compares our scarring estimate with those of some other forecasting institutions. Since March, external forecasters’ estimates of medium-term shortfalls in output relative to the pre-pandemic trend have generally also been reduced.¹⁸

Chart 2.9: Selected estimates of medium-term scarring of real GDP



Note: IMF and Independent average are calculated as the differences between the pre-pandemic and latest projections of GDP up to 2024 in the IMF’s *World Economic Outlooks* and the averages in the HM Treasury’s *Forecasts for the UK economy* publications.
Source: Bank of England, HM Treasury, IFS, IMF, OBR

Future developments

2.41 We review our potential output assumptions ahead of each *EFO*, revising them when appropriate as new data and research come to light. In terms of our scarring judgement, with the passage of time, it will become increasingly difficult to distinguish the effects of the pandemic from other factors, like Brexit or the underlying path of potential output in light of the post-financial crisis ‘productivity puzzle’ (see Boxes 2.3 and 2.5). Nonetheless, ahead of our next forecast, we are likely to assess the implications of:

- New **demographic data**, including updated estimates of net migration that are due to be released in November, new population projections expected to be published in December, and the census in Spring 2022.
- The labour market impact of the **closure of the CJRS**. The CJRS appears to have successfully prevented the destruction of many viable jobs and businesses, but around

¹⁷ Bloom, N. et al., *The impact of Covid-19 on productivity*, September 2021.

¹⁸ HM Treasury, *Comparison of independent forecasts for the UK economy*, August 2021, February 2020.

a million people were still on furlough as the scheme closed at the end of September, and as yet there is relatively little data on the post-CJRS state of the labour market.

- **Corporate failures** as government support is phased out and creditor forbearance rules expire. A temporary directive restricting winding-up petitions was subsequently extended to September 2021, while eviction protection for commercial tenants currently runs up to April 2022. Partly reflecting this support, bankruptcies have been unusually low during the pandemic, implying that some businesses have been kept alive that would have otherwise failed. This could act as a drag on future productivity growth over the medium term if it prevents resources being used more productively.
- The **impact of working from home and other behavioural changes**. As we discuss in Box 2.2, changes to how output is produced and consumed since the onset of the pandemic have been significant. Were they to persist, there could be important consequences for the composition, location, and overall volume of economic activity. At this early stage, their direction and magnitude are still highly uncertain, but we anticipate continuing to monitor developments in our future *EFOs*.

Box 2.2: The behavioural legacy of the pandemic

The successful rollout of highly effective vaccines, coupled with unprecedented fiscal support to households and businesses, has significantly reduced the collateral economic damage that could have resulted from the pandemic. However, coronavirus has also catalysed or accelerated a set of behavioural changes whose consequences may outlast the pandemic itself:

- The pandemic has prompted a sharp rise in the number of people regularly **working from home**, which rose from 12 per cent before the pandemic to a peak of 50 per cent in April 2020. Despite then falling back, it remained at 31 per cent in October. Moreover, 85 per cent of those who worked from home in May 2021 expected to continue to do so for at least part of the week even after they are able to return to their usual workplace, while in a more recent survey from October, 16 per cent of businesses intended to use increased homeworking as a permanent business model going forward.^a
- The pandemic has accelerated the shift in the share of **households' retail spending taking place online**. The share rose from below 3 per cent in 2006 to 20 per cent on the eve of the pandemic in 2019, then leapt to a peak of 37 per cent in January 2021. Despite the lifting of most restrictions on retail shops in mid-April, it remained above its pre-crisis trend at around 26 per cent in September (top-left panel of Chart A). A February 2021 survey found that 38 per cent of UK consumers said they will shop more online for products previously bought in stores.^b
- The pandemic has seen a sharp reversal in the growth in **international air travel**. Having risen over three-fold between 1990 and 2019, UK international air passenger traffic fell by 86 per cent to three million a month on average from March to December 2020, compared to the same period in 2019, and remained 48 per cent below its 2019 level in August 2021. Airline analysts predict only a slow recovery in passenger numbers, with

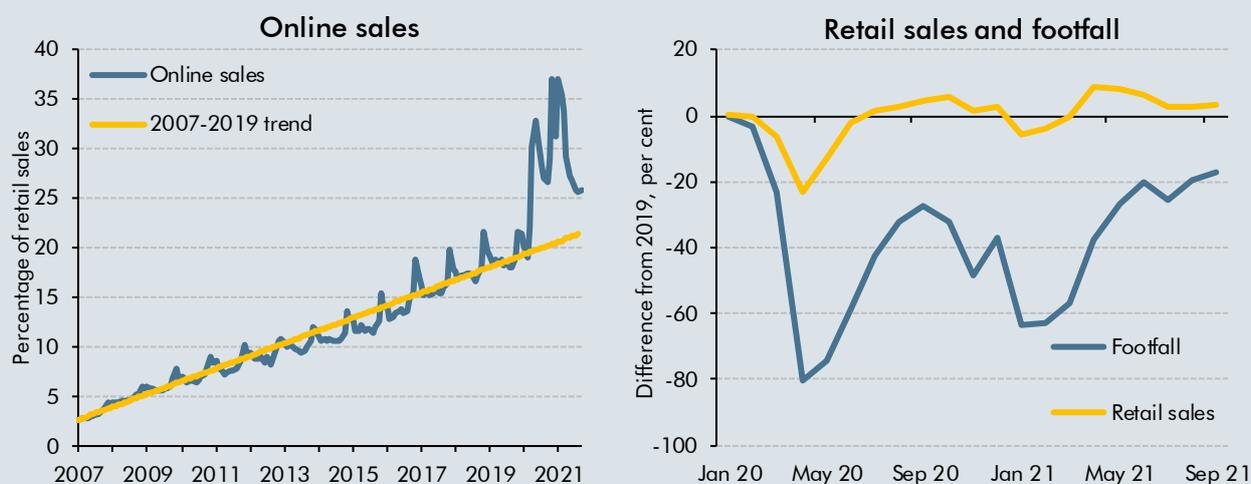
global air traffic not expected to return to 2019 levels until 2024^c. The profitable business travel area may be more persistently affected: in a May 2021 survey of large global businesses, 72 per cent expected to maintain limits on business travel after social distancing measures end.^d

- Both the pandemic and Brexit have prompted firms to consider building greater resilience into their **supply chains**, reversing a decades-long trend toward internationalisation of production and ‘just-in-time’ logistics. Having risen from 24 per cent in 1965 to 63 per cent in 2018, the trade intensity of UK output has fallen to a twelve-year low of 55 per cent in the second quarter of 2021. A survey of 353 companies across 77 countries found that, post-pandemic, two thirds of businesses were planning to source more locally and 20 per cent planned to hold more inventories.^e

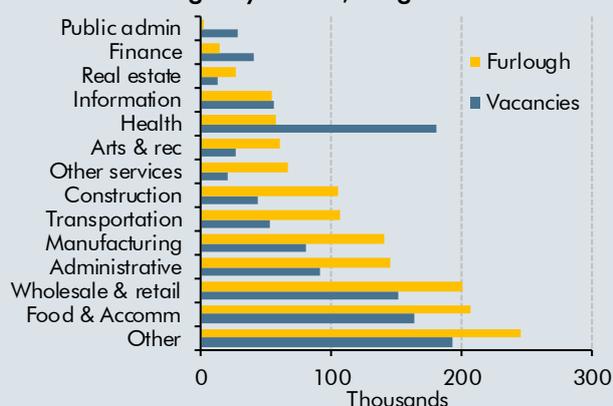
These behavioural changes, which surveys suggest will at least partially endure, have had a significant impact on the geographical distribution and sectoral composition of economic activity:

- **Geographic distribution.** Footfall in retail destinations across the UK was still 17 per cent below pre-pandemic levels in September, though retail sales were up 3 per cent in September, as visitors spend more per visit and sales have shifted online (top-right panel of Chart A). And since the start of the pandemic, house prices have risen 6 percentage points faster in the UK as a whole than in London, and over 3 percentage points faster for detached and semi-detached houses than flats, reflecting the ‘race for space’ as more people work from home.
- **Sectoral composition.** While total output was only 1.1 per cent below its pre-pandemic level in August, output in the transport sector was still down 9.1 per cent, and other services (including hairdressing and beauty treatments) down 18.7 per cent, while IT and communications output was up 3.1 per cent and health and social work was up 9.8 per cent on pre-pandemic levels.

Chart A: The impact on sectors from the behavioural legacy of the pandemic

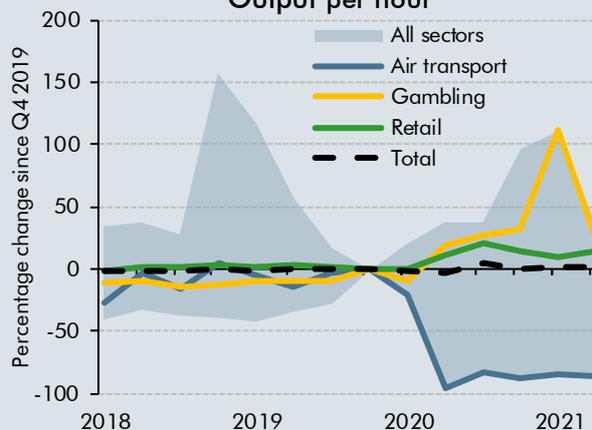


Number of vacancies and people on furlough by sector, August 2021



Source: ONS, Springboard, OBR

Output per hour



Note: excludes crude oil due to series volatility.

Moreover, there are signs that some further adjustment to the composition and location of output and employment may be necessary to respond to these changes. In particular:

- Sectoral mismatch.** Comparisons between the sectoral composition of the 1.3 million employees remaining on the furlough scheme in August (its penultimate month) and the 1.1 million vacancies posted in August suggest there may be some supply-demand mismatches in the labour market – especially in retail, transport, and food services (where furloughed staff exceed vacancies) and in health (where vacancies exceed furloughed staff) (bottom-left panel of Chart A). Further, the adoption of new modes of delivery of goods and services induced by the pandemic, for example in the retail sector, will necessitate a significant amount of reallocation within, as well as between, sectors.^f
- Geographic mismatch.** There is some evidence of geographic mismatch in the labour market, as online vacancies have risen fastest in the North East and Midlands since the start of the pandemic, while increases in unemployment and use of furlough have been most pronounced in London and the South East, which in turn have seen a smaller increase in vacancies.
- Productivity dispersion.** Trends in productivity by sector highlight large and persistent differentials in output per hour worked (bottom-right panel of Chart A) – driven mainly by underperformance in those sectors with relatively high fixed costs and/or greater exposure to the potential behavioural legacies of the pandemic, such as air and water transport, and other services. The withdrawal of government support for these sectors could warrant a transition to new business models, involving reallocation of factor inputs, unless demand in these sectors makes a complete recovery. By contrast, in some sectors, such as retail, the pandemic has encouraged new approaches resulting in improved productivity. If businesses seek to hold on to these improvements, some of the changes to their business models will endure with potential consequences for their demand for labour.

^a ONS, *Business and individual attitudes towards the future of homeworking, UK: April to May 2021*, June 2021.

^b Ernst & Young LLP, *Future Consumer Index: four ways to make the most of consumers' post-lockdown spending*, March 2021.

^c McKinsey & Company, *Back to the future? Airline sector poised for change post-COVID-19*, April 2021.

^d Citibank, *What does the future of business travel look like?*, 2021.

^e The BCI, *Covid-19: The Future of Supply Chain*, 2020.

^f Anayi, L. et al., *Labour market reallocation in the wake of Covid-19*, August 2021.

Prospects for real GDP growth

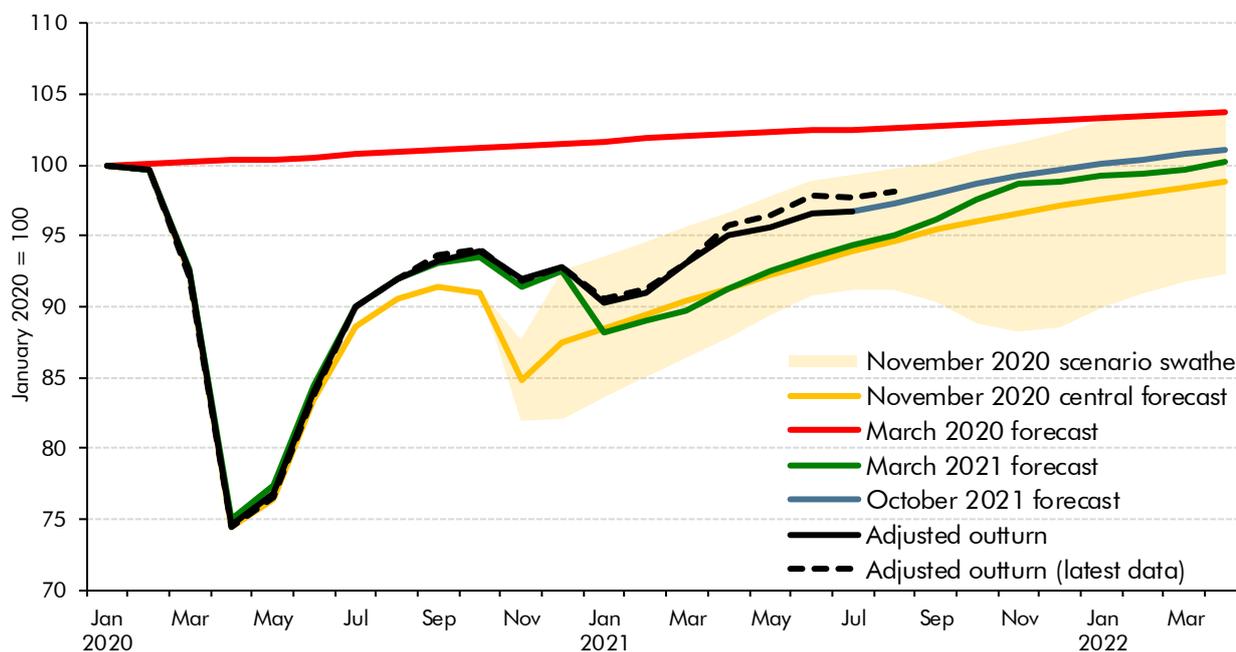
Developments since our March forecast

- 2.42 The latest vintage of data suggest that the first wave of the pandemic led to a 25.3 per cent fall in GDP from January 2020 to its trough in April, followed by a strong but fitful recovery, as public health restrictions have been repeatedly loosened and then tightened over the course of last year and into this one. In our March forecast, we expected the January 2021 lockdown to cause output to fall by 4.7 per cent in that month, before progressively recovering as the vaccine was rolled out and restrictions eased. In fact, output fell by only 2.4 per cent in January, and consumer spending and business has proved, once again, more adaptable and resilient to these restrictions than we anticipated.¹⁹ The higher starting level of, and stronger recovery in, activity carried through to the latest outturn figures for August 2021, when output stood only 1.1 per cent below the January 2020 pre-crisis peak, rather than the 3.9 per cent we had expected in our March forecast.
- 2.43 Our forecast – shown alongside recent developments in Chart 2.10 – is based on the first estimate of GDP data up to the second quarter of 2021.²⁰ Revisions contained in the latest Quarterly National Accounts (QNA), released after we closed our forecast to non-policy changes, mean that cumulative real growth in our forecast between the fourth quarter of 2019 and the second quarter of 2021 is 1.1 percentage points lower than the latest data imply. Box 2.3, below, discusses the potential implications of the newer data.
- 2.44 But regardless of the precise vintage of data chosen, relative to the three pandemic scenarios first shown in our November 2020 *EFO*, GDP has followed a path somewhere between our upside and central scenarios. In the upside scenario, rapid vaccine rollout allowed early relaxation of public health restrictions. The central scenario assumed slower rollout, requiring restrictions to remain in place until mid-2021 to keep the virus in check. The downside scenario assumed limited vaccine effectiveness and a further lockdown to control the virus this winter. Barring the emergence of a vaccine-escaping variant, this latter scenario now looks unlikely, which has fed into our reappraisal of the likely degree of scarring to potential output from the pandemic discussed earlier in this chapter.

¹⁹ See Chapter 2 of OBR, *Fiscal risks report*, July 2021.

²⁰ There is a roughly 1 per cent difference between the output measure of GDP (that the ONS produce on a monthly basis) and the headline measure that enters our fiscal forecast. In Chart 2.10, we adjust for this by scaling down the monthly figures.

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



Source: ONS, OBR

Box 2.3: Blue Book 2021 revisions and other post-forecast developments

Every year, the ONS updates the sources and methods for the UK National Accounts and publishes the latest estimates in its annual Blue Book publication. The 2021 Blue Book is set to be released on 29 October, but its implications for output up to and including 2019 were presaged in ONS publications on 28 June, 28 July and 8 September.^a Blue Book changes for that period and up to the most recent data were also incorporated into the Quarterly National Accounts (QNA) for the second quarter of 2021, released on 30 September. As this was around a week after we finalised our pre-measures forecast on 24 September, these revisions were not incorporated into our forecast. In the QNA, the level of nominal GDP and cumulative real GDP growth since the onset of the pandemic were both revised up.

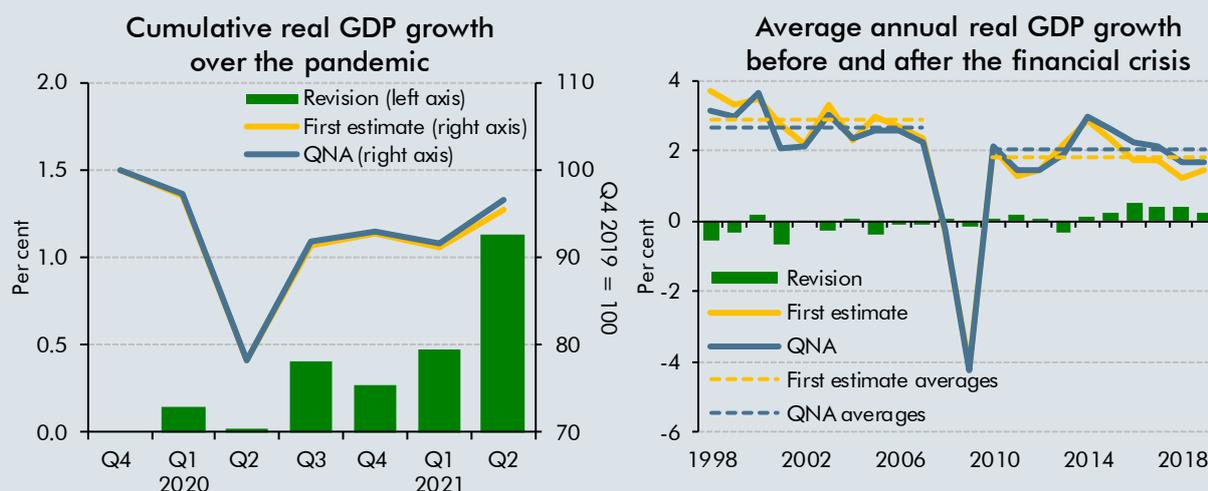
The revisions were partly due to incorporating more up-to-date data, including from the Financial Services Survey (FSS), which has raised the output of some financial institutions.^b There were also methodological changes to the price indices used to deflate output.^c These raised real growth in the telecoms sector, to account for the under-representation of internet services and an improvement in the handling of access charges for telecommunication services and incorporated 'double deflation' (so better accounting for changes in the prices of outputs and intermediate inputs in the calculation of real GDP). As the left-hand panel of Chart B shows, the revisions raised cumulative growth since the onset of the pandemic by 1.1 percentage points, leaving GDP in the second quarter of 2021 3.3 per cent lower than its pre-pandemic level, compared to an initial estimate of 4.4 per cent. Taken in isolation, these changes would have raised the starting level and near-term path of GDP in our forecast.

However, the QNA revisions were not the only significant piece of economic news since we closed our pre-measures forecast in late September that is relevant for our GDP forecast. Other

developments, including higher gas prices, increased evidence of supply bottlenecks, and shortages in key occupations (discussed in Box 2.4), are likely to weigh on the recovery over the next few months. We judge that the net impact of these post-forecast developments is likely to have left our forecast for the level of real GDP in early 2022 broadly unchanged. Moreover, given the increased evidence of bottlenecks and shortages, we judge that the higher level of real GDP represents news about the strength of demand and the size of the near-term output gap, rather than providing additional information about the underlying trajectory of potential output or prospects for the medium term.

The methodological revisions in Blue Book 2021 also imply modest changes in average real GDP growth in the decade before the financial crisis (down by 0.2 percentage points) and the decade after it (up by 0.2 percentage points); see right-hand panel of Chart B. Although growth over the entire period is broadly unchanged, this reduces the corresponding post-crisis slowdown in average annual productivity growth from 1.1 to 0.7 percentage points. Our forecast already assumes that productivity growth will pick up a little from the subdued rates seen since the financial crisis and the revisions are broadly consistent with that.

Chart B: Real GDP revisions: over pandemic and annual since 1998

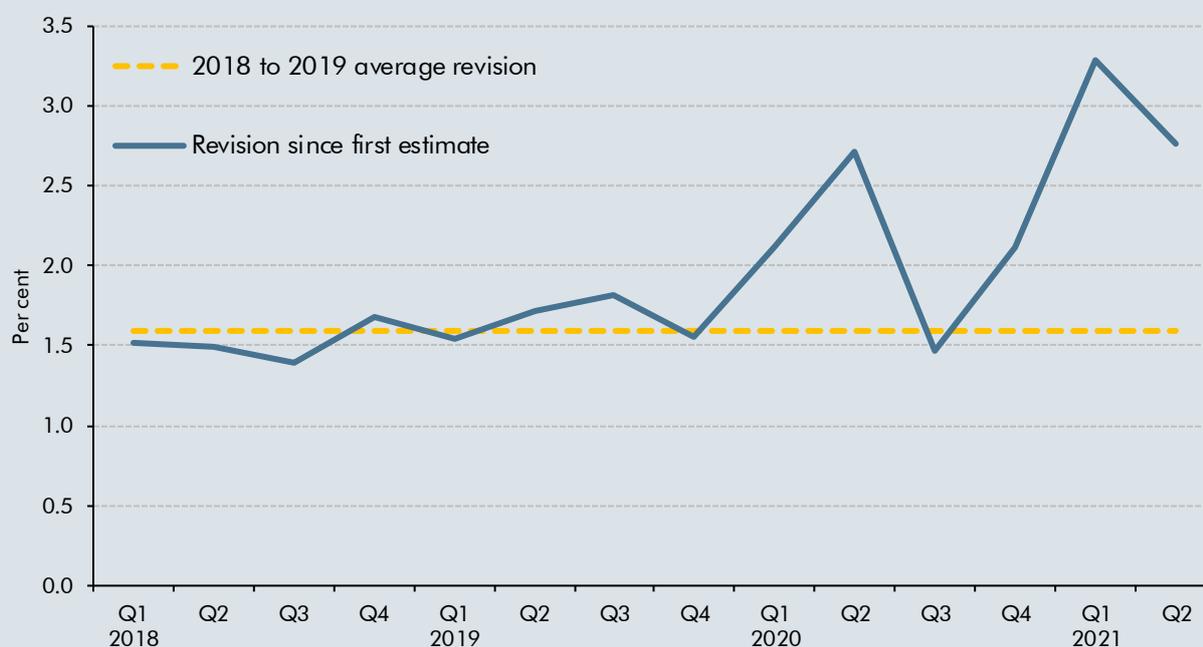


Source: ONS

Nominal GDP is particularly important for understanding developments in the public finances as it represents the cash size of – and therefore tax base for – the economy as a whole. In the QNA, the level of nominal GDP was revised up by 2.8 per cent in the second quarter of 2021 (the latest quarterly outturn). As Chart C shows, 1.2 percentage points of the revision came from higher nominal growth since the fourth quarter of 2019. This largely corresponds to the upward revision to cumulative real growth outlined above. The remaining 1.6 percentage points (more than explained by the new FSS data) represents a general historical increase in the level of nominal GDP relative to real GDP (equivalently, a higher deflator). Since tax data are both more timely and less prone to revisions than nominal GDP data, the revisions have little impact on our fiscal forecast in cash terms. In outturn, it is offset by a correspondingly lower effective tax rate (and indeed brings the strength of nominal GDP growth more into line with the strength of receipts growth we had already seen during 2021-22). The higher level of nominal GDP will,

however, have a purely arithmetic effect in lowering fiscal aggregates expressed as a share of nominal GDP (as we note in Chapter 3).

Chart C: Nominal GDP revisions



Source: ONS, OBR

However, the period since we closed our forecast has also seen the accumulation of other news that would have been material to our projections for interest rates and other market-derived assumptions as well as our forecast for inflation. And while the net effect of all post-forecast developments was probably neutral for real GDP (beyond the next couple of quarters), it was probably negative overall for our fiscal forecast as discussed in Chapter 4.

^a ONS, *Impact of Blue Book 2021 changes on current price and volume estimates of gross domestic product*, June 2021, ONS, *Impact of Blue Book 2021 changes on average quarterly gross domestic product*, July 2021, and ONS, *Impact of Blue Book 2021 changes on quarterly and monthly volume estimates of gross domestic product by industry*, September 2021.

^b ONS, *Financial services sector methods changes: 1997 to 2019*, June 2021.

^c ONS, *Double deflation methods and deflator improvements to UK National Accounts: Blue Book 2021*, May 2021.

The short-term outlook for GDP

2.45 After average monthly growth of 1.6 per cent between March and June, there are signs that the pace of recovery has slowed in recent months, with the latest data showing output shrinking slightly in July and a more moderate pace of expansion than earlier in the year in August (0.4 per cent). We expect that moderate growth to continue over the coming months, reflecting continued supply bottlenecks, the withdrawal of some fiscal support (including closure of the CJRS and the end of the £20 a week uplift in universal credit awards), and the impact of colder weather on coronavirus case numbers and other seasonal infections (see Chart 2.10 above). The moderate growth also reflects the fact that most consumption opportunities have already resumed.

2.46 On a quarterly basis, we still expect growth over the second half of 2021 to be high by historical standards, as consumption is supported by rising vaccination rates and a rundown of some of the additional savings accumulated during the pandemic, and as business investment growth is boosted by the super deduction announced the March 2021 Budget (Table 2.4).

Table 2.4: The short-term quarterly GDP profile

	Percentage change on previous quarter											
	2021				2022				2023			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
March 2021 ¹	-3.8	3.9	3.0	3.3	1.1	1.1	0.5	0.4	0.4	0.3	0.3	0.4
October 2021 ²	-1.6	4.8	1.6	1.9	1.2	1.0	0.7	0.7	0.4	0.4	0.3	0.3
Change³	2.2	0.9	-1.4	-1.5	0.1	-0.1	0.3	0.3	0.0	0.1	0.0	-0.1

¹ Forecast from the first quarter of 2021.

² Forecast from the third quarter of 2021.

³ Changes may not sum due to rounding.

2.47 Since we closed our forecast to non-policy changes, several new pieces of information have emerged. The increased prominence of supply bottlenecks (discussed in Box 2.4), including developments in energy markets, points to a more subdued near-term outlook for GDP than incorporated into our forecast. This broadly offsets the positive news from the upgrade to recent GDP data that is discussed in Box 2.3.

Box 2.4: The economic effects of supply bottlenecks

In normal circumstances, markets are relatively efficient at bringing the supply of labour, goods, or services into line with demand. However, even relatively well-functioning markets can experience temporary shortages, or ‘supply bottlenecks’, either because of adverse shocks to firms’ supply capacity or their inability to respond quickly to sudden changes in demand. The latter – ‘demand-driven bottlenecks’ – can be particularly severe when there is an inelastic supply of essential inputs, constraints on prices, or factor market rigidities that prevent labour and capital from moving. Signs of shortages can also prompt amplifying ‘panic’ buying and stockpiling, while bottlenecks can also be ameliorated or aggravated by policy interventions.

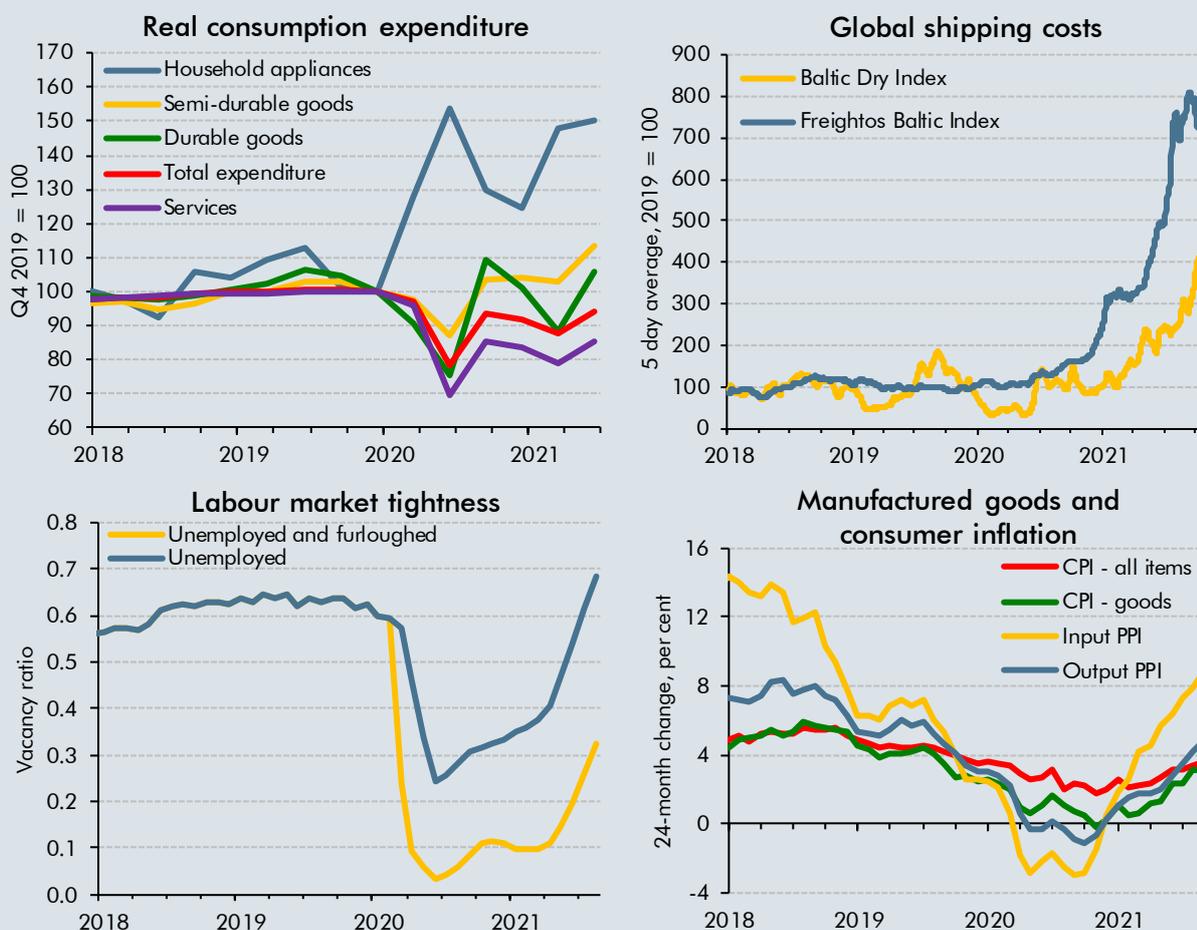
As elsewhere, the post-pandemic UK recovery is being held back by various bottlenecks:

- In **energy markets**, a combination of depleted European gas reserves after last year’s cold winter, increased demand from China, unresponsive gas supply from Russia and disruptions to renewable energy supply, has pushed wholesale gas prices to historic highs. The Government’s price cap has prevented energy providers from passing most of this price increase onto consumers, resulting in failures among smaller energy providers who purchase gas on the spot market. High prices are also putting pressure on energy-intensive businesses, such as steel, glass, and chemical production, that are not protected by the price cap.
- In **product markets**, a surge in demand for imported goods in Europe and North America has bumped up against supply constraints in Asia. Demand for durable goods related to

home working, including household appliances and computers, increased during the pandemic and remained significantly above pre-pandemic levels in the second quarter of 2021 (top left panel of Chart D). Sources of supply constraints include: coronavirus outbreaks in key manufactured goods exporters in Asia; an inelastic supply of key components, such as semiconductors; and logjams at key ports driven by logistical constraints, leading to sharp rises in shipping costs (top right panel of Chart D).

- In **labour markets**, shortages have arisen due to a combination of shocks to labour supply and mismatch between labour supply and demand. Shocks to labour supply are most evident in the market for heavy goods vehicle (HGV) drivers, where a 13 per cent fall in the number of drivers in the two years to June 2021 has been exacerbated by both delays in the certification of new drivers over the past year and post-Brexit limits placed on the hiring and utilisation of qualified drivers from the EU. Vacancies have risen rapidly compared to unemployment across the economy, indicating a tighter labour market, though labour market conditions will depend on what proportion of those on furlough in August return to their jobs (bottom left panel of Chart D). There is also evidence of mismatch in the sectoral and geographic compositions of labour supply and demand, discussed further in Box 2.2.

Chart D: Shifting demand and bottlenecks to supply are impacting prices



Note: Unemployed, vacancies and furloughed all expressed as three month averages.
Source: Datastream, Investing.com, ONS, OBR

These bottlenecks have contributed to rising wages in occupations where workers are in short supply. For example, data from the online job search platform Indeed show that between January and September 2021 the median annual salary in postings for HGV drivers rose 19 per cent, versus just 1.3 per cent in the wider jobs market (adjusted for compositional changes).^a The ONS estimates that in the most recent data for June to August 2021, adjusting for composition and base effects, regular earnings grew between 4.1 and 5.6 per cent, only slightly above average growth of 3.6 per cent in 2019. Despite shortages in some occupations, the Institute for Fiscal Studies finds that for most unemployed workers competition for jobs, defined as the number of available jobseekers per vacancy, adjusted for jobseekers' occupational background, is more intense than before the pandemic.^b

Bottlenecks have also contributed to higher consumer price inflation, as firms raise prices to reflect higher input costs (bottom right panel of Chart D). Data for the three months to September (to avoid the distortions from annual base effects) reveals that price increases have originated mainly in sectors subject to product market bottlenecks (such as industrial and durable goods, and vehicles). But inflation increases have been broadly based across subsectors, and we expect inflation to rise further, as recent energy price rises and labour market shortages add to input cost pressures. Our inflation forecast is discussed in more detail from paragraph 2.86.

^a Indeed, *Foreign Interest in Driving Jobs Rises on Visa Announcement*, October 2021.

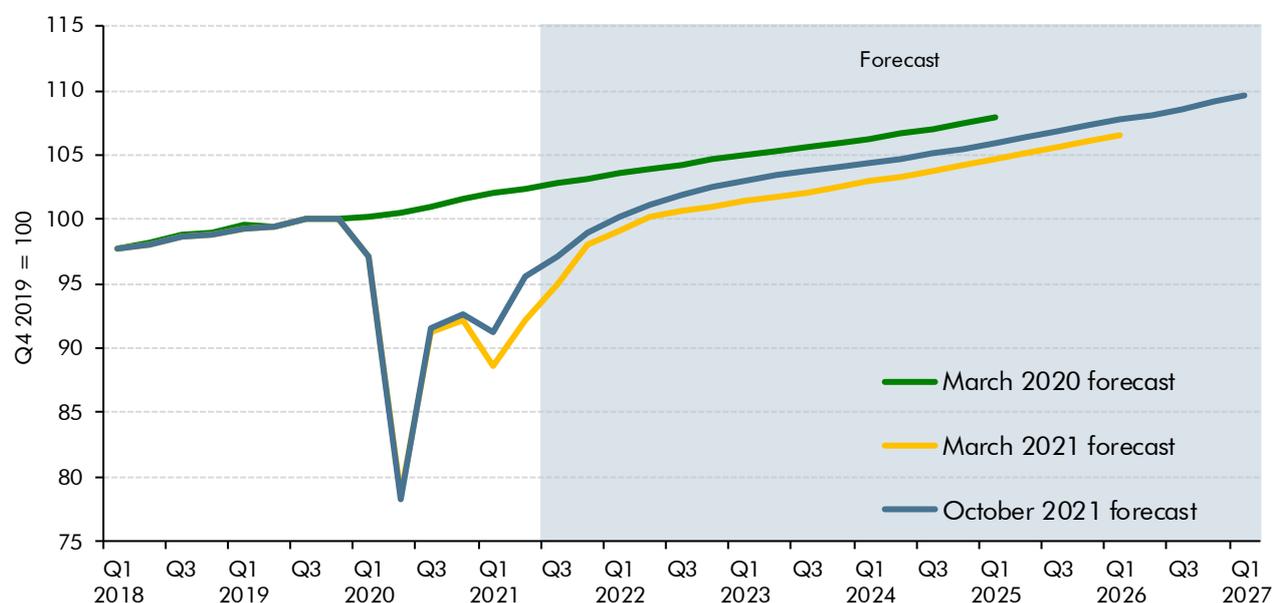
^b Institute for Fiscal Studies, *Job opportunities during the pandemic*, September 2021.

The medium-term outlook for GDP

2.48 Despite the expected slowdown in the second half of this year, the stronger than expected recovery in the first half means that GDP now regains its pre-pandemic level around the turn of the year, somewhat earlier than the mid-2022 of our March forecast (Chart 2.11). But even so, it will still be around 3 per cent below its corresponding level in our March 2020 forecast.²¹ On an annual basis, GDP increases by 6.5 per cent in 2021, compared to the 4.0 per cent we expected in March 2021.

²¹ In our forecast, GDP returns to its pre-crisis peak at the turn of the year. But the precise month in which this level is recovered depends on several factors. For instance, due to the discrepancy between the output and headline measures of GDP, the output figure reaches its January 2020 pre-crisis peak in November, but the headline measure of monthly GDP takes until January. In addition, the timing will be affected by the precise date chosen as the pre-crisis peak and whether monthly or quarterly data are used.

Chart 2.11: Real GDP



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

Source: ONS, OBR

- 2.49** Quarterly growth is expected to ease further in 2022 on the back of slowing growth in consumption and residential investment. The former reflects the ending of the largely mechanical boost to spending as consumer-facing sectors re-open, while the latter reflects a fading in the release of previously pent-up demand. On an annual basis, GDP growth of 6.0 per cent is below the 7.3 per cent we expected in March 2021, reflecting the slowdown towards the end of this year.
- 2.50** As Table 2.5 shows, growth in 2022 and 2023 is partly driven by business, supported by the continuing economic recovery and temporary uplifts to capital allowances announced in March 2021 that run until March 2023. The discretionary fiscal loosening announced in this Budget, and described in Box 2.1, provides further support to near-term output growth, whereas previously government consumption was expected to act as a drag on growth. Net trade reduces GDP growth, reflecting the growth in consumption and business investment (both of which are relatively import intensive).
- 2.51** From 2023 onwards, annual growth returns to historically more normal rates. Growth falls from 2.1 per cent in 2023 to 1.3 per cent in 2024 as the boost to output from the Government's fiscal loosening unwinds and as the super deduction ends. It then settles at around 1.7 per cent at the forecast horizon, with consumption, investment, and government spending providing steady contributions to growth. Potential output anchors the level of activity in the medium run, so – reflecting our revised scarring judgement – by the first quarter of 2025, GDP stands around 1 per cent above our March 2021 forecast and 2 per cent below our March 2020 forecast.

Table 2.5: Expenditure contributions to real GDP

	Percentage points, unless otherwise stated						
	Outturn	Forecast					
	2020	2021	2022	2023	2024	2025	2026
GDP growth (per cent)	-9.8	6.5	6.0	2.1	1.3	1.6	1.7
<i>Main contributions:</i>							
Private consumption	-7.0	3.0	6.2	0.8	1.1	0.8	0.7
Business investment	-1.0	-0.2	1.4	0.5	-0.1	0.5	0.6
Dwellings investment ¹	-0.6	0.8	0.2	-0.1	0.0	0.1	0.1
Government ²	-1.1	3.4	0.4	0.5	0.2	0.4	0.5
Change in inventories	-0.5	0.1	0.2	0.0	0.0	0.0	0.0
Net trade	0.8	-0.8	-2.5	0.3	0.1	-0.1	-0.2
Other ³	-0.3	0.2	0.0	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.

² The sum of government consumption and general government investment.

³ Includes the statistical discrepancy and net acquisition of valuables.

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

The output gap

- 2.52** While potential output anchors the level of activity in the medium term, divergences in the path for real GDP in the near term reflect both the evolution of demand and temporary disruptions to supply. The difference between demand and supply (the output gap) is one factor that drives our forecast for domestically generated inflation (discussed in paragraph 2.86).
- 2.53** We judge that the gradual re-opening of the economy through the middle of this year as restrictions were relaxed was associated with a faster recovery in demand than supply, so opening up a modest degree of excess demand (Chart 2.12). This reflects evidence of the growing importance of product market bottlenecks and labour shortages (see Box 2.4). In contrast, our March forecast assumed that the recovery in demand would lag slightly behind the recovery in supply as the economy reopened, leading to a small margin of spare capacity.
- 2.54** Excess demand lessens slightly at the end of 2021 and start of 2022 as bottlenecks ease and labour supply is boosted by the ending of the CJRS. Excess demand then increases again as a result of the discretionary fiscal easing announced in the Budget, which coincides with the peak impact on business investment of the super-deduction announced in the March Budget. As the super-deduction ends, the fiscal easing fades and the effect of tighter monetary policy is felt, excess demand wanes and output returns to potential by the fourth quarter of 2024. On a pre-policy basis, the output gap would have averaged 0.2 per cent in 2022, but Budget measures raise it to 0.6 per cent creating additional inflationary pressure (explained further in paragraph 2.86).

Chart 2.12: The output gap



Composition of economic activity

Private consumption and saving

- 2.55** During the pandemic, government support measures, notably the CJRS and Self-Employed Income Support Scheme (SEISS), protected household incomes, and with public health restrictions limiting retail and social consumption opportunities, savings increased sharply. Private consumption then rose 17 per cent over the second half of 2020 before a resurgence of cases and the renewed imposition of public health restrictions led it to fall back by 4.3 per cent in the first quarter of 2021. In response to the easing of health restrictions, waning fear of the virus, and the reopening of social consumption opportunities, consumption has rebounded over the summer. The latest outturn indicates that consumption increased by 7.1 per cent in the second quarter, although that leaves the level still around 6.8 per cent below its pre-pandemic peak.
- 2.56** We expect the recovery to continue, although at a slower pace as most restrictions on social consumption have already been lifted. Consumption is expected to regain its pre-pandemic level around the turn of the year. Our medium-term consumption forecast is higher than March 2021, the slightly lower saving rate outlined below. Consumption is around 0.7 per cent higher than our March 2021 forecast by the first quarter of 2025 and only a little lower than our pre-pandemic March 2020 forecast.

Chart 2.13: Real private consumption



Source: ONS, OBR

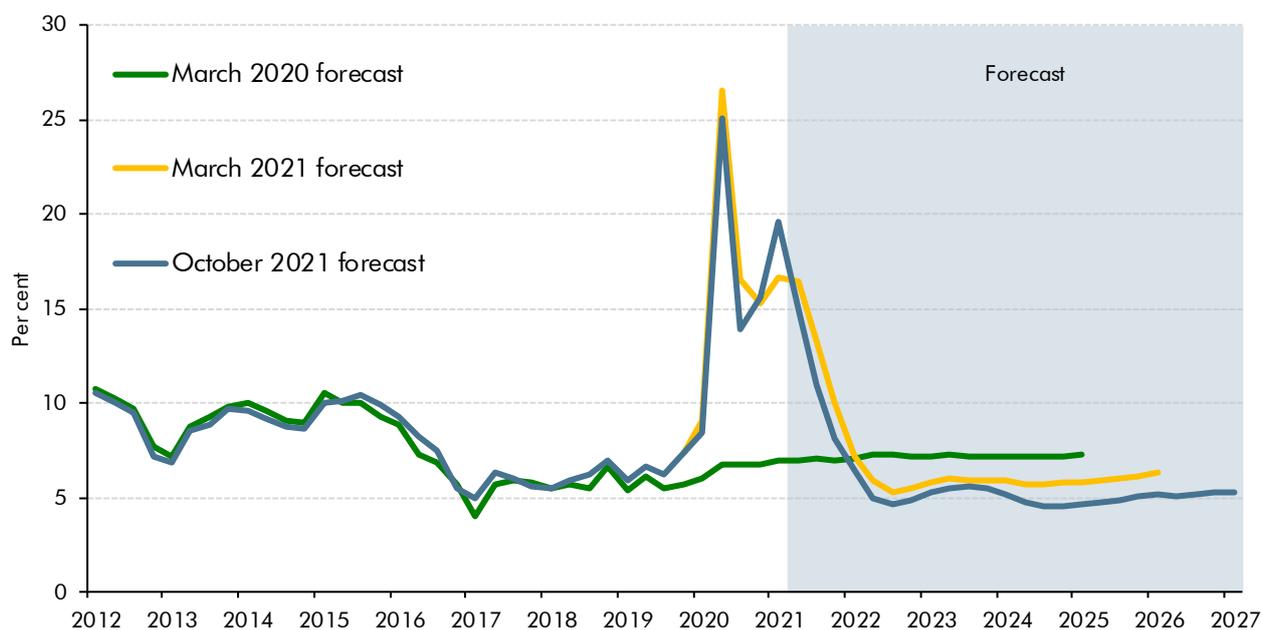
2.57 After we closed our forecast to non-policy changes, the QNA revisions outlined above raised cumulative growth in private consumption since the fourth quarter of 2019 by 0.7 percentage points. Had we been able to incorporate these revisions, the pre-pandemic peak might be recovered slightly earlier than our forecast assumes, but there would have been few implications for our medium-term forecast judgements.

2.58 Having reached a record high of 23 per cent in the second quarter of 2020, the saving ratio fell back sharply as restrictions were eased, though it remained elevated in the second quarter of 2021. Our forecast assumes that it continues to fall back, stabilising at around 5 per cent in the medium term (Chart 2.14). This is slightly below the March 2021 forecast as the removal of the worst of the pandemic-related downside risks and a smaller rise in unemployment lessen the need for precautionary saving. Movements in the saving ratio since the start of 2020 have largely been driven by pandemic-related restrictions, and, as a result, over this period households have built up additional savings of around £170 billion.²² We maintain our assumption that households spend around 5 per cent of these additional savings each year (this effect is somewhat front-loaded into late 2021 and early 2022).²³ This additional spending leaves the saving ratio a little below its pre-crisis average (based on the pre-QNA data vintage used in our forecast) in the medium term.

²² This figure is calculated by comparing household net currency and deposits accumulation between the first quarter of 2020 and the second quarter of 2021 relative to the 2019 quarterly average. Based on the latest QNA data released after our forecast closed, this figure is now slightly higher at around £180 billion.

²³ Standard consumption theory suggests that households will only gradually spend an unanticipated increase in wealth, rather than spending it all immediately. Empirical evidence typically suggests the share of such increases spent is around 5 to 10 per cent a year, consistent with our forecast assumption. For instance, see Institute for Fiscal Studies, *MPCs in an economic crisis: spending, saving and private transfers*, August 2021.

Chart 2.14: Household saving ratio



Source: ONS, OBR

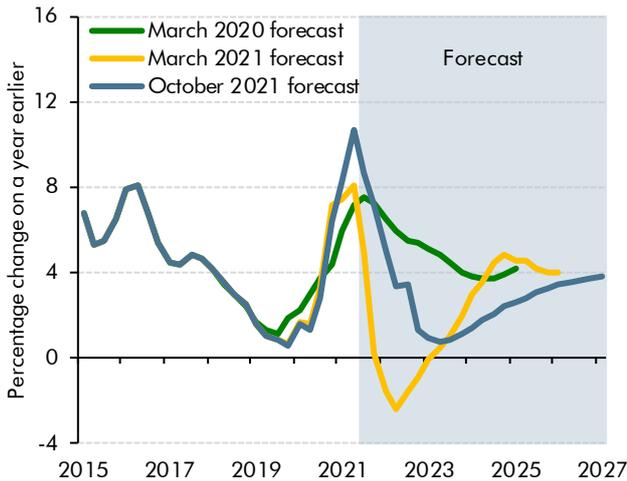
Housing market

House prices

- 2.59** House prices have risen significantly faster since the start of the pandemic than we had expected (Chart 2.15). The pandemic and changes in ways of working appear to have led to a re-evaluation of the housing needs of many households, including the desire for more outdoor space and more room to work from home, resulting in a surge in demand for houses – the ‘race for space’. This surge in demand for houses was facilitated by the availability of low-cost mortgages and boosted by the accumulation of forced savings during the pandemic (especially by higher-income households). The time-limited stamp duty holiday meant that this demand was concentrated into a shorter period than would otherwise have been the case. These factors appear to have provided significant support to house prices, far beyond what would be implied by recent movements in income – usually the largest driver of housing demand – so lifting the house price to earnings ratio (Chart 2.16).
- 2.60** House price inflation has been volatile in recent months as stamp duty deadlines loomed then passed, but seems to have eased a little recently. We expect this to continue over the next few quarters, although we no longer expect prices to fall at any point (as we did in March). The Halifax and Nationwide indices – more timely measures than the ONS series we use in our forecast – suggest that house price inflation peaked in July and August respectively, while other survey indicators of house price inflation have also started to ease. We expect annual house price inflation to fall from almost 11 per cent in the second quarter of 2021 to just 0.5 per cent by the middle of 2023 as the temporary factors discussed above fade. This brings the house price to earnings ratio back to around its pre-pandemic level.

2.61 Over the medium term, we expect house price inflation to rise to around 3.5 per cent a year, matching the growth in nominal incomes. This leaves house prices around 4 per cent higher in 2025 than we forecast back in March. This mainly reflects our upward revision to household incomes in the medium term.

Chart 2.15: House price forecast



Source: ONS, OBR

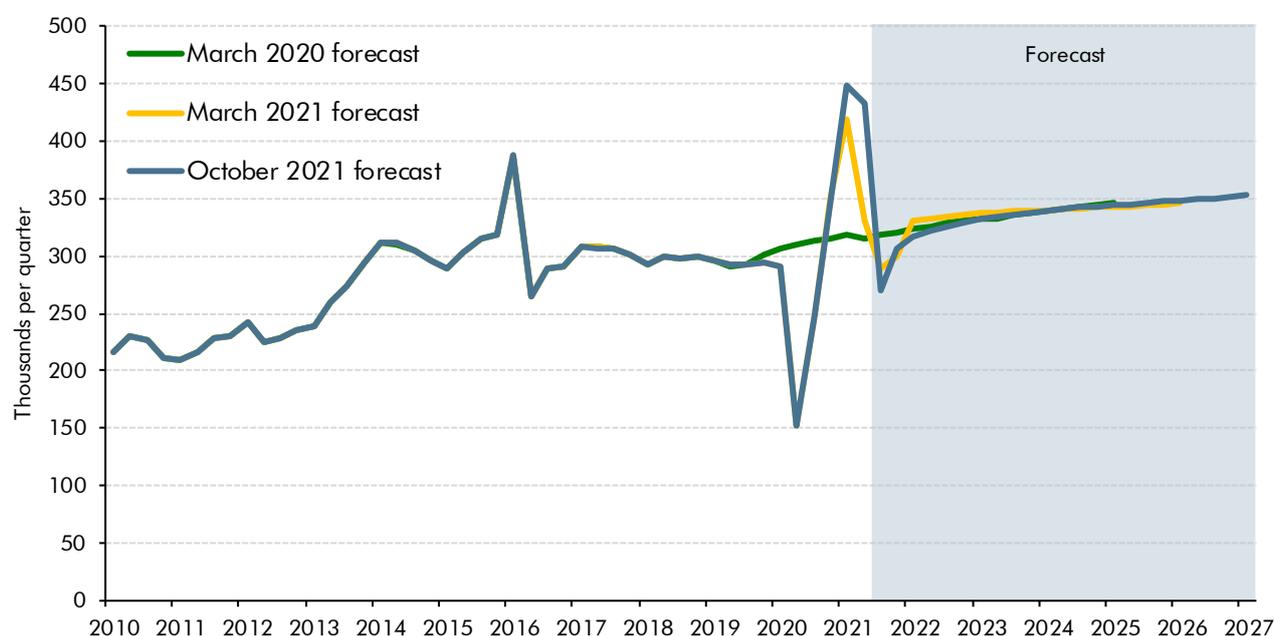
Chart 2.16: House price to earnings ratio



Property transactions

2.62 Residential property transactions rose sharply over the first half of 2021 (Chart 2.17), driven by the stamp duty holiday and increased demand for larger properties, especially in suburban areas, as preferences and working patterns changed as a result of the pandemic. The stamp duty holiday on properties up to £500,000 tapered down to £250,000 on 8 July, resulting in a drop in transactions in July. We expect a smaller drop in October, when the holiday ends entirely and thresholds return to their pre-pandemic levels. Thereafter, we expect transactions to rise steadily to a level consistent with longer-term average rates of housing market turnover, similar to our pre-pandemic March 2020 forecast.

Chart 2.17: Residential property transactions



Source: HMRC, OBR

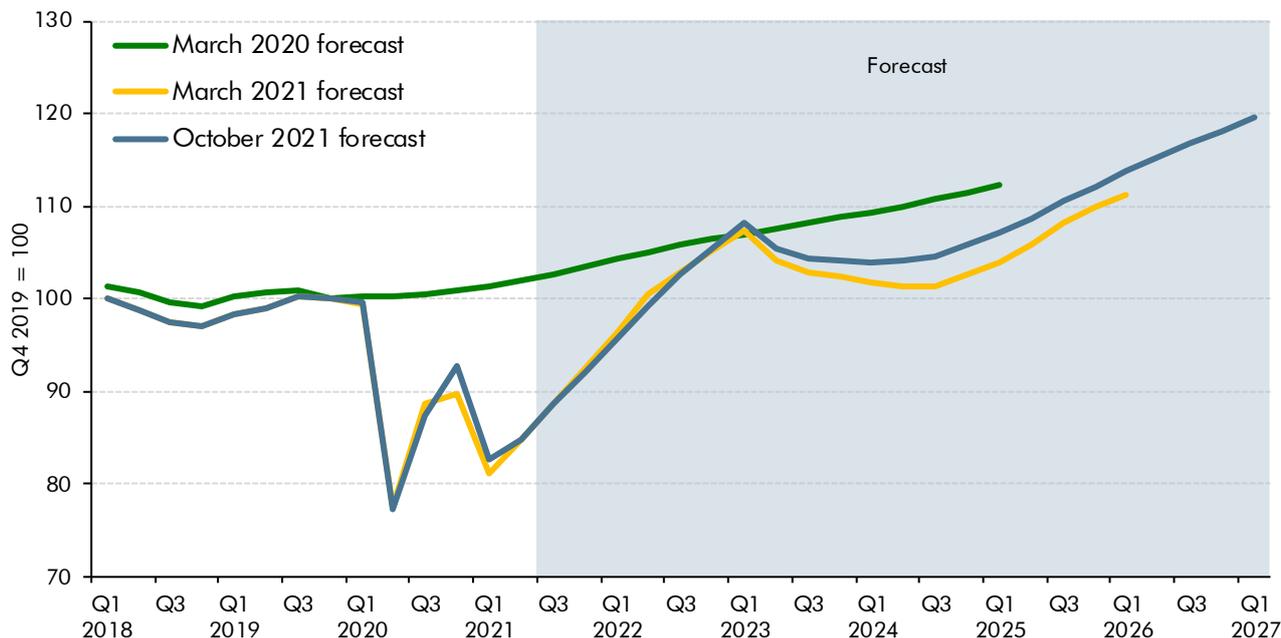
Residential investment

2.63 Residential investment rebounded after a sharp fall in the second quarter of 2020 and is now around 3.6 per cent above its pre-pandemic level. Both new-build construction and residential improvements remained strong in early 2021, as the sector continued to adapt to working under public health restrictions. The transactions element of residential investment was also boosted by the stamp duty holiday. We expect a further rise in residential investment in the near term following the recent strength in housing starts. Thereafter, residential investment is expected to fall back as the effect of the stamp duty holiday fades and housing starts drop back. By the first quarter of 2025, we expect residential investment to be around 1.7 per cent above our March 2020 forecast, as increased home working compared to before the pandemic results in greater investment in homes, and 1.2 per cent above our March 2021 forecast. There are potentially downside risks to our near-term forecast from materials shortages affecting the construction sector.

Business investment

2.64 After falling by 11 per cent in 2020, business investment fell a further 9.3 per cent in the first quarter of this year as a result of renewed uncertainty due to the third lockdown and the UK's exit from the EU. It only grew by 4.5 per cent in the second quarter – slower than the 5.5 per cent rise in GDP. These uncertainties recede only slowly which, along with the extra debt that some businesses have accumulated over the pandemic, should weigh on business investment growth. However, the time-limited capital allowance super-deduction announced in the March 2021 Budget is expected to bring forward investment in the near term, providing a substantial, though temporary, boost to the recovery over the next two years. As a result, business investment regains its pre-pandemic peak by the middle of 2022 – only a little later than GDP as a whole. But once the incentive is withdrawn, business investment falls before picking up again towards the end of the forecast.

Chart 2.18: Real business investment



Source: ONS, OBR

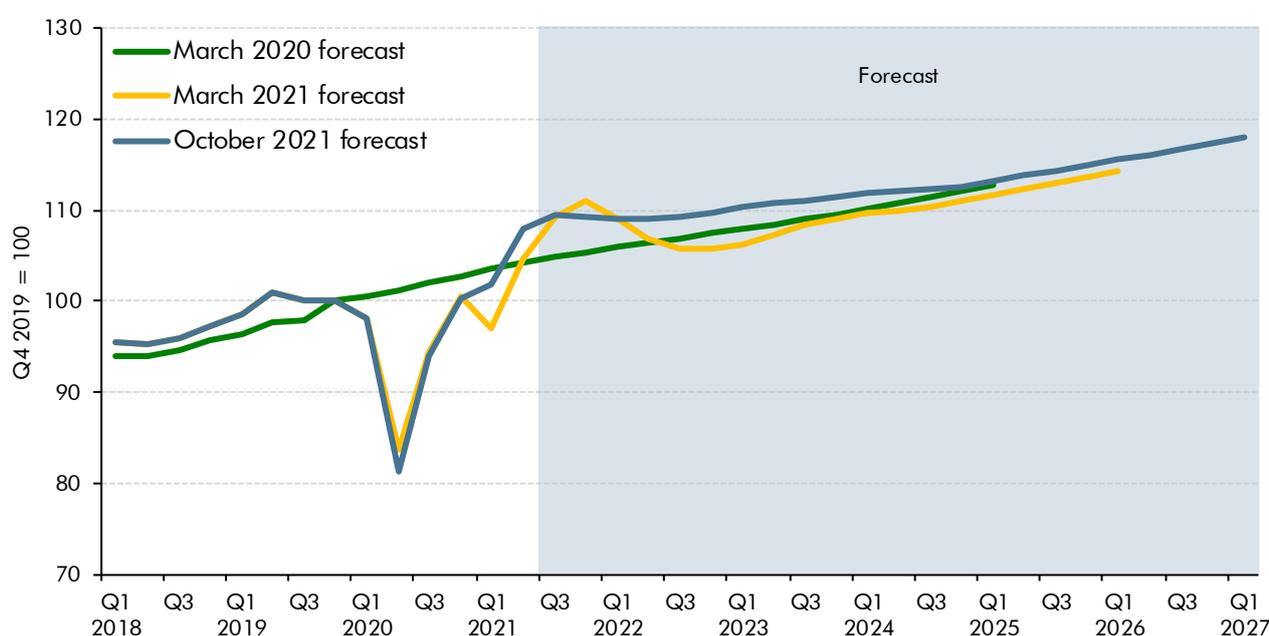
- 2.65 Cumulative business investment from the first quarter of 2020 to the first quarter of 2025 is 7.3 per cent lower than in our pre-pandemic March 2020 forecast. This translates into a reduction of around 1.6 per cent in the gross capital stock relative to March 2020 and contributes 0.6 percentage points to our scarring assumption.
- 2.66 QNA revisions increased cumulative growth in business investment by 2.9 percentage points relative to the fourth quarter of 2019 after our pre-measures forecast closed, potentially signalling a somewhat stronger recovery than we had anticipated in this forecast. That said, this revision to business investment is fairly small relative to the overall capital stock (which is what matters for the capital shallowing component of our scarring judgement) and the worsening in supply bottlenecks and higher yield curve since we finalised would likely weigh on business investment in the coming quarters, offsetting the impact of the revision.

Government

- 2.67 Government consumption increased by 12 per cent in cash terms over the first half of 2020 to fund virus-related pressures on health and other public services, but in real terms it fell by 20 per cent reflecting the ONS's methodology for measuring real output and expenditure in health and education (as discussed in Box 2.4 of our March 2021 *EFO*). By the second quarter of 2021, real government consumption had risen 35 per cent from its trough in the second quarter of 2020, following the resumption of elective healthcare procedures and the reopening of schools. The growth partly represents new health programmes too: over the first half of 2021, £14.2 billion (1.3 per cent of GDP in that period) was added to the volume measure of GDP to account for coronavirus testing, tracing and vaccination services. Combined, this left real government consumption 8.6 per cent above its pre-pandemic peak, broadly in line with our March 2021 forecast (Chart 2.19).

2.68 The Chancellor has announced significant increases in departmental resource spending in the Budget and Spending Review. This results in nominal government consumption rising by 0.3 per cent year-on-year in 2022, in contrast to the 8.3 per cent fall that would have occurred on his March 2021 plans. This follows a 7.4 per cent increase in 2021. In real terms, this removes the fall in government consumption in 2022 that was incorporated in our March forecast. The Spending Review sets detailed spending plans up to 2024-25 and totals for 2025-26 and 2026-27. These leave real government consumption 1.2 per cent higher than in our March forecast by the first quarter of 2026. It is also now materially higher than our pre-pandemic March 2020 forecast in all years.

Chart 2.19: Real government consumption



Source: ONS, OBR

2.69 The latest QNA data suggest government investment rose by 2.6 per cent over 2020 and has risen by only a further 0.1 per cent over the first half of 2021. Our forecast assumes that the large spending increases that were announced in the March 2020 Budget increase government investment to 23 per cent above its pre-pandemic level in real terms by 2025.

Trade and the current account

2.70 After partly recovering from significant falls in early 2020 over the second half of the year, imports and exports fell 11 and 8 per cent respectively in the first quarter of 2021 after Brexit compounded pandemic-related disruption at the border. Imports and exports partly recovered these falls in the second quarter, as these disruptions began to fade and consumption and business investment at home and abroad picked up.

2.71 In the near term, we expect the recovery in imports to be slightly more rapid than in exports, as relatively import-intensive business investment and durables consumption pick up quickly over 2021 and 2022. Over the medium term, imports rise only marginally while exports fall slightly. This reflects our assumption that the UK's departure from the EU will reduce the

trade intensity of GDP (Box 2.5), 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 market share. Overall, the outlook for net trade in the medium term has improved slightly since our March 2021 forecast. We have revised up our forecast for growth in UK export markets by more than we have revised up our forecast for UK domestic demand.

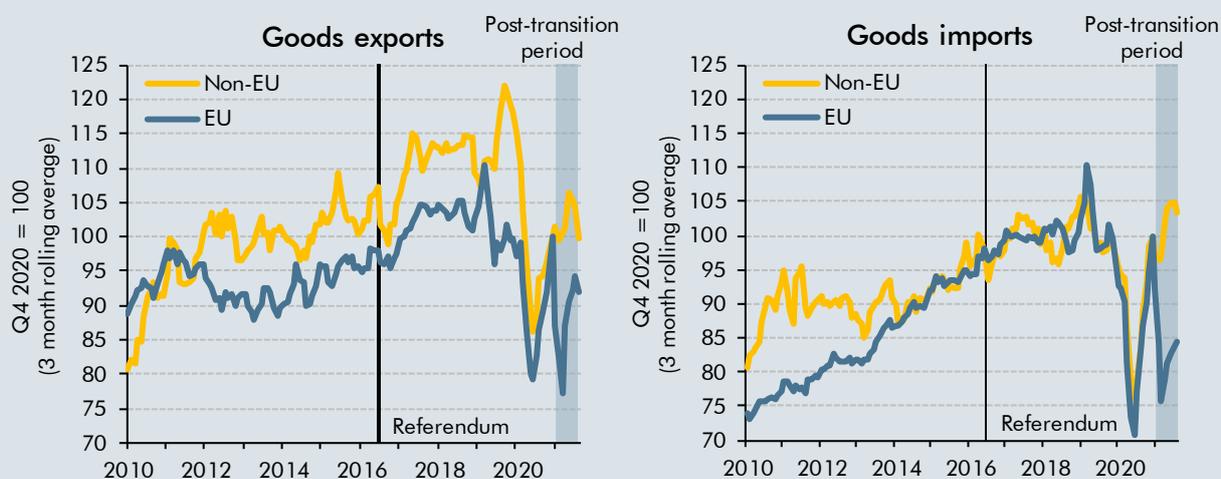
Box 2.5: The initial impact of Brexit on UK trade with the EU

Since our first post-EU referendum *EFO* in November 2016, our forecasts have assumed that total UK imports and exports will eventually both be 15 per cent lower than had we stayed in the EU. This reduction in trade intensity drives the 4 per cent reduction in long-run potential productivity we assume will eventually result from our departure from the EU.

While the UK left the EU on 31 January 2020, the transition period meant that trading terms between the UK and EU were unchanged until 1 January 2021 when some, but not all, of the provisions of the Trade and Cooperation Agreement (TCA) came into effect. We expect the full impact of Brexit on trade to be manifest only after all the terms of the TCA have been fully implemented and businesses have had time to adjust fully to the change in trading conditions, including reorganising their supply chains. Initial data under the new regime may nevertheless provide early insights about the impact of Brexit and the TCA on UK trade patterns.

UK-EU goods trade volumes fell sharply after the TCA came into effect, and remain below their pre-Brexit (and pre-pandemic) levels in 2019. Chart E shows that UK goods exports to the EU fell by 45 per cent in January of this year (greater than their fall early in the pandemic) and in August were still down around 15 per cent on the level before the transition period ended. UK goods imports from the EU also fell by over 30 per cent at the start of the year and were still down around 20 per cent in August compared to December 2020. While goods trade with the rest of the world experienced similarly sharp falls at the start of the pandemic, in August it had recovered to 7 per cent below average 2019 levels whereas total goods trade with the EU remained down 15 per cent.^a

Chart E: EU and non-EU goods trade

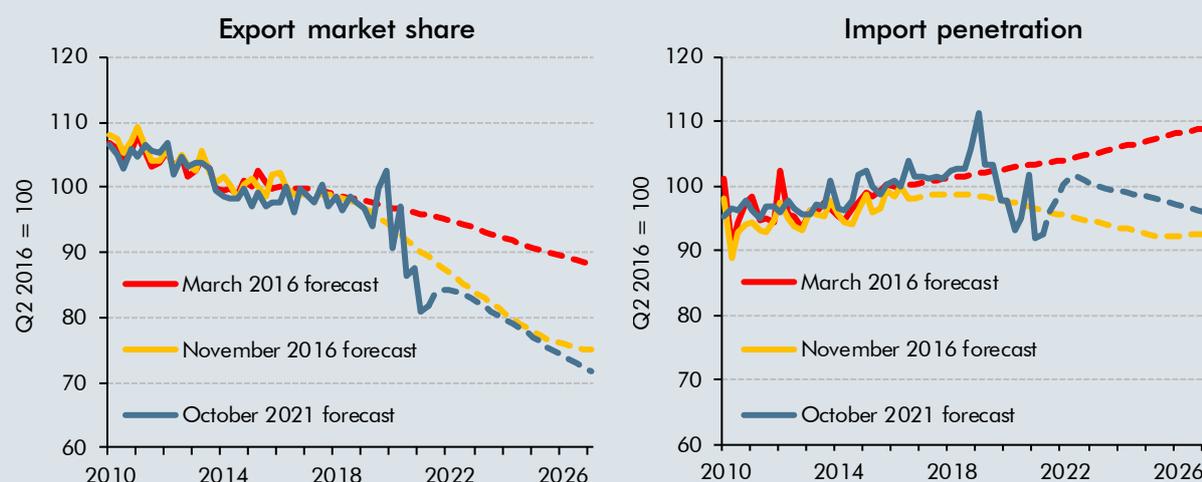


Note: Excludes unspecified goods.
Source: ONS, OBR

Of course, some of the recent disruption to trade was associated with the onset of the pandemic in early 2020, the more stringent testing of lorry drivers initiated in response to the spread of the Alpha variant at the turn of the year, and the emergence of supply bottlenecks as the global recovery gathered pace. The Centre for European Reform has attempted to isolate the impact of Brexit using a 'doppelgänger UK' (constructed as a weighted average of other countries' gross goods trade flows) as a counterfactual for what would have happened had the UK remained in the EU. That analysis concluded that, since the transition period ended, leaving the single market and customs union had reduced UK goods trade by 15.8 per cent as of August 2021.^b

Chart F shows that the UK's export market share (UK exports relative to total imports in the countries the UK exports to) and import penetration (the degree to which UK domestic demand is satisfied by imports) are still broadly tracking our post-referendum forecast from November 2016 despite the disruption of the pandemic and the fact Brexit was delayed compared to our initial assumption. This suggests that UK trade was lowered even before trading conditions with the EU changed, potentially due to anticipatory effects and the uncertainty created by the EU referendum.^c

Chart F: Export market share and import penetration



Note: March and November 2016 forecasts include an illustrative extension. Export market share is defined as exports divided by UK export markets. Import penetration is UK imports relative to UK import-weighted domestic demand.
Source: ONS, OBR

In summary, the evidence so far suggests that both import and export intensity have been reduced by Brexit, with developments still consistent with our initial assumption of a 15 per cent reduction in each. It is, however, too early to reach definitive conclusions because:

- The terms of the TCA are yet to be implemented in full, meaning trade barriers will rise further as more of the deal comes into force. For example, the introduction of full checks on UK imports has recently been delayed until 2022.
- The full effect of the referendum outcome and higher trade barriers will probably take several years to come through, with businesses needing considerable time to adjust.

- The pandemic has delivered a large shock to UK and global trade volumes over the past 18 months, making it difficult to disentangle the separate effect of leaving the EU.
- Finally, trade data tend to be relatively volatile and are revised frequently, rendering any initial conclusions subject to change as the data are revised.

We will keep our assumptions under review as more information becomes available.

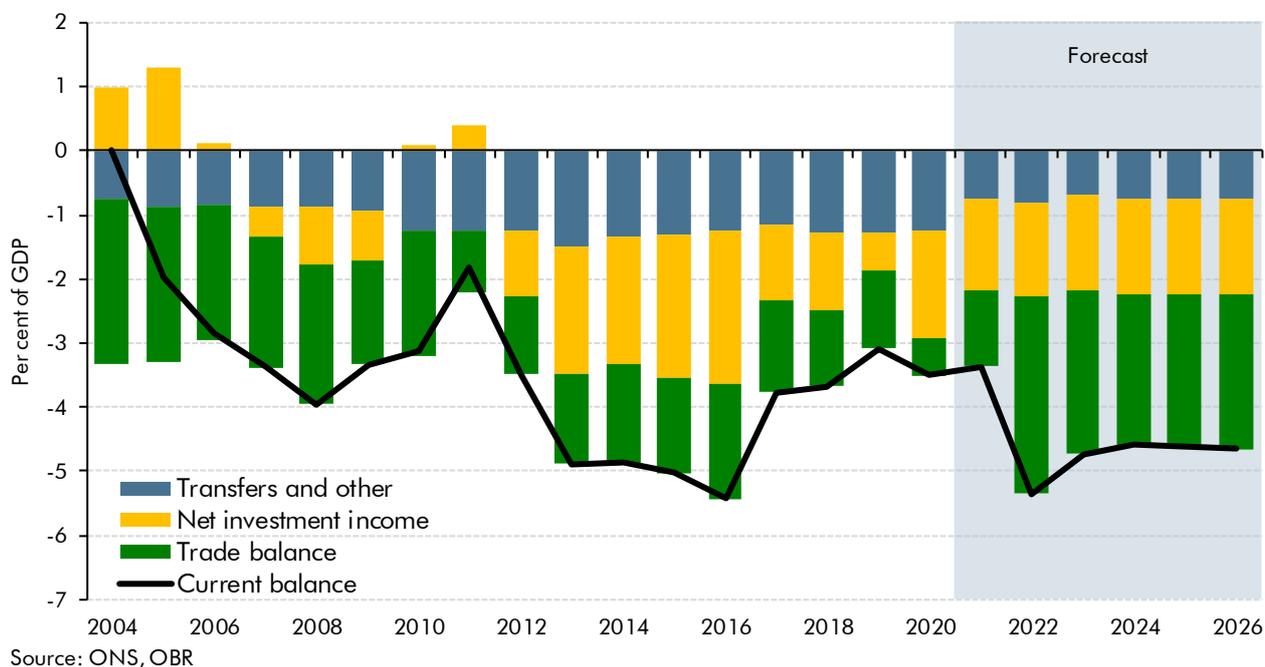
^a Our forecast was closed before the latest trade data were published. In the latest ONS release, the level of exports in the second quarter of 2021 was 5.4 per cent higher and imports 3.4 per cent higher than in the first estimate. While this would have led to an upward revision in our net trade forecast in the short term, it would be unlikely to materially affect our view of the medium-term impact of Brexit.

^b Estimate with data up to August 2021 using the model in Springford, J., *The cost of Brexit: May 2021*, 21 July 2021.

^c For discussion of the impact of uncertainty on trade, see Crowley, M. et al, *Renegotiation of Trade Agreements and Firm Exporting Decisions: Evidence from the Impact of Brexit on UK Exports*, February 2020, and Douch, M. et al, *The Trade Effects of the Brexit Announcement Shock*, August 2018.

2.72 Since 2017, the current account has on average been in deficit by around 3 per cent of GDP, and we expect it to settle at a slightly wider deficit than this at the forecast horizon. In the vintage of data used for our forecast the current account deficit had been somewhat wider in recent years than in the QNA at around 3½ per cent of GDP, reflecting both a wider deficit in trade and net investment income. In our forecast we expect the current account deficit to widen to 5.3 per cent of GDP in 2022, a similar level to the recent peak seen in 2016, driven by strong import growth on the back of the recovery in import-intensive components of consumption and investment. The trade deficit narrows from 2023 onwards, as import-intensive domestic demand moderates and the upwards revision to the global outlook boosts UK exports. Both the net investment income and transfer deficits remain stable over the forecast, the latter had narrowed in our previous forecast but that has been offset by the decision to restore the overseas aid budget to 0.7 per cent of national income. This leaves the current account deficit at around 4.5 per cent of GDP in the medium term, a slightly narrower deficit than in our March 2021 forecast (Chart 2.20).

Chart 2.20: Current account deficit



2.73 QNA revisions to recent data have more material implications for net trade and the current account than the other components of GDP. The latest data suggest that a 0.7 per cent of GDP trade deficit in the first quarter of 2021 turned into a 0.1 per cent of GDP trade surplus in the second quarter, adding 0.9 percentage points to nominal GDP growth. But the data available at the time our pre-policy forecast closed instead pointed to a small trade deficit widening in the second quarter of the year, taking 0.7 percentage points off GDP growth. All other things being equal, knowing the extent of this revision, we would have raised our net trade forecast in the near term, although it would have been unlikely to materially alter our medium-term judgements given how volatile and prone to revision trade data can be. The net investment income balance deficit was 0.9 per cent of GDP in the second quarter of 2021 in the QNA data, a 0.5 percentage points narrower deficit than in our forecast. Knowing this would likely have raised our near-term net investment income forecast and also somewhat increased it in the medium term. Overall, QNA revisions would have therefore mainly affected the short-term path of the current account balance, although they would likely also have marginally narrowed the deficit at the forecast horizon.

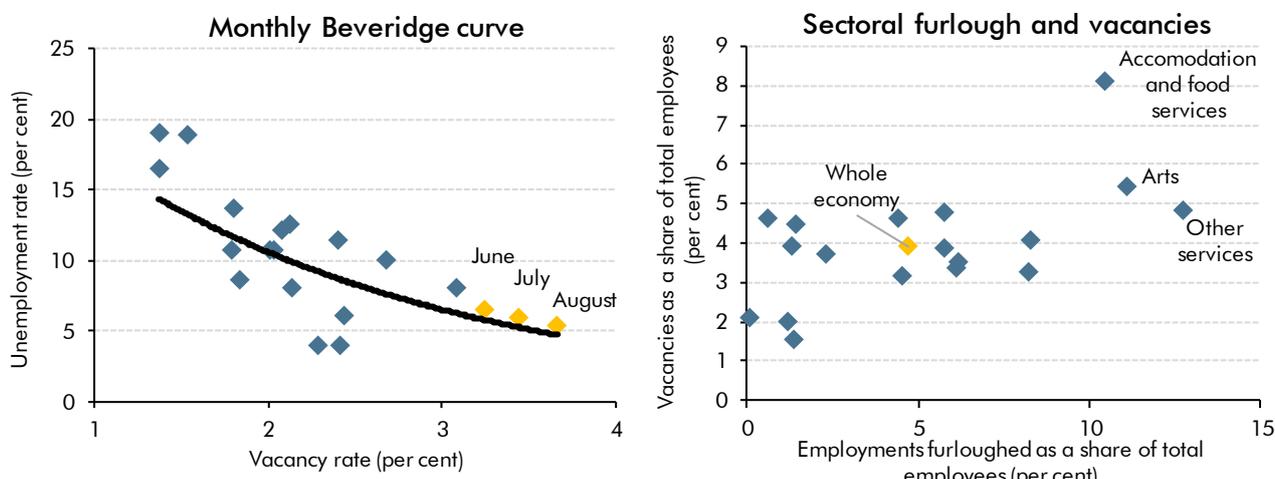
Labour market

2.74 Government schemes to sustain viable jobs and support household incomes through the pandemic have proved remarkably successful. The CJRS has allowed firms to keep paying workers – who might otherwise have been laid off – a large fraction of their normal earnings. And the SEISS has provided similar income support to the self-employed. As a result, unemployment rose only slightly from 4.0 per cent in the first quarter of 2020, to a peak of 5.2 per cent in the final quarter of 2020, far less than the shortfall in output over the same period would have implied. However, the available labour force also shrank, as those with serious health conditions were forced to ‘shield’, some ‘discouraged’ workers

stopped looking for work, an unusually large cohort of students entered higher education, and net migration fell. The recovery in output since the spring has led to a notable rise in the demand for labour and growing evidence of shortages in parts of the labour market.

2.75 The success of the CJRS in preserving job matches has meant that much of the impact of the pandemic on total hours worked has come through average hours rather than employment. While on the CJRS, workers were initially unable to work at all, weighing heavily on average hours which fell by 17 per cent between the first and second quarters of 2020. Hours have subsequently recovered faster than expected in our March 2021 forecast, leaving them only 2.7 per cent below pre-pandemic levels in the second quarter of 2021, compared to the 5.7 per cent assumption in our March 2021 forecast. This was largely the result of both activity and output recovering faster than expected, which contributed to there being approximately 1.2 million fewer people remaining on the CJRS in August than assumed in March. A rise in the proportion who are on part-time furlough, record levels of vacancies (over 1.1 million), and the fact that those left on the CJRS were particularly concentrated in high-vacancy sectors (Chart 2.21) suggests that many of them will either remain with their existing employer or will be able to find alternative work quite easily now that the scheme has closed. Although there remains a good deal of uncertainty, we expect the numbers flowing into unemployment after closure to be rather lower than we did in March (180,000 compared to 310,000).

Chart 2.21: Vacancies and unemployment



Note: The unemployment rate used in this chart includes those on the CJRS as 'unemployed'.
Source: HMRC, ONS, OBR

2.76 More generally, the labour market has proved stronger than we assumed in March. The PAYE RTI measure of employees has reached record levels at 29 million, and the latest estimate for the unemployment rate covering the three months to August has fallen to 4.5 per cent, well below our March forecast of 5.6 per cent, which is indicative of the recent buoyancy of the demand for labour.

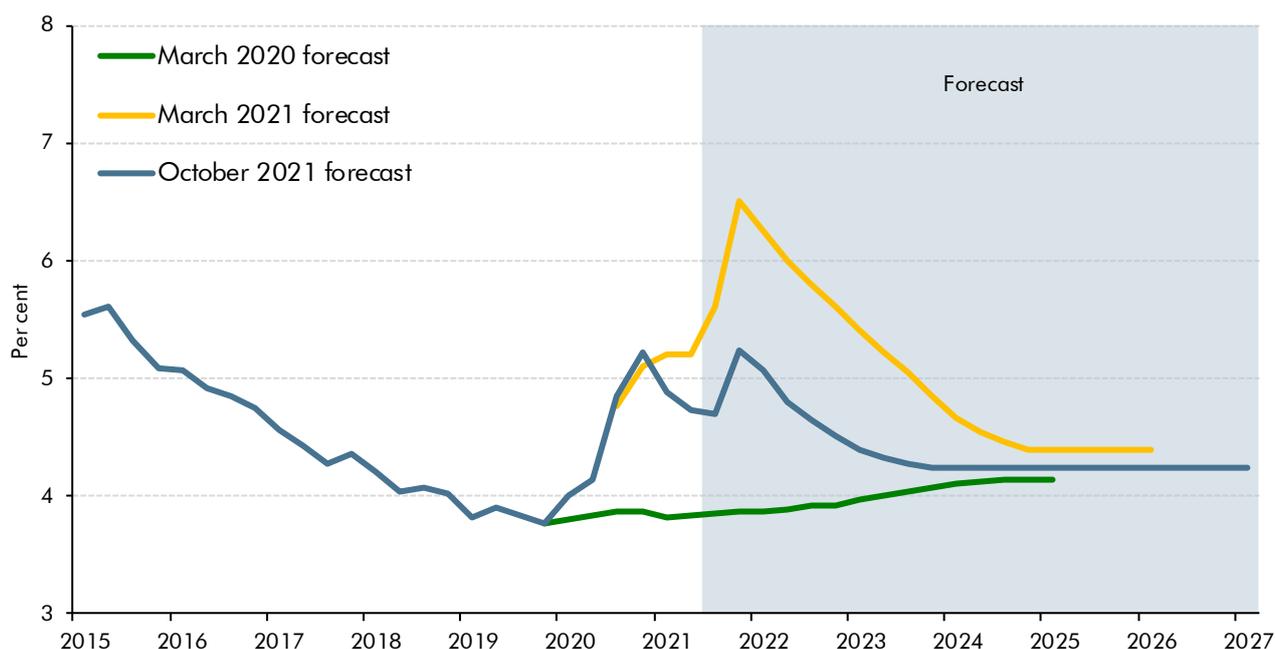
2.77 Average earnings have held up much better than output over the pandemic and by the second quarter of 2021 were 4.9 per cent above pre-pandemic levels. Headline measures

of annual average pay growth soared in the second quarter of 2021, with the ONS average weekly earnings growth series hitting 8.8 per cent on the year before, and HMRC's PAYE RTI median earnings series reaching 9.1 per cent. In part, this simply reflects a recovery from the unusually depressed wage levels a year earlier. It also reflects compositional effects, as job losses since the start of the pandemic have been concentrated in low-wage positions. These effects have begun to unwind since the summer, with job creation skewed towards social consumption sectors and younger age groups, where wage levels tend to be lower than average. Alongside this, the effect of the CJRS, which had been weighing on earnings during 2020, has reversed and since April 2021 begun to push up earnings as significant numbers flowed off furlough. Earnings growth has also been stoked by the tightening in labour market conditions, which, as shown above, has pushed vacancies to record levels.

Prospects for employment and unemployment

2.78 The faster recovery in output and employment together with the record levels of vacancies have led us to lower our forecast for near-term unemployment. We now expect the unemployment rate to peak at 5.2 per cent in the fourth quarter of 2021, some 1.3 percentage points lower than we did in March (equivalent to 460,000 fewer people unemployed); see Chart 2.22. The present combination of high vacancies and relatively low redundancies suggests that unemployment may then fall back quite quickly, though restructuring in the wake of the pandemic means that there is also likely to be a rise in frictional unemployment as some workers are forced to change occupations or locations. Over the medium term, the unemployment rate is expected to settle at 4.2 per cent. This is 0.1 percentage points lower than in our March forecast, though 0.1 percentage points higher than we expected before the pandemic.

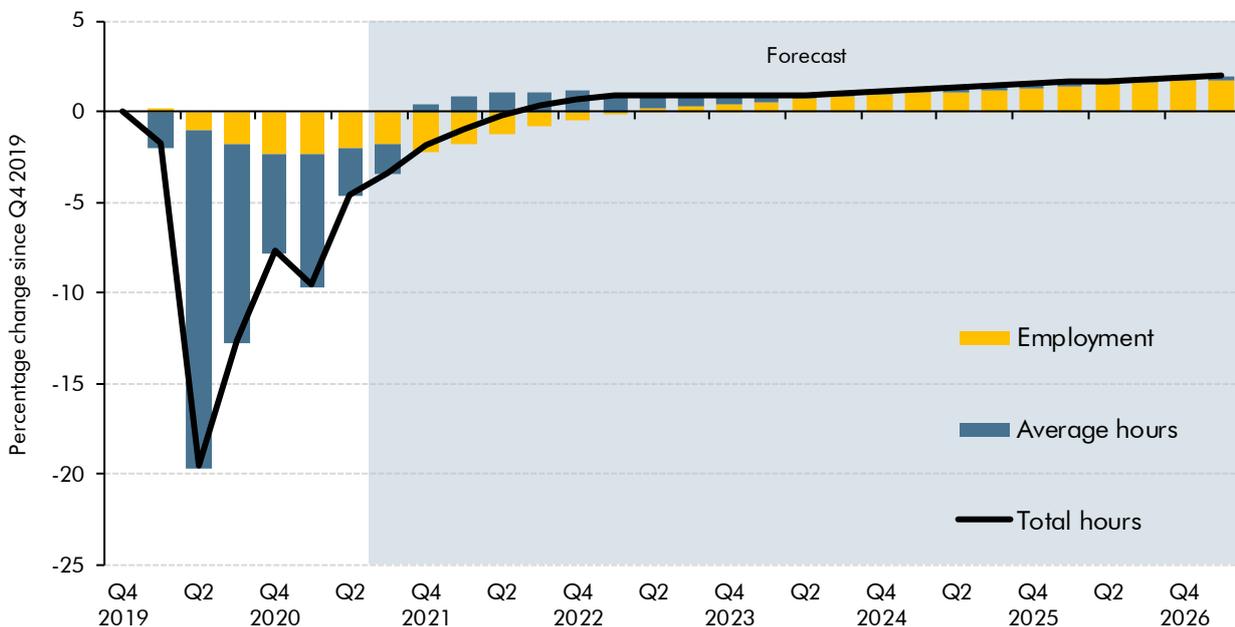
Chart 2.22: Unemployment rate



Source: ONS, OBR

2.79 Chart 2.23 illustrates the extent to which CJRS-subsidised swings in average hours worked have allowed total hours worked to move with fluctuations in output without causing correspondingly large movements in employment. Average hours have rebounded swiftly since the spring in line with the easing in restrictions, the recovery in output, reductions in the numbers on the CJRS, and increased overtime working in response to labour supply bottlenecks. We expect average hours to exceed pre-pandemic levels marginally and temporarily, as persistent difficulties in filling vacancies quickly means that firms have to ask their existing workforce to put in extra hours. Average hours then return to trend levels, which we assume will be unaffected by the pandemic.

Chart 2.23: Contributions of employment and average hours to total hours growth

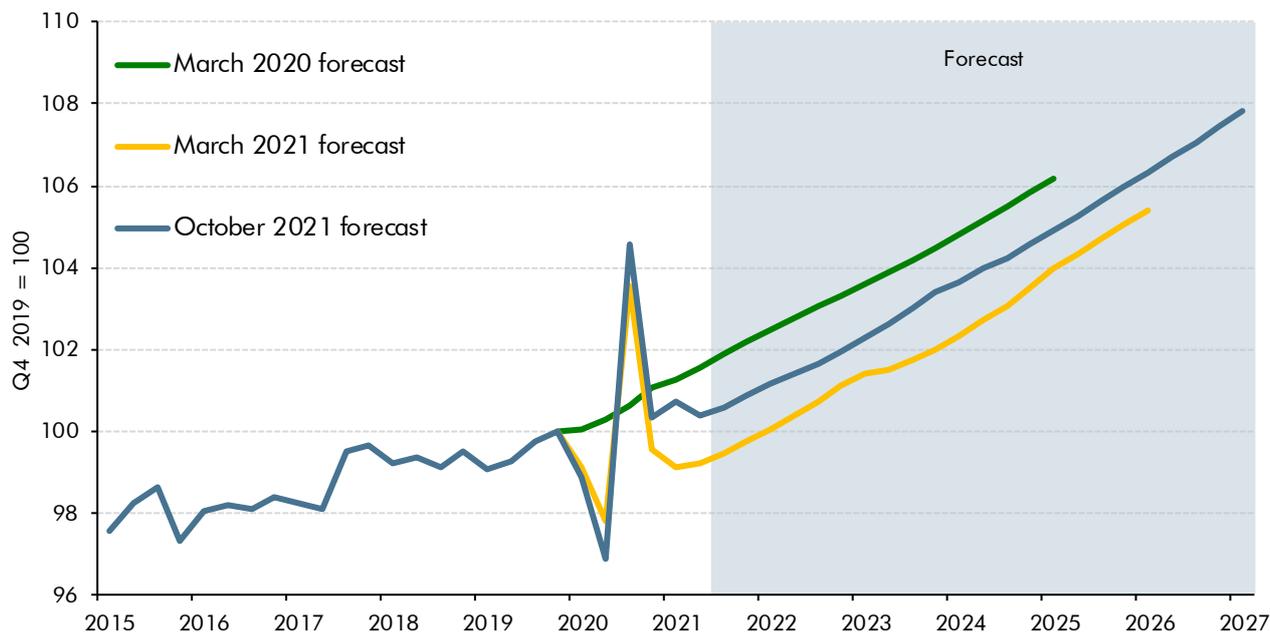


Source: ONS, OBR

Productivity

2.80 Output per hour worked was volatile during the pandemic, reflecting the varying impact of two competing forces: first, the loss of efficiency arising from changes in working practices brought about by the virus and lockdown; and, second, an upward ‘batting average’ effect arising from the disproportionate impact of lockdown on the hours worked in jobs with below-average productivity. Productivity is expected to recover gradually following the easing of restrictions and as business investment rises, though the reopening of some lower productivity businesses will act as a partial offset. In the medium term, cumulative productivity growth since the fourth quarter of 2019 is 1.3 percentage points below our March 2020 forecast (reflecting pandemic-related scarring on trend productivity) but 0.9 percentage points above cumulative growth in our March 2021 forecast (reflecting the downward revision to our scarring estimate, explained in paragraph 2.27).

Chart 2.24: Output per hour



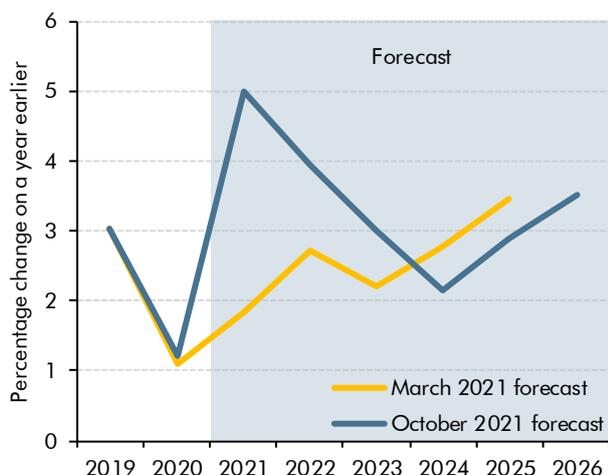
Source: ONS, OBR

Earnings growth

- 2.81** The outlook for earnings has been revised up across the forecast period relative to our March 2021 forecast.²⁴ A stronger near-term path for wages reflects growing evidence of labour shortages in some places and occupations, which is only partially alleviated by the increase in the number of people seeking work as the CJRS ends (Chart 2.25). Alongside this, the scheme's closure will increase wage growth as pay is restored for those returning to work. But negative compositional effects related to the average pay of those returning to work should provide some offset, by continuing to weigh on wage growth in the near term.
- 2.82** We have also raised our medium-term earnings forecast compared to March 2021 (Chart 2.25) to reflect reduced scarring of productivity, higher whole-economy inflation, and a higher labour share of income (measured by wages and salaries and self-employment earnings as a share of GDP), which now returns to its pre-pandemic historical average on a pre-measures basis (Chart 2.26).

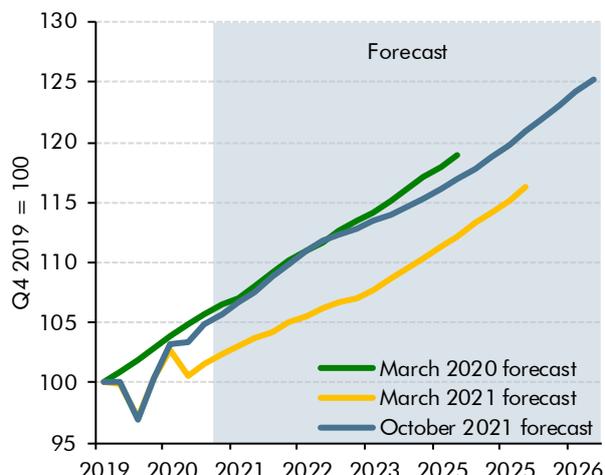
²⁴ Our forecast for earnings growth uses an implied measure constructed by dividing the National Accounts measure of wages and salaries by the number of employees, rather than the official ONS average weekly earnings (AWE) series. This allows us to fit our earnings forecast directly into the National Accounts framework on which our fiscal forecast is based – particularly the wages and salaries measure that is a key determinant of tax receipts.

Chart 2.25: Average earnings growth



Source: ONS, OBR

Chart 2.26: Average earnings level



2.83 On a post-measures basis, the labour share is a little lower than its pre-pandemic average because the cost of the employer element of the new health and social care levy is passed on to employees' wages (Chart 2.27). This results in a lower share of overall employment compensation being made up of wages as a higher share will be employer contributions.

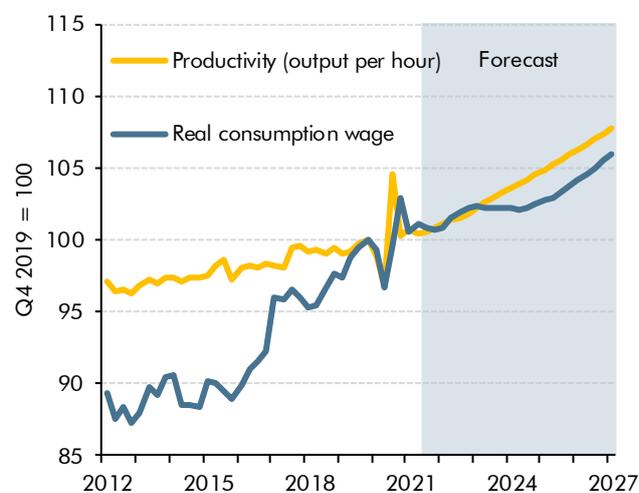
2.84 As discussed in Box 2.4, supply bottlenecks are likely to lead to some upward pressure on wages but also higher inflation (our inflation forecast is discussed in more detail from paragraph 2.86). In our forecast, the combined effect of these and other forces leads to subdued real wage growth over the next three years. Real wage growth then picks up, growing broadly in line with productivity (Chart 2.28). In the near term, elevated inflation – partly driven by product market input costs – offsets pressure for higher wages emanating from the tight labour market. An easing back in inflation is then broadly matched by lower wage pressures as excess demand fades. Then as inflation returns to target and unemployment settles around its natural rate, real wages grow in line with productivity from mid-2024 onwards. Developments since the forecast closed suggest there are upside risks to our inflation forecast. The extent to which this would be reflected in lower real wages depends on how much of this is matched with higher nominal wages and this is demonstrated in two scenarios in Box 2.6.

Chart 2.27: The labour share



Source: ONS, OBR

Chart 2.28: Real consumption wage and productivity



- 2.85 While shortages of labour or other inputs may catalyse productivity improvements in some businesses, there is little evidence that supply constraints drive up economy-wide productivity or real wages. For instance, higher levels of immigration are generally found to have a positive effect on productivity.²⁵ Oil and energy price shocks reduced economy-wide productivity across advanced economies in the 1970s and 80s, albeit less so during the more recent price rises in the early 2000s as output became less energy-intensive, labour markets more flexible, and monetary policy more credible.²⁶

Inflation

- 2.86 After remaining well below target during most of the pandemic, CPI inflation has risen sharply in recent months. It reached 3.1 per cent in September – which was released after we finalised the forecast but was in line with our expectation – up from a low of 0.3 per cent in November 2020. Part of the recent increase can be attributed to the arithmetic effect on the annual comparison of unusually low prices a year earlier. The rise also reflects increases in global commodity prices, which have raised fuel price inflation in particular. In addition, bottlenecks have emerged in global product markets and there have been signs of excess demand in the domestic economy, raising the prices of other goods (see Box 2.4).
- 2.87 We expect CPI inflation to rise further in the coming months, peaking at 4.4 per cent in the second quarter of 2022. The increase mainly reflects higher utility prices, with the Ofgem energy price cap having increased by 12 per cent in October. Our forecast assumes that the sharp rise in wholesale gas prices already evident when we closed our forecast to new information will result in another increase in the price cap in April 2022. Wholesale gas prices have leapt a further 53 per cent since we closed our forecast, and oil prices have risen to 19 per cent above our forecast conditioning assumption. The mechanical effect of

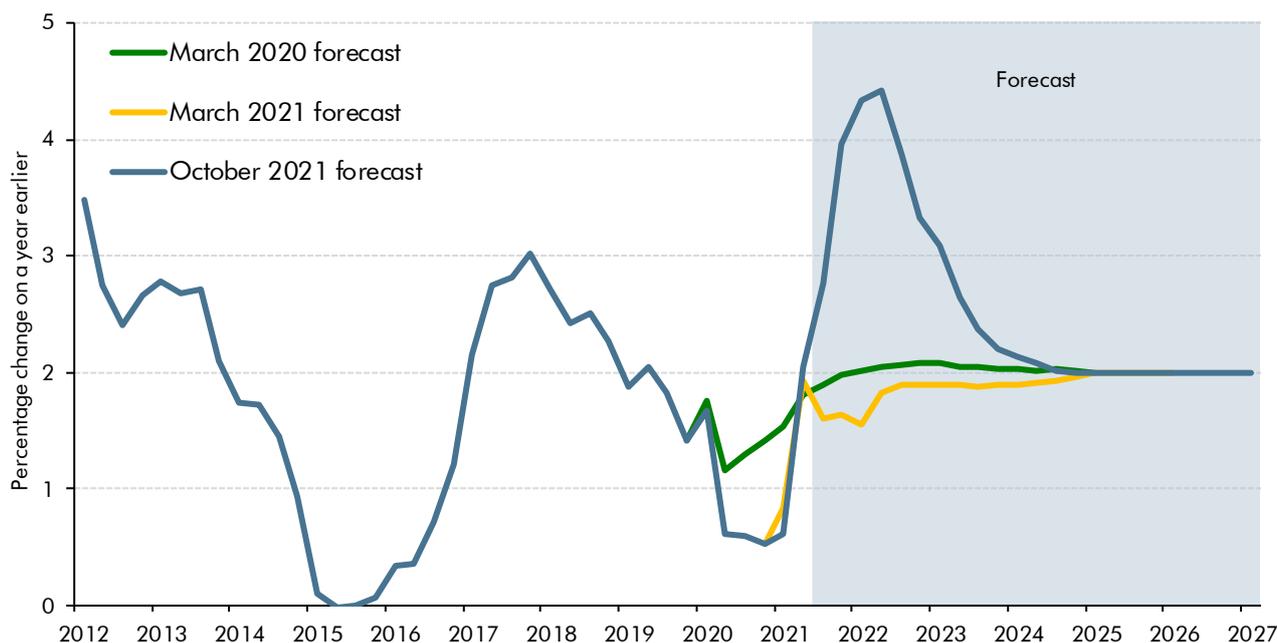
²⁵ Migration Advisory Committee, *EEA migration in the UK: Final report*, September 2018.

²⁶ Blanchard, O., and Gali, J., *The macroeconomic effects of oil shocks: why are the 2000s so different from the 1970s?*, September 2007.

these rises on fuel duty and utility prices would be sufficient to add a further 0.5 percentage points to the peak in CPI inflation next year. A further impulse from increased transportation costs, and excess demand resulting from supply bottlenecks and labour market shortages is expected to put additional upward pressure on inflation. Inflation is also boosted slightly over the next couple of years by policy announced in the Budget and Spending Review. Increased inflationary pressure from the near-term fiscal loosening and pass-through from the increase in employer NICs to consumer prices outweigh the downward pressure from the customary freezes in fuel and alcohol duties.

2.88 We assume inflation returns to the target in the second half of 2024. Inflation initially drops back as energy prices stabilise and the effect of recent rises drop out of the annual calculation. Thereafter, tighter monetary policy (including our adjustment to the market curve to reflect the Government’s policy package (see paragraph 2.15) closes the output gap by the second quarter of 2024, bringing inflation back to the target. But the actual path of inflation is unlikely to be as smooth as our forecast suggests given the uncertainty around the extent and pace of pass through of increased cost pressures and how quickly global supply bottlenecks will be resolved.

Chart 2.29: CPI inflation



Source: ONS, OBR

2.89 While our central forecast sees inflation rise to well above the target, there is a significant risk that it may rise even higher and turn out to be more persistent. The economic and fiscal implications of such a scenario would depend on the underlying causes of the higher inflation. This could be due to greater pressures originating in product markets – including a larger and more sustained impact from oil and gas prices than we have assumed – or stronger wage pressures from a tighter labour market. Box 2.6 sets out the economic implications of two scenarios with higher and more persistent inflation.

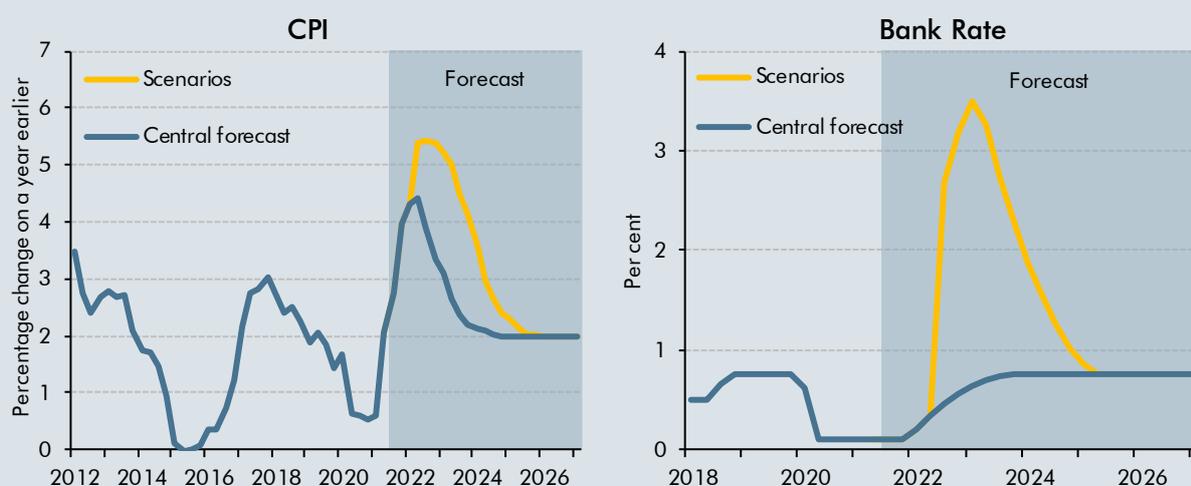
Box 2.6: The economic effects of higher and more persistent inflation

Inflation risks have intensified since we closed our pre-measures forecast on 24 September. In our central forecast, CPI inflation peaks at 4.4 per cent in the second quarter of 2022, with above-target inflation due to higher utility prices and rebounding demand running up against supply bottlenecks (Box 2.3). Inflation then returns relatively quickly towards the Bank of England's 2 per cent target as utility prices stabilise and these supply bottlenecks ease. But that judgement may prove too optimistic, and inflation may prove more durable, especially if people come to expect high inflation to continue and businesses raise prices to protect their profit margins or workers demand larger wage increases to maintain their purchasing power.

To highlight the uncertainty surrounding the outlook for inflation and its different effects on wages and consumption depending on its source, we show two stylised and deliberately stark scenarios, embodying higher and more persistent inflation than in our central forecast. While they have the same profile for CPI inflation, one is driven mainly by pressures emanating from the product market (including possibly higher utility prices) and the other by increased labour market pressures (reflecting an improved negotiating position for workers). The fiscal implications of sustained higher inflation also differ depending on its source – these are discussed in Box 3.2.

In both scenarios, a further sharp and persistent increase in costs means inflation peaks at 5.4 per cent (1 percentage point above our central forecast and the highest rate in three decades) and then falls back more slowly than in our central forecast. Based on a simple monetary policy rule, Bank Rate in our scenario reaches 3.5 per cent (its highest since November 2008), thereby suppressing demand and moderating inflationary pressures, but even so it still takes a year longer for inflation to return to the target than in our central forecast. At its peak, the impact of this vigorous monetary tightening prevents a further 2 to 3 percentage point rise in inflation, and without it the price level would be some 6 to 8 per cent higher at the scenario horizon.

Chart G: CPI inflation and Bank Rate: central forecast versus alternative scenarios



Source: ONS, OBR

In the **product market scenario**, the higher inflation is assumed to originate within the product market, with businesses imposing a higher mark-up over unit labour costs, possibly to cover their

higher energy costs. Higher energy costs would also raise CPI inflation directly. Indeed, since we closed our pre-measures forecast, wholesale oil and gas prices for the coming six months have risen by 19 and 53 per cent respectively. If the increases were passed on to consumers through higher petrol and utility prices this would add around 0.5 percentage points to CPI inflation by the second quarter of next year relative to our central forecast.

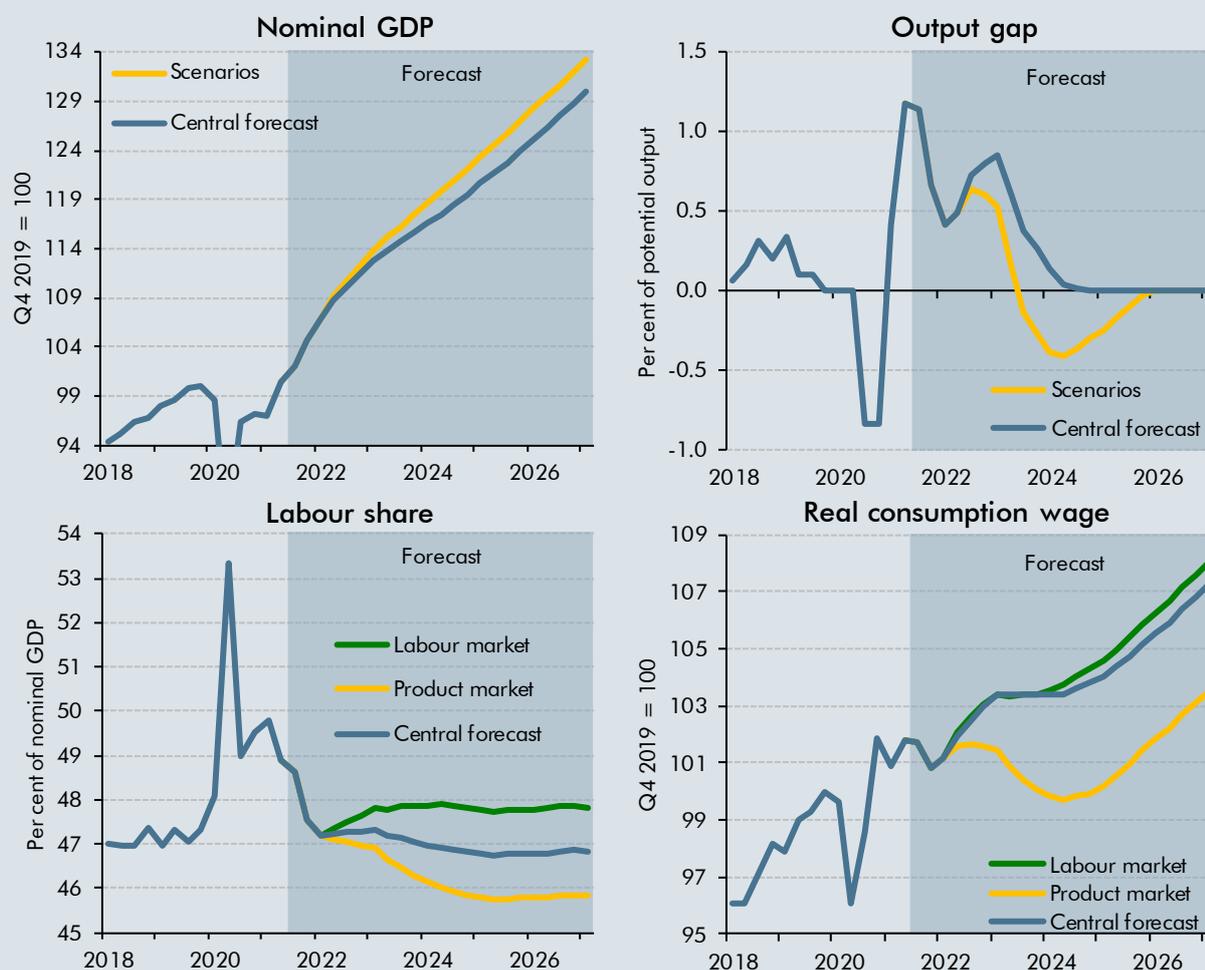
In the **labour market scenario**, the higher inflation is driven by stronger wage growth than in our central forecast. This is consistent with workers demanding higher wage increases, either because of an increase in inflation expectations or because the tightness in some parts of the labour market allows workers to extract higher wages, setting in train a mild wage-price spiral.

Both scenarios result in higher nominal GDP (and so nominal tax bases), up 2.5 per cent at the scenario horizon, with the key difference between them lying in the distribution of incomes:

- In the product market scenario, firms do not fully compensate workers for increased inflation, so that real wages are 3.5 per cent lower at the scenario horizon (with nominal wages and the consumption deflator higher by 0.3 per cent and 4 per cent respectively) and the labour share is 1 percentage point lower than in our central forecast.
- In the labour market scenario, firms' profit margins are squeezed as a result of conceding higher nominal wage increases in the absence of higher productivity, so that real wages are 0.7 per cent higher at the scenario horizon (with nominal wages and the consumption deflator higher by 4.7 per cent and 4 per cent respectively) and the labour share is 1 percentage point higher than in our central forecast.

Wages are subject to a higher effective tax rate than other forms of income, so this has fiscal consequences. Higher real wage growth in the labour market scenario also boosts consumption compared to the product market scenario, and consumption is the second most important tax base. Finally, the differences in wages in the scenarios feed into house prices, leaving house prices 8 per cent lower in the product market scenario than the labour market scenario. In each case, the changes in house prices and mortgage rates (due to higher Bank Rate) also affect the 'wedge' between RPI and CPI inflation through their impact on the housing depreciation and mortgage interest payments components. This has fiscal consequences too given the large stock of debt that is linked to RPI inflation.

Chart H: Alternative scenarios for higher and more persistent inflation



Source: ONS, OBR

RPI inflation

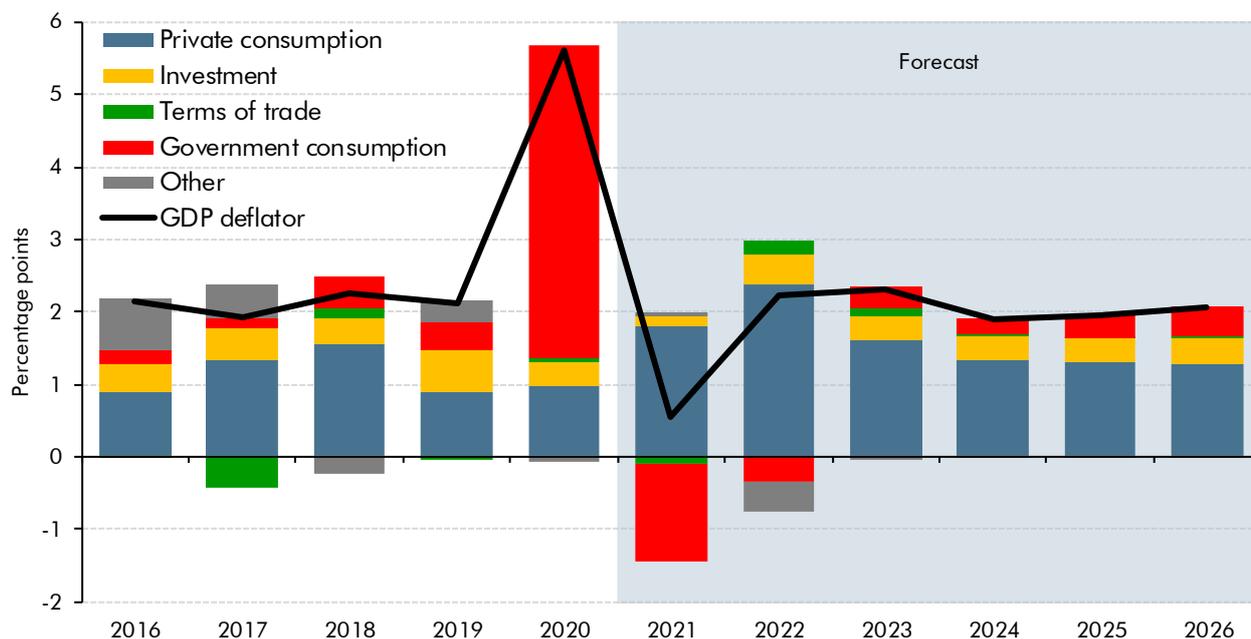
- 2.90** RPI inflation has also risen rapidly in recent months due to higher house price inflation (which affects the RPI but not the CPI) adding to the effects of higher CPI inflation. RPI inflation rose from 0.9 per cent in November 2020 to 4.9 per cent in September 2021, boosted relative to CPI by the housing depreciation component of RPI. We expect RPI inflation to rise slightly further in the coming months, hitting 5.4 per cent in January 2022 – a key month for interest payments on index-linked gilts. Over the next three years, larger rises in council tax announced in the Budget will also add modestly to RPI inflation.
- 2.91** Thereafter, we expect RPI inflation gradually to ease, settling around 2.9 per cent at the end of the forecast, reflecting our current estimate of the long-term wedge between CPI and RPI inflation. The fall in RPI inflation reflects both easing CPI inflation and a fall in the wedge, as house price inflation slows. Alongside the 2020 Spending Review, the Government and UK Statistics Authority confirmed that reform to the RPI methodology will not be implemented

before 2030. Until this change enters our 5-year forecast period, we will continue with our current approach of adding a 'wedge' to our CPI inflation forecast.

GDP deflator

- 2.92 The GDP deflator – a broad measure of prices in the domestic economy – rose sharply at the onset of the pandemic, reflecting increases in the implied price of government expenditure. The GDP deflator also includes the prices of all other goods and services that constitute GDP – including those relating to private consumption, investment and the relative price of exports to imports (the 'terms of trade') – which experienced more moderate movements during the pandemic. After rising by around 6 per cent in 2020, we expect the GDP deflator to be broadly flat in 2021 as the pandemic-related movements in the government consumption deflator reverse (discussed in Box 2.4 of our March 2021 *EFO*) and more than offset the rise in private consumption inflation. GDP deflator inflation rises thereafter, and averages 2 per cent from 2024 to 2026.
- 2.93 Relative to our March 2021 forecast, the level of the GDP deflator is around 3 per cent higher at the forecast horizon. This mainly reflects the private consumption deflator, which is around 4½ per cent higher as a result of the higher and more persistent CPI inflation outlined above. The government consumption deflator is also around 1 per cent higher in the medium term, reflecting the increased departmental spending discussed in Box 2.1. The ONS measures parts of real government output based on indicators that do not change when spending changes (for example, student numbers for education) so we assume around half of movements in nominal government consumption show up in the deflator. The boost to the government consumption deflator is even greater in the near term as a result of the Spending Review settlements in 2022 and 2023, boosting the GDP deflator by 0.6 and 0.1 percentage points respectively (Chart 2.30).

Chart 2.30: Contributions to GDP deflator inflation

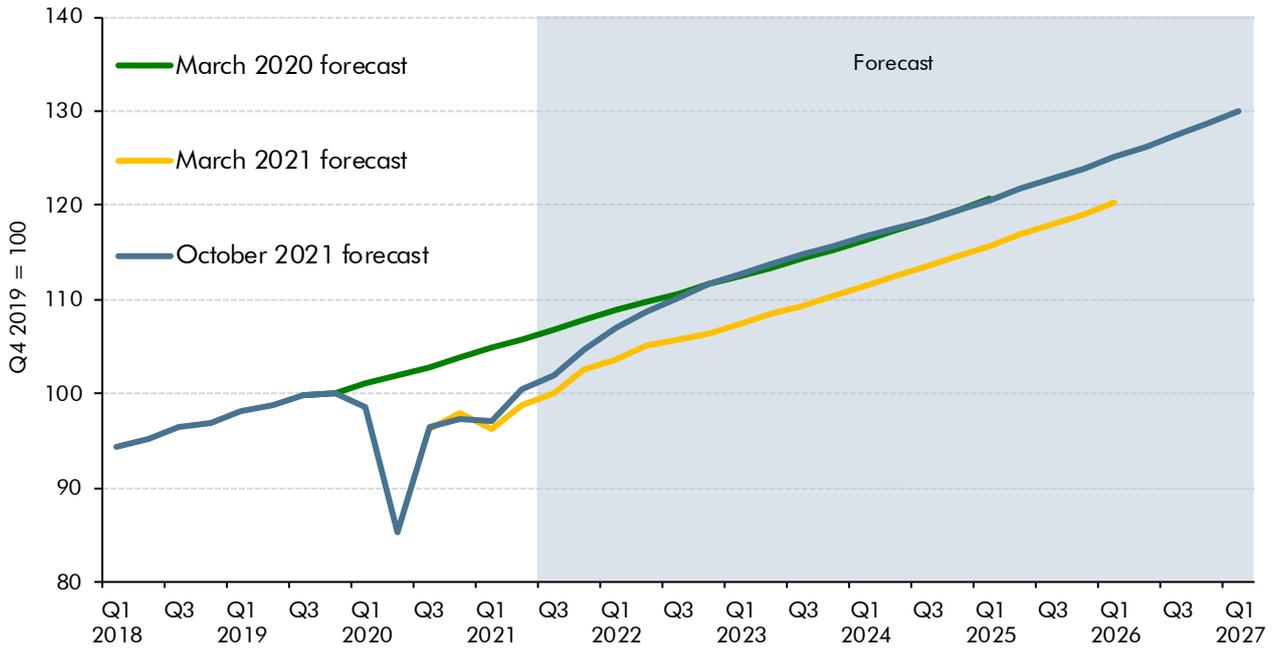


Source: ONS, OBR

Nominal GDP forecast

2.94 Nominal GDP growth averages 5.3 per cent a year between 2021 and 2025, up from 4.4 per cent in our March 2021 forecast. This reflects the combination of higher whole economy prices and higher real GDP, which results in a 4.2 per cent upward revision to the level of nominal GDP by 2025 relative to March 2021. Nominal GDP fell sharply in 2020, by 4.4 per cent. Falls in nominal (as opposed to real) GDP have been unusual in the post-war period, with the smaller fall of 2.6 per cent recorded in 2009 being the only previous instance. The pick-up in real activity and inflation causes nominal GDP to rebound strongly this year and next, before settling at pre-pandemic growth rates (Chart 2.31). That leaves cumulative nominal GDP growth between the final quarter of 2019 and first quarter of 2025 similar to our March 2020 forecast (0.1 percentage points lower) with higher prices broadly offsetting lower real GDP growth. Nominal GDP outturns were revised up significantly in the latest data vintage released after our forecast was closed for new data. The causes and implications of this for our forecast are discussed in Box 2.3.

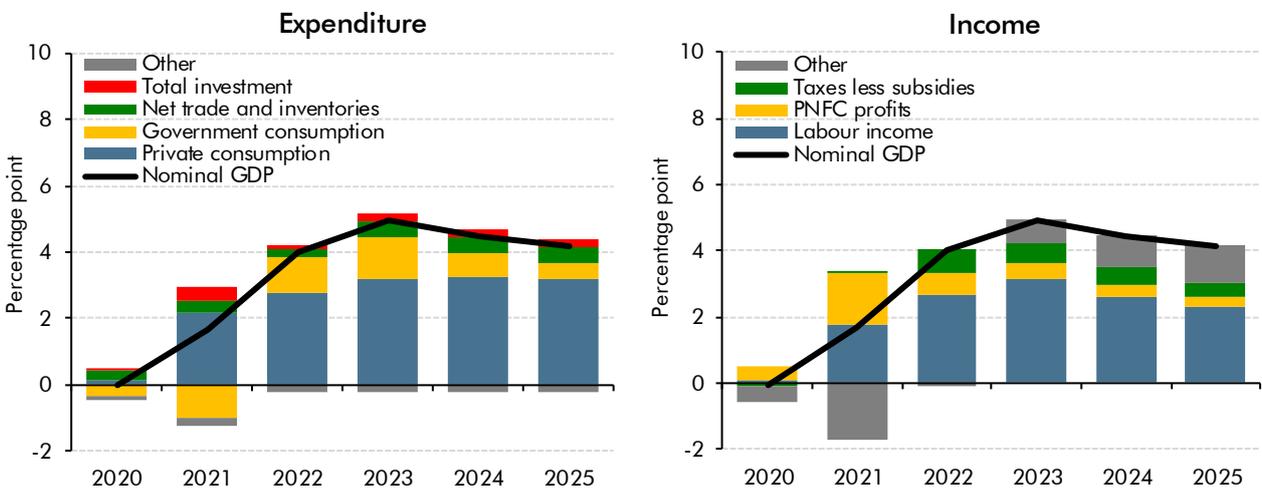
Chart 2.31: Nominal GDP



Source: ONS, OBR

2.95 As Chart 2.32 shows, the 4.2 per cent upward revision to the level of nominal GDP is unusually tax rich. The left-hand side shows the split of GDP on an expenditure basis, with the largest contribution to higher nominal GDP coming from consumer spending, the second most important tax base, where the level in 2025 has been revised up by 5.0 per cent. The right-hand side shows the upward revision to nominal GDP split by income, where the largest contribution is from higher labour income. This reflects both reduced scarring and a higher labour share. The higher labour share (and correspondingly lower profit share) mean that the extra income goes disproportionately to households. The level of labour income, the most important tax base, has been revised up 5.0 per cent in 2025 compared to our March forecast.

Chart 2.32: Contributions to the nominal GDP revision since March 2021



Source: ONS, OBR

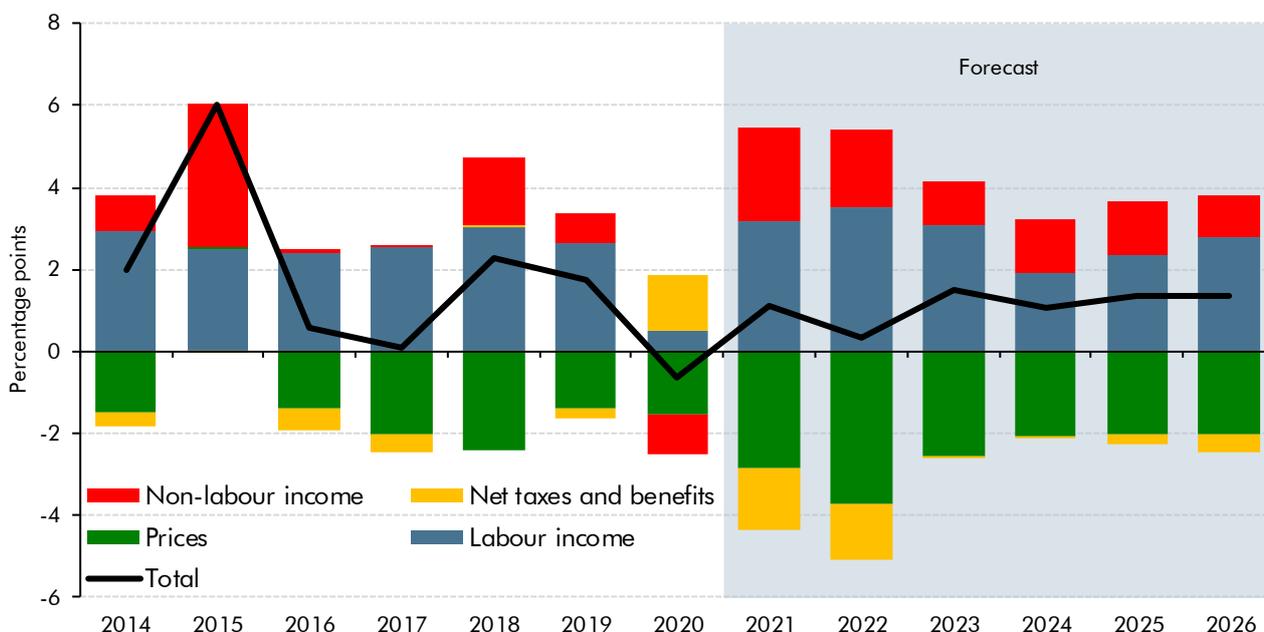
Income composition of nominal GDP growth

Households

2.96 Nominal household disposable incomes are expected to grow by 4.0 per cent in both 2021 and 2022, but price rises weigh on real incomes which grow by just 1.1 and 0.3 per cent in 2021 and 2022 respectively (Chart 2.33). Nominal household incomes grew weakly in 2020 (0.4 per cent), while incomes fell in real terms – although both outperformed GDP as a whole. The main component of household incomes is labour income, which is expected to grow by 4.5 per cent in 2021, following weak growth of 0.9 per cent in 2020. Non-labour income, which includes household dividends, is expected to grow in 2021 having fallen in 2020. Net tax and benefits weigh on income growth in 2021 and then again in 2022 thanks largely to tax rises (notably the rise in NICs and dividend tax rates that take effect in April 2022) but also to the end of the temporary uplift to universal credit payments.

2.97 In real terms, higher inflation also weighs on income growth in both 2021 and 2022, thereafter real incomes grow by 1.3 per cent a year on average over the rest of the forecast. On a per person basis, real household disposable incomes return sustainably to pre-pandemic levels in the latter half of 2023 (Chart 2.34) The level of real household disposable income per person is similar in 2025 (0.1 per cent lower) to our March 2021 forecast, as higher labour income, reflecting an upward revision to the labour share and to a lesser extent non-labour income, broadly offset higher prices (Chart 2.35).

Chart 2.33: Contributions to real household income growth



Source: ONS, OBR

Chart 2.34: Real household disposable income (RHDl) per person

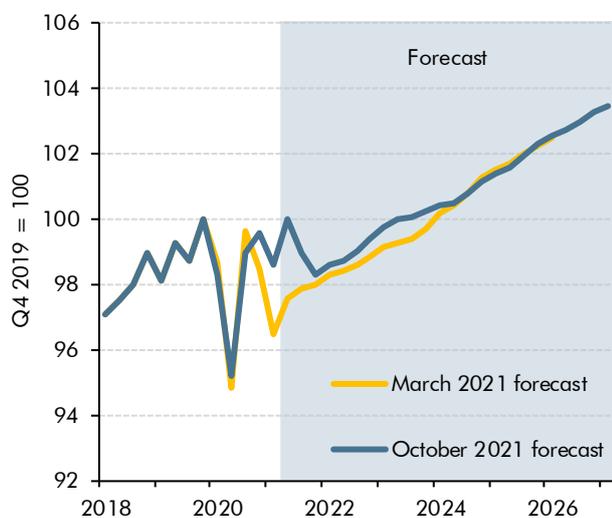
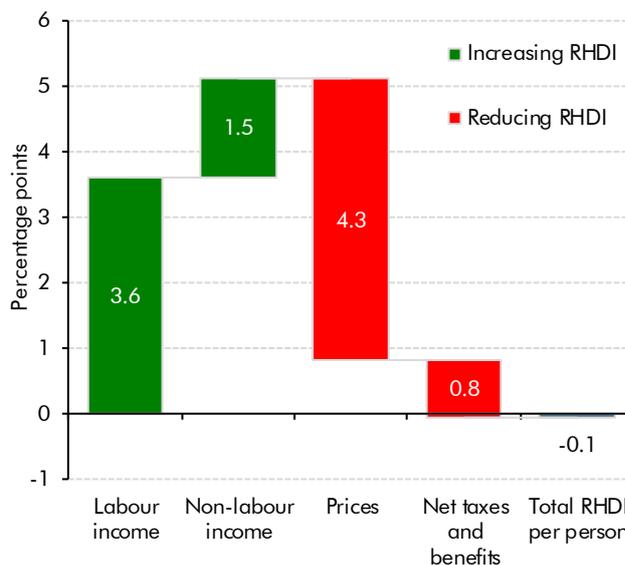


Chart 2.35: Change in RHDl in 2025 relative to March 2021 forecast



Source: ONS, OBR

Corporate profits

2.98 Private sector non-oil non-financial profits are forecast to grow by 7.8 per cent in 2021, having grown by 1.8 per cent in 2020. In the medium term, the profit share of GDP falls from an elevated 17.3 per cent in 2021 to around 16.3 per cent from 2023 onwards, closer to its pre-pandemic average. This medium-term profit share is 0.2 percentage points lower than our March 2021 forecast, consistent with the upward revision to our medium-term labour share forecast.

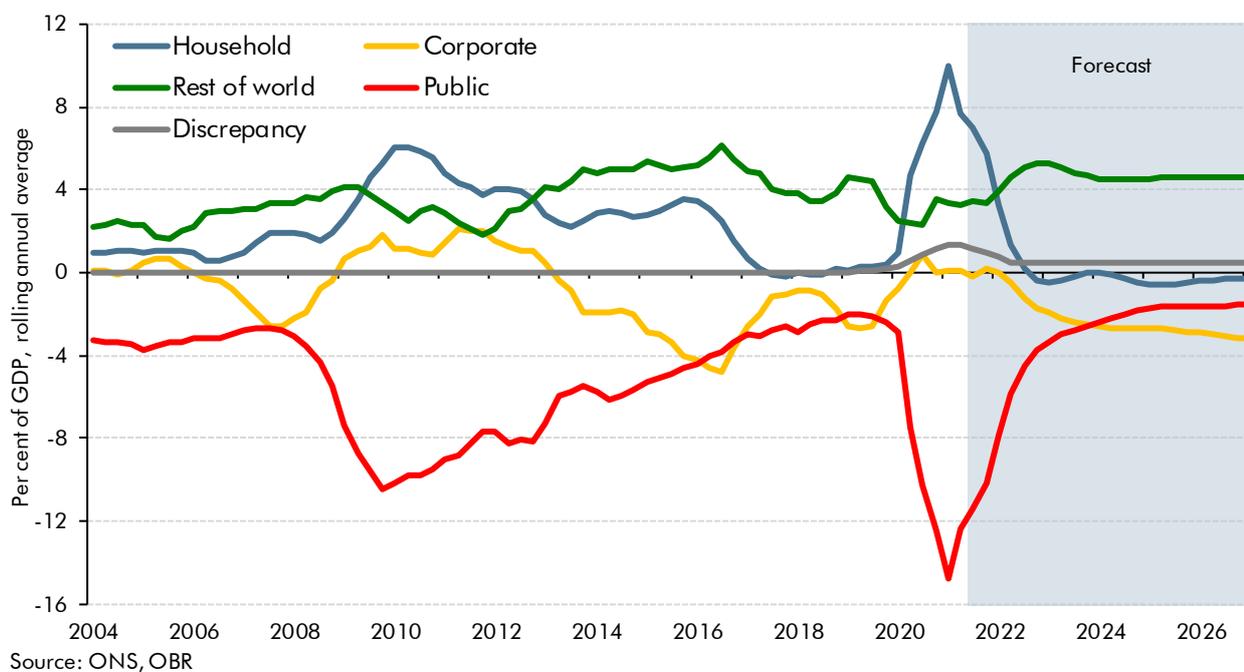
Sectoral net lending

2.99 In the National Accounts framework that underpins our economy forecast, the income and expenditure of the different sectors of the economy imply a path for each sector's net lending to, or borrowing from, the others. In practice, ONS estimates of sectoral net lending do not sum precisely to zero, reflecting differences between the income and expenditure measures of GDP (the 'statistical discrepancy'). Our standard practice is to assume that this difference remains flat over the forecast period from the most recent data.

2.100 This framework is helpful for understanding the financial flows in the economy resulting from the pandemic and the huge fiscal support provided in response. The spike in government net borrowing to around 13 per cent of GDP in 2020 to pay for fiscal support to other sectors meant that household and corporate incomes did not fall nearly as much as their expenditure or output (Chart 2.36). The household financial surplus rose to the highest level since the mid-1990s at around 6 per cent of GDP in 2020, while the corporate deficit moved to a record surplus (in the vintage of data used for our forecast the corporate sector was broadly in balance in 2020 rather than surplus). These imbalances have persisted into 2021 as restrictions and support remained in place, though to a lesser degree. Thereafter, household and corporate spending move more into line with income, and government

borrowing falls. Over the medium term, sectoral net lending positions return to more usual levels, with a significant and persistent current account deficit (the rest of world surplus) representing the counterpart to the public and corporate deficits.

Chart 2.36: Sectoral net lending



Comparison with external forecasters

- 2.101** In this section, we compare our latest projections with those of selected outside forecasters. The differences between our forecasts and those of external forecasters mostly reflect different judgements around the speed of recovery over the near term and the degree of medium-term scarring, as well as differences in expectations for the pace of underlying potential output growth. Also, our forecast incorporates the new Budget and Spending Review measures, which will not have been reflected in earlier forecasts.
- 2.102** The latest Bank of England forecast for real GDP, set out in its August 2021 *Monetary Policy Report*, settles in a similar place to ours at their forecast's 2023 horizon (Chart 2.37), only 0.2 per cent above the level in our own forecast. This reflects the fact that the Bank applies a more optimistic scarring assumption (1 per cent rather than our 2 per cent) to a slightly more pessimistic underlying path for potential output.²⁷ The Bank has a slightly more positive outlook for real GDP in the near term.
- 2.103** The Bank's CPI inflation forecast is lower than ours, peaking at 4.0 per cent in the fourth quarter of 2021 compared to our forecast which peaks at 4.4 per cent in the second quarter of 2022. This largely reflects the recent greater strength in goods and energy prices, which

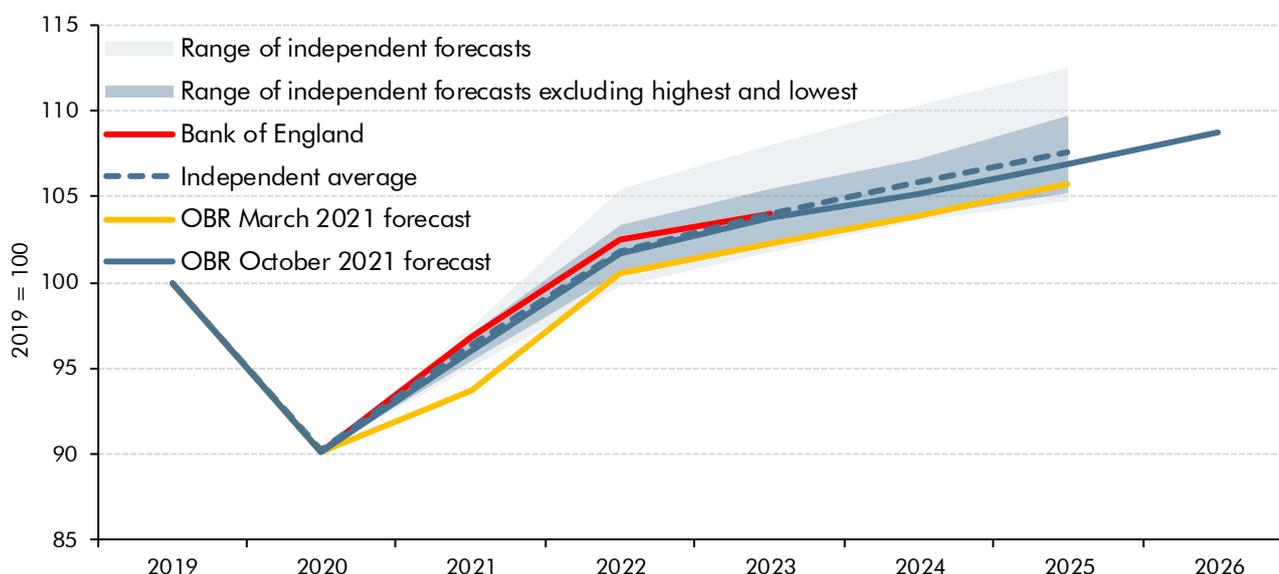
²⁷ See Table 2.5 of the March 2020 EFO for a comparison of our pre-pandemic potential output forecasts.

the Governor expected in September to push inflation "slightly above 4 per cent" by the end of the year.²⁸

2.104 We are slightly more pessimistic about the outlook for unemployment than the Bank, as we forecast unemployment to peak at 5¼ per cent in the fourth quarter of 2021 rather than the 4¾ per cent assumed by the Bank, reflecting our judgement that the closure of the CJRS is likely to lead to some near-term pick-up in unemployment.

2.105 In comparison to the range of external forecasters, we are broadly in line with the external consensus in the short term with growth of around 7.0 per cent in 2021.²⁹ As Chart 2.37 shows, our GDP path is slightly below the most recent published external consensus over the medium term.

Chart 2.37: Real GDP forecast comparison



Note: Independent average uses the most recent average of independent forecasters' medium-term projections, published by the Treasury in August. Bank of England forecast excludes the backcast.

Source: Bank of England, HM Treasury, ONS, OBR

²⁸ Bailey, A., *The hard yards*, speech given at the Society of Professional Economists Annual Dinner, September 2021.

²⁹ HM Treasury, *Forecasts for the UK economy: a comparison of independent forecasts*, October 2021.

Table 2.6: Comparison with external forecasters

	Per cent					
	2021	2022	2023	2024	2025	2026
OBR (October 2021)						
GDP growth	6.5	6.0	2.1	1.3	1.6	1.7
CPI inflation	2.3	4.0	2.6	2.1	2.0	2.0
Unemployment	4.9	4.8	4.3	4.2	4.2	4.2
Bank of England (August 2021)¹						
GDP growth ²	7.4	5.9	1.4			
CPI inflation	2.3	3.4	2.2			
Unemployment ³	4.7	4.3	4.3			
NIESR (August 2021)						
GDP growth	6.8	5.3	2.4	2.1	1.8	
CPI inflation	2.1	2.7	1.7	1.8	2.0	
Unemployment	5.0	5.2	4.7	4.2	4.0	
IMF (October 2021)						
GDP growth	6.8	5.0	1.9	1.6	1.5	1.5
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

¹ Modal forecast based on market interest rates.

² Includes backcast.

³ Fourth quarter unemployment rate.

Detailed summary of our central forecast

Table 2.7: Detailed summary of our October 2021 forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2020	2021	2022	2023	2024	2025	2026
UK economy							
Gross domestic product (GDP)	- 9.8	6.5	6.0	2.1	1.3	1.6	1.7
GDP per capita	-10.2	6.3	5.6	1.7	1.0	1.3	1.4
GDP level (2020=100)	100.0	106.5	112.8	115.2	116.7	118.6	120.6
Nominal GDP	-4.8	7.1	8.2	4.4	3.3	3.6	3.8
Output gap (per cent of potential output)	-0.4	0.9	0.6	0.5	0.1	0.0	0.0
Expenditure components of GDP							
Domestic demand	-10.5	7.3	8.3	1.7	1.2	1.7	1.8
Household consumption ¹	-10.9	4.7	9.8	1.3	1.7	1.3	1.0
General government consumption	-6.5	14.7	2.0	1.5	1.2	1.7	2.1
Fixed investment of which :	-8.8	5.7	8.9	3.3	-0.7	3.2	3.9
Business	-10.2	-2.4	15.7	4.7	-0.8	4.8	5.8
General government ²	3.5	14.7	-2.1	6.5	-1.0	1.1	1.8
Private dwellings ²	-13.1	16.3	4.6	-1.4	-0.5	1.4	1.5
Change in inventories ³	-0.5	0.1	0.2	0.0	0.0	0.0	0.0
Exports of goods and services	-15.8	-0.1	7.3	1.7	0.2	-0.4	-0.4
Imports of goods and services	-17.8	2.7	15.7	0.5	0.0	0.1	0.1
Balance of payments current account							
Per cent of GDP	-3.5	-3.4	-5.3	-4.7	-4.6	-4.6	-4.7
Inflation							
CPI	0.9	2.3	4.0	2.6	2.1	2.0	2.0
RPI	1.5	3.6	5.0	3.4	2.8	2.8	2.9
GDP deflator at market prices	5.8	0.4	2.2	2.3	1.9	1.9	2.1
Labour market							
Employment (million)	32.5	32.2	32.6	33.0	33.2	33.3	33.4
Productivity per hour	0.6	0.5	0.9	1.3	1.3	1.3	1.4
Wages and salaries	1.5	5.2	4.6	3.7	2.2	3.0	3.6
Average earnings ⁴	1.2	5.0	3.9	3.0	2.2	2.9	3.5
LFS unemployment (% rate)	4.6	4.9	4.8	4.3	4.2	4.2	4.2
Unemployment (million)	1.6	1.7	1.6	1.5	1.5	1.5	1.5
Household sector							
Real household disposable income	-0.6	1.1	0.3	1.5	1.1	1.4	1.3
Saving ratio (level, per cent)	15.7	13.4	5.2	5.4	4.7	4.8	5.2
House prices	3.0	8.6	3.2	0.9	1.9	2.9	3.5
World economy							
World GDP at purchasing power parity	-3.1	5.9	4.9	3.7	3.5	3.4	3.3
Euro area GDP	-6.5	4.8	4.3	2.2	1.7	1.4	1.4
World trade in goods and services	-8.1	9.9	6.8	4.4	3.8	3.6	3.5
UK export markets ⁵	-8.3	9.1	6.0	4.6	3.5	3.3	3.2

¹ Includes households and non-profit institutions serving households.

² Includes transfer costs of non-produced assets.

³ Contribution to GDP growth, percentage points.

⁴ Wages and salaries divided by employees.

⁵ Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports.

Table 2.8: Detailed summary of changes since March 2020

	Percentage point difference, unless otherwise stated				
	Outturn	Forecast			
	2020	2021	2022	2023	2024
UK economy					
Gross domestic product (GDP)	-10.9	4.7	4.5	0.8	-0.1
GDP per capita	-10.7	5.0	4.5	0.7	-0.1
GDP level (2020=100) ¹	0.0	4.7	9.6	10.6	10.7
Nominal GDP	-7.9	3.3	4.6	1.1	-0.2
Output gap (per cent of potential output)	-0.4	0.5	0.2	0.3	0.0
Expenditure components of GDP					
Domestic demand	-11.6	5.3	6.6	0.1	-0.4
Household consumption ²	-12.0	3.5	8.6	-0.1	0.3
General government consumption	-10.2	11.9	-0.1	-0.4	-1.0
Fixed investment of which:	-8.0	2.3	6.0	1.3	-2.6
Business	-10.2	-4.3	12.7	2.4	-3.1
General government ³	1.6	3.8	-6.7	4.7	-2.2
Private dwellings ³	-8.9	14.8	3.0	-2.7	-1.7
Change in inventories ⁴	-0.4	0.0	0.2	0.0	0.0
Exports of goods and services	-15.2	0.4	7.9	2.8	1.2
Imports of goods and services	-17.6	2.3	15.5	0.3	-0.2
Balance of payments current account					
Per cent of GDP	0.3	0.6	-1.4	-0.7	-0.5
Inflation					
CPI	-0.6	0.5	1.9	0.5	0.0
RPI	-0.7	0.8	1.9	0.5	0.0
GDP deflator at market prices	3.8	-1.6	0.0	0.3	-0.2
Labour market					
Employment (million)	-0.4	-0.8	-0.6	-0.3	-0.2
Productivity per hour	-0.3	-0.7	-0.3	0.2	0.0
Wages and salaries	-2.1	1.4	1.0	0.4	-1.0
Average earnings ⁵	-2.1	1.4	0.6	-0.1	-0.9
LFS unemployment (% rate)	0.7	1.0	0.9	0.3	0.1
Unemployment (million)	0.2	0.3	0.3	0.1	0.0
Household sector					
Real household disposable income	-1.8	-0.5	-1.0	0.1	-0.3
Saving ratio (level, per cent)	9.1	6.4	-2.0	-1.7	-2.4
House prices	-0.3	1.7	-2.5	-3.7	-1.9
World economy					
World GDP at purchasing power parity	-6.0	2.2	1.4	0.1	-0.1
Euro area GDP	-7.6	3.4	2.9	0.9	0.4
World trade in goods and services	-10.1	6.0	3.2	0.7	0.1
UK export markets ⁶	-9.9	5.7	2.7	1.2	0.1

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.

⁶ Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports.

Table 2.9: Detailed summary of changes since March 2021

	Percentage point difference, unless otherwise stated					
	Outturn	Forecast				
		2020	2021	2022	2023	2024
UK economy						
Gross domestic product (GDP)	0.1	2.4	-1.3	0.3	-0.2	-0.1
GDP per capita	0.2	2.6	-1.3	0.3	-0.3	-0.1
GDP level (2020=100) ¹	0.0	2.3	1.1	1.4	1.2	1.1
Nominal GDP	0.0	1.8	2.4	0.9	-0.5	-0.3
Output gap (per cent of potential output)	0.2	1.9	1.0	0.7	0.2	0.1
Expenditure components of GDP						
Domestic demand	0.0	-0.3	1.0	0.3	-0.3	-0.1
Household consumption ²	0.1	1.8	-1.2	0.0	0.0	0.0
General government consumption	-0.8	2.7	0.6	0.7	-1.1	-0.5
Fixed investment of which:	-0.1	2.0	-1.9	0.7	-0.3	-0.1
Business	0.4	-0.2	-0.8	1.8	1.5	-0.3
General government ³	-0.3	-3.1	-6.3	4.5	-2.5	-0.1
Private dwellings ³	-1.3	10.2	-0.4	-3.8	-2.3	0.0
Change in inventories ⁴	0.1	-2.2	1.8	0.1	0.0	0.0
Exports of goods and services	0.9	-0.4	-0.7	1.3	0.7	0.1
Imports of goods and services	0.3	-9.8	7.5	1.1	0.5	0.1
Balance of payments current account						
Per cent of GDP	0.2	3.0	0.9	1.0	0.8	0.8
Inflation						
CPI	0.0	0.8	2.2	0.7	0.1	0.0
RPI	0.0	1.1	2.9	1.1	0.1	-0.2
GDP deflator at market prices	-0.1	-0.7	3.6	0.6	-0.2	-0.2
Labour market						
Employment (million)	-0.1	-0.1	0.2	0.2	0.1	0.1
Productivity per hour	0.2	1.1	-0.3	0.2	0.0	-0.3
Wages and salaries	-0.1	3.8	1.9	0.7	-1.2	-0.6
Average earnings ⁵	0.1	3.2	1.2	0.8	-0.6	-0.6
LFS unemployment (% rate)	0.1	-0.7	-1.2	-0.8	-0.3	-0.1
Unemployment (million)	0.0	-0.3	-0.4	-0.3	-0.1	-0.1
Household sector						
Real household disposable income	0.0	1.3	-1.1	0.3	-0.5	-0.1
Saving ratio (level, per cent)	-1.1	-0.7	-0.8	-0.5	-1.0	-1.2
House prices	-0.4	3.6	4.9	0.1	-2.0	-1.4
World economy						
World GDP at purchasing power parity	0.4	0.4	0.6	-0.1	-0.1	-0.1
Euro area GDP	0.8	0.6	0.7	0.0	0.0	0.0
World trade in goods and services	1.4	1.8	0.5	0.1	0.0	0.0
UK export markets ⁶	0.8	1.2	0.0	0.4	-0.2	-0.1

¹ Per cent change since March 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.⁶ Other countries' imports of goods and services weighted according to the importance of those countries in the UK's total exports.

Table 2.10: Determinants of the fiscal forecast

	Percentage change on previous year, unless otherwise specified							Growth over forecast
	Outturn	Forecast						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
GDP and its components								
Real GDP	-10.9	10.8	4.2	1.7	1.4	1.6	1.7	23.2
Nominal GDP ¹	-5.6	10.4	7.0	3.9	3.3	3.7	3.8	36.6
Nominal GDP (£ billion) ^{1,2}	2,099	2,317	2,481	2,578	2,663	2,761	2,866	767
Nominal GDP (centred end-March £bn) ^{1,3}	2,211	2,413	2,532	2,618	2,711	2,812	2,919	708
Wages and salaries ⁴	1.4	5.5	4.8	3.0	2.4	3.2	3.6	24.7
Non-oil PNFC profits ^{4,5}	-0.8	7.8	3.1	3.9	2.8	3.3	3.7	27.2
Consumer spending ^{4,5}	-9.5	7.7	13.9	3.8	3.8	3.3	3.1	40.8
Prices and earnings								
GDP deflator	6.3	-0.7	2.7	2.2	1.9	2.0	2.1	10.6
RPI	1.2	4.6	4.6	3.2	2.8	2.8	2.9	22.7
CPI	0.6	3.3	3.7	2.3	2.0	2.0	2.0	16.3
Average earnings ⁶	1.4	5.2	4.0	2.5	2.3	3.1	3.6	22.4
'Triple-lock' guarantee (September) ⁷	2.5	3.1	3.9	3.1	2.5	2.8	3.5	20.4
Key fiscal determinants								
Employment (million)	32.3	32.3	32.7	33.1	33.2	33.3	33.5	1.2
Output gap (per cent of potential output)	-0.3	0.8	0.7	0.3	0.0	0.0	0.0	0.3
Financial and property sectors								
Equity prices (FTSE All-Share index)	3,490	4,134	4,429	4,604	4,756	4,930	5,118	1,628
HMRC financial sector profits ^{1,5,8}	-13.3	13.6	4.1	1.8	1.5	1.7	1.7	26.5
Residential property prices ⁹	4.7	7.8	2.2	1.0	2.2	3.1	3.6	21.5
Residential property transactions (000s) ¹⁰	1,197	1,328	1,309	1,348	1,372	1,388	1,405	207
Commercial property prices ¹⁰	-9.7	2.3	2.2	2.2	1.9	2.0	2.1	13.3
Commercial property transactions ¹⁰	-13.6	16.7	-1.0	1.7	1.4	1.6	1.7	23.2
Oil and gas								
Oil prices (\$ per barrel) ⁵	42.3	68.1	68.3	65.5	66.5	67.8	69.2	26.9
Oil prices (£ per barrel) ⁵	33.0	49.2	49.4	47.4	48.1	49.1	50.0	17.1
Gas prices (p/therm) ⁵	24.8	95.1	97.5	65.1	66.4	67.7	69.1	44.3
Oil production (million tonnes) ⁵	45.9	39.4	37.9	36.4	34.3	32.1	30.2	-15.7
Gas production (billion therms) ⁵	13.2	10.9	11.8	11.2	10.2	9.2	8.2	-5.0
Interest rates and exchange rates								
Market short-term interest rates (%) ¹¹	0.1	0.1	0.5	0.8	0.8	0.9	0.9	0.8
Market gilt rates (%) ¹²	0.4	0.8	0.9	0.9	1.0	1.1	1.2	0.8
Euro/Sterling exchange rate (€/£)	1.12	1.17	1.17	1.17	1.17	1.17	1.17	0.05

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.¹⁰ Outturn data from HMRC information on stamp duty land tax.¹¹ 3-month sterling interbank rate (LIBOR).¹² Weighted average interest rate on conventional gilts.

Table 2.11: Changes in determinants of the fiscal forecast since March 2020

	Percentage point difference, unless otherwise specified				
	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25
GDP and its components					
Real GDP	-12.2	9.1	2.8	0.5	-0.1
Nominal GDP ¹	-9.0	6.5	3.5	0.6	-0.3
Nominal GDP (£ billion) ^{1,2}	-205.7	-76.5	2.5	16.3	9.1
Nominal GDP (centred end-March £bn) ^{1,3}	-137.3	-23.8	12.9	12.5	11.3
Wages and salaries ⁴	-2.4	1.9	1.1	-0.2	-1.0
Non-oil PNFC profits ^{4,5}	-3.5	5.0	-0.3	0.5	-1.2
Consumer spending ^{4,5}	-11.8	4.6	10.6	0.3	0.4
Prices and earnings					
GDP deflator	4.3	-2.8	0.6	0.1	-0.2
RPI	-0.9	1.7	1.6	0.2	-0.1
CPI	-0.8	1.4	1.6	0.3	0.0
Average earnings ⁶	-2.2	1.8	0.5	-0.5	-0.9
'Triple-lock' guarantee (September)	-0.7	-0.6	0.5	-0.1	-0.5
Key fiscal determinants					
Employment (million)	-0.7	-0.8	-0.5	-0.3	-0.2
Output gap (per cent of potential output)	-0.4	0.4	0.3	0.2	0.0
Financial and property sectors					
Equity prices (FTSE All-Share index)	-754.9	-274.1	-135.5	-114.3	-132.9
HMRC financial sector profits ^{1,5,8}	-15.0	11.7	2.3	0.2	-0.3
Residential property prices ⁹	0.4	0.7	-3.2	-3.2	-1.7
Residential property transactions (000s) ¹⁰	-61.6	49.6	-7.6	4.3	-1.6
Commercial property prices ¹⁰	-8.3	2.3	1.5	0.1	-0.2
Commercial property transactions ¹⁰	-11.9	15.0	-2.4	0.5	-0.1
Oil and gas					
Oil prices (\$ per barrel) ⁵	-13.8	13.3	13.2	9.3	9.2
Oil prices (£ per barrel) ⁵	-9.1	8.6	8.7	6.1	6.2
Gas prices (p/therm) ⁵	-1.7	59.7	61.3	28.3	28.8
Oil production (million tonnes) ⁵	-5.1	-9.0	-8.0	-7.2	-7.3
Gas production (billion therms) ⁵	0.2	-1.6	0.0	0.0	-0.5
Interest rates and exchange rates					
Market short-term interest rates (%) ¹¹	-0.7	-0.7	-0.3	-0.1	-0.1
Market gilt rates (%) ¹²	-0.5	-0.1	-0.1	-0.1	-0.1
Euro/Sterling exchange rate (€/£)	0.0	0.0	0.0	0.0	0.0

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 October 2021 assumption adjusted for suspension of 2021-22 'triple-lock'.⁸ HMRC Gross Case 1 trading profits.⁹ Outturn data from ONS House Price Index.¹⁰ Outturn data from HMRC information on stamp duty land tax.¹¹ 3-month sterling interbank rate (LIBOR).¹² Weighted average interest rate on conventional gilts.

Table 2.12: Changes in determinants of the fiscal forecast since March 2021

	Percentage point difference, unless otherwise specified					
	Outturn 2020-21	Forecast				
		2021-22	2022-23	2023-24	2024-25	2025-26
GDP and its components						
Real GDP	0.7	1.3	-0.7	0.2	-0.3	-0.1
Nominal GDP ¹	0.1	2.4	2.2	0.4	-0.5	-0.3
Nominal GDP (£ billion) ^{1,2}	2.1	52.9	105.7	118.7	111.6	109.1
Nominal GDP (centred end-March £bn) ^{1,3}	17.0	81.3	118.6	113.8	110.8	109.1
Wages and salaries ⁴	0.5	3.6	1.9	0.0	-1.2	-0.4
Non-oil PNFC profits ^{4,5}	2.7	8.0	-6.5	-0.7	-1.0	-0.5
Consumer spending ^{4,5}	0.2	3.6	0.8	0.6	0.1	0.0
Prices and earnings						
GDP deflator	-0.8	0.9	2.8	0.2	-0.2	-0.1
RPI	-0.1	2.0	2.5	0.7	-0.1	-0.2
CPI	-0.1	1.6	1.8	0.4	0.1	0.0
Average earnings ⁶	0.7	2.7	1.4	0.4	-0.8	-0.4
'Triple-lock' guarantee (September)	0.0	-1.5	1.2	0.6	-0.1	-0.7
Key fiscal determinants						
Employment (million)	-0.2	0.0	0.2	0.2	0.1	0.1
Output gap (per cent of potential output)	0.6	1.8	1.0	0.5	0.1	0.0
Financial and property sectors						
Equity prices (FTSE All-Share index)	5.5	176.7	279.6	306.4	296.4	296.2
HMRC financial sector profits ^{1,5,8}	-3.3	5.6	-5.9	0.1	-0.3	-0.2
Residential property prices ⁹	-0.2	5.0	3.5	-0.5	-2.1	-1.1
Residential property transactions (000s) ¹⁰	26.8	79.0	-30.5	-7.1	4.4	9.9
Commercial property prices ¹⁰	-1.0	3.2	2.0	0.4	-0.2	-0.2
Commercial property transactions ¹⁰	5.9	5.8	-5.9	-2.2	-2.4	-1.8
Oil and gas						
Oil prices (\$ per barrel) ⁵	0.0	13.8	16.3	14.2	14.3	14.6
Oil prices (£ per barrel) ⁵	-0.2	10.4	11.4	9.9	9.9	10.1
Gas prices (p/therm) ⁵	0.0	48.2	53.4	20.2	20.6	21.0
Oil production (million tonnes) ⁵	1.3	-1.9	-0.9	-0.1	-0.1	-0.1
Gas production (billion therms) ⁵	0.2	-1.6	-0.6	0.0	0.0	0.0
Interest rates and exchange rates						
Market short-term interest rates (%) ¹¹	0.0	0.1	0.5	0.6	0.5	0.3
Market gilt rates (%) ¹²	0.0	0.2	0.2	0.2	0.1	0.1
Euro/Sterling exchange rate (£/€)	0.0	0.0	0.0	0.0	0.0	0.0

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.¹⁰ Outturn data from HMRC information on stamp duty land tax.¹¹ 3-month sterling interbank rate (LIBOR).¹² Weighted average interest rate on conventional gilts.

3 Fiscal outlook

Introduction

3.1 This chapter:

- explains the effects on our fiscal forecast of **new policies announced since March 2021**, and the combined effect of **all policies announced since the start of the pandemic** (from paragraph 3.7);
- notes **classification issues** affecting our forecast (from paragraph 3.11);
- describes the outlook for **public sector receipts** (from paragraph 3.15) and **public sector expenditure** (from paragraph 3.51);
- presents forecasts for the **fiscal deficit**, including headline and structural measures of the overall, current and primary fiscal balances (from paragraph 3.107);
- describes the outlook for the **public sector balance sheet** and for government lending to the private sector and other **financial transactions** (from paragraph 3.121); and
- summarises key **uncertainties and risks to the fiscal outlook** (paragraph 3.149).

3.2 The forecasts in this chapter start from the estimates of 2020-21 outturn data published by the Office for National Statistics (ONS) on 21 October. We then present an in-year estimate for 2021-22 that makes use of ONS outturn data for April to August 2021 that were released on 21 September (but not the September outturn released on 21 October). Finally, we present forecasts for 2022-23 to 2026-27.¹ 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 March 2021.

3.3 The Foreword to this document describes the timetable followed in producing the forecasts presented here. We finalised our pre-measures fiscal forecast on 1 October, earlier than usual in order to give the Chancellor a stable base on which to make decisions for the October 2021 Budget and Spending Review (the first multi-year review since 2015). This means that our fiscal forecasts do not incorporate ONS public finances outturn data for September 2021 (nor HMRC's administrative receipts data that were available ahead of the ONS numbers, with the exception of some in-month data for corporation tax). In addition, as described in Box 2.3 and throughout Chapter 2, there have been several items of new information since the forecast was closed that could have affected our near-term forecasts,

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

although none that would obviously have altered our view about medium-term economic prospects. Higher estimates of nominal GDP data in the Quarterly National Accounts released on 30 September would have raised the denominator in metrics such as the tax-to-GDP and debt-to-GDP ratios, so we note the mechanical implications of these revisions for such ratios. Other relevant post-forecast news includes the sharp rise in energy prices (especially gas prices), and its implications for near-term inflation and for interest rate expectations. In Chapter 4 we consider the fiscal implications of these developments in the context of our assessment of the Government's performance against its new fiscal targets.

3.4 This fiscal forecast:

- represents our **central view** of the path of the public finances, conditioned on the current policies of the Government;
- 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 March 2021 forecast; and
- focuses on official '**headline**' **fiscal aggregates** that exclude public sector banks.

3.5 In recent forecasts, both the course of the pandemic and the path of Brexit have been highly uncertain, necessitating a range of assumptions and the presentation of alternative scenarios around our central forecasts. While uncertainty remains elevated, it has diminished in both areas: first, thanks to the successful rollout of effective vaccines and lifting of most pandemic-related restrictions; and second, as a result of the UK-EU Trade and Cooperation Agreement (TCA) coming into force on 1 January 2021 following the end of the transition period since leaving the EU on 31 January 2020.

3.6 Our assumptions concerning the course of the pandemic and its impact on the economy are set out in Chapter 2 and the implications of Brexit for trade with the EU are discussed in Box 2.5. The introduction of several TCA-related policies (such as the UK Global Tariff, UK Emissions Trading Scheme, and the new points-based immigration system) was reflected in our March 2021 fiscal forecast, although the implementation of some elements has been further delayed (notably in respect of customs declarations on goods imports from the EU). In addition, there remains uncertainty in some Brexit-related areas where the Government's long-term policy is still being decided or is subject to ongoing negotiations, not least in respect of the Northern Ireland protocol. It is likely that uncertainty will continue in some of these areas for some time, with updates continuing to affect future forecasts.

Policy announcements

The October 2021 Budget and Spending Review

3.7 In the first multi-year Spending Review since 2015, the Chancellor has announced a large and sustained increase in departmental resource spending that is financed partly by higher taxes (particularly the new health and social care levy) but partly also by higher borrowing.

Net giveaways increase borrowing by a peak of £15.5 billion in 2022-23, before declining steadily to £4.8 billion by 2026-27, as the yield from net tax rises continues to build whereas the scale of spending increases diminishes.

3.8 Table 3.1 presents the aggregate direct and indirect effects of new policy announcements since March. It shows:

- A significant increase in **departmental resource spending and equivalent Scottish Government spending** of £37.6 billion in 2022-23 and an average of £26.5 billion a year from 2023-24 onwards. These increases more than reverse the unspecified cuts relative to pre-pandemic plans that were announced at the November 2020 Spending Review and increased in the March 2021 Budget. We assume that between 5 and 10 per cent of these additions to budgets will go unspent – a smaller margin than the large shortfalls recorded this year and last.
- Modest net changes to **other spending** that are uneven across years and reflect larger, but largely offsetting, measures. The largest takeaway relative to the pre-measures position comes from uprating state pensions with CPI inflation of 3.1 per cent rather than with average earnings growth of 8.3 per cent. The largest giveaway relates to universal credit, where a more generous taper rate and a £500 a year increase in the work allowance have been announced.
- Significant further **net tax rises**, which lower borrowing by £17.4 billion in 2022-23, rising to £24.3 billion in 2026-27. These are dominated by the new health and social care levy – the direct effect of which raises an average of £17.3 billion a year from 2022-23 onwards (although net of its effect on wages, it raises £14.7 billion a year).² The largest tax cut is the traditional one-year fuel duty freeze. The latest net tax rises come on top of others announced since the start of the pandemic, in particular the March 2021 Budget measures raising the main rate of corporation tax and freezing income tax thresholds for five years.
- The **indirect fiscal effect of policy decisions** via their implications for the wider economy lowers borrowing by a peak of £7.1 billion in 2023-24, when the boost to nominal GDP from the discretionary fiscal loosening is at its greatest. This effect dissipates over time, though the higher price level continues, raising receipts in the medium term. By 2026-27, it is largely offset by lower receipts as the additional payroll costs for employers associated with the health and social care levy are passed through into lower wages, reducing the take from income tax and NICs by £2.9 billion in that year (as detailed in Annex A).

² This refers to the tax element only. This is marginally different to the scorecard costing, which also includes some spending.

Table 3.1: Total effect of Government decisions since March 2021

	£ billion					
	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total effect of Government decisions	0.7	15.5	11.4	5.4	5.4	4.8
<i>of which:</i>						
Direct effect of scorecard policies	3.0	25.4	21.9	9.8	7.5	7.7
Direct effect of non-scorecard policies	-3.2	-4.3	-3.3	-1.4	-1.5	-1.6
Indirect effect of Government decisions	0.9	-5.5	-7.1	-3.0	-0.6	-1.3
Direct effect of scorecard policies	3.0	25.4	21.9	9.8	7.5	7.7
<i>of which:</i>						
Resource DEL and Scottish AME	1.2	41.8	32.9	27.0	26.4	27.5
Capital DEL and Scottish AME	0.0	-0.5	2.9	-1.2	-0.5	-0.5
AME spending (excluding Scottish)	0.6	-2.3	-0.7	-0.6	-2.6	-2.6
<i>of which:</i>						
State pensions triple-lock	0.0	-5.4	-5.8	-6.1	-6.5	-6.7
UC taper and work allowances	0.7	2.2	2.4	2.5	2.8	3.0
Other AME spending	-0.1	0.9	2.7	3.1	1.1	1.1
Receipts	1.1	-13.7	-13.2	-15.4	-15.7	-16.7
<i>of which:</i>						
Health and social care levy	0.0	-16.7	-17.0	-17.1	-17.6	-18.2
Other tax rises	-0.5	-0.7	-5.4	-5.0	-5.7	-6.1
Tax cuts	1.6	3.7	9.2	6.8	7.5	7.6
Direct effect of non-scorecard policies	-3.2	-4.3	-3.3	-1.4	-1.5	-1.6
<i>of which:</i>						
Resource DEL	-2.7	-3.9	-2.3	-1.3	-1.3	-1.3
Other tax and spending decisions	-0.5	-0.4	-1.0	-0.1	-0.2	-0.3

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

The cost of pandemic-related rescue measures

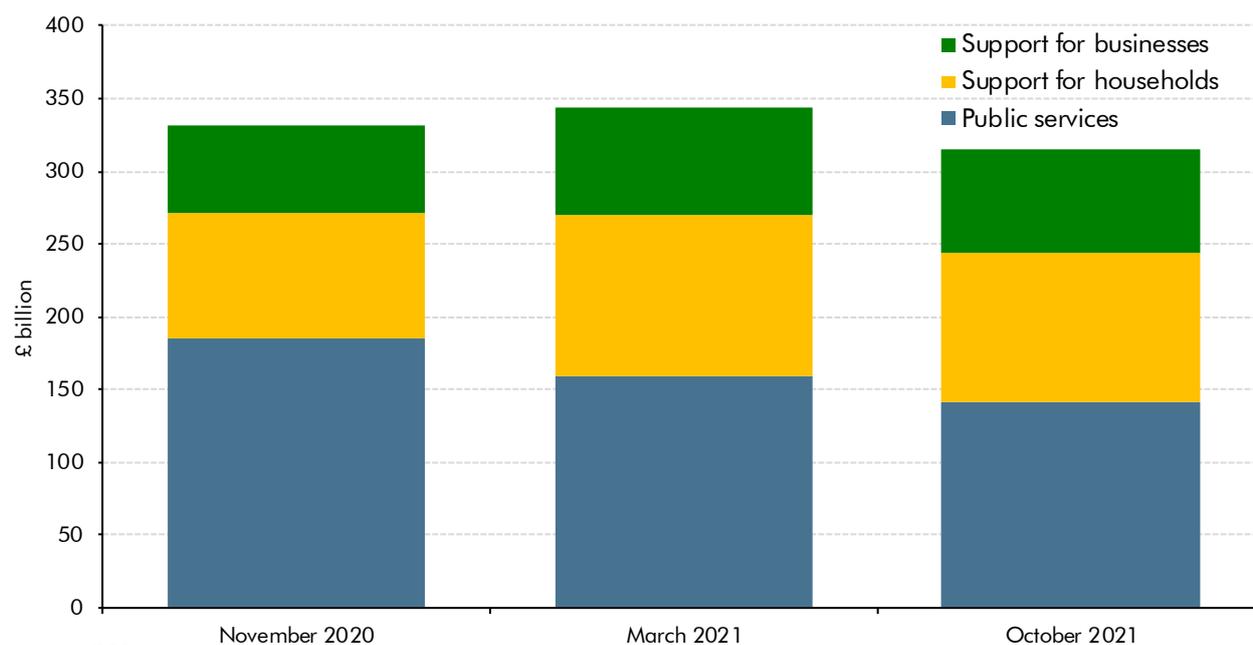
3.9 In our November 2020 and March 2021 *EFOs* we described the evolution of the Government's fiscal policy response to the pandemic and its growing total cost over the course of successive 'mini-budgets' as well as the formal fiscal events of the November 2020 Spending Review and the March 2021 Budget. Our March 2021 estimate of the total cost of pandemic-related support was £344 billion. There is no straightforward definition of a pandemic-related rescue measure, so we have decided to draw a line at the March 2021 Budget, such that policies announced since then will not be added to our running total of the cost of the coronavirus policy response.³ This means revisions to the estimated cost of this response since March reflect updates to estimates of the cost of previously announced interventions.

3.10 Our latest estimate of the total cost of pandemic-related rescue measures is £315 billion, down £29 billion (8 per cent) from our March estimate and down £21 billion (6 per cent) from our November 2020 estimate. The downward revision since March reflects greater than expected departmental underspending in pandemic-related areas (particularly NHS

³ With two small exceptions: a small change to the fifth tranche of the Self-Employment Income Support Scheme, and the business rates relief for sectors outside of retail, hospitality and leisure that was announced in late March.

test and trace), the lower cost of income support schemes, and smaller expected losses on government-backed loan schemes. Overall, we now estimate that £142 billion (45 per cent) was spent on support for public services, £102 billion (32 per cent) on support for households, and £71 billion (23 per cent) on support for businesses (Chart 3.1). These costs are detailed in Annex A and relevant parts of this chapter, while Annex B initiates a running commentary on the cost of pandemic-related balance sheet interventions.

Chart 3.1: The cost of pandemic-related rescue measures



Source: OBR

Classification and other statistical changes

3.11 Since our March forecast the ONS has implemented methodological changes and data improvements in respect of public sector pension schemes, the expected costs of pandemic-related loan guarantee schemes, and the Bank of England. These have had large effects in outturn and smaller ones for our forecast:

- A reduction in the **discount rate applied for pension liabilities** of funded public sector schemes from 5 to 4 per cent increases the discounted value of those liabilities on the balance sheet. This affects our forecasts for public sector net financial liabilities and net worth (which include these liabilities), but not public sector net debt. As this discount rate unwinds it affects accrued pension flows and so expenditure. This is partially offset by a similar change on the asset side that affects accrued interest income.
- New **data sources for public sector pension funds** suggest they hold a higher share of government gilts than previously thought. These gilts net out of the balance sheet as they do not represent liabilities to the private sector. We assume that this persists

through the forecast, reducing debt by progressively larger amounts as pension funds' balance sheets expand, reaching £16.5 billion (0.6 per cent of GDP) by 2026-27.

- The ONS has now incorporated estimates for the **expected losses on government guaranteed pandemic-related loan schemes** into public sector net borrowing. As explained later in this chapter, these estimates were lower than our initial forecast assumptions. This also has implications for our cash forecasts in future years as less cash is expected to be paid out against these guarantees. These estimates remain subject to large uncertainties as actual write-off rates remain unknown.

3.12 The ONS has also decided on the treatment of the **Recovery Loan Scheme** (in line with other loan guarantee schemes) and **business rates reliefs** (as a reduction in tax receipts). These are in line with the assumptions made in our March forecast.

3.13 On the advice of Treasury classification experts, we have included some other policies and transactions in our central forecast, pending ONS decisions. These include:

- the **health and social care levy**, which is based on NICs and we therefore treat similarly as a social contribution (although in reality it is another new tax and is included in the National Accounts taxes definition used in this chapter);
- a **residential property developer tax**, which we have treated as a tax on income; and
- an **economic crime levy**, which we treat as a tax on production.

3.14 The Government's increasing use of guarantees and its wider balance sheet to support businesses in particular continues to pose classification risks. From a statistical perspective, an entity is treated as part of the public sector if sufficient control over its activities is in the hands of the public sector. It is therefore possible that more entities will come onto the balance sheet over time as these policy interventions continue to evolve.

Public sector receipts

Summary of the receipts forecast

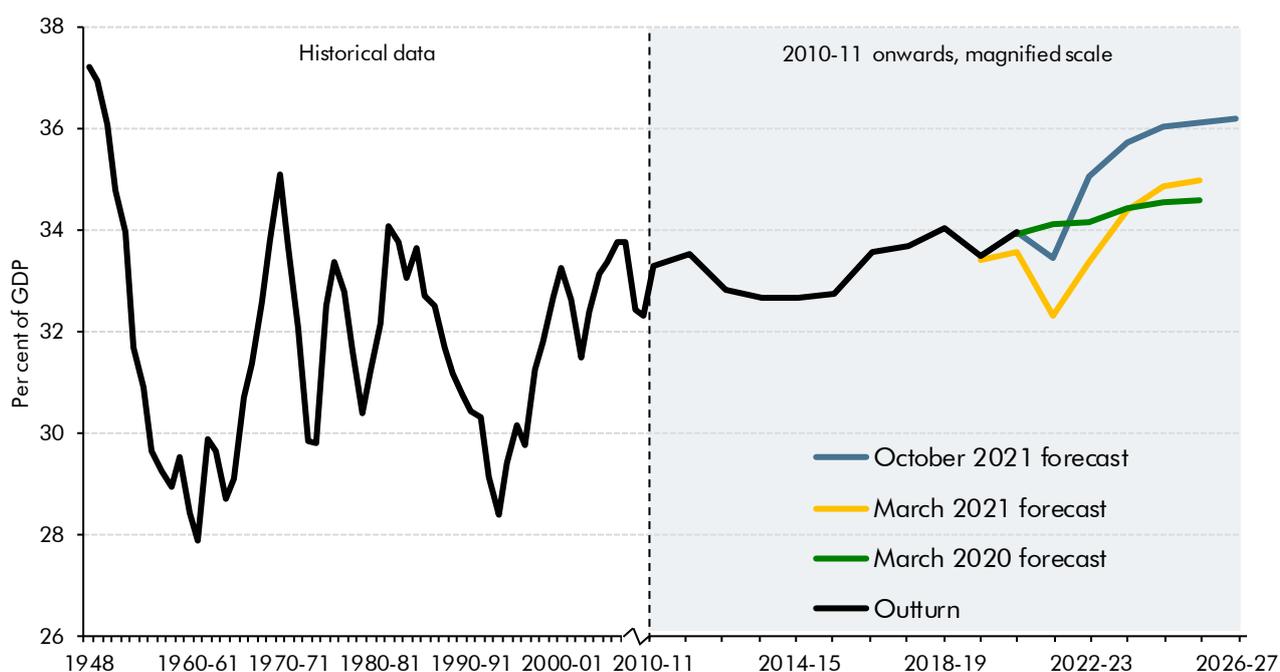
3.15 In this section we discuss our latest forecast of public sector receipts, and how it has changed since both our March 2020 forecast (produced on the eve of the pandemic) and our previous forecast in March 2021 (produced during the second wave of infections).

3.16 Receipts fell by £31.8 billion (3.8 per cent) in 2020-21 – outperforming nominal GDP, which fell 5.6 per cent, despite large tax cuts. That outperformance was largely the result of pandemic-related policy measures that supported private sector incomes and thus tax bases in the face of sharp falls in output and expenditure. We expect receipts to rebound in 2021-22, rising by £66.7 billion (8.4 per cent) on a year earlier, slightly underperforming nominal GDP, which we expect to rise by 10.4 per cent. Both receipts and National Accounts taxes (a slightly narrower measure that is more comparable over longer historical periods, shown in

Chart 3.2) consequently fall modestly as a share of GDP in 2021-22, reversing the modest rise seen in 2020-21.

3.17 The growth in receipts then outpaces GDP from 2022-23 onwards. This is largely driven by the Chancellor's decisions to raise additional income tax (via threshold freezes announced in the March Budget), corporation tax (via the rate rise also announced in March), and the temporary rise in NICs and its subsequent replacement with a permanent new health and social care levy (announced in September). These raise taxes significantly as a share of GDP relative to the pre-pandemic position. As Table 3.2 shows, each of these taxes raises at least 0.6 per cent of GDP more in 2026-27 than they did in 2019-20 (with the first two raising at least 0.9 per cent of GDP more). The ratios of both public sector current receipts and National Accounts taxes to GDP therefore peak in the final year of the forecast, at 40.0 and 36.2 per cent respectively, with the latter representing the highest tax burden since the early 1950s, late in Clement Attlee's post-war Labour Government.

Chart 3.2: National Accounts taxes as a share of GDP



Note: Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the National Accounts tax-to-GDP ratio by 0.8 per cent of GDP across the forecast. This would still leave the tax-to-GDP ratio at its highest since 1951.
Source: ONS, OBR

Table 3.2: Major receipts as a share of GDP

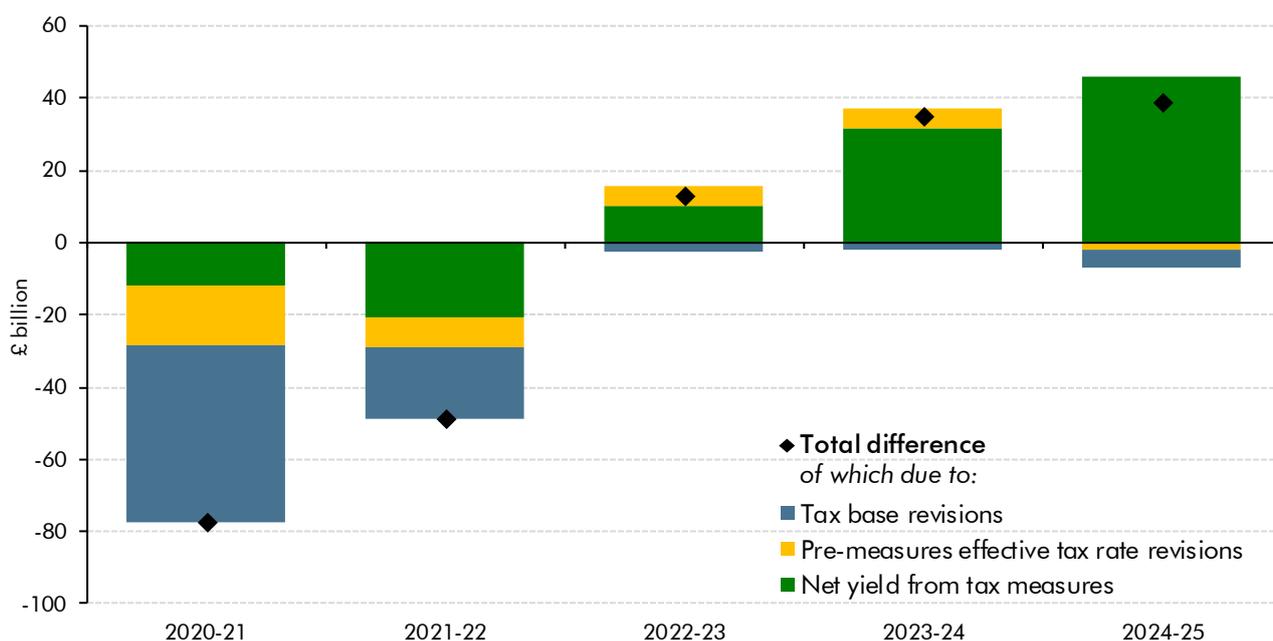
	Per cent of GDP							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Income tax	8.7	9.4	9.2	9.3	9.3	9.5	9.7	9.9
NICs and H&SC levy ¹	6.5	6.9	6.8	7.3	7.2	7.1	7.1	7.1
Value added tax	6.0	5.7	5.7	6.2	6.2	6.1	6.1	6.0
Onshore corporation tax	2.2	2.4	2.2	2.2	2.9	3.1	3.2	3.1
Council tax	1.6	1.8	1.7	1.7	1.7	1.7	1.7	1.7
Capital taxes ²	1.4	1.4	1.5	1.6	1.6	1.7	1.7	1.8
Business rates	1.4	0.9	1.0	1.2	1.3	1.3	1.3	1.3
Fuel duties	1.2	1.0	1.2	1.2	1.2	1.1	1.1	1.1
Alcohol and tobacco duties	1.0	1.1	1.0	0.9	0.9	0.9	0.9	0.9
Other taxes	3.4	3.4	3.3	3.5	3.4	3.4	3.4	3.4
National Accounts taxes	33.5	34.0	33.5	35.0	35.7	36.0	36.1	36.2
Interest and dividend receipts	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2
Other receipts	2.7	2.8	2.7	2.6	2.6	2.6	2.6	2.6
Current receipts	37.2	37.9	37.2	38.8	39.6	39.8	39.9	40.0

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.

3.18 Relative to our March 2020 pre-pandemic forecast, Chart 3.3 and Table 3.3 show that total receipts fell short by £78 billion in 2020-21 and are forecast to remain £49 billion below that forecast this year. That reflects both lower than expected nominal GDP hitting tax bases and the effects of temporary tax cuts. Receipts recover to a level that is actually above our pre-pandemic forecast from 2022-23 onwards. This reflects the hit to tax bases (as higher inflation raises nominal GDP and largely counteracts medium-term scarring to real GDP) plus the yield from the large tax-raising measures described above.

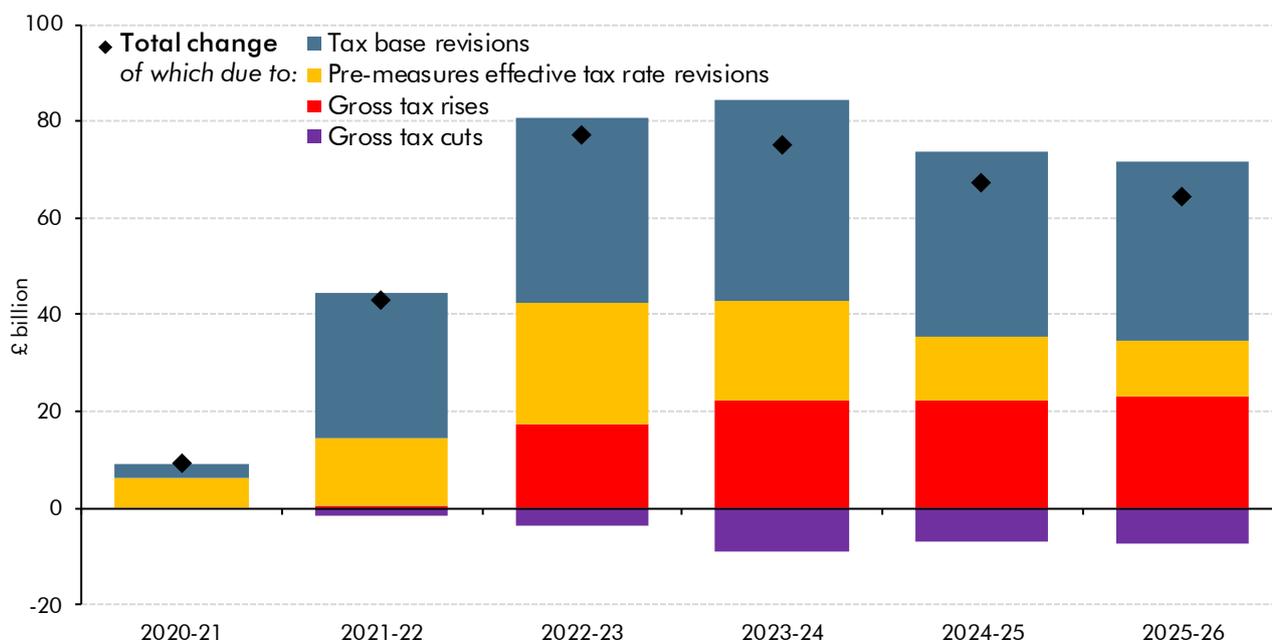
Chart 3.3: Changes to receipts since March 2020



Source: ONS, OBR

3.19 Relative to our March 2021 forecast (Chart 3.4 and Table 3.2), we have revised receipts up by £43 billion in 2021-22 and by £71 billion on average between 2022-23 and 2025-26. Over the forecast as a whole, this is predominantly due to upward revisions to nominal GDP and thus to the major tax bases, which increase receipts by £30 billion in 2021-22, rising to £37 billion by 2025-26. Upward revisions to effective tax rates paid on those higher tax bases also boost receipts throughout the forecast – thanks to strength in receipts so far this year outpacing even the strong recovery in tax bases. From 2024-25 onwards they add smaller amounts – thanks to a more tax-rich composition of GDP, higher asset prices and greater fiscal drag as a result of the threshold freezes announced in March (which raise more when inflation is higher). From 2022-23 onwards, net tax rises announced since March add between £13 and £16 billion a year to receipts, as gross tax rises (in particular the new health and social care levy) outweigh the more modest costs of gross tax cuts (including the customary one-year freezes in fuel and alcohol duties).

Chart 3.4: Changes to receipts since March 2021



Source: ONS, OBR

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

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	872.9	910.8	949.2	984.7	1,022	
March 2021 forecast	786.3	819.3	885.4	944.7	994.2	1,038
October 2021 forecast	795.3	862.0	962.4	1,020	1,061	1,102
Change since March 2020	-77.7	-48.8	13.2	35.1	39.0	
<i>of which:</i>						
Wages and salaries	-9.1	-3.5	0.1	-0.6	-4.2	
Self assessment income streams	-1.3	-4.5	-3.9	-2.5	-1.6	
Profits	-2.3	0.4	-0.2	-0.2	-0.6	
Household spending	-22.1	-7.5	1.6	1.2	2.0	
Value of property transactions	-1.0	0.4	-0.5	-0.8	-1.2	
Other tax bases	-13.7	-5.1	0.2	1.1	0.6	
Pre-measures effective tax rate	-16.2	-8.4	5.7	5.1	-1.7	
Direct effect of Government decisions	-12.0	-20.5	10.2	31.8	45.7	
Change since March 2021	8.9	42.7	77.0	75.1	67.1	64.1
<i>of which:</i>						
Wages and salaries	1.6	12.7	19.9	20.6	17.1	16.3
Self assessment income streams	-0.2	1.4	2.0	2.6	3.2	3.0
Profits	1.3	4.4	1.8	1.9	1.7	1.5
Household spending	-0.1	6.0	6.8	7.4	7.9	8.0
Value of property transactions	0.1	1.9	1.0	1.2	1.0	0.9
Other tax bases	0.1	3.4	6.9	7.8	7.3	7.2
Pre-measures effective tax rate	6.2	14.1	24.9	20.3	13.4	11.5
Direct effect of Government decisions	0.0	-1.2	13.7	13.3	15.4	15.8

Explaining the rise in tax as a share of GDP

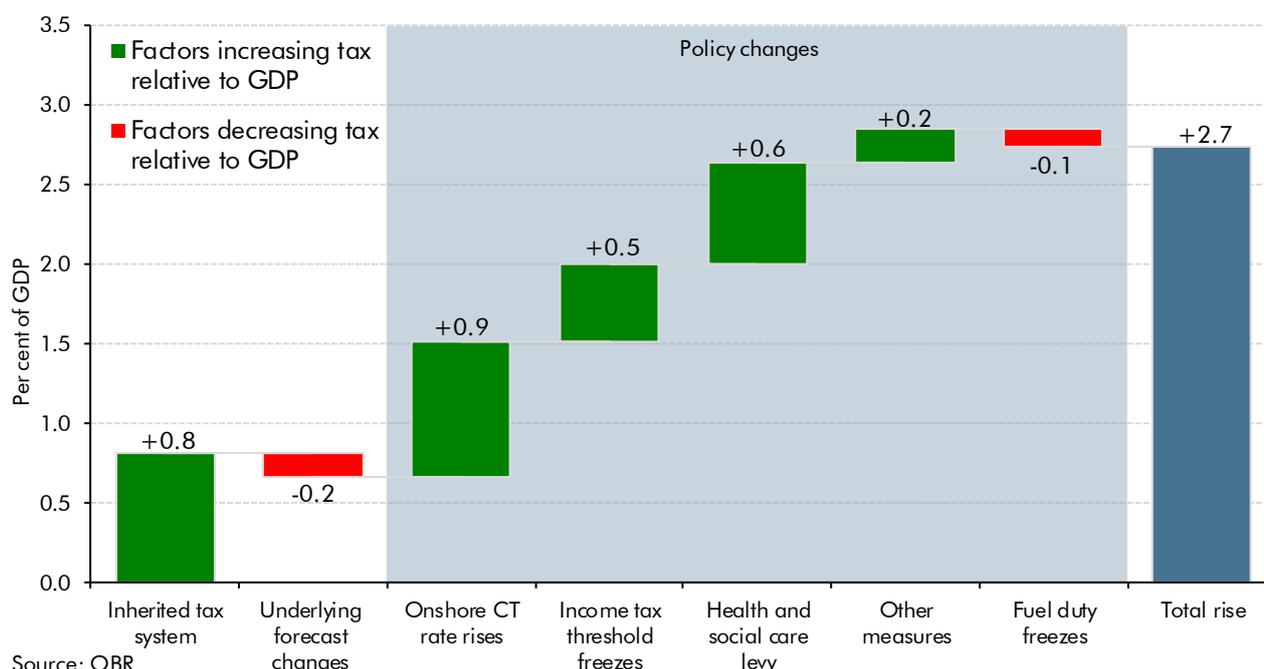
Changes in the tax-to-GDP ratio relative to the pre-pandemic position

- 3.20** The tax-to-GDP ratio at the forecast horizon in 2026-27 is 2.7 percentage points higher than its pre-pandemic 2019-20 position. As Chart 3.5 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 1.9 percentage point rise in the tax burden relative to that inherited position is more than explained by the tax rises announced by the current Chancellor. **Underlying forecast revisions** since March 2020 actually reduce the extent to which the ratio rises over this period (by 0.2 percentage points), reflecting small pandemic-related scarring assumptions in respect of individual tax bases (include a small hit to the business rates tax base and a permanent reduction in business travel weighing on air passenger duty).
- 3.21** The 2.1 percentage point increase in the tax burden due to **policy measures** announced by the current Chancellor since he took office includes:
- **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 0.5 percentage points to the tax-to-GDP ratio in 2026-27.
- The **health and social care levy** announced in September 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 in 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. This Chancellor has announced three further years of frozen rates, reducing the tax-to-GDP ratio by 0.1 percentage points by 2026-27.

Chart 3.5: Sources of the rise in the National Accounts tax-to-GDP ratio between 2019-20 and 2026-27



The composition of receipts

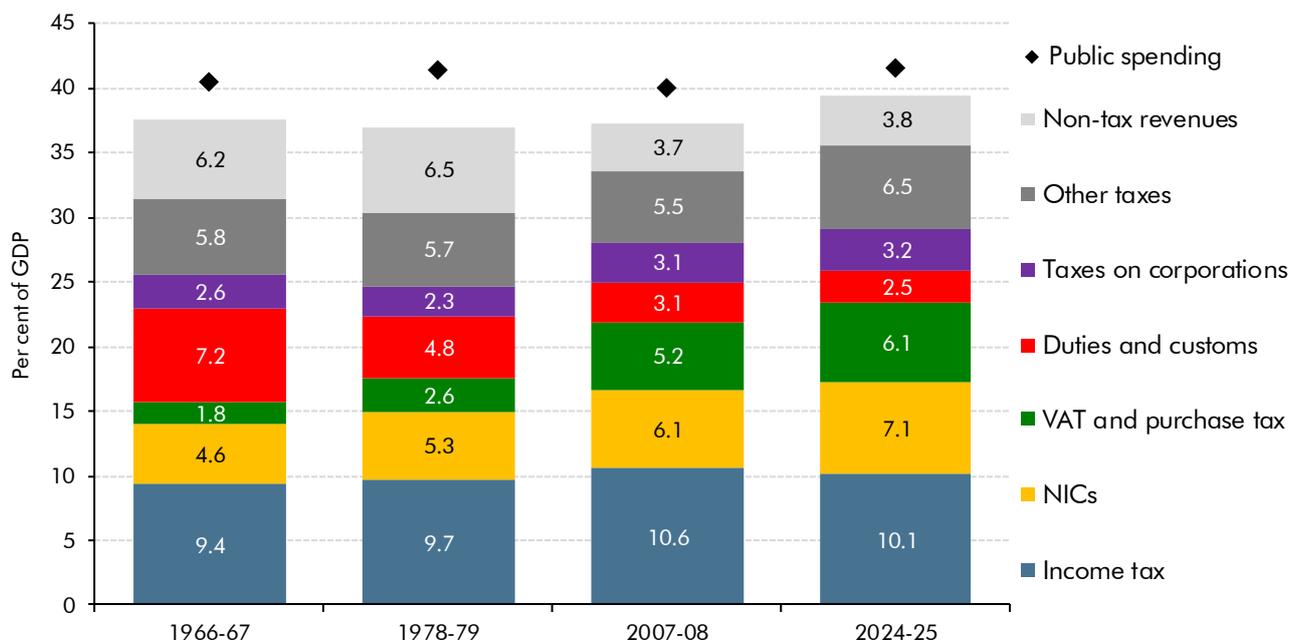
3.22 The tax burden not only rises to a historical high, but its composition continues to shift. Taking selected years when the size of the state was similar to the 41.6 per cent of GDP reached at the end of the latest Spending Review (discussed from paragraph 3.62 below), Chart 3.6 shows that:

- **Taxes on personal income** have increased by 3.3 per cent of GDP since 1966-67, with three quarters explained by increasing amounts raised through NICs while only a

quarter is explained by increases in income tax receipts. By 2024-25, NICs and the NICs-like health and social care levy will raise 41 per cent of taxes on income, up from 36 per cent before the financial crisis in 2007-08 and 33 per cent in 1966-67.

- **Indirect taxes** have remained in a range of 7.4 to 9.0 per cent of GDP, but their source has changed materially over time. The share of indirect taxes coming from VAT (and its predecessor purchase tax) has risen from less than a quarter to almost three quarters, with the share raised from specific duties (in particular from tobacco duties) falling correspondingly.
- **Non-tax revenues** as a per cent of GDP have fallen by around two-fifths since the end of the 1970s, reflecting in part the loss of the operating surpluses of nationalised industries that were privatised during the 1980s and 1990s.

Chart 3.6: The composition of receipts: historical trend and forecast



Source: Bank of England, IFS, ONS, OBR

Detailed current receipts forecast

3.23 Our detailed receipts forecast, and changes since our March 2020 and March 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.

Table 3.4: Current receipts

	£ billion							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Income tax ¹	193.6	198.1	213.2	229.6	240.5	253.0	268.4	284.3
of which: Pay as you earn	165.2	169.3	183.8	196.9	206.9	214.9	227.7	239.7
Self assessment	32.0	31.9	31.8	35.3	36.3	40.9	43.5	47.2
Other income tax	-3.7	-3.1	-2.3	-2.6	-2.6	-2.8	-2.8	-2.6
National insurance contributions	144.6	144.0	157.0	182.0	168.1	171.7	176.5	183.4
Health and social care levy					18.3	18.7	19.3	20.1
Value added tax	133.8	118.6	131.9	155.0	159.1	163.1	167.4	172.1
Corporation tax ²	49.8	51.8	52.0	56.6	75.6	85.2	89.3	91.5
of which: Onshore	48.8	51.1	50.2	53.8	73.7	83.6	87.7	90.1
Offshore	1.0	0.7	1.8	2.8	1.9	1.6	1.6	1.5
Petroleum revenue tax	-0.4	-0.3	-0.4	-0.3	-0.2	-0.2	-0.1	-0.1
Fuel duties	27.6	20.9	26.8	28.8	29.9	30.4	30.7	31.1
Business rates	31.3	19.5	22.5	29.8	34.0	34.7	35.2	36.0
Council tax	36.3	38.4	40.1	41.8	43.6	45.4	46.9	48.4
VAT refunds	19.0	20.2	21.0	22.9	23.4	23.6	24.6	25.9
Capital gains tax	9.8	10.6	9.2	13.0	15.2	16.7	18.1	19.7
Inheritance tax	5.1	5.4	6.0	6.4	6.5	6.8	7.2	7.6
Property transaction taxes ³	12.5	9.5	14.8	15.8	16.5	17.2	18.2	19.4
Stamp taxes on shares	3.6	3.7	4.2	3.9	4.0	4.1	4.3	4.5
Tobacco duties	9.7	9.8	10.1	10.1	10.0	10.0	9.9	9.8
Alcohol duties	11.5	12.4	12.8	12.6	13.0	13.7	14.2	14.8
Air passenger duty	3.7	0.3	1.1	2.1	3.2	4.4	4.5	4.8
Insurance premium tax	6.5	6.3	6.5	6.8	7.0	7.1	7.2	7.4
Climate change levy	2.1	1.8	2.0	1.9	2.0	2.0	2.1	2.2
Bank levy	2.5	1.9	1.3	1.2	1.2	1.2	1.2	1.2
Bank surcharge	1.5	1.1	1.6	1.2	0.6	0.5	0.5	0.5
Apprenticeship levy	2.8	3.0	3.2	3.2	3.3	3.4	3.6	3.7
Digital services tax	0.1	0.3	0.6	0.6	0.7	0.8	0.9	1.1
Other HMRC taxes ⁴	7.5	7.4	8.4	9.1	9.3	9.4	9.5	9.7
Vehicle excise duties	6.8	6.9	7.1	7.3	7.5	7.6	7.7	7.8
Licence fee receipts	3.3	3.7	3.7	3.9	3.9	4.0	4.0	4.1
Environmental levies	8.0	8.5	9.5	9.2	10.4	10.9	11.2	12.4
Emissions Trading Scheme	1.6	1.3	0.9	4.9	4.3	4.3	4.2	4.2
Other taxes	10.2	7.8	8.8	10.0	10.1	10.2	10.3	10.4
National Accounts taxes	744.4	713.0	775.7	869.4	921.1	959.8	996.9	1,038
Less own resources contribution to EU	-3.2	-2.2	-	-	-	-	-	-
Interest and dividends	23.4	23.3	24.3	27.8	30.7	31.2	32.2	33.7
Gross operating surplus	57.7	57.6	58.5	61.5	64.1	66.6	69.1	72.1
Other receipts	4.8	3.6	3.5	3.7	3.8	3.6	3.8	3.9
Current receipts	827.0	795.3	862.0	962.4	1,020	1,061	1,102	1,148
Memo: UK oil and gas revenues ⁵	0.6	0.4	1.4	2.5	1.7	1.4	1.5	1.4

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

² 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, 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
Income tax ¹	-9.5	-4.1	2.2	4.0	6.5
of which: Pay as you earn	-6.2	-0.5	3.5	5.9	5.2
Self assessment	-2.4	-4.1	-1.9	-2.7	0.5
Other income tax	-0.8	0.5	0.6	0.8	0.8
National insurance contributions	-6.2	0.0	18.0	-2.3	-5.4
Health and social care levy				18.3	18.7
Value added tax	-22.0	-14.0	4.0	3.3	2.4
Corporation tax ²	-6.3	-8.0	-6.0	10.8	18.0
of which: Onshore	-6.0	-8.7	-7.7	10.1	17.6
Offshore	-0.2	0.7	1.7	0.7	0.4
Petroleum revenue tax	0.0	-0.2	0.0	0.0	0.0
Fuel duties	-6.6	-1.4	-1.7	-1.3	-1.3
Business rates	-12.0	-10.9	-4.5	-1.0	-1.6
Council tax	0.5	1.0	1.4	2.0	2.5
VAT refunds	0.1	0.0	1.1	0.9	-0.1
Capital gains tax	-0.8	-3.4	-1.2	-0.4	-0.3
Inheritance tax	-0.2	0.1	0.1	-0.3	-0.4
Property transaction taxes ³	-4.3	0.1	-0.4	-1.0	-1.4
Stamp taxes on shares	0.1	0.5	0.0	0.0	0.0
Tobacco duties	0.8	1.2	1.3	1.3	1.3
Alcohol duties	0.6	0.4	-0.3	-0.3	-0.2
Air passenger duty	-3.7	-3.1	-2.3	-1.4	-0.4
Insurance premium tax	-0.3	-0.2	-0.1	0.0	0.0
Climate change levy	-0.4	-0.1	-0.3	-0.4	-0.5
Bank levy	0.0	0.2	0.2	0.2	0.2
Bank surcharge	-0.4	0.0	-0.4	-1.1	-1.2
Apprenticeship levy	0.0	0.1	0.0	0.0	0.0
Digital services tax	0.0	0.2	0.2	0.2	0.3
Other HMRC taxes ⁴	-0.4	0.4	1.0	1.2	1.2
Vehicle excise duties	-0.2	0.0	0.1	0.1	-0.1
Licence fee receipts	0.1	0.0	0.0	0.0	0.0
Environmental levies	-1.1	-0.4	-0.6	0.0	0.0
Emissions Trading Scheme receipts	0.1	-0.3	3.6	3.0	2.9
Other taxes	-1.2	-0.6	0.3	0.3	0.2
National Accounts taxes	-73.2	-42.6	15.8	36.1	41.3
Less own resources	0.2	-	-	-	-
contribution to EU					
Interest and dividends	-4.3	-4.5	-2.8	-1.7	-2.6
Gross operating surplus	0.6	-0.2	0.2	0.6	0.5
Other receipts	-0.9	-1.4	-0.1	0.0	-0.1
Current receipts	-77.7	-48.8	13.2	35.1	39.0
<i>Memo: UK oil and gas revenues⁵</i>	<i>-0.2</i>	<i>0.6</i>	<i>1.6</i>	<i>0.7</i>	<i>0.4</i>

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

² 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 March 2021

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Income tax ¹	3.3	15.1	20.9	20.6	19.8	20.1
of which: Pay as you earn	2.0	13.0	15.2	16.7	13.8	13.8
Self assessment	1.1	1.1	5.0	3.2	5.6	5.8
Other income tax	0.2	1.0	0.6	0.6	0.5	0.5
National insurance contributions	0.2	10.3	29.4	10.6	8.1	6.3
Health and social care levy				18.3	18.7	19.3
Value added tax	-1.3	4.0	9.3	9.4	8.0	8.3
Corporation tax ²	6.3	11.7	7.8	4.4	3.5	4.0
of which: Onshore	6.2	10.7	5.6	2.9	2.3	2.8
Offshore	0.1	1.0	2.2	1.5	1.2	1.2
Petroleum revenue tax	0.0	-0.2	0.0	0.0	0.0	0.0
Fuel duties	-0.6	0.7	-0.4	-0.3	-0.2	-0.5
Business rates	1.5	-1.3	-1.8	0.2	0.2	0.2
Council tax	0.4	0.2	0.6	1.0	1.3	1.3
VAT refunds	-1.3	-1.8	0.1	-0.3	-1.2	-1.6
Capital gains tax	0.5	0.6	2.3	3.1	3.6	3.7
Inheritance tax	0.1	0.0	0.6	0.7	0.7	0.6
Property transaction taxes ³	-0.1	2.5	1.4	1.4	1.0	0.8
Stamp taxes on shares	0.2	0.8	0.6	0.6	0.6	0.6
Tobacco duties	0.8	0.5	0.7	0.8	0.8	0.8
Alcohol duties	-0.2	0.4	-0.1	-0.1	-0.1	0.0
Air passenger duty	-0.3	-0.3	0.1	0.1	0.1	0.1
Insurance premium tax	0.0	0.0	0.1	0.2	0.2	0.2
Climate change levy	0.0	-0.1	-0.2	-0.3	-0.3	-0.3
Bank levy	0.0	0.2	0.2	0.2	0.2	0.2
Bank surcharge	0.0	0.4	-0.1	-0.7	-0.9	-0.9
Apprenticeship levy	0.0	0.3	0.2	0.2	0.2	0.2
Digital services tax	0.0	0.1	0.1	0.1	0.2	0.2
Other HMRC taxes ⁴	0.4	1.1	1.2	1.3	1.3	1.2
Vehicle excise duties	-0.1	0.1	0.3	0.3	0.3	0.2
Licence fee receipts	-0.1	0.0	0.0	0.0	0.1	0.1
Environmental levies	-1.0	-0.7	-0.8	-0.2	0.1	0.0
Emission Trading Scheme receipts	0.2	-0.3	3.7	3.1	3.0	3.0
Other taxes	-0.2	0.0	0.5	0.3	0.5	0.5
National Accounts taxes	8.7	44.1	76.7	75.1	69.8	68.7
Less own resources contribution to EU	-0.1	-	-	-	-	-
Interest and dividends	-0.2	-0.8	1.4	2.3	0.4	-1.1
Gross operating surplus	1.1	-0.2	-0.8	-2.1	-3.0	-3.4
Other receipts	-0.5	-0.4	-0.3	-0.2	-0.1	-0.1
Current receipts	8.9	42.7	77.0	75.1	67.1	64.1
Memo: UK oil and gas revenues ⁵	0.2	0.9	2.1	1.4	1.2	1.3

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

² 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.

Tax-by-tax analysis

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

- 3.24 Despite the sharp fall in nominal GDP in 2020-21, income tax and NICs receipts (excluding those collected through self-assessment (SA)) actually rose modestly (by £4.1 billion). That represented a shortfall of £13.2 billion relative to our pre-pandemic March 2020 forecast, but was £2.4 billion higher than our March 2021 forecast. Receipts are expected to rise sharply (by £28.3 billion) in 2021-22, thanks to the rebounding economy, and even more so (by £37.8 billion) in 2022-23, thanks largely to the significant further tax rises announced in September 2021. Receipts from these taxes – including the new health and social care levy that takes effect in 2023-24 – rise more gradually thereafter.
- 3.25 Relative to previous forecasts, receipts exceed our most recent forecast by significant margins in all years, while they even exceed our pre-pandemic forecast from 2022-23 onwards (Table 3.7). Those revisions reflect:
- **Relative to March 2020**, receipts are little different in 2021-22 as the modest hit from lower wages and salaries is largely offset by the modest gain from a more tax-rich composition of those wages, and the yield from smaller tax measures announced up to the March 2021 Budget. Thereafter, receipts have been revised up by an average of £21.3 billion a year between 2022-23 and 2024-25. This is more than explained by tax rises announced by the Chancellor in successive Budgets (which add £19.8 billion in 2022-23 and £26.9 billion in 2024-25), principally the NICs rise and associated health and social care levy announced in September, on top of the March Budget threshold freezes. (In Annex A we show that the gross yield from the NICs rise and levy introduction is around 15 per cent higher than the net yield factoring in their depressing effect on real wages.) These tax increases more than offset the modest downward revisions to the tax base that result from medium-term scarring of real GDP – wages and salaries in 2024-25 are 1.1 per cent lower than our March 2020 forecast, a somewhat smaller shortfall than the 2 per cent loss of real GDP due to the partially offsetting effect of higher inflation on nominal earnings.
 - **Relative to March 2021**, receipts have been revised up sharply. The £24.2 billion upward revision in 2021-22 is explained in roughly equal parts by the stronger than expected recovery in wages and salaries and their more tax-rich composition. In 2022-23 and 2023-24, an upward revision to wages and salaries provides the largest boost. This reflects near-term strength in earnings growth, persistent inflation raising nominal GDP, and an upwardly revised labour share of income. The NICs and health and social care levy announcements from September add similar amounts. In addition, unexpectedly high inflation has resulted in substantial upward revisions to the yield from tax threshold freezes announced in the March Budget – adding £4.7 billion to the yield in 2025-26.

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

	£ billion					
	Outturn	Forecast				
		2020-21	2021-22	2022-23	2023-24	2024-25
March 2020 forecast	323.4	338.5	354.2	367.9	383.2	
March 2021 forecast	307.8	314.2	331.0	344.4	361.4	380.7
October 2021 forecast	310.2	338.5	376.3	390.6	402.5	420.7
Change since March 2020	-13.2	0.0	22.1	22.7	19.3	
of which:						
Wages and salaries	-9.1	-3.5	0.1	-0.6	-4.2	
Pre-measures effective tax rate	-10.4	1.6	2.3	-1.2	-3.4	
Direct effect of Government decisions	6.4	1.9	19.8	24.5	26.9	
Change since March 2021	2.4	24.2	45.2	46.2	41.0	40.0
of which:						
Wages and salaries	1.6	12.7	19.9	20.6	17.1	16.3
Recosted SB21 threshold freezes	0.0	0.0	1.7	4.0	4.3	4.7
Other pre-measures effective tax rate	0.8	11.5	7.1	4.6	2.5	1.4
Direct effect of Government decisions	0.0	0.1	16.6	17.0	17.1	17.6

Self-assessment (SA) income tax

3.26 Self-assessed income tax receipts (which apply to income from a range of sources including dividends, savings, property, and self-employment) in 2020-21 were £2.4 billion below our March 2020 forecast, but £1.1 billion above our March 2021 forecast. We expect receipts to be roughly flat in 2021-22 (at £31.8 billion), which is again below our March 2020 forecast (by £4.1 billion) but above our March 2021 one (by £1.1 billion). These differences relative to March 2020 are largely driven by lower self-employment, which fell from pre-pandemic levels of 4.9 million to 4.3 million by the end of last year. This hit has been tempered by £28 billion in self-employment income support scheme grants, which propped up the incomes of around 3 million self-employed individuals – the tax on which will be paid this year and next.

3.27 Relative to previous forecasts, SA income tax receipts are expected to rise modestly but to remain below our March 2020 forecast until 2024-25. But they exceed our March 2021 forecast (Table 3.8). From 2022-23 onwards, these revisions reflect:

- **Relative to March 2020**, receipts have been revised down by £1.9 billion in 2022-23, but are up £0.5 billion in 2024-25. This is more than explained by a downward revision to total SA incomes (particularly from self-employment), which lowers receipts by an average of £2.7 billion between 2022-23 and 2024-25. This has been partially offset by tax rises, particularly the threshold freezes announced in March.
- **Relative to March 2021**, receipts are up £5.0 billion in 2022-23, rising to an upward revision of £5.8 billion by 2025-26. The largest contributor to this is our stronger forecast for SA income streams. The effect of Budget measures is uneven, largely due to pre-announcing the 1.5 per cent dividend tax rise that will take effect in April 2022, which gives taxpayers several months to bring forward income to avoid the tax rise.

Table 3.8: SA income tax: changes since March 2020 and March 2021

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	34.3	35.9	37.2	38.9	40.5	
March 2021 forecast	30.8	30.7	30.3	33.0	35.4	37.7
October 2021 forecast	31.9	31.8	35.3	36.3	40.9	43.5
Changes since March 2020	-2.4	-4.1	-1.9	-2.7	0.5	
<i>of which:</i>						
Self Assessment Income ¹	-1.3	-4.5	-3.9	-2.5	-1.6	
Pre-measures effective tax rate	-0.3	-2.6	0.6	-0.8	0.5	
Direct effect of Government decisions	-0.9	2.9	1.5	0.6	1.6	
Changes since March 2021	1.1	1.1	5.0	3.2	5.6	5.8
<i>of which:</i>						
Self Assessment Income ¹	-0.2	1.4	2.0	2.6	3.2	3.0
Recosted SB21 threshold freezes	0.0	0.0	0.0	0.2	0.5	0.5
Pre-measures effective tax rate	1.3	-0.3	1.5	1.1	1.0	1.7
Direct effect of Government decisions	0.0	0.0	1.5	-0.7	0.9	0.6

¹ Weighted average of self-employment, partnership, dividend and savings income

VAT

3.28 VAT raised £118.6 billion in 2020-21, £15.1 billion less than the previous year. That was a shortfall of £22.0 billion relative to our March 2020 forecast and £1.3 billion lower than our March 2021 forecast. Receipts remain below pre-pandemic levels this year, with the tax base still somewhat depressed and pandemic-related tax cuts in force for part of the year. They then rebound sharply in 2022-23 by £23.1 billion (18 per cent), before rising at a more modest 3 per cent a year on average over the remainder of the forecast.

3.29 We have revised up VAT receipts in every year relative to our March 2021 forecast, to the extent that receipts are now expected to exceed our pre-pandemic forecast from 2022-23 onwards (Table 3.9). Those revisions reflect:

- **Relative to March 2020**, receipts in 2021-22 remain £14.0 billion (9.6 per cent) lower than previously forecast thanks to lower nominal consumption, compounded by a lower share of that spending being subject to the standard rate of 20 per cent, which lowers the effective tax rate. Policy measures, including the temporary rate cut for the hospitality and accommodation sectors, also continue to weigh on receipts this year. This is partially offset by VAT paid on additional government procurement. From 2022-23 onwards, once temporary tax cuts have ended, VAT receipts have been revised up by an average of £3.2 billion a year, in line with the upward revision to nominal consumption (which in turn reflects the higher and more persistent inflation than predicted in March 2020). The additional government spending announced in this Budget and Spending Review has further boosted VAT receipts.
- **Relative to March 2021**, receipts have been revised up significantly in each year. An additional £4.0 billion in 2021-22 reflects a material upward revision to nominal consumption this year, partially offset by the shift away from spending subject to the

standard rate. Between 2022-23 and 2025-26 receipts have been revised up £8.7 billion a year on average as higher and more persistent inflation raises nominal spending. Receipts have also been boosted by the yield from previous measures related to online marketplaces and low-value consignment relief being considerably higher than expected (adding £1.5 billion a year – as detailed in Annex A).

Table 3.9: VAT: changes since March 2020 and March 2021

	£ billion					
	Outturn 2020-21	Forecast				
		2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	140.6	145.9	151.0	155.8	160.7	
March 2021 forecast	119.9	127.9	145.6	149.7	155.1	159.2
October 2021 forecast	118.6	131.9	155.0	159.1	163.1	167.4
Changes since March 2020	-22.0	-14.0	4.0	3.3	2.4	
<i>of which:</i>						
Household spending	-22.1	-7.5	1.6	1.2	2.0	
Pre-measures effective tax rate	6.3	-0.9	1.8	0.7	-1.3	
Direct effect of Government decisions	-6.1	-5.6	0.6	1.4	1.7	
Changes since March 2021	-1.3	4.0	9.3	9.4	8.0	8.3
<i>of which:</i>						
Household spending	-0.1	6.0	6.8	7.4	7.9	8.0
Pre-measures effective tax rate	-1.2	-2.0	2.5	2.0	0.1	0.2
Direct effect of Government decisions	0.0	0.0	0.0	0.0	0.0	0.0
<i>Memo: VAT gap (per cent)</i>	<i>7.5</i>	<i>7.9</i>	<i>7.5</i>	<i>7.3</i>	<i>7.3</i>	<i>7.4</i>

3.30 The ‘implied VAT gap’ shown in Table 3.9 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

3.31 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).⁴

3.32 Onshore CT receipts rose modestly (by £2.3 billion) in 2020-21, in spite of the sharp fall in nominal GDP. We expect receipts to fall by just £1.0 billion in 2021-22 (to £50.2 billion), notwithstanding the £9.3 billion estimated cost of the ‘super-deduction’ capital allowances this year. Following a modest rise in 2022-23, the 6 percentage point increase in the main rate of CT (tempered by the reintroduction of a small profits rate) and the end of the super-deduction generate a 37 per cent jump in receipts in 2023-24. Receipts rise more gradually thereafter, but still reach 3.2 per cent of GDP in 2025-26 – the highest since the ‘Lawson boom’ in 1989-90 (as discussed in Box 3.2 of our March 2021 EFO).

⁴ The ‘onshore’ distinction is relative to the ‘offshore’ corporation tax regime that applies to North Sea oil and gas companies.

3.33 Onshore CT receipts exceed our most recent forecast by a significant margin in all years, and our pre-pandemic forecast from 2023-24 onwards (Table 3.10). Those revisions reflect:

- **Relative to March 2020**, receipts have been revised down by an average of £7.5 billion a year between 2020-21 and 2022-23, but have been revised up in 2023-24 and 2024-25 (by £10.1 billion and £17.6 billion respectively). The 2020-21 revision reflected weakness in the tax base. Thereafter, revisions are almost entirely explained by policy measures announced in the March 2021 Budget, with the near-term cost of the super-deduction this year and next followed by the medium-term yield from the increase in the main rate from 2023-24 onwards. These measures raise an additional £18.5 billion a year in receipts by 2024-25.
- **Relative to March 2021**, receipts have been revised up by £6.2 billion in 2020-21 and £10.7 billion this year. These revisions reflect: a much smaller initial lockdown hit to profits than many firms assumed, followed by a faster rebound this year; a profitable 2021 in investment banking and write backs of loan-loss provisions that banks made in 2020 boosting financial sector receipts; and a downward revision to the 2021-22 cost of the super-deduction (as detailed in Annex A). Receipts have been revised up by £5.6 billion in 2022-23, with the revision diminishing to around half that in the years thereafter. This reflects lower growth in future years as a result of the faster rebound in non-financial profits this year and our expectation that some of the strength of financial sector receipts this year is temporary. The re-profiling of the super-deduction measure and several modelling changes also reduce the surplus relative to our March 2021 forecast by 2025-26.

Table 3.10: Corporation tax: changes since March 2020 and March 2021

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	57.2	58.9	61.4	63.6	66.0	
March 2021 forecast	45.0	39.5	48.1	70.8	81.3	84.9
October 2021 forecast	51.1	50.2	53.8	73.7	83.6	87.7
Change since March 2020	-6.0	-8.7	-7.7	10.1	17.6	
<i>of which:</i>						
Profits	-2.3	0.4	-0.2	-0.2	-0.6	
Pre-measures effective tax rate	-3.1	1.1	0.9	1.3	1.3	
Direct effect of Government decisions	-0.6	-10.1	-8.3	9.0	16.9	
Change since March 2021	6.2	10.7	5.6	2.9	2.3	2.8
<i>of which:</i>						
Profits	1.3	4.4	1.8	1.9	1.7	1.5
Other pre-measures effective tax rate	4.9	6.3	3.9	0.8	-0.1	0.0
Direct effect of Government decisions		0.0	-0.1	0.3	0.6	0.7

Property transaction taxes

3.34 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 held up remarkably well through the pandemic. More working from home raised the demand for out-of-town and larger dwellings; some of the forced savings built up during lockdown appears to have flowed into house purchases; and the deadlines imposed by temporary tax holidays provided additional impetus. As a result, property transaction taxes are expected to raise only £0.7 billion less on average than our pre-pandemic March 2020 forecast. Receipts are higher by £1.4 billion on average compared to our March 2021 forecast. Those revisions reflect (Table 3.11):

- **Relative to March 2020**, receipts are slightly higher in 2021-22, and then slightly lower until 2024-25. The £3.2 billion cost of tax holidays in the first half of this year is offset by a higher value of property transactions and a higher underlying effective tax rate from a significantly more tax-rich composition of sales. From next year, the lower than forecast value of property transactions weighs on receipts.
- **Relative to March 2021**, receipts have been revised up by £2.5 billion in 2021-22 and to a lesser extent in subsequent years, declining to a £0.8 billion upward revision in 2025-26. The strength in 2021-22 is predominantly driven by the higher value of property transactions reflecting near-term upward revisions to both house prices and the volume of transactions. The boost from the tax-rich composition of transactions this year is assumed to diminish steadily over the subsequent three years.

Table 3.11: Property transaction taxes: changes since March 2020 and March 2021

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	13.8	14.7	16.2	17.4	18.7	
March 2021 forecast	9.6	12.3	14.5	15.1	16.2	17.3
October 2021 forecast	9.5	14.8	15.8	16.5	17.2	18.2
Changes since March 2020	-4.3	0.1	-0.4	-1.0	-1.4	
<i>of which:</i>						
Value of property transactions ¹	-1.0	0.4	-0.5	-0.8	-1.2	
Pre-measures effective tax rate	-0.6	2.9	0.1	-0.2	-0.3	
Direct effect of Government decisions	-2.7	-3.2	0.0	0.0	0.0	
Changes since March 2021	-0.1	2.5	1.4	1.4	1.0	0.8
<i>of which:</i>						
Value of property transactions ¹	0.1	1.9	1.0	1.2	1.0	0.9
Pre-measures effective tax rate	-0.2	0.6	0.4	0.2	0.1	0.0
Direct effect of Government decisions	0.0	0.0	0.0	0.0	0.0	0.0

¹ Equal to prices times transactions summed across residential and commercial markets.

Taxes on capital

3.35 Capital gains tax (CGT) receipts are expected to fall £1.4 billion (13.0 per cent) in 2021-22 before rising sharply next year and gradually thereafter. The decline this year reflects the sharp fall in equity prices (the key determinant of the CGT tax base) in 2020-21, which affects CGT receipts with a lag as they are paid a year after the liability was incurred (with the exception of payments due to residential property gains). Receipts have been revised down from our pre-pandemic March 2020 forecast in every year (by £1.4 billion on

average) thanks largely to lower equity prices, while they have been revised up relative to March 2021 (by £2.6 billion on average across the five years) as equity prices have risen.

3.36 Inheritance tax receipts been revised up relative to March 2020 by £0.1 billion this year and £0.1 billion next year, and then down by £0.3 billion, and £0.4 billion in the two years thereafter. Relative to March 2021, receipts have been revised up from next year onwards. As with CGT this picture is largely driven by revisions to asset prices, which are lower than anticipated in March 2020 but higher than anticipated in March 2021. Excess deaths associated with the pandemic also raise receipts in the short term, relative to March 2020.

Excise duties

3.37 Fuel duties are forecast to bounce back this year by £5.8 billion (a 28 per cent increase), rising gradually thereafter. Receipts remain below our March 2020 forecast in every year and below our March 2021 forecast from 2022-23 onwards. Those revisions reflect:

- **Relative to March 2020**, receipts have been revised down by an average £1.4 billion (5 per cent) a year. This reflects: a modest reduction in fuel purchased relative to economic activity due to reduced commuting; upward revisions to electric vehicle uptake, which reduces receipts by £1.2 billion in 2024-25; and two further years of frozen duty rates in 2021-22 and 2022-23. The Government has not implemented its default policy of RPI indexation since 2011, costing it a total of around £65 billion to date.
- **Relative to March 2021**, receipts have been revised up this year (by £0.7 billion) thanks to a faster than anticipated return to more normal traffic levels, and then down by £0.4 billion a year on average between 2022-23 and 2025-26. On a pre-measures basis, higher RPI inflation and an improved GDP path would have raised our forecast, but these are more than offset by the latest duty rate freeze announced at this Budget, which costs £1.6 billion a year on average. (This is a larger cost than has been recorded in previous years due to higher pre-measures RPI indexation.)

3.38 Alcohol duties in 2021-22 held up during the pandemic thanks to a shift in consumption between on- and off-site trade (i.e. from pubs and restaurants to supermarkets for home consumption). We expect receipts to dip in 2022-23 as a result of the latest one-year duty freeze, then to grow by 4 per cent a year on average from 2023-24 to 2026-27, as default RPI indexation returns. Our latest forecast is relatively little changed from either our March 2020 or March 2021 forecasts, with receipts a little higher in the near term (thanks to stronger outturns) and a little lower in the medium term (thanks to duty freezes).

3.39 Tobacco duty receipts have also held up well through the pandemic. Receipts are higher in all years relative to both our March 2020 and March 2021 forecasts, by an average of £1.3 billion and £0.7 billion respectively. This is largely thanks to higher RPI inflation, with duty rate increases announced in the Budget raising just £25 million a year.

- 3.40 **Air passenger duty** receipts were the hardest hit revenue stream during the pandemic with its associated international travel restrictions. Receipts this year are 74 per cent less than we forecast in March 2020, with that shortfall diminishing over time as the aviation industry recovers. The gradual recovery profile in passenger numbers is similar to that observed in the wake of the 9/11 terrorist attacks in the US.⁵ We assume a permanent reduction in business travel due to greater use of online meetings. Relative to our March 2021 forecast, receipts have been revised down by £0.3 billion this year as flight numbers have recovered less quickly than assumed. From 2022-23 onwards, receipts have been revised up by an average of £0.1 billion a year, reflecting both higher RPI inflation and measures including the reintroduction of a higher rate on flights to the farthest destinations.
- 3.41 The first **UK Emissions Trading Scheme** (ETS) auction took place on 19 May 2021,⁶ meaning this is the first forecast using outturn data for the UK carbon price. Receipts are recorded in the public sector finances when the allowances are surrendered rather than when they are purchased, meaning that revenues increase sharply from 2022-23 onwards. Relative to March 2021, receipts from the UK ETS have been revised up by an average of £3.2 billion a year from 2022-23 onwards. This reflects both a higher carbon price (the £53 a tonne price in 2021-22 is more than twice the £21 a tonne we assumed in March⁷) and a higher number of allowances auctioned (auctions in 2021-22 had already raised £2.4 billion by 24 September). For subsequent years of the forecast, we have assumed a constant real carbon price (based on the CPI measure of inflation).

Business rates and council tax

- 3.42 Receipts from **business rates** in 2020-21 fell 38 per cent on a year earlier and are expected to remain 28 per cent below their 2019-20 level this year, largely thanks to pandemic-related holidays and reliefs. Business rates rise modestly thereafter, but do not recover their pre-pandemic level until 2023-24. Relative to previous forecasts:
- **Relative to March 2020**, receipts have been revised down sharply in 2021-22 and 2022-23, by £10.9 billion and £4.5 billion respectively, thanks to holidays and reliefs announced in previous Budgets and those added in this one. These new measures include relief to sectors outside of retail, hospitality and leisure in 2021-22; the ruling out of pandemic-related material change of circumstances appeals; a freeze in the multiplier that uprates the rateable values of non-domestic properties in 2022-23; and a further (but smaller) relief to retail, hospitality and leisure businesses in 2022-23. Receipts remain around £1½ billion lower by 2024-25, reflecting a modest permanent hit to the tax base.
 - **Relative to March 2021**, receipts have been revised down by £1.3 billion this year and £1.8 billion next year, as a result of policy measures. But they are little changed thereafter, reflecting the offsetting effects of Budget measures, which reduce receipts by

⁵ US Bureau of Transportation Statistics, *Airline Travel since 9/11*, December 2005.

⁶ ICE, *2021 UK ETS Auction Calendar and Introduction of UK ETS Contracts*, February 2021.

⁷ This assumption is derived from carbon price futures for December 2021 obtained on 15 September.

£1.2 billion on average from 2023-24 onwards, and higher CPI inflation (the default uprating multiplier), which adds £1.1 billion a year to receipts by 2023-24.

3.43 Net council tax receipts continued to rise in 2020-21 despite the pandemic (by 6 per cent) and are expected to continue to rise at similar rates across the forecast period: by 2026-27, we expect receipts to be £12.1 billion (33 per cent) above their 2019-20 level. This largely 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 included in our baseline forecasts. Relative to previous forecasts:

- **Relative to March 2020**, receipts were higher in 2021-22 by around £1 billion due to a measure allowing local authorities to increase council tax rates by up to 3 per cent without calling a local referendum. The upward revision rises to £2.2 billion by 2024-25 due to this Budget's policy allowing authorities to increase the adult social care precept by a further 1 per cent each year from 2022-23 to 2024-25.
- **Relative to March 2021**, receipts have been revised up by £0.2 billion in 2021-22 due to lower than forecast unemployment, which reduces the eligibility of households for local council tax support. Council tax receipts are up by increasing amounts thereafter, with the revision reaching £1.3 billion by 2025-26, mostly due to the latest increase in adult social care precepts announced at this Budget.

Other taxes

3.44 Environmental levies include levy-funded policies such as the renewables obligation (RO), contracts for difference (CfD) and the capacity markets scheme. Relative to both our March 2020 and March 2021 forecasts, levies have been revised down in both 2021-22 and 2022-23 (by £0.5 billion and £0.7 billion respectively), which is more than explained by lower costs through the CfD scheme. Higher wholesale energy prices mean less subsidy because wholesale prices will be nearer the guaranteed strike price (indeed, they could move above it). With energy prices rising rapidly after our forecast was closed, estimates of CfD subsidy costs are particularly uncertain. CfD subsidies pick up at the end of the forecast due to the expected opening of Hinkley Point C nuclear power plant in 2026-27.

3.45 Oil and gas receipts have been revised up from our March 2020 and March 2021 forecasts for all years from 2021-22 onwards. Relative to March 2021, the upward revision averages £1.4 billion a year. This is almost entirely explained by higher oil and gas prices. Our forecast for gas prices is based on futures prices over the 10 days to 15 September. Since then, oil prices have risen by 4.7 per cent while gas prices have soared 65.7 per cent. All else equal, this would add £2.3 billion to receipts in 2022-23, but only £1.2 billion by 2026-27, reflecting the sharply downward sloping forward curve for gas prices.

3.46 Customs duty receipts have been revised up by £1.0 billion a year on average relative to our March 2020 forecast, which was based on the pre-Brexit tariff regime in which all goods imports from the EU arrived tariff free. We have also revised our 2021-22 estimate up by £1.1 billion relative to our March 2021 forecast, which was the first to be based on

the new UK Global Tariff. This reflects higher outturn so far in 2021, which appears to be partly driven by a higher share of imports from the EU paying tariffs because they do not meet the terms of the free-trade agreement (such as its rules of origin requirements). We have assumed that around a fifth of this surplus unwinds from next year as traders get used to the new system and ‘preference utilisation rates’ (the proportion of imports qualifying for tariff-free access under the FTA) rise. Further detail is provided in Annex A.

- 3.47 **Stamp taxes on shares** are little changed from March 2020, but up £0.6 billion a year on average relative to March 2021. This is largely driven by higher equity prices, as well as higher outturn receipts in recent months.
- 3.48 **VAT refunds** are little changed this year relative to our March 2020 forecast, but have been revised up by £0.6 billion a year on average from next year onwards. The upward revision reflects near-term higher central government and local authority procurement following the boost to spending announced in this Budget. Relative to March 2021, we have revised down VAT refunds by £1.8 billion this year but up by £0.1 billion next year. From 2023-24 onwards, VAT refunds have been revised down £1.0 billion a year on average. Lower than expected refunds in outturn this year relative to March are consistent with underspends in departmental spending, while the revisions thereafter reflect a lower path of local authority investment that is partially offset by the near-term lift in government spending.

Other receipts

- 3.49 **Interest and dividend receipts** include income from the government’s financial assets such as student loans and bank deposits. Methodological changes incorporated into the September 2021 public sector finances release include the reduction in the discount rate used for future liabilities from funded public sector pension schemes from 5 to 4 per cent (which takes around £2¾ billion off imputed interest in 2021-22 relative to both our March 2020 and March 2021 forecasts, rising to around £4 billion by the end of the forecast period). In addition, the interest earned on the Bank of England’s corporate bond holdings is now scored as receipts (adding around £¾ billion a year) rather than netting off spending. On a like-for-like basis, receipts are £0.4 billion a year lower on average than our March 2020 forecast (as a result of lower interest rates), but £3.1 billion a year higher than our March 2021 forecast (thanks to higher RPI inflation raising accrued student loan interest, by £2.5 billion at its peak in 2023-24, and a modestly higher path for short-term interest rates).
- 3.50 **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 £3.0 billion a year, mostly due to new ONS outturn data showing higher government capital stocks, but has been revised down relative to our March 2021 forecast by an average of £2.1 billion a year. This reflects the latest vintage of data showing lower capital stocks than we assumed in March 2021, and

also lower depreciation rates on those assets. The latest Treasury capital spending plans also incorporate lower direct government capital formation and higher grants to the private sector, which reduce the depreciation charges falling on the public sector.

- **Public corporations' gross operating surplus** 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 £2.6 billion a year, thanks largely to a £1.8 billion a year downward revision to depreciation. This reflects more recent data showing lower capital stocks and the reclassification of Northern Irish housing associations into the private sector. The remaining £0.8 billion downward revision is mainly due to falling trading profits, with more than half relating to Transport for London (TfL). Central government absorbed a large proportion of TfL's losses in 2020-21 and the latest TfL revised budget from July still required larger grants than currently agreed with central government to ensure that 2021-22 losses are covered. This shows up in our forecast as lower GOS, although in reality it could be translated into higher spending if further central government support were to follow to maintain services. Relative to our March 2021 forecast, PC GOS is higher in 2021-22 and 2022-23 by around £1 billion, mostly due to higher than anticipated income.

Public sector expenditure

Definitions and approach

3.51 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:

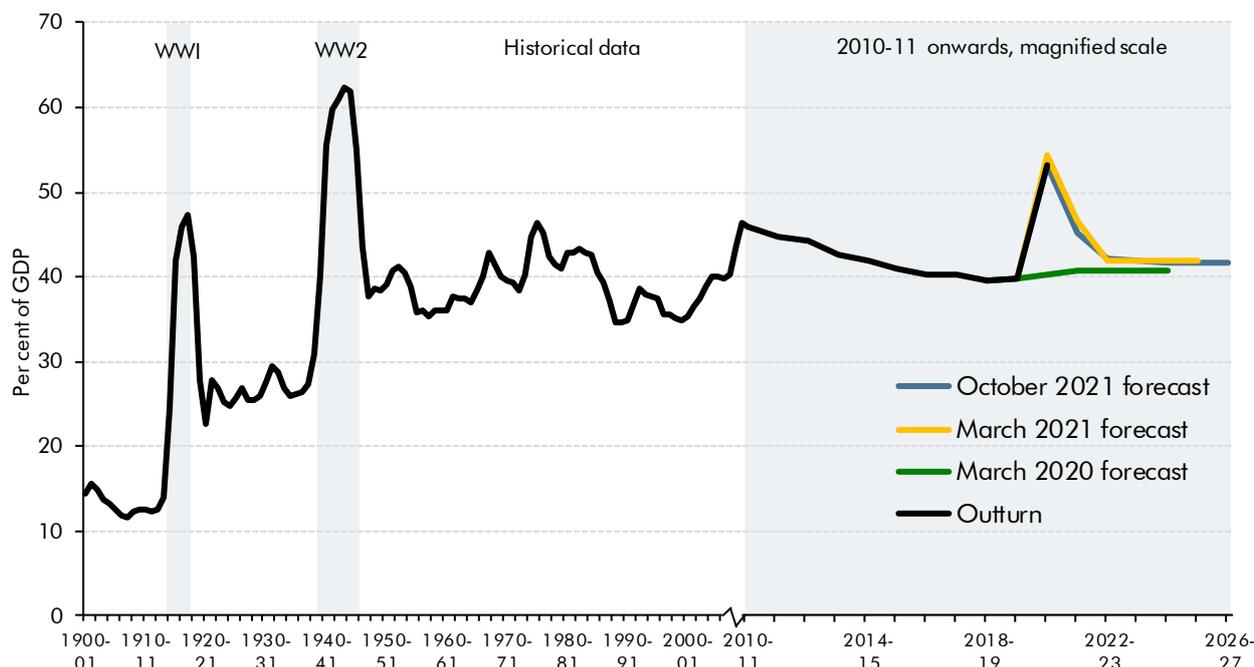
- **Departmental expenditure limits (DELs)** mostly cover spending on public services, grants and administration ('resource' spending), and investment ('capital' spending). These are items that in normal times can be planned over multiple years. Our fiscal forecast therefore shows PSCE in resource DEL 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.

3.52 The distinction between these two administrative categories has diminished recently, with the two years prior to this Autumn's Spending Review representing the longest period without a multi-year settlement since the introduction of multi-year expenditure planning in 1998. This meant that the Treasury was in effect managing DEL budgets on an annual basis for most departments (the exceptions being the NHS, schools, defence and selected capital projects) in both its one-year 2019 Spending Round and the one-year 2020 Spending Review. This Spending Review – which covers the three years from 2022-23 to 2024-25 – represents a return to the multi-year budgeting that has been the norm in this century and the first multi-year spending round conducted since George Osborne's 2015 Spending Review, which set four-year RDEL plans out to 2019-20 and five-year CDEL plans out to 2020-21.

Summary of the expenditure forecast

- 3.53 This section discusses the path of government spending and how it has changed since our pre-pandemic March 2020 forecast and since our previous forecast in March 2021.
- 3.54 Public spending leapt by £231 billion (26 per cent) in 2020-21. Combined with the sharp fall in nominal GDP, that raised the spending-to-GDP ratio by 13.4 percentage points to 53.1 per cent (Chart 3.7). This is the highest ratio recorded outside World War II and the fastest peacetime increase on record, far greater than the 4.4 percentage point rise in the aftermath of the oil crisis in 1974-75 or the 3.5 and 2.6 percentage point increases in 2008-09 and 2009-10 as a result of the global financial crisis. The rise in 2020-21 reflected pandemic-related policy measures in the form of a £95 billion increase in departmental resource spending (particularly for health) and £99 billion of support for individuals and businesses (notably the furlough scheme and grants for many businesses).
- 3.55 We expect spending to fall back sharply in 2021-22 (by £70.2 billion) as pandemic-related spending recedes. Combined with an expected 10.4 per cent rise in nominal GDP, this reduces the spending-to-GDP ratio by 8.0 percentage points to 45.1 per cent. The ratio falls sharply again in 2022-23, as many support schemes cease altogether, before then stabilising at 41.6 per cent of GDP from 2024-25 onwards.
- 3.56 Spending stabilises at 1.8 per cent of GDP above its pre-pandemic level (of 39.8 per cent) and 0.9 per cent of GDP above the 40.7 per cent it was expected to reach in the medium term on the basis of the pre-pandemic plans reflected in our March 2020 forecast. The rise relative to 2019-20 is thanks mainly to higher departmental spending, with resource and capital spending each higher by around 1 per cent of GDP in 2026-27 (Table 3.12). The last time spending as a share of GDP was sustained at a higher level than it reaches in the medium term on current plans was in the late 1970s, when it was around 43 per cent (although it was at a higher, but declining, level following the financial crisis in the early 2000s and also during the early 1980s).

Chart 3.7: Public spending as a share of GDP



Note: Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the spending-to-GDP ratio by 1.0 per cent of GDP across the forecast. This would still leave the spending-to-GDP ratio at its highest sustained level since the late 1970s.

Source: Bank of England, ONS, OBR

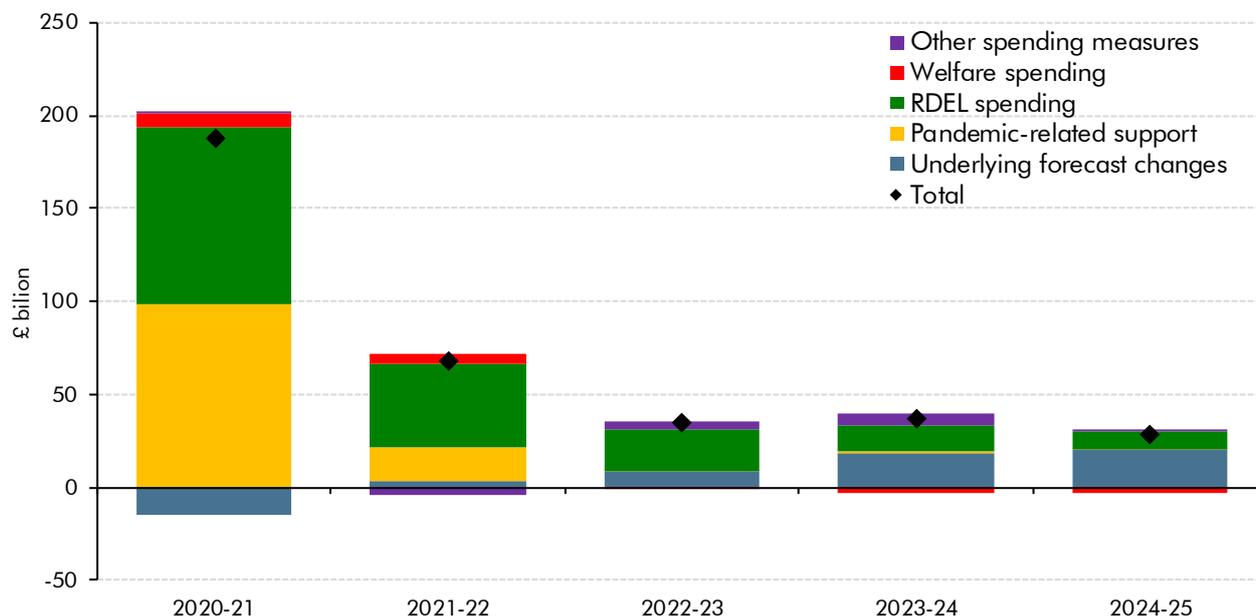
Table 3.12: TME split between DEL and AME

	Per cent of GDP							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
TME	39.8	53.1	45.1	42.1	41.9	41.6	41.6	41.6
<i>of which:</i>								
TME in DEL	17.1	24.2	20.9	19.5	19.4	19.2	19.3	19.3
<i>of which:</i>								
Pandemic-related measures	0.1	5.1	2.5	0.0	0.0	0.0	0.0	0.0
Other PSCE in RDEL	14.4	16.1	15.0	16.0	15.7	15.7	15.7	15.7
Other PSGI in CDEL	2.6	3.0	3.3	3.5	3.7	3.6	3.6	3.6
TME in AME	22.7	29.0	24.2	22.6	22.5	22.4	22.3	22.3
<i>of which:</i>								
Pandemic-related measures ¹	0.1	5.3	0.7	0.1	0.0	0.0	0.0	0.0
Other welfare spending	10.2	11.3	10.5	10.2	10.3	10.4	10.5	10.5
Debt interest, net of APF	1.7	1.1	1.7	1.6	1.5	1.4	1.4	1.4
Other AME	10.7	11.3	11.3	10.7	10.7	10.5	10.4	10.4

¹ All AME measures since March 2020.

3.57 Chart 3.8 and Table 3.13 show that spending exceeded our March 2020 forecast by £188 billion in 2020-21 largely as a result of pandemic-related measures. While spending falls back thereafter, it remains higher by an average of £33 billion between 2022-23 and 2024-25, thanks to increases in departmental spending and welfare spending.

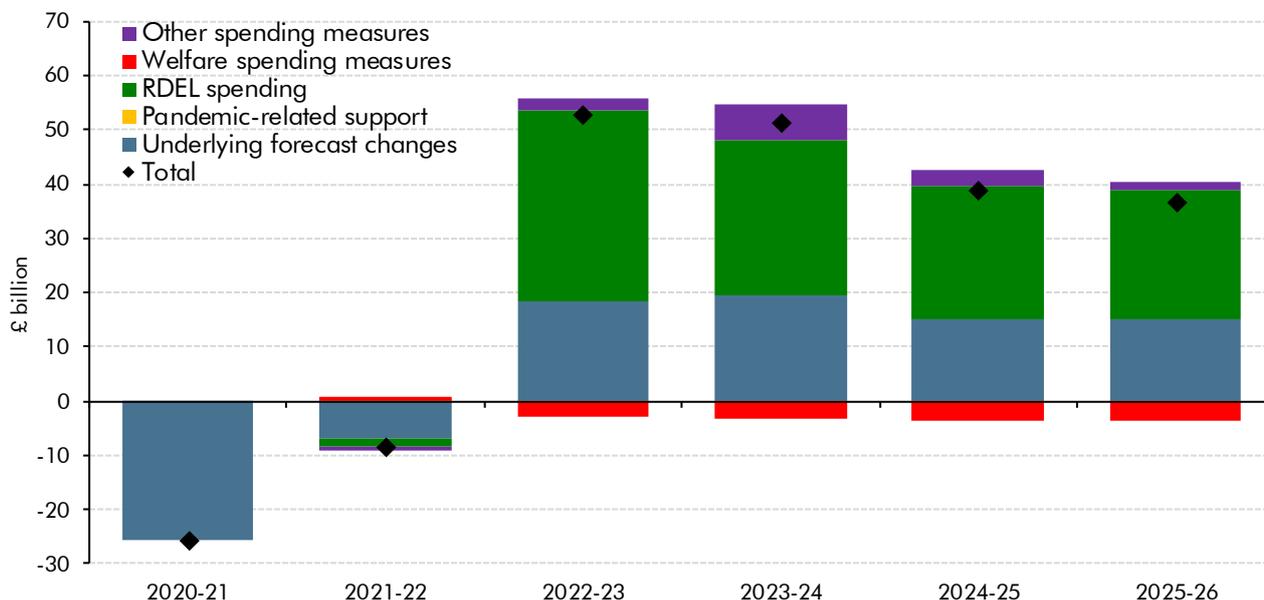
Chart 3.8: Change to spending since March 2020



Source: ONS, OBR

3.58 Relative to our March 2021 forecast, we have revised spending down by £25.8 billion in 2020-21 and £8.3 billion in 2021-22 (Chart 3.9 and Table 3.13), driven mainly by larger than expected departmental underspends and the lower than expected cost of pandemic-related support schemes. But spending has been revised up significantly from 2022-23 onwards (by between £37 billion and £53 billion a year) reflecting the large increases in departmental budgets announced in the Spending Review. These increases more than reverse the £15 billion of cuts in 2024-25 relative to pre-pandemic plans that the Chancellor announced in last year's Spending Review in November and then increased to £19 billion in the March Budget. Higher debt interest and welfare spending also raise spending in the later years of the forecast, mainly due to the effects of more persistent inflation raising the cost of uprating benefits and public service pensions.

Chart 3.9: Change to spending since March 2021



Source: ONS, OBR

Table 3.13: Public expenditure: changes since March 2020 and March 2021

	£ billion					
	Outturn		Forecast			
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	927.7	977.4	1,011	1,045	1,080	
March 2021 forecast	1,141	1,053	992.3	1,030	1,069	1,111
October 2021 forecast	1,115	1,045	1,045	1,081	1,108	1,148
Changes since March 2020	187.5	67.6	34.7	36.5	27.4	
<i>of which:</i>						
Underlying forecast changes	-15.4	3.0	8.6	18.7	20.6	
Pandemic-related support schemes	98.9	18.5	0.5	0.2	0.0	
RDEL spending	94.8	44.7	21.7	14.0	8.9	
Welfare spending measures	8.0	5.5	-0.7	-2.7	-3.2	
Other spending measures	1.3	-4.0	4.7	6.2	1.0	
Changes since March 2021	-25.8	-8.3	53.1	51.3	38.9	36.8
<i>of which:</i>						
Underlying forecast changes	-25.8	-6.9	18.3	19.4	15.1	15.1
Pandemic-related support schemes		0.2	0.0	0.0	0.0	0.0
RDEL spending measures		-1.5	35.1	28.5	24.5	24.0
Welfare spending measures		0.8	-2.9	-3.3	-3.5	-3.6
Other spending measures		-0.9	2.5	6.6	2.9	1.3

Explaining the rise in spending as a share of GDP

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

3.59 The size of the state – as measured by the ratio of spending to GDP – is 1.8 percentage points higher in 2026-27 than its pre-pandemic level in 2019-20. As Chart 3.10 shows, 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 0.8 per cent of GDP between 2019-20 and 2026-27. The 2.6 per cent of GDP increase in the size of the state in 2026-27 relative to those inherited plans is largely explained by decisions taken by the current Chancellor – both before and since the pandemic struck – with more modest contributions from the lasting impacts of the pandemic assumed in our spending forecasts.

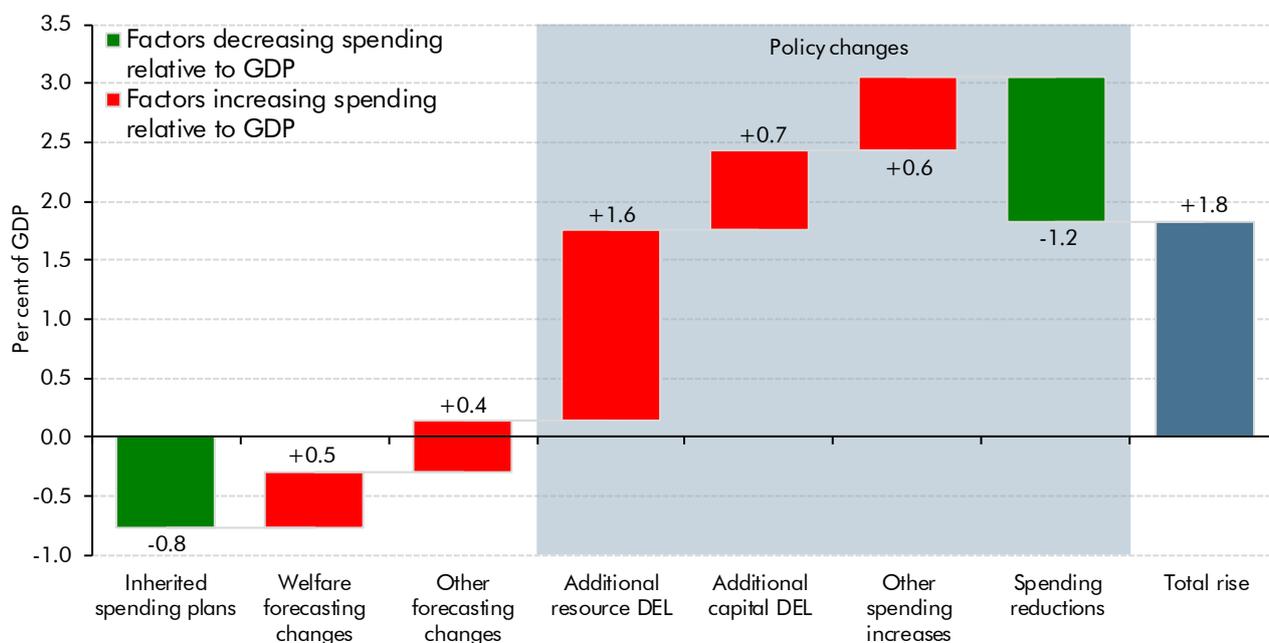
3.60 Underlying forecast revisions raise the spending-to-GDP ratio by 0.9 percentage points relative to pre-pandemic expectations. The effect is mainly felt in welfare spending, which is 0.5 per cent of GDP higher as a result of modestly higher working-age benefit caseloads (with incapacity and disability benefit caseloads assumed to remain on a higher path than pre-pandemic) and the impact of the triple lock and other factors on benefit uprating. But lower interest rates and further quantitative easing by the Bank of England mean that debt interest spending is lower than our pre-pandemic forecast in spite of higher debt, which largely offsets other sources of upward revision (for example, the cost of R&D tax credits).

3.61 Once underlying forecast revisions are factored in, the state would have been on course to rise very slightly between 2019-20 and 2026-27, meaning the growth in the size of the state in our forecast is largely explained by **policy measures** announced by the current Chancellor in his first Budget in March 2020 and at subsequent fiscal events (in particular, this Spending Review). Summed across all his Budgets and Spending Reviews, the rise reflects:

- **Higher RDEL spending.** The Chancellor announced large increases in RDEL spending in his first Budget in March 2020, which were partly financed by the end of full contributions to the EU after Brexit. He then indicated in his first Spending Review and his next Budget that he would cut spending relative to these plans from 2022-23 onwards, but at this Spending Review has reversed course to announce another large increase to departmental budgets (more than undoing the post-pandemic cuts in these years). This leaves RDEL spending in 2026-27 higher by 1.6 per cent of GDP relative to our pre-measures March 2020 forecast (extended by two years at a constant share of GDP).
- **Higher CDEL spending.** At the March 2020 Budget, departmental capital spending plans were raised very substantially, such that public investment is set to reach its highest sustained levels for 40 years. These plans have changed little since then. They leave CDEL spending in 2026-27 higher by 0.7 per cent of GDP relative to inherited plans, and 45 per cent higher as a share of GDP than in 2019-20.
- **Increases in other spending.** Increasing the generosity of universal credit, together with modest increases in local authorities self-financed spending (reflecting measures that raise council tax), adds a further 0.6 per cent of GDP to spending in 2026-27.
- **Reductions in other spending.** The largest policy-related factor reducing spending relates to Brexit, where the cost of the Brexit ‘divorce bill’ falls over time, 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 announced in this Budget also lowers spending relative to our pre-measures forecast.

Chart 3.10: Sources of the rise in the spending-to-GDP ratio between 2019-20 and 2026-27



Source: ONS, OBR

The composition of public spending

3.62 While the Chancellor’s medium-term plans entail a larger state than that targeted in either the plans he inherited or in his previous Budgets, the resulting spending-to-GDP ratio is not abnormal by historical standards. It is comparable to levels seen in the 1960s and 1970s, and is modestly higher than the level reached in 2007-08 on the eve of the financial crisis, after the sustained period of strong public spending growth delivered across successive Spending Reviews through the 2000s. But as Chart 3.11 shows, the make-up of that spending has shifted substantially between these four points in time when the state took up a similar share of the economy.

3.63 Most prominently, the relative amount of age-related spending, **health, care and state pensions**, steadily increased as a share of GDP from the 1960s, nearly doubling from 7.3 per cent in 1966-67 to 11.8 per cent in 2007-08. An illustrative profile that takes into account estimated departmental spending allocations and our forecasts for other spending suggests that this figure is set to rise to 14.2 per cent of GDP by 2024-25.⁸ The increasing proportion of expenditure in areas concentrated on older people, rising from 7.3 per cent in 1966-67 to 11.8 per cent in 2007-08 to 14.2 per cent by 2024-25, is unsurprising given the ageing of the UK population. In 1966-67, 12.7 per cent of the population was aged 65 or older. That ratio rose gradually over the next 40 years to reach 16 per cent in 2007-08.

⁸ Based on the latest Public Expenditure Statistical Analyses outturns in health, education and defence, grown with Spending Review allocations. Figures for welfare, debt interest and total capital and current expenditure are from our forecast.

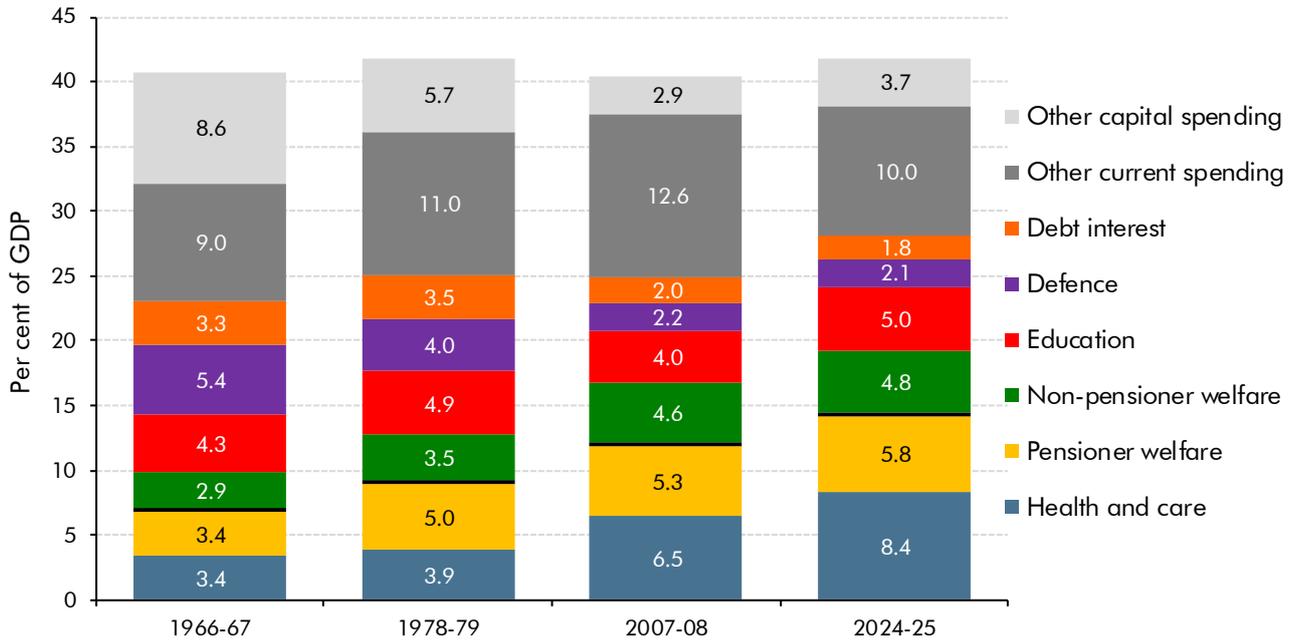
Since then, however, the pace of ageing has quickened, with a further 3.9 percentage point rise expected in the years to 2024-25, taking the share of the population aged 65 or older to 19.9 per cent.

3.64 This significant increase in age-related expenditure (alongside a moderate increase in **welfare spending on children and working-age adults**) has been offset by significant decreases in three areas:

- **Defence spending.** This totalled 5.4 per cent of GDP in 1966-67 but has fallen by more than half to 2.3 per cent of GDP today, falling to 2.1 per cent by 2024-25. This reflects the ‘peace dividend’ from the end of the Cold War and Britain’s shrinking military presence around the world.
- **Debt interest spending.** This is forecast to be just 1.8 per cent of GDP in 2024-25, almost half its level in 1966-67 (3.3 per cent). Initially, this reflects falling debt over the course of the 20th century, and then falling interest rates over the course of the 21st.
- **Other capital spending** (that is, capital spending outside the individual spending areas shown in Chart 3.11, which is mainly housing and transport). This fell from 8.6 per cent of GDP in 1966-67 to 2.9 per cent of GDP in 2007-08, but is forecast to rise to 3.7 per cent of GDP in 2024-25. The equivalent figures for total capital spending, including that related to health, education and defence, are 9 per cent of GDP in 1966-67, 4 per cent of GDP in 2007-08, and 5 per cent of GDP in 2024-25. The long-run decline reflects, among other things, declining rates of social housebuilding since in the 1960s and privatisation of major industries and infrastructure providers.

3.65 The pace of population ageing raises the question of how to accommodate likely further increases in spending on health, care and state pensions given the limited remaining scope to shrink other areas of public expenditure. This will be a particular challenge given the Government’s commitment to reach net zero and the additional spending that could entail (discussed in Box 3.3 below), combined with rising interest rates that could see debt interest increasing as a share of spending. These are issues that we will return to in our next *Fiscal sustainability report*.

Chart 3.11: The composition of spending: historical trend and illustrative projection



Source: Bank of England, DHSC, DWP, HMT, IFS, OBR

Detailed spending forecasts

3.66 Tables 3.14, 3.15 and 3.16 detail our latest spending forecast and how it differs from our March 2020 and March 2021 forecasts.

Table 3.14: Total managed expenditure

	£ billion							
	Outturn		Forecast					
	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	406.0	397.6	405.8	417.5	433.7	450.3
PSCE in AME	468.2	554.6	524.0	523.6	542.0	556.8	575.8	597.6
<i>of which:</i>								
Welfare spending	227.0	245.4	246.7	254.0	267.1	278.5	289.9	300.3
Virus-related income support schemes ¹	2.2	78.0	17.0	0.0	0.0	0.0	0.0	0.0
Locally financed current expenditure	52.0	48.9	51.6	56.1	60.3	62.6	62.3	64.4
Central government debt interest, net of APF ²	36.8	22.4	40.4	40.7	37.9	36.5	37.7	39.0
Scottish Government's current spending	29.1	42.0	39.2	38.0	38.9	39.1	41.3	42.9
EU financial settlement	10.9	10.4	8.5	8.8	4.9	1.9	1.0	0.5
Net public service pension payments	5.8	4.1	3.5	3.6	4.9	4.9	5.0	5.1
Company and other tax credits	7.3	8.7	8.9	9.6	10.9	12.1	13.1	13.8
BBC current expenditure	3.8	3.5	4.2	4.1	4.0	4.3	4.2	4.3
National Lottery current grants	1.3	1.5	1.5	1.3	1.2	1.3	1.3	1.3
General government imputed pensions	0.6	0.8	1.0	0.8	0.8	0.8	0.9	0.9
Public corporations' debt interest	0.2	0.2	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	48.2	50.3	52.6	54.9	57.1	59.7
Current VAT refunds	16.5	17.8	18.6	20.6	21.0	21.2	22.1	23.3
Environmental levies	9.0	10.4	10.5	10.2	11.5	11.9	12.2	13.4
Other PSCE items in AME	2.0	1.9	2.3	2.8	2.7	2.8	2.8	2.9
Other National Accounts adjustments	2.8	-7.2	2.1	2.1	1.9	1.8	1.8	1.7
Total public sector current expenditure	789.6	989.1	930.0	921.1	947.8	974.3	1,010	1,048
Public sector gross investment (PSGI)								
PSGI in CDEL	58.0	72.7	77.6	87.0	94.6	94.9	99.3	103.0
PSGI in AME	36.3	53.4	37.3	37.3	38.9	38.5	39.5	40.8
<i>of which:</i>								
Locally financed capital expenditure	14.1	11.0	8.1	8.4	8.0	8.3	8.5	8.8
Public corporations' capital expenditure	10.8	10.0	10.7	10.7	11.0	11.3	11.4	11.8
Student loans	10.2	10.6	11.8	12.4	13.1	13.8	14.4	15.0
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	5.5	4.9	5.1	5.0	5.2	5.3
Tax litigation	0.0	0.0	1.9	0.9	1.5	0.7	0.7	0.7
Calls on virus-related loan schemes	0.0	20.9	1.5	0.5	0.2	0.0	0.0	0.0
Other PSGI items in AME	0.6	-0.1	-0.6	1.1	1.1	0.8	0.8	0.7
Other National Accounts adjustments	-4.0	-3.2	-2.6	-2.8	-2.7	-2.7	-2.6	-2.6
Total public sector gross investment	94.2	126.1	114.9	124.3	133.5	133.3	138.7	143.9
Less public sector depreciation	-52.4	-53.5	-54.8	-57.0	-59.5	-61.9	-64.2	-67.0
<i>Public sector net investment</i>	<i>41.8</i>	<i>72.7</i>	<i>60.1</i>	<i>67.2</i>	<i>74.1</i>	<i>71.4</i>	<i>74.5</i>	<i>76.9</i>
Total managed expenditure	883.9	1,115	1,045	1,045	1,081	1,108	1,148	1,192

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 3.15: Total managed expenditure: changes since March 2020

	£ billion				
	Outturn	Forecast			
	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector current expenditure (PSCE)					
PSCE in RDEL	94.8	44.7	21.7	14.0	8.9
PSCE in AME	78.5	31.2	18.0	24.0	24.6
<i>of which:</i>					
Welfare spending	14.2	8.9	7.1	10.1	11.7
Virus-related income support schemes ¹	78.0	17.0	0.0	0.0	0.0
Locally financed current expenditure	-6.1	-3.5	-0.8	1.7	2.5
Central government debt interest, net of APF ²	-12.1	2.6	2.9	0.6	-0.2
Scottish Government's current spending	8.5	3.7	0.6	0.0	-1.6
EU financial settlement	1.4	-2.7	0.4	0.1	-0.3
Net public service pension payments	-0.1	0.5	1.6	3.7	4.6
Company and other tax credits	1.3	1.0	1.2	2.0	2.9
BBC current expenditure	-0.5	0.2	0.0	0.0	0.0
National Lottery current grants	0.2	0.4	0.3	0.2	0.4
General government imputed pensions	-0.5	-0.3	-0.6	-0.5	-0.5
Public corporations' debt interest	-0.2	0.0	0.0	0.0	0.0
Funded public sector pension schemes	-1.3	-2.2	-2.3	-2.4	-2.7
General government depreciation	2.5	2.6	2.8	3.3	3.6
Current VAT refunds	0.2	0.2	1.5	1.3	0.3
Environmental levies	-0.2	-0.4	-0.6	-0.1	-0.1
Other PSCE items in AME	0.6	0.9	1.4	1.2	1.1
Other National Accounts adjustments	-7.3	2.3	2.6	2.7	3.0
Total public sector current expenditure	173.3	76.0	39.7	38.0	33.5
Public sector gross investment (PSGI)					
PSGI in CDEL	1.5	-4.6	0.4	3.1	0.1
PSGI in AME	12.7	-3.8	-5.3	-4.6	-6.1
<i>of which:</i>					
Locally financed capital expenditure	0.0	-2.2	-2.4	-2.3	-2.2
Public corporations' capital expenditure	-1.4	-0.7	-0.8	-0.7	-0.7
Student loans	0.0	0.5	0.5	0.7	0.9
Funded public sector pension schemes	-1.2	0.2	0.4	0.7	0.4
Scottish Government's capital spending	-0.1	0.1	-0.8	-0.8	-1.0
Tax litigation	-1.8	0.7	-0.2	0.4	-0.4
Calls on virus-related loan schemes	20.9	1.5	0.5	0.2	0.0
Other PSGI items in AME	-0.9	-1.3	0.3	0.3	0.2
Other National Accounts adjustments	-2.9	-2.5	-2.8	-3.3	-3.4
Total public sector gross investment	14.2	-8.4	-5.0	-1.5	-6.1
Less public sector depreciation	-1.2	-0.8	-1.0	-1.4	-1.6
Public sector net investment	12.9	-9.2	-6.0	-2.9	-7.7
Total managed expenditure	187.5	67.6	34.7	36.5	27.4

Table 3.16: Total managed expenditure: changes since March 2021

	£ billion					
	Outturn 2020-21	Forecast				
		2021-22	2022-23	2023-24	2024-25	2025-26
Public sector current expenditure (PSCE)						
PSCE in RDEL	-10.5	-7.5	35.1	28.5	24.5	24.0
PSCE in AME	-12.0	3.1	19.7	21.1	16.7	13.9
<i>of which:</i>						
Welfare spending	0.6	-2.4	-0.9	3.8	6.6	7.5
Virus-related income support schemes ¹	-1.7	-7.3	0.0	0.0	0.0	0.0
Locally financed current expenditure	0.6	0.1	1.5	3.3	3.3	1.3
Central government debt interest, net of APF ²	-1.5	15.7	16.2	10.2	5.4	4.0
Scottish Government's current spending	-1.4	-0.6	2.9	2.3	1.2	1.9
EU financial settlement	0.0	-2.6	0.1	0.5	-0.3	-0.6
Net public service pension payments	2.3	3.1	1.2	2.7	3.2	3.4
Company and other tax credits	0.3	0.6	0.5	0.7	0.7	0.7
BBC current expenditure	-0.1	0.1	0.0	0.0	0.1	0.0
National Lottery current grants	0.0	0.2	0.2	0.1	0.3	0.3
General government imputed pensions	-0.5	-0.3	-0.6	-0.5	-0.5	-0.5
Public corporations' debt interest	-0.2	0.0	0.0	0.0	0.0	0.0
Funded public sector pension schemes	0.3	-0.5	-0.7	-1.0	-1.2	-1.5
General government depreciation	0.0	-1.3	-1.9	-2.1	-2.4	-2.8
Current VAT refunds	-1.6	-1.7	0.4	-0.1	-0.9	-1.4
Environmental levies	0.0	-0.7	-0.8	-0.2	0.1	0.1
Other PSCE items in AME	-0.6	-0.6	0.4	0.4	0.3	0.5
Other National Accounts adjustments	-8.3	1.4	1.2	1.0	0.9	0.8
Total public sector current expenditure	-22.5	-4.4	54.9	49.6	41.2	37.9
Public sector gross investment (PSGI)						
PSGI in CDEL	1.7	-4.2	0.4	3.1	0.1	0.7
PSGI in AME	-4.9	0.3	-2.2	-1.4	-2.3	-1.8
<i>of which:</i>						
Locally financed capital expenditure	3.8	-0.8	-0.3	-0.2	0.0	0.1
Public corporations' capital spending	1.0	1.4	1.0	1.0	1.0	1.0
Student loans	0.0	0.5	0.7	0.9	1.2	1.4
Funded public sector pension schemes	-2.3	-0.9	-1.4	-0.6	-0.4	-0.1
Scottish Government's capital spending	-0.4	0.1	-1.0	-1.0	-1.3	-1.4
Tax litigation	0.0	1.2	-0.5	-0.1	-0.9	-0.9
Calls on virus-related loan schemes	-6.3	0.7	0.5	0.2	0.0	-0.1
Other PSGI items in AME	0.1	0.1	0.3	0.3	0.1	0.1
Other National Accounts adjustments	-0.7	-2.2	-1.4	-1.8	-1.9	-1.9
Total public sector gross investment	-3.2	-3.9	-1.8	1.7	-2.3	-1.1
Less public sector depreciation	0.0	1.8	2.1	2.2	2.4	2.8
Public sector net investment	-3.2	-2.0	0.3	3.9	0.2	1.7
Total managed expenditure	-25.8	-8.3	53.1	51.3	38.9	36.8

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.

Spending within departmental expenditure limits

3.67 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.

3.68 Our forecasts reflect:

- **Departments' provisional outturn for 2020-21**, which reflect full-year positions (including the large underspends against limits by departments directly involved in the response to the pandemic). These are reflected in the ONS's outturn statistics.
- **Departments' detailed plans for 2021-22**, as set out by the Treasury in July 2021 in its *PESA* publication.⁹ These included more detailed allocations of the limits set by the Treasury in its November 2020 Spending Review.
- **Departments' plans for 2022-23 to 2024-25**, as announced in the October 2021 Spending Review and **the Government's 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.**
- 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.¹⁰

Provisional outturn spending in 2020-21

3.69 Departmental resource spending was £477 billion in 2020-21, up 36 per cent on its pre-pandemic level in 2019-20. This was £103 billion higher than our March 2020 forecast, reflecting pandemic-related spending on health, transport subsidies, and business grants.

3.70 But spending was £11.9 billion lower than our March 2021 forecast as a result of even greater than anticipated underspending. In most years, underspends are around 1 per cent of limits, but in our March 2021 forecast we assumed that departments would underspend their much-increased resource spending limits by £19.9 billion (4.3 per cent of their limits). The latest (near-final) outturn data suggest that underspends hit £30.4 billion (6.5 per cent of limits), as shown in Table 3.17. Underspending was concentrated in departments directly involved in the response to the pandemic:

⁹ HM Treasury, *Public Expenditure Statistical Analyses 2021*, July 2021.

¹⁰ 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.

- The **Department for Health and Social Care**. Underspends were largest in respect of NHS Test and Trace (£9.2 billion underspend against a budget of £20.4 billion, reflecting the generous budget cover put in place for uncertain quantities of testing in particular). Core NHS activities also underspent materially (£5.4 billion relative to a budget of £147.5 billion, reflecting fewer elective treatments due to the focus on treating coronavirus cases and people choosing to try not to burden the NHS).
- The **Department for Business, Energy and Industrial Strategy**. BEIS oversees vaccine procurement and the grants for small business that are disbursed through local authorities. The vaccine programme had a proportionately large underspend (£2.2 billion against a budget of £3.0 billion, largely because budget cover was provided for a very rapid rollout to all adults by the end of the financial year, when in reality the programme extended well into 2021-22 – as such, this largely represents a timing effect rather than a true underspend on the overall cost of vaccinations). Grants to local authorities to cover payments to business were also underspent due to fewer businesses being identified than was expected based on Valuation Office Agency data.

3.71 Departmental capital spending was £77 billion in 2020-21, up 25 per cent on the previous year (thanks to the boost to CDEL plans announced in March 2020 and providing timely support to the economy during the pandemic) and £1.3 billion higher than we forecast in March 2021 (reflecting slightly less underspending than expected).

Planned spending in for 2021-22

3.72 We expect departmental resource spending in 2021-22 to remain around 27 per cent higher than pre-pandemic levels at £445 billion, which is £48 billion higher than forecast in March 2020 (Table 3.17). Echoing the experience of last year, cash spending so far this year suggests that limits set by the Treasury will be underspent by a significant margin. We have therefore revised up expected underspending by £6 billion to £14 billion, mostly attributable to health spending again. This means that total departmental resource spending in 2021-22 is £8 billion (2 per cent) below our March 2021 forecast.

3.73 Revisions to departmental capital spending are much smaller than those to resource spending. Plans are little changed since the March 2020 Budget. In 2021-22, we have observed some cash underspending, and as a result have increased our underspend assumption by £3.0 billion to £10.5 billion.

October 2021 Spending Review plans for 2022-23 to 2024-25

3.74 The October 2021 Spending Review sets out detailed plans for departmental spending for the three years from 2022-23 to 2024-25. Taking RDEL and Scottish Government AME together, the Government has increased resource spending in 2022-23 by £37.7 billion (9.5 per cent), falling to £25.7 billion (6 per cent) in 2024-25 relative to our March 2021 forecast. These increases far outweigh the £16 to £19 billion of unspecified cuts relative to pre-pandemic plans that were announced across the November 2020 Spending Review and March 2021 Budget – which we flagged as a key policy-related risk to our March forecast. The latest plans include an additional £12 billion a year for health and social care, which

the Government has nominally hypothecated from the new health and social care levy that was announced in September. It also includes additional funding for catch-up spending in public services outside health that were hit by the pandemic, notably for schools, transport and the courts – a policy-related risk that we explored in our 2021 *Fiscal risks report*. ODA spending is returned to the legislated 0.7 per cent of GNI in 2024-25, raising spending by £5.2 billion in that year.

- 3.75 Capital plans (Table 3.19) are little changed from those set out in the March 2020 Budget in most years, maintaining large growth relative to previous levels. The exception is a £2 billion addition to 2023-24 that leaves a somewhat uneven profile for capital spending.
- 3.76 But in contrast to the CDEL budgets that apply across England, Wales and Northern Ireland, the Spending Review reduces Scotland's capital AME budget relative to the totals included in our March 2021 forecast by an average of £1.3 billion a year from 2022-23 onwards. This reduction amounts to £6.2 billion over the five years from 2021-22 to 2025-26, around one-fifth of the pre-measures totals over that period.
- 3.77 Relative to our pre-pandemic March 2020 forecast, RDEL spending is now £22 billion higher in 2022-23 and £9 billion higher in 2024-25. And since the March 2020 Budget itself included large increases in RDEL spending plans, the differences relative to our pre-measures March 2020 forecast (in effect, the plans that the current Chancellor inherited) are even greater – up £54 billion in 2022-23 and £47 billion in 2024-25.
- 3.78 The large expansions in departmental resource spending plans in recent years have been underspent by very large margins. The latest additions are also historically very large, but they do not require large year-on-year rises in spending to be met, so while we expect underspending to be larger than normal next year, we do not expect it to be on the scale of 2020-21 or 2021-22. We have therefore assumed that 10 per cent of the net addition to RDEL plans will not be spent in 2022-23, progressively reverting to our typical assumption of 5 per cent from 2024-25 onwards (Table 3.18). This leaves our RDEL underspend assumption at £7.2 billion in 2022-23, falling back to £4.8 billion in 2024-25.

Post-Spending Review policy assumptions for 2025-26 and 2026-27

- 3.79 In the years beyond the current Spending Review period, the Government has increased resource spending by around £26 billion relative to our March 2021 forecast. This results in resource spending rising by 1.9 per cent a year in real terms in the final two years of our forecast – leaving it stable as a share of GDP. Capital spending totals are little changed in those two years, with spending rising by 2.1 per cent a year in real terms and also remaining stable as a share of GDP.
- 3.80 On this basis, the post-Spending Review years see overall departmental spending stabilise at 2.4 per cent of GDP above its pre-pandemic level in 2019-20. In contrast to many previous forecasts (including our March 2021 forecast), the Treasury has not set post-Spending Review totals that would require departmental spending to fall as a share of GDP

in the period beyond that covered by detailed plans. As such, policy risks to our medium-term forecast from this source have diminished.

Table 3.17: Changes to departmental resource spending since March 2020 and March 2021

	£ billion						
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
PSCE in RDEL and Scottish Government current AME							
March 2020 forecast	373.3	396.9	413.3	430.6	449.2		
March 2021 forecast	488.4	453.4	397.5	413.8	430.9	449.1	
October 2021 forecast	476.5	445.3	435.5	444.7	456.5	475.0	493.2
Relative to March 2020 forecast	103.3	48.4	22.2	14.0	7.3		
<i>of which:</i>							
Underlying changes	-1.5	1.6	0.0	0.0	0.0		
Effect of Government decisions	104.8	46.8	22.2	14.0	7.3		
Relative to March 2021 forecast	-11.9	-8.1	38.0	30.8	25.7	25.9	
<i>of which:</i>							
Underlying changes	-11.9	-7.1	0.4	0.3	0.0	0.8	
Effect of Government decisions		-1.0	37.7	30.5	25.7	25.1	26.2
Scorecard measures		1.2	41.8	32.9	27.0	26.4	27.5
Non-scorecard measures		-2.2	0.0	0.0	0.0	0.0	0.0
Underspend response		0.0	-4.2	-2.5	-1.3	-1.3	-1.4

Table 3.18: Changes to departmental resource spending limits and assumed spending since March 2020 and March 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		
March 2021 forecast							
Limits	465.0	421.0	365.7	380.7	396.5	413.4	
Assumed underspend	-19.9	-7.5	-3.3	-3.4	-3.5	-3.7	
Actual spending	445.0	413.6	362.4	377.3	393.0	409.7	
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
Change since March 2020							
Limits	122.0	54.4	24.8	15.5	9.3		
Assumed underspend	-27.2	-9.7	-3.1	-1.5	-0.4		
Actual spending	94.8	44.7	21.7	14.0	8.9		
Change since March 2021							
Limits	0.0	-1.5	39.0	30.8	25.8	25.3	
Assumed underspend	-10.5	-6.1	-3.9	-2.3	-1.3	-1.3	
Actual spending	-10.5	-7.5	35.1	28.5	24.5	24.0	

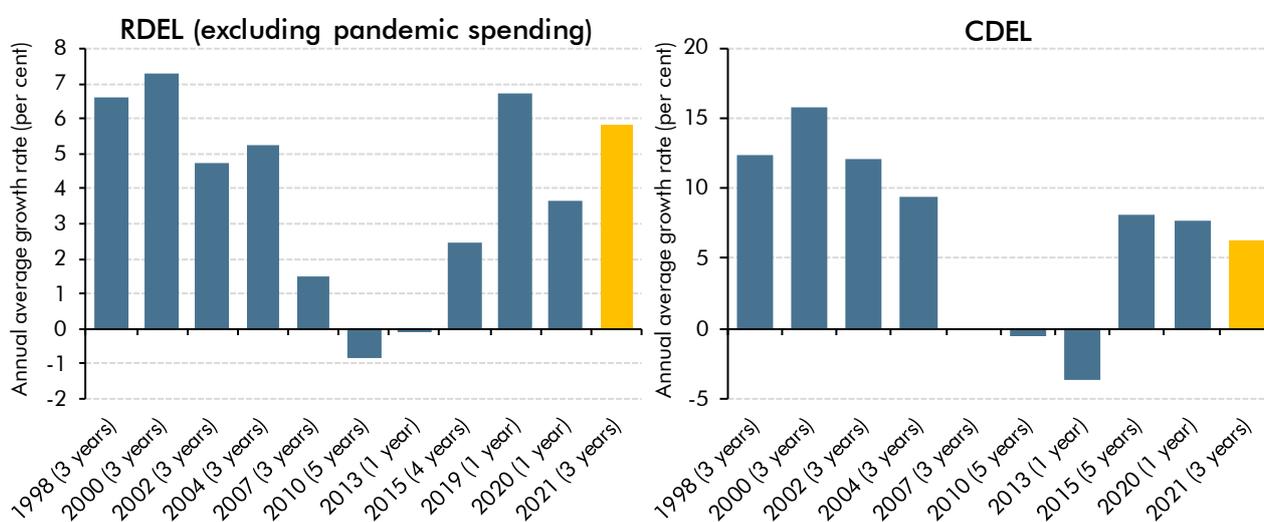
Table 3.19: Changes to departmental capital spending since March 2020 and March 2021

	£ 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		
March 2021 forecast	76.0	87.2	92.5	97.6	101.1	105.1	
October 2021 forecast	77.2	83.1	91.9	99.7	99.8	104.4	108.4
Changes in actual spending							
Relative to March 2020 forecast	1.4	-4.5	-0.4	2.4	-1.0		
Relative to March 2021 forecast	1.3	-4.0	-0.6	2.1	-1.3	-0.7	
<i>of which:</i>							
Underlying changes	1.3	-3.0	0.0	0.0	0.0	0.0	
Effect of Government decisions		-1.1	-0.6	2.1	-1.3	-0.7	-0.7
Scorecard measures		0.0	-0.3	3.1	-1.0	-0.3	-0.2
Non-scorecard measures		-1.1	-0.2	-0.2	-0.3	-0.3	-0.3
Underspend response		0.0	-0.1	-0.8	0.0	-0.2	-0.2

Comparisons with previous Spending Reviews

- 3.81 At the 2021 Spending Review, the Chancellor has set out plans to increase business-as-usual departmental resource spending at a 5.8 per cent annual rate in cash terms over the three fiscal years from 2022-23 to 2024-25. This is slightly lower than growth in non-pandemic spending in the period covered by the one-year 2019 Spending Round (2020-21, even after removing spending on the pandemic response). But otherwise it is comfortably the fastest rate of departmental resource spending growth since the 2000 Comprehensive Spending Review, a time when substantial growth in health spending was also taking place.
- 3.82 In terms of departmental capital spending, the Chancellor has largely stuck to the plans he announced in the March 2020 Budget, and which had pencilled in a large expansion in investment spending, leading to an annual average growth rate of 6.3 per cent in cash terms between 2022-23 and 2024-25. This builds on the substantial increase in capital spending in the one-year Spending Review conducted in 2020, reversing the cash reductions in the periods covered by the 2007, 2010 and 2013 Spending Reviews. Even so, the rate of growth in this Spending Review is still well short of those announced by Gordon Brown in the late 1990s and early 2000s, which grew capital spending at rates of between 12 and 16 per cent a year.

Chart 3.12: RDEL and CDEL spending growth over successive Spending Review periods

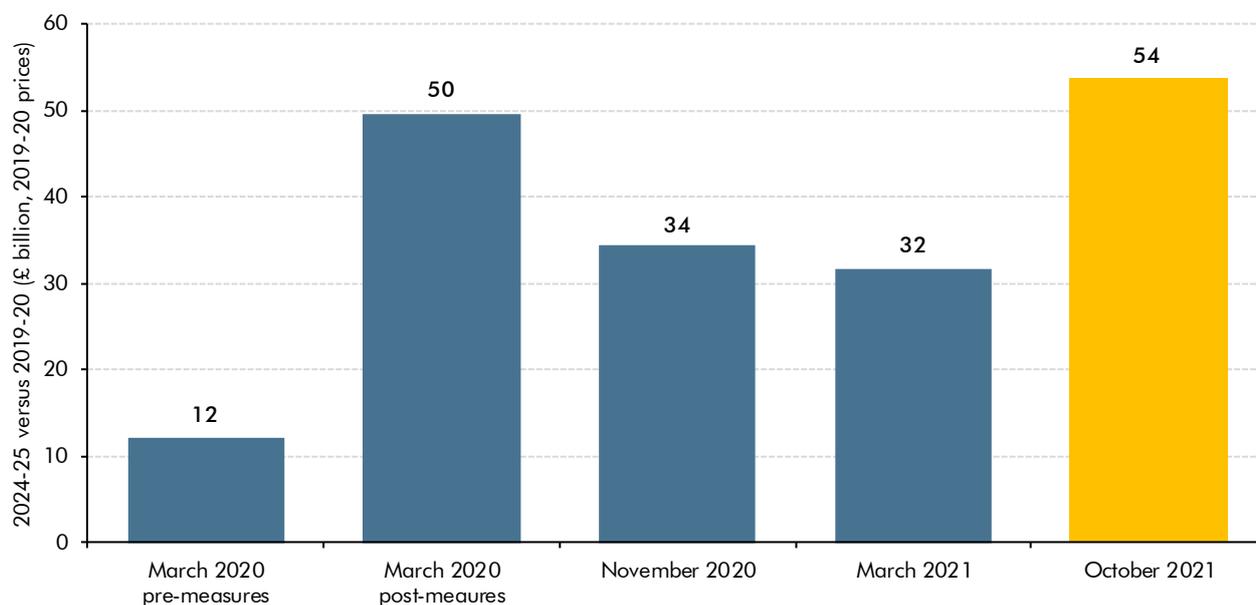


Note: Includes Scottish equivalent of RDEL from SR 2019 onwards and shows nominal growth rate.
Source: OBR

Note: Includes Scottish equivalent of CDEL from SR 2020 onwards and shows nominal growth rate.
Source: OBR

3.83 In the past, we have noted a pattern by which the departmental spending totals for years beyond those covered by detailed Spending Review plans tend to be unusually low when initially set and then revised up when the time comes to set detailed plans in the Spending Review itself. We flagged this as a key policy risk in March as this pattern appeared to be repeating – this time overlaid by several post-pandemic spending pressures that were not reflected in those provisional totals. As Chart 3.13 illustrates for the year 2024-25, the increases in departmental budgets announced in this Spending Review see that risk crystallise. Having raised real terms growth in resource spending between 2019-20 and 2024-25 from £12 billion in the plans he inherited to £50 billion in his March 2020 Budget, the Chancellor then cut the real increase in those totals first to £34 billion and then to £32 billion in last November’s Spending Review and this March’s Budget respectively, only to raise it back to £54 billion (£4 billion above where it was in March 2020) when setting detailed spending plans in this Spending Review.

Chart 3.13: RDEL spending growth in successive Budgets and Spending Reviews



Note: Includes Scottish equivalent of RDEL.

Source: OBR

Welfare spending

- 3.84** 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 job and income support schemes introduced last year 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 perform a similar role – in effect creating more generous, though temporary, benefit systems for employees and the self-employed.
- 3.85** Total welfare spending rose £17.8 billion (7.8 per cent) in 2020-21. That was £14.2 billion higher than our pre-pandemic March 2020 forecast (but little changed from March 2021), driven by the pandemic-induced increase in the universal credit caseload and policy measures, primarily the temporary £20 a week increase in UC and tax credits.
- 3.86** Welfare spending is forecast to increase by just £1.2 billion (0.5 per cent) in 2021-22. This reflects the largely offsetting effects of several factors. Those increasing spending include: unemployment on average is expected to be a little higher than in 2020-21; uprating of working-age benefits in line with CPI inflation of 0.5 per cent last September; and uprating the state pension by 2.5 per cent in accordance with the minimum set by the triple lock. The largest factor reducing spending relative to 2020-21 is the ending of the £20 per week uplift to UC at the start of October, lowering payments to around 4.1 million households by £2.1 billion in total over the second half of the year.

3.87 Welfare spending then rises steadily from 2022-23 onwards due to the effects of inflation and earnings growth on benefits uprating, an ageing population pushing up pensioner benefit caseloads, and permanent increases in the generosity of UC relative to the pre-pandemic system (though not relative to the £20 a week uplift). By the forecast horizon in 2026-27, spending is 0.2 per cent of GDP higher than its 2019-20 pre-pandemic level.

Table 3.20: 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	117.6	122.5	129.3	135.4	141.3	145.9
UC and legacy equivalents ²	80.4	76.3	75.4	77.8	80.2	82.7	85.5
Disability benefits ³	24.8	25.8	28.0	30.6	32.7	34.9	37.2
Child benefit	11.5	11.4	11.6	11.9	12.0	12.0	12.0
Other spending ⁴	15.2	15.5	16.5	17.3	18.1	18.9	19.7
Total welfare spending	245.4	246.7	254.0	267.1	278.5	289.9	300.3
<i>of which:</i>							
Inside welfare cap	123.4	123.6	126.2	131.0	134.2	137.8	142.1
Outside welfare cap	122.0	123.1	127.7	136.1	144.3	152.0	158.2

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

² UC and legacy equivalents includes personal tax credits, housing benefit (excluding 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 spending includes all Northern Ireland social security expenditure.

3.88 Relative to March 2020, welfare spending is significantly higher in all years, with the upward revision in 2024-25 (£11.7 billion) almost as large as that at the height of the pandemic in 2020-21. These differences are dominated by spending on UC and its predecessors, which on a pre-measures basis has been revised up by an average of £5.8 billion a year from 2021-22 onwards. This reflects higher unemployment in the near term and somewhat lower labour force participation boosting caseloads in the medium term. Pre-measures pensioner spending has been revised down by £2.0 billion in 2021-22 thanks to weak earnings growth in 2020 reducing uprating, and excess deaths as a result of the pandemic. Higher mortality continues to lower pensioner spending in future years but is offset by the effects of strong earnings growth on uprating, resulting in an average pre-measures upward revision to pensioner spending of £2.6 billion from 2022-23 onwards. Upward revisions to disability benefits spending (which average £2.8 billion a year from 2022-23 onwards) reflect higher caseloads due to pandemic-related increases in labour market inactivity and health conditions. Policy measures announced since March 2020 boosted spending last year and this – driven mainly by the temporary £20 a week increase in UC and tax credits – but reduce spending slightly from 2022-23 onwards. This reflects the suspension of the state pensions triple lock next year more than offsetting increases to the generosity of UC.

3.89 Relative to March 2021, spending has been revised down this year and next, but has then been revised up by increasing amounts from 2023-24 onwards, with the upward revision reaching £7.5 billion in 2025-26. These revisions reflect:

- **UC and its predecessors (pre-measures).** The improved labour market outlook reduces spending by £2.2 billion this year and £1.2 billion next year, but higher inflation and compositional changes affecting health- and housing-related caseloads increase spending from 2023-24 onwards.
- **Pensioner benefits (pre-measures).** Spending is £0.5 billion lower this year, but has been revised up £4.2 billion a year on average from 2022-23 onwards. This year's downward revision reflects higher excess mortality and a lower than expected cost of state pension underpayment corrections (detailed in Annex A). Excess mortality continues to have an effect over the forecast period, but is offset by the effects of stronger earnings growth on pensioner benefits uprating via the triple lock (though this is partly offset by Budget measures described below). The triple lock adds an average of £4.0 billion a year to our pre-measures forecast relative to March based on the 8.3 per cent earnings figure for the three months to July 2021.
- **Changes to UC's taper rate and work allowances** announced in this Budget. The Government has reduced the UC taper rate from 63 to 55 per cent and increased work allowances by around £500 a year from December this year. These will raise awards for most working claimants. This costs £0.7 billion in 2021-22 and then amounts rising from £2.23 billion in 2022-23 to £3.0 billion in 2026-27.
- **The temporary replacement of the state pensions triple lock with a double lock.** This results in state pensions and pension credit being uprated by 3.1 per cent in 2022-23 (in line with September CPI inflation) rather than the 8.3 per cent that would have taken place had they risen with earnings growth in the three months to July. This saves amounts rising from £5.4 billion in 2022-23 to £6.7 billion in 2026-27.
- **Other pre-measures forecast revisions** include a £0.6 billion downward revision in 2021-22 due to the improved labour market outlook reducing Northern Ireland spending and lower take-up of child benefit as a result of the pandemic.

Table 3.21: Welfare spending: changes since March 2020 and March 2021

	£ billion					
	Outturn	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Total welfare spending						
March 2020 forecast	231.2	237.8	246.8	256.9	266.8	
March 2021 forecast	244.8	249.1	254.9	263.3	271.9	282.3
October 2021 forecast	245.4	246.7	254.0	267.1	278.5	289.9
Changes since March 2020	14.2	8.9	7.1	10.1	11.7	
<i>of which:</i>						
Forecast changes	6.3	3.4	7.8	12.8	14.8	
Universal credit ¹	6.7	5.2	4.5	6.3	7.1	
Pensioner spending	-1.1	-2.0	1.7	2.9	3.1	
Disability benefits ²	0.5	0.6	1.5	3.0	3.8	
Other benefits	0.1	-0.3	0.2	0.6	0.8	
Direct effect of Government decisions	8.0	5.5	-0.7	-2.7	-3.2	
Changes since March 2021	0.6	-2.4	-0.9	3.8	6.6	7.5
<i>of which:</i>						
Forecast changes	0.6	-3.1	2.4	7.2	9.2	10.5
Universal credit ¹	0.9	-2.2	-1.2	1.2	2.2	2.9
Pensioner spending	-0.4	-0.5	3.1	4.2	4.6	4.9
Disability benefits ²	0.1	0.2	0.7	1.7	2.3	2.7
Other benefits	0.1	-0.6	-0.2	0.2	0.1	0.0
Direct effect of Government decisions	0.0	0.7	-3.3	-3.5	-2.7	-2.9
<i>of which:</i>						
UC taper and work allowances		0.7	2.2	2.4	2.5	2.8
Triple lock suspension		0.0	-5.4	-5.8	-6.1	-6.5

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

² Disability benefits includes disability living allowance, personal independence payment, and attendance allowance.

Pandemic-related income support schemes: CJRS and SEISS

3.90 Both income support schemes introduced during the pandemic – the coronavirus job retention scheme (CJRS) and the self-employment income support scheme (SEISS) – have now closed. Final outturns were not available when we closed our forecast (and are still not available for the CJRS where employers are able to submit late claims or amend existing ones relating to September). But on the latest provisional information, spending associated with each scheme this year has been significantly less than we expected in March:

- Overall, the **CJRS** is expected to have cost £68.9 billion in gross terms across the entire programme, £4.0 billion less than we forecast in March. The number of employees furloughed has declined faster than expected (Table 3.22), although more than a million people remained on the scheme as it closed at the end of September. We overestimated the cost the scheme by proportionately less than the caseload, reflecting a higher than expected share of jobs remaining on full-time furlough in recent months, whereas we had assumed that part-time furlough would become increasingly prevalent as co-funding by employers ramped up from July onwards.

- The fourth and fifth **SEISS** grants that were paid in 2021-22 cost £8.3 billion in total in gross terms, £5.1 billion less than we forecast in March (Table 3.23). The five SEISS grants cost £28.0 billion in total across 2020-21 and 2021-22, with the cost per tranche declining over time. The lower than expected cost of this year's grants is likely to reflect both the faster than expected economic recovery and HMRC's financial impact declaration test for claimants acting as more of a deterrent than we assumed.

Table 3.22: CJRS caseload, average claims and total cost

	Outturn		Estimate							Total
	2019-20	2020-21	Apr 21	May 21	Jun 21	Jul 21	Aug 21	Sep 21	2021-22	
October 2021 forecast										
Caseload (millions)	1.9	5.2	3.7	2.7	2.0	1.7	1.4	1.3	2.1	4.1
Average claim (£)	1,140	930	705	695	710	655	605	620	680	815
Cost (£ billion)	2.1	58.1	2.6	1.9	1.4	1.1	0.8	0.8	8.7	68.9
Difference from March 2021 forecast										
Caseload (millions)	-0.1	-0.1	-0.3	-0.9	-1.3	-0.9	-1.2	-0.7	-0.9	-0.6
Average claim (£)	50	-10	-40	5	45	125	190	250	80	25
Cost (£ billion)	0.0	-1.7	-0.4	-0.6	-0.8	-0.3	-0.2	0.1	-2.2	-3.9

Table 3.23: SEISS recipients, average grants and total cost

	First grant	Second grant	Third grant	2020-21	Fourth grant	Fifth grant	2021-22	Total
October 2021 forecast								
Recipients (millions)	2.6	2.4	2.2	7.2	2.0	1.2	3.1	10.3
Average award (£)	2,900	2,500	2,800	2,800	2,800	2,400	2,700	2,700
Cost (£ billion)	7.6	5.9	6.2	19.7	5.5	2.8	8.3	28.0
Difference from March 2021 forecast								
Recipients (millions)	0.0	0.0	0.1	0.1	-0.7	-0.8	-1.5	-1.4
Average award (£)	0	0	-100	0	-100	-500	-200	-100
Cost (£ billion)	0.0	0.0	0.0	0.0	-2.3	-2.9	-5.1	-5.1

Pandemic-related loan guarantee schemes

3.91 The Government has provided guarantees on several pandemic-related loan schemes: the Coronavirus Business Interruption Loan Scheme (CBILS), Bounce Back Loan Scheme (BBLs), Coronavirus Large Business Interruption Loan Scheme (CLBILS) and the Recovery Loan Scheme (RLS). The fiscal costs of these arise from the proportion of the loans extended that are written off (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 the proportion of losses that are covered by the Exchequer. The ONS has determined that the cost of these expected losses should be recorded in the year that the guarantees are extended rather than when the defaults actually occur and associated cash payments are made.

3.92 In September, the ONS published an initial estimate for these upfront costs of £20.9 billion in 2020-21. This was £5.2 billion lower than our March 2021 forecast, of which £0.5

billion was a timing effect, being recorded in 2021-22 rather than 2020-21. Of the remaining £4.7 billion like-for-like difference from our March forecast:

- The **value of loans extended** was a net £1.7 billion lower than expected at £72 billion across CBILS, CLBILS and BBLs combined. Holding loss rates at the levels we assumed in March, this reduced expected write-offs by £0.8 billion.
- **Expected loss rates** have been revised down somewhat across all three schemes. This reduces losses associated with the loans extended in 2020-21 by £3.0 billion.
- **Discounting** accounts for the remaining £1.0 billion difference in 2020-21, where our March 2021 forecast assumed the expected losses would be recorded on a cash basis. This effect unwinds over the subsequent years of the forecast, so that accrued and cash spending associated with the loan write-offs are ultimately equal.
- Finally, **losses associated with the original RLS** have been revised down £0.5 billion, thanks in part to expected take up being revised down from £12 billion to £1.6 billion, in line with latest published figures. The extension of the scheme by six months has added just £30 million a year to expected write-offs in 2021-22 and 2022-23, reflecting a relatively modest expected uptake of around £850 million.

Table 3.24: Loan guarantee schemes: expected write-offs

	£ billions						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2021 forecast	26.1	0.7	0.0	0.0	0.0	0.0	0.0
October 2021 forecast	20.9	1.4	0.5	0.2	0.0	0.0	0.0
Change since March 2021	-5.2	0.8	0.5	0.2	0.0	0.0	0.0
<i>of which:</i>							
Timing of loan outlays	-0.5	0.5					
Revised loan volumes	-0.8						
Revised loss rates	-3.0						
Applying discounting treatment	-1.0	0.8	0.5	0.2			
Recovery loan scheme		-0.5	0.0				

Locally financed current expenditure

3.93 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.

3.94 Relative to previous forecasts, revisions to locally financed current expenditure reflect:

- **Relative to March 2020**, spending was £6.1 billion lower in 2020-21 and is expected to be £3.5 billion lower in 2021-22, largely due to the effect of business rates holidays and other business rates relief measures. Central government has compensated local authorities for the loss in revenues, however, so from the perspective of overall public spending this simply shifts the composition from self-financed expenditure to central government grants – with the cost of the reliefs instead reflected in the forgone business rates. The Government has also increased the amount by which local authorities can raise the adult social care precept in council tax, and we assume that they take up this flexibility by close to the maximum extent. Other changes are small and due to impacts of our inflation forecast on the business rates multiplier and of our unemployment forecast on local council tax support.
- **Relative to March 2021**, underlying revisions are small and mostly driven by retained business rates in England, which are up £0.6 billion by the end of the forecast – mostly due to higher inflation increasing the business rates multiplier and therefore revenues. Council tax is also marginally higher due to lower unemployment leading to lower spending on local council tax support. There are larger but partly offsetting changes due to Budget measures, including further business rates reliefs, additional full retention pilots, and a one-year freeze in the multiplier, plus additional adult social care precept increases to council tax bills. The business rates measures increase self-financed expenditure by £0.4 billion a year on average from 2022-23 onwards, whereas the council tax measures increase it by £0.7 billion a year on average.

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

	£ billion					
	Outturn 2020-21	Forecast				
		2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	55.0	55.1	56.9	58.6	60.1	
March 2021 forecast	48.3	51.5	54.6	57.0	59.3	61.0
October 2021 forecast	48.9	51.6	56.1	60.3	62.6	62.3
Changes since March 2020	-6.1	-3.5	-0.8	1.7	2.5	
Underlying forecast	0.6	-2.4	-2.4	-1.2	-1.1	
<i>of which:</i>						
Council tax	0.3	-0.1	-0.1	0.0	0.1	
Retained business rates (England)	0.4	-0.2	-0.7	0.0	-0.3	
Devolved business rates ¹	-1.3	-1.4	-0.4	-0.1	0.0	
Net use of current reserves	1.5	-0.1	-0.1	-0.1	-0.2	
Other	-0.4	-0.6	-1.2	-1.1	-0.7	
Effect of Government decisions	-6.7	-1.1	1.6	2.9	3.5	
Changes since March 2021	0.6	0.1	1.5	3.3	3.3	1.3
Underlying forecast	0.6	0.2	0.7	1.3	0.9	0.8
<i>of which:</i>						
Council tax	0.4	0.2	0.3	0.2	0.2	0.2
Retained business rates (England)	0.2	0.3	0.4	0.9	0.6	0.6
Devolved business rates ¹	0.0	-0.4	0.0	0.1	0.1	0.1
Other	0.0	0.1	0.0	0.0	-0.1	-0.1
Effect of Government decisions	0.0	-0.1	0.8	2.0	2.4	0.5

¹Includes 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

3.95 Locally financed capital expenditure is measured net of capital spending by authorities' housing revenue accounts (HRAs) and Transport for London's subsidiaries – in both cases, these are treated as public corporations in the National Accounts.¹¹ We therefore group locally financed and public corporations' capital expenditure together, abstracting from any switches between the two sectors. All these forecasts are net of asset sales, forecasts for which are available in supplementary tables on our website.

3.96 Relative to previous forecasts, revisions to locally financed capital expenditure reflect:

- **Relative to March 2020**, spending has been revised down by an average of £2.7 billion a year. In 2020-21, this was mostly due to lower underlying own-financed TfL capital expenditure (£2.2 billion below forecast), though this was partly offset by measures to support TfL spending worth £1.6 billion. Useable capital receipts were also £1.4 billion below our forecast, largely due to lower sales volumes.

¹¹ These TfL transport subsidiaries trade under the company name 'Transport Trading Ltd' (TTL). The ONS currently classifies all the large TTL subsidiaries as public corporations apart from Crossrail, which is classified as part of the local government sector.

- Relative to March 2021**, spending was £4.8 billion higher than expected in 2020-21 due to considerably more spending financed by prudential borrowing (which was £5.0 billion higher than expected) in the run up to caps being imposed on commercial activities. TfL own-financed spending was £1.3 billion lower than forecast, largely due to higher grants. But this was more than offset by a £1.9 billion increase in capital spending across a broad range of public corporations. From 2021-22 onwards, spending is up by an average of £0.8 billion a year, mostly due to higher spending by public corporations (£1.3 billion a year) projected forward based on the latest outturn data. This is partially offset by lower local authority prudential borrowing (down by an average of £0.7 billion a year), which reflects our medium-term judgement on lower attractiveness of commercial investments (due to the pandemic and reforms to Public Works Loan Board lending).

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

	£ billion					
	Outturn 2020-21	Forecast				
		2021-22	2022-23	2023-24	2024-25	2025-26
March 2020 forecast	22.3	21.6	22.3	21.9	22.4	
March 2021 forecast	16.2	18.1	18.4	18.2	18.6	18.9
October 2021 forecast	21.0	18.8	19.1	19.0	19.5	20.0
Changes since March 2020	-1.4	-2.9	-3.2	-3.0	-2.9	
Underlying forecast	-2.4	-2.6	-2.9	-2.7	-2.7	
of which:						
Prudential borrowing (non-TfL, non-HRA)	1.6	-2.1	-1.6	-1.4	-1.2	
Own-financed TfL capital spending	-2.2	-0.3	-0.8	-0.9	-1.1	
Useable capital receipts	-1.4	-0.5	-0.6	-0.7	-0.8	
Other	-0.4	0.3	0.2	0.4	0.4	
Effect of Government decisions	1.0	-0.2	-0.3	-0.3	-0.2	
Changes since March 2021	4.8	0.6	0.7	0.8	0.9	1.1
Underlying forecast	4.8	0.9	1.0	1.0	1.0	1.1
of which:						
Prudential borrowing (non-TfL, non-HRA)	5.0	-1.2	-0.6	-0.6	-0.6	-0.6
Own-financed TfL capital spending	-1.3	-0.2	-0.2	-0.3	-0.5	-0.5
Other public corporations	1.9	1.2	1.3	1.3	1.4	1.4
Other	-0.8	1.1	0.4	0.6	0.7	0.8
Effect of Government decisions	0.0	-0.2	-0.3	-0.2	-0.1	0.0

Central government debt interest

3.97 Central government debt interest spending, net of savings associated with gilts held in the Asset Purchase Facility (APF) as a result of quantitative easing by the Bank of England, totalled £22.4 billion in 2020-21, down £14.4 billion on 2019-20.¹² On a like-for-like basis, that was £12.8 billion below our March 2020 forecast – thanks to lower inflation, lower interest rates, and the £450 billion expansion of quantitative easing, offset slightly by

¹² For an explanation of the accounting effects of quantitative easing in the public finances, see OBR, *The direct fiscal consequences of unconventional monetary policies*, March 2019.

higher financing needs as the deficit ballooned – and £2.2 billion below our March 2021 forecast. Debt interest costs jump £18.1 billion to £40.4 billion in 2021-22 due to higher RPI inflation that raises the cost of servicing index-linked gilts by £18.0 billion relative to 2020-21. They then fall to £36.5 billion by 2024-25 as RPI inflation subsides, before rising again across the rest of the forecast to reach £39.0 billion in 2026-27 thanks to rising interest rates and higher cash levels of debt (despite the debt-to-GDP ratio falling).

3.98 Since March, the ONS has reclassified the interest received by the APF on its corporate bond holdings as interest receipts rather than negative debt interest spending. This raises both by £0.7 billion a year. On a like-for-like basis, excluding this classification change, debt interest spending exceeds our most recent forecast in all years, but is below our pre-pandemic forecast from 2023-24 onwards (Table 3.27). These revisions reflect that:

- **Relative to March 2020**, costs have been revised up by £1.9 billion in 2021-22 due to the sharp rise in RPI inflation, which raises costs and offsets the downward effects of the APF expansion and lower interest rates. From 2023-24 onwards, RPI inflation subsides, leading debt interest costs to fall below our March 2020 forecast despite the stock of debt being £535 billion (26 per cent) higher than we forecast by 2024-25.
- **Relative to March 2021**, interest costs have been revised up by £15.0 billion in 2021-22, £15.5 billion in 2022-23 and an average of nearly £6 billion a year across the rest of the forecast. Again, this is predominantly due to higher than expected RPI inflation, with the increase in interest costs associated with index-linked gilts accounting for £13.8 billion and £10.3 billion of the increase in 2021-22 and 2022-23 respectively. Higher interest rates also increase debt interest spending across the forecast, while a higher path for Bank Rate reduces the impact of the APF in bringing down interest costs from 2022-23 onwards.

3.99 Our forecast also now reflects the Monetary Policy Committee's updated guidance that it will no longer use the proceeds from maturing APF gilts to buy more gilts (as it does at present) once Bank Rate reaches 0.5 per cent. This will result in 'passive' quantitative tightening, the pace of which will be determined by the maturity structure of the gilts held in the APF. This organic reduction in the size of the APF increases debt interest costs by reducing the saving associated with the gilts it holds. The effect is modest despite the APF's gilt holdings falling by nearly £240 billion by 2026-27 – amounting to around £1 billion a year by then. This is because the impact depends on the difference between Bank Rate and prevailing gilt rates, which is small in our forecast (0.4 per cent at the forecast horizon).¹³

¹³ Note that there is no impact from 'passive' quantitative tightening due to the loss of coupon income from the redeeming gilt as this effect is the same for both unwinding and reinvesting scenarios.

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

	£ billion						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	34.5	37.8	37.9	37.3	36.7		
March 2021 forecast	23.9	24.8	24.5	27.7	31.1	33.7	
October 2021 forecast	22.4	40.4	40.7	37.9	36.5	37.7	39.0
<i>Corporate bond classification change</i>	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Like-for-like changes since March 2020	-12.8	1.9	2.2	-0.1	-0.9		
<i>of which:</i>							
Interest rates		-3.0	-1.2	0.7	1.9		
Inflation		10.7	6.1	1.2	0.2		
Financing		1.2	1.1	0.8	0.2		
Asset Purchase Facility		-7.4	-3.8	-2.2	-2.0		
Other factors		0.5	0.1	-0.6	-1.2		
Like-for-like changes since March 2021	-2.2	15.0	15.5	9.5	4.7	3.3	
<i>of which:</i>							
Interest rates		0.7	2.5	3.2	2.8	2.7	
Inflation		13.8	10.3	3.9	0.8	0.9	
Financing		-0.7	-1.6	-2.0	-2.3	-2.8	
Other factors		0.5	0.2	0.1	0.0	0.0	
Asset Purchase Facility		0.7	4.2	4.5	3.4	2.5	
<i>of which:</i>							
Interest rates		0.7	4.2	4.4	3.0	1.8	
Quantitative tightening		0.0	0.0	0.1	0.3	0.7	
Memo: Assumptions for gilts held in the Asset Purchase Facility							
March 2020	435	435	435	435	435		
March 2021	774	875	875	875	875	875	
October 2021	774	875	875	837	762	680	637

Public service pensions

3.100 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.¹⁴ 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 members (notably the Local Government Pension Scheme), and also the Pension Protection Fund (PPF) and the National Employment Savings Trust (NEST).¹⁵

¹⁴ The police and firefighters' pension schemes are administered at a local level, but pensions in payment are funded from AME, along with other public service pension schemes. They are therefore included in our pensions forecast.

¹⁵ For more detail on the impact of these schemes in the public finances, see OBR, *Restated March 2019 forecast*, December 2019.

Unfunded schemes

- 3.101 Relative to our March 2021 forecast, net public service pensions spending in respect of unfunded schemes has been revised up by an average of £3.0 billion a year. This is more than explained by the correction of a double-counting error related to adjustments in previous forecasts that were included when RDEL budgets were raised, increasing the forecast by an average of £3.4 billion a year, with higher CPI inflation increasing the forecast by an average of a further £1.2 billion per year. These increases have been largely offset by the pension contributions associated with additions to RDEL spending in this Spending Review, which increase in schemes' income and therefore reduce net expenditure.
- 3.102 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'.¹⁶ This set out how the Government would address the age discrimination associated with the transitional protection that was offered to scheme members close to retirement, but not to younger scheme members. Although announced prior to the March Budget, it was not possible to reflect the consequences of the remedy measures at that time given the extent of uncertainty over how individual schemes would implement the changes (see Box 3.5 of our March 2021 EFO). That uncertainty has now receded sufficiently to be able to estimate the medium-term consequences for schemes, which has been reflected on the Treasury's scorecard of policy measures in the Budget. The McCloud remedy adds £0.6 billion to pensions spending in 2023-24 (when the remediation payments will begin, including back payments to those who have already retired), with the costs falling to £0.5 billion a year by 2026-27. These estimates remain highly uncertain and can be expected to be revised over time.
- 3.103 Another legal ruling presents an upside policy risk to the cost of public service pensions. In July 2021, the Government published its response to *The teachers' pensions (miscellaneous provisions) (amendment) regulations* consultation, known as the 'Goodwin case'.¹⁷ This relates to gender discrimination, and rectifies the discrimination of same-sex partners and male partners of female employees receiving less generous benefits than female partners of male employees. Although initially brought against the Teachers' Pension Scheme, the response requires all public service pension schemes that have similar discrimination to provide remediation. Uncertainty over how the remediation will be implemented means that it has not been possible to reflect the associated costs in this forecast, but we expect it to be possible by our next forecast. The Treasury estimates that the overall increase in pension liabilities as a result of remediation could be of the order of £3 billion, with costs spread over around 40 years. This is roughly a fifth of the lifetime cost of the McCloud remedy.

Funded schemes

- 3.104 Funded pensions expenditure in 2020-21 was £2.0 billion lower than forecast in March, and has then been revised down by an average of £1.7 billion a year over the forecast. This

¹⁶ HM Treasury, *Public service pension schemes: changes to the transitional arrangements to the 2015 schemes, Government response to consultation*, February 2021.

¹⁷ Department for Education, *The Teachers' Pensions (Miscellaneous Provisions) (Amendment) Regulations 2021, Government consultation response*, July 2021.

is a result of the ONS's downward revision to the imputed return on assets held by these schemes (which is mirrored on the expenditure side in the discount rate used to unwind the net present value of liabilities) from 5 to 4 per cent. We have also revised down our estimate of liabilities from failed private sector funded pension schemes that will be taken on by the Pension Protection Fund in light of faster than expected GDP growth.

Student loans

3.105 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. This spending rises from £10.6 billion in 2020-21 to £15.0 billion in 2026-27 thanks to growth in student numbers and to tuition fees and loans rising in line with RPIX inflation beyond the 2022-23 academic year. These forecasts have been revised up compared to both March 2020 and March 2021, largely due to higher student numbers in England as a result of the pandemic.

Other AME spending

3.106 The main changes to other AME spending items since our March 2021 forecast include:

- **General government depreciation** has been revised down by an average of £2.1 billion a year across the forecast. There are two main factors contributing to this: revised ONS data that imply lower depreciation of local government assets, both due to lower capital stocks and lower depreciation rates; and lower spending on direct capital formation within CDEL plans, with a higher proportion being spent on grants to the private sector instead (thereby boosting private sector capital, so not incurring depreciation costs for government). Firm plans only exist for 2021-22 (with the latest Spending Review plans for 2022-23 to 2024-25 not yet split by economic category), so we project these shares forward in line with 2021-22 plans.
- **Spending on the EU financial settlement** in 2021-22 has been revised down by £2.6 billion compared to our March 2021 forecast, but this is largely a timing effect. We had anticipated that the cost of each instalment would be recorded at the time of notification, which occurs in May and September of each year. But instead the ONS has decided to record spending at the time of payment, which means that the April and May 2022 payments relating to invoices received in 2021-22 fall into 2022-23. This has no effect on the overall cost of the settlement. Other changes include: a stronger pound relative to the euro, which reduces the cost of the settlement by an average of £0.2 billion a year until 2024-25; and new modelling of pension liabilities, which lead to an average downward revision of £0.2 billion a year in expenditure transfers relating to the settlement.¹⁸
- Current **VAT refunds** have been revised down from our March 2021 forecast by an average of £0.9 billion a year. This is mostly due to lower than expected grant-

¹⁸ Further detail on the cost of the financial settlement and the profile of payments is available in supplementary tables on our website.

financed local authority spending, and reflects the latest plans published in PESA. As noted above, firm plans only exist for 2021-22, so we project these shares forward.

- **Tax litigation** costs have been revised up by £1.2 billion in 2021-22, and then down by an average of £0.6 billion a year for the remainder of the forecast. This is due to a large case being lost in 2021-22, moving the accrual point for spending associated with this case into 2021-22, whereas it had previously been spread over several years.

Deficit aggregates

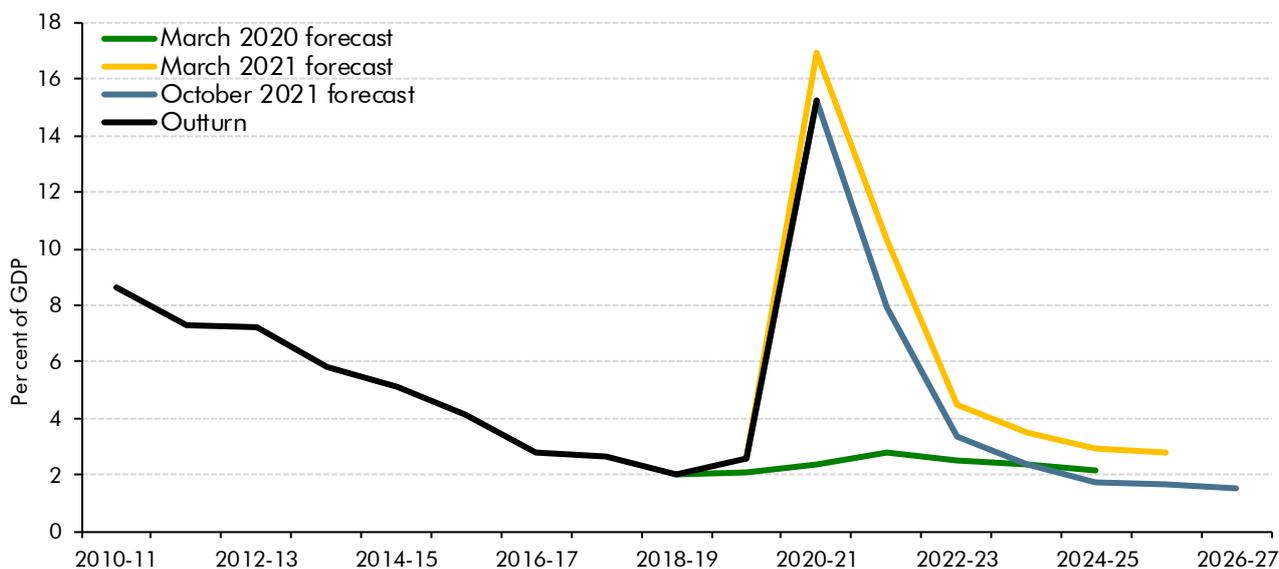
3.107 Our central forecast for the budget deficit – ‘public sector net borrowing’ (PSNB) – is the difference between the forecasts for receipts and expenditure set out in the preceding sections of this chapter. In this section we discuss our latest forecast for the path of borrowing, and how it has changed since our March 2020 and March 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 new fiscal targets and indicators, as well as those of previous administrations.

Public sector net borrowing

Summary of the borrowing forecast

3.108 Borrowing is currently estimated to have peaked in 2020-21 at a peacetime high of 15.2 per cent of GDP (£320 billion). We expect it to almost halve to 7.9 per cent of GDP in 2021-22 (£183 billion) and to halve again to 3.3 per cent of GDP in 2022-23 (£83 billion), before declining more gradually to reach 1.5 per cent of GDP (£44 billion) in 2026-27 (Chart 3.14). Borrowing in 2026-27 is 1.0 per cent of GDP lower than it was in 2019-20 and reaches what would be the lowest level since 2001-02.

Chart 3.14: Public sector net borrowing



Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the borrowing-to-GDP ratio by 0.3 per cent of GDP in 2020-21, decreasing in subsequent years to be unchanged by 2024-25.

Source: ONS, OBR

Changes since March 2020

3.109 Relative to our March 2020 forecast, borrowing is much higher in 2020-21 and 2021-22, but the upward revision declines quickly thereafter and borrowing actually falls below our pre-pandemic forecast by 2024-25. Borrowing exceeded our forecast by £265 billion in 2020-21, reflecting the £229 billion of pandemic-related policy interventions and the impact of the pandemic on the economy hitting receipts and raising spending. Borrowing remains £116 billion higher than forecast in 2021-22, thanks in particular to continued pandemic-related spending in the first half of the year. By 2022-23 borrowing is only £22 billion higher than forecast while in 2023-24 the excess is just £1.4 billion. In 2024-25 borrowing is actually £12 billion lower than our pre-pandemic forecast, thanks to large net tax rises announced since March 2020 that outweigh additions to departmental spending and underlying forecast revisions as a result of medium-term economic scarring.

3.110 Table 3.28 details the sources of these differences. It shows that:

- **Underlying forecast differences** added £96 billion to borrowing in 2020-21, and add an average of £36 billion a year from 2021-22 onwards, mainly reflecting the pandemic's adverse effects on tax bases in the near term and economic scarring in the medium term. Lower receipts account for around two-thirds of the underlying forecast difference over the four years from 2021-22, with lower debt interest spending partly offsetting increases in other spending.
- The **direct effect of policy decisions** announced since our March 2020 forecast added £220 billion to borrowing in 2020-21 and £86 billion this year, largely pandemic-related spending. The cost of policy decisions falls to £11 billion next year, as support measures largely end and tax rises start to take effect. In 2023-24 and 2024-25,

policy decisions reduce borrowing relative to our March 2020 forecast (by £17 billion and £41 billion respectively). In 2024-25, that is more than explained by a £46 billion increase in receipts (thanks to corporation tax rises, income tax threshold freezes, and the introduction of the new health and social care levy). This is partly offset by around £4 billion of additional public spending.

- The **indirect effect of policy decisions** reduced borrowing by £51 billion in 2020-21 and lowers it by £28 billion this year, with the effect falling to £6 billion in 2024-25. In 2020-21, this includes the contribution to receipts from measures that protected private sector incomes relative to the fall in GDP.¹⁹ Thereafter it is largely explained by the impacts of fiscal loosening on nominal GDP and the major tax bases.

Table 3.28: Changes to public sector net borrowing since March 2020

	£ billion				
	Outturn	Forecast			
		2020-21	2021-22	2022-23	2023-24
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
Difference	265.2	116.4	21.5	1.4	-11.6
<i>of which:</i>					
Underlying differences¹	95.6	57.9	21.1	28.6	35.0
<i>of which:</i>					
Receipts	110.9	55.0	12.5	9.9	14.3
Debt interest spending	-11.9	-2.6	-4.5	-4.7	-3.1
Other spending	-3.5	5.5	13.1	23.5	23.7
Direct effect of policy decisions²	220.2	86.1	11.2	-17.3	-40.8
<i>of which:</i>					
Pandemic crisis response	229.2	83.8	1.0	0.9	0.4
<i>of which:</i>					
Public services	95.2	47.0	-0.1	-0.3	0.0
Support for households	78.4	21.5	0.9	0.9	0.3
Support for businesses	55.5	15.2	0.3	0.2	0.0
Non-crisis response	-9.0	2.3	10.1	-18.2	-41.2
<i>of which:</i>					
Spending decisions	-9.6	-7.7	19.8	13.7	4.4
Receipts decisions	0.6	10.0	-9.7	-32.0	-45.6
Indirect effects of decisions	-50.6	-27.7	-10.8	-10.0	-5.7

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 Includes classification changes.

² The cost of policy decisions announced up to and including at SB21 has been adjusted to include significant updates to estimates via the usual recosting process.

¹⁹ The approach to calculating this indirect effect differs from our standard practice of comparing pre- and post-measures economy forecasts to calculate the fiscal consequences of differences between them because we did not attempt to produce a counterfactual pre-measures forecast in our July 2020 *Fiscal sustainability report*, which contained our initial estimates of the medium-term fiscal consequences of the pandemic. The measures announced up to that point were not designed to support economic activity, which was being deliberately suppressed to control the virus. But they did support private sector incomes (which are relatively heavily taxed). Calculating the implications of this for receipts delivers an illustrative estimate of the indirect effects of pandemic-related support measures announced between March 2020 and the Summer Economic Update in July 2020. See paragraphs 2.23 to 2.24 of our 2019 *Fiscal risks report* for a fuller explanation of how receipts outperformed nominal GDP in 2020-21.

Changes since March 2021

3.111 Relative to our March 2021 forecast, we have revised borrowing down by an average of £31 billion a year in the five years from 2021-22 to 2025-26. On a pre-measures basis, the downward revision was even larger, as higher nominal GDP boosted all the major tax bases, but that has been partly offset by the cost of the Chancellor's Budget and Spending Review measures from 2022-23 onwards.

3.112 Table 3.29 details the sources of these revisions. It shows that:

- **Underlying forecast differences** reduce borrowing by an average of £38 billion a year between 2021-22 and 2025-26. These revisions are dominated by higher tax receipts, which in turn reflect the upward revision to nominal GDP thanks to lower medium-term scarring of real GDP and, more importantly, higher and more sustained inflation. This has boosted all the major tax bases, most notably for income tax and NICs (which have also been supported by a higher labour share of national income). Upward revisions to welfare spending (thanks largely to higher uprating) and to debt interest spending (thanks to higher inflation and interest rates) provide a modest offset.
- The **direct effect of policy decisions** is to raise borrowing by £21 billion in 2022-23, and by diminishing amounts thereafter, reaching £6 billion in 2026-27. These costs are more than explained by large increases to departmental resource spending, which more than reverse the cuts to pre-pandemic plans factored into the March 2021 Budget. These are partly financed by tax rises, in particular the new health and social care levy, which are only partly offset by the cost of freezing fuel and alcohol duties for another year. Welfare spending is modestly lower as the saving from suspending the triple lock for a year outweighs the cost of increasing the generosity of universal credit. Over the four years from 2022-23 to 2025-26, the Chancellor has in effect spent in net terms around a third of the improvement in borrowing in our pre-measures forecast (albeit with a £28 billion a year discretionary increase in spending partly offset by a £15 billion a year discretionary increase in taxes).
- The **indirect effects of policy decisions** reduce borrowing by more than £5 billion a year in 2022-23 and 2023-24, and by smaller amounts thereafter, thanks to the boost to real and nominal GDP from the discretionary fiscal easing in the Budget. This more than outweighs the effect of the employer element of the health and social care levy being passed onto workers in lower real wages. Overall, the indirect effects of the Budget and Spending Review measures offsets around a third of their direct cost.

Table 3.29: Changes to public sector net borrowing since March 2021

	£ billion						
	Outturn		Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2021 forecast	354.6	233.9	106.9	85.3	74.4	73.7	
October 2021 forecast	319.9	183.0	83.0	61.6	46.3	46.4	44.0
Difference	-34.7	-50.9	-23.9	-23.8	-28.1	-27.3	
<i>of which:</i>							
Underlying differences¹	-34.7	-51.6	-39.4	-35.2	-33.6	-32.7	
<i>of which:</i>							
Income tax and NICs	-3.5	-25.3	-26.2	-27.7	-27.1	-28.4	
Other receipts	-5.4	-18.4	-25.6	-22.5	-19.2	-18.0	
Welfare spending	0.6	-3.1	2.4	7.2	9.2	10.5	
Debt interest spending	-1.5	14.9	11.1	5.8	3.1	2.7	
Other spending	-24.9	-19.8	-1.2	2.0	0.4	0.5	
Direct effect of policy decisions		-0.2	21.1	18.6	8.4	6.0	6.1
<i>of which:</i>							
Receipts decisions		1.2	-13.7	-13.3	-15.4	-15.8	-16.7
Tax rises		-0.5	-17.4	-22.4	-22.2	-23.3	-24.3
Tax cuts		1.6	3.7	9.2	6.8	7.5	7.6
Spending decisions		-1.4	34.8	31.9	23.8	21.7	22.9
<i>of which:</i>							
RDEL ²		-1.5	35.1	28.5	24.5	24.0	25.0
CDEL		-1.2	0.4	3.1	0.1	0.7	0.7
AME		1.2	-0.7	0.2	-0.7	-3.0	-2.9
Indirect effects of decisions		0.9	-5.5	-7.1	-3.0	-0.6	-1.3
<i>of which:</i>							
Receipts		-0.2	-11.5	-11.6	-5.4	-2.0	-1.7
Spending		1.1	5.9	4.5	2.4	1.5	0.4

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 Includes classification changes.

² The change in 2026-27 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.

Changes in borrowing relative to the pre-pandemic position

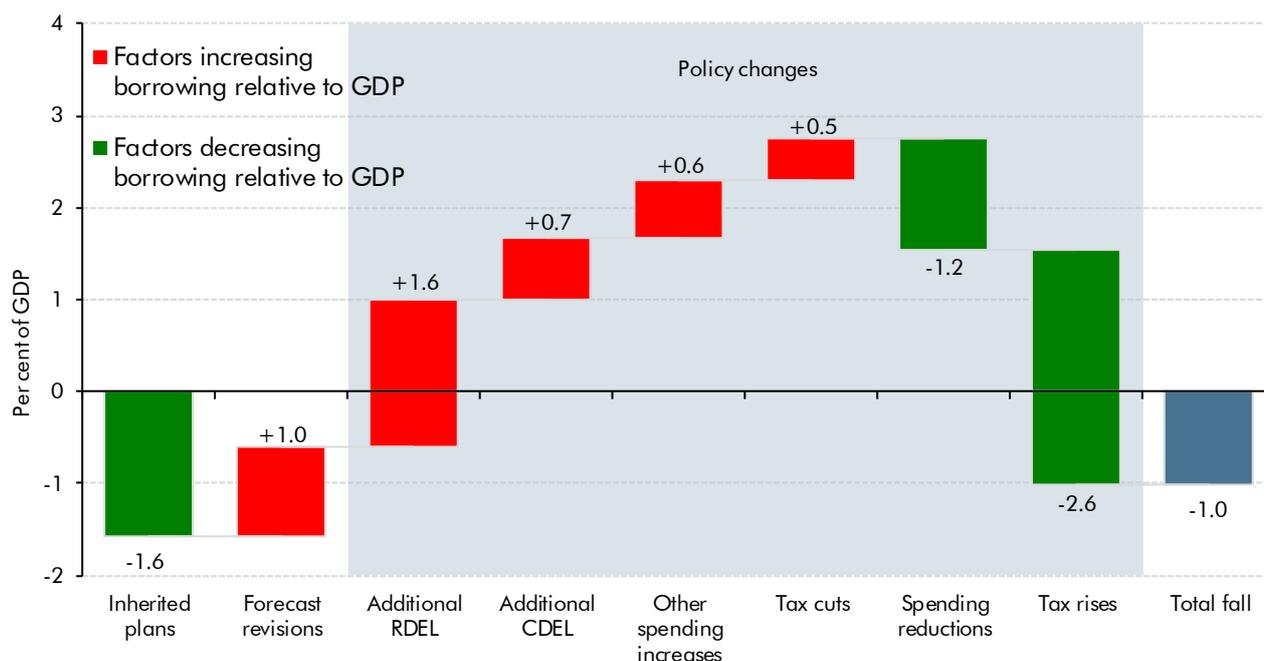
3.113 The budget deficit falls to 1.5 per cent of GDP at the forecast horizon in 2026-27, 1.0 percentage points lower than its pre-pandemic 2019-20 position. Chart 3.15 shows that:

- This overall 1.0 per cent of GDP fall is actually smaller than would have occurred under **the plans the Chancellor inherited** in March 2020 (as reflected in our pre-measures forecast at that time). Those plans entailed a fall of 1.6 percentage points over this period, reflecting both a slowly rising tax burden and a slowly falling share of GDP devoted to public spending (in roughly equal measure).
- Our **underlying forecast revisions** since March 2020 increase borrowing by 0.7 per cent of GDP by 2026-27. This includes the effect of modest scarring to some tax bases and of the triple lock and higher inflation on welfare spending.

- The effect of **policy measures announced by the current Chancellor** in his first Budget in March 2020 and since then is broadly neutral due to roughly equally large increases in both the tax burden and the size of the state. Net tax increases raise the tax burden by 2.1 per cent of GDP, with 0.2 percentage points of that announced in the March 2020 Budget and 1.9 percentage points announced subsequently. Net spending increases raise the size of the state by 1.7 per cent of GDP, with the vast majority announced in the March 2020 Budget. The tax increases are dominated by raising the main rate of corporation tax, freezing income tax thresholds, and introducing the new health and social care levy. Spending increases are dominated by additions to RDEL and CDEL spending.

3.114 In the March 2020 Budget, spending increases outweighed tax rises by 1.5 per cent of GDP, whereas since then tax rises have outweighed spending increases by 1.9 per cent of GDP. In Box 3.1 we compare this post-pandemic fiscal repair job with that planned and ultimately delivered in the aftermath of the financial crisis by George Osborne.

Chart 3.15: Sources of the fall in borrowing between 2019-20 and 2026-27



Source: OBR

Box 3.1: Repairing the public finances: the pandemic versus the financial crisis

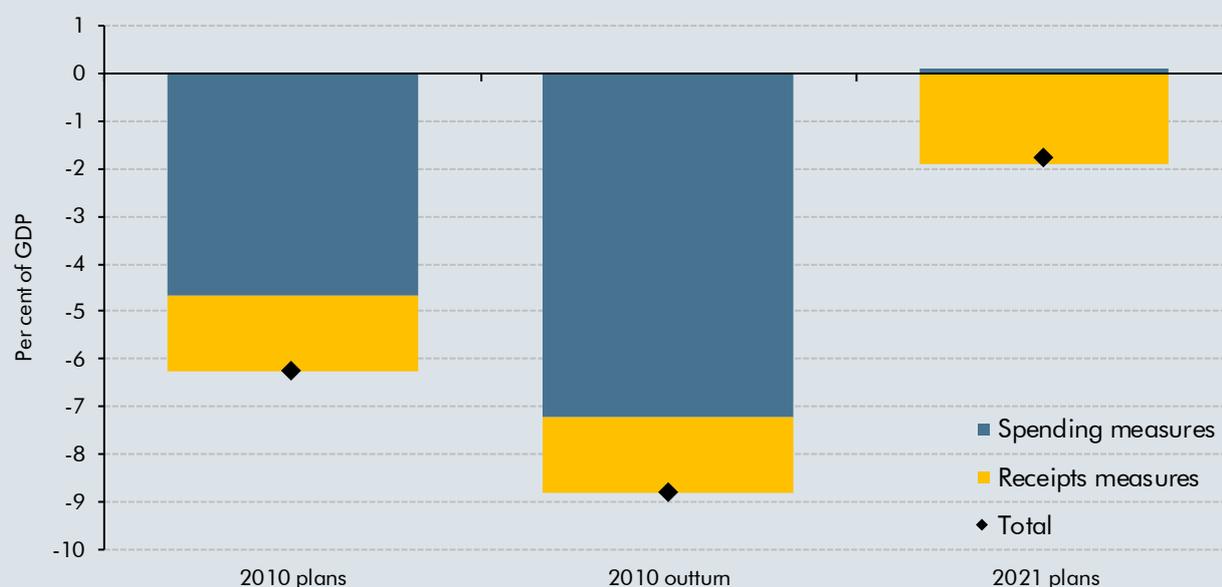
While borrowing reached a peacetime high of 15.2 per cent of GDP last year, the vast bulk of this was to fund the Government’s temporary coronavirus rescue package, which largely expires this year. The structural damage to the fiscal position over the medium term is therefore relatively modest (borrowing falls to just 3.3 per cent of GDP next year) – indeed the unprecedented fiscal support provided over the past two years played an important role in keeping it so. Nonetheless, the pandemic has left a gap relative to what the Chancellor considers a sustainable position: current balance and falling debt as a share of GDP. This box compares the scale of the fiscal

challenge facing the Chancellor and his approach to repairing the public finances, with the challenge that faced Chancellor George Osborne after the financial crisis.

Over the course of the past 19 months, this Chancellor has announced policies that deliver 1.8 per cent of GDP of fiscal tightening by 2026-27 relative to the pre-pandemic fiscal plans set out in his March 2020 Budget. Chart A shows that this reduction in borrowing is more than explained by net tax rises (on top of those contained in the March 2020 Budget), which reduce borrowing by 1.9 per cent of GDP in 2026-27. These outweigh the 0.1 per cent of GDP cost of raising public spending (on top of the significant rise announced in March 2020).

The size and composition of this planned consolidation contrasts with what followed the financial crisis – both in terms of the plan set out by Chancellor Osborne in the Coalition Government’s first Budget in June 2010, and relative to what was ultimately delivered. In June 2010, the Coalition announced a plan to deliver 6.3 per cent of GDP of fiscal tightening by 2014-15. This represented an additional 2 per cent of GDP of tightening on top of the plan they inherited from the outgoing Labour Government. 74 per cent of the overall consolidation measures were to be delivered by spending cuts, and the remainder by tax rises (mainly by raising VAT). While the Government managed to deliver close to 6 percentage points of fiscal tightening by 2014-15, the persistent underperformance of productivity and real GDP over that period meant the deficit remained higher than initially expected. In response, the Coalition extended the consolidation period, adding further years of spending reductions to successive plans. By 2018-19, 8.8 per cent of GDP in fiscal consolidation had been delivered, with a slightly higher share of 82 per cent delivered by reduced spending than was originally planned.^a

Chart A: Discretionary fiscal tightening: the pandemic versus the financial crisis



Note: 2010 plans refer to forecast impact of 2008-2010 Budget measures on 2014-15. 2010 outcome refers to impact of measures on 2018-19. 2021 plans refer to impact of all measures from the 2020 Budget onwards on 2026-27.

Source: IFS, ONS, OBR

The much greater planned and actual fiscal tightening after the financial crisis relative to this Chancellor’s post-pandemic plans should be viewed in the context of the greater damage to the prospects for potential output (and associated structural fiscal damage) in the former. Our latest

central forecast presents this Chancellor with a 2 per cent hit to medium-term real GDP, revised down from 3 per cent in our previous forecast. By contrast, in his first Budget in June 2010, Chancellor Osborne faced an OBR estimate of the medium-term shortfall in output (relative to a continuation of the pre-crisis trend) of no less than 8¾ per cent. And that was itself larger than the 6½ per cent estimate on which the outgoing Labour Government’s plans had been based.^b Moreover, the shortfall in output continued to grow as it became evident that the underlying rate of productivity growth had slowed, with the latest data pointing to a shortfall of around 15 per cent relative to the pre-crisis trend (with many factors likely to have contributed to this beyond those directly attributable to the financial crisis).

A more modest degree of economic scarring from a pandemic than from a financial crisis seems reasonable – the economy did not enter the pandemic with financial imbalances that needed to be unwound. And many forecasters – ourselves included – have revised down estimates of post-pandemic scarring recently. The post-financial crisis experience nevertheless reminds us that the actual extent of scarring that results from acute shocks like these only reveal themselves over time. Should post-pandemic scarring eventually turn out to be greater than assumed, then the size, pace, and composition of fiscal consolidation can be expected to be adjusted accordingly.

^a Figures in this paragraph are drawn from either the June 2010 Budget (Table 1.1) or from IFS, *Fiscal response to the crisis*.

^b See Table B.1 of our *Pre-Budget forecast*, June 2010.

Other fiscal aggregates

- 3.115 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, the level of borrowing if the output gap were zero. Applying the output gap path in our central forecast gives a CAPSNB of £191 billion (8.3 per cent of GDP) in 2021-22, a little above the headline PSNB figure, with the two measures converging by 2025-26 as the output gap closes.
- 3.116 The current budget deficit** is the difference between receipts and current expenditure in each year and is equal to PSNB excluding borrowing to finance net investment spending. It is the subject of the Chancellor’s new supplementary fiscal target. It is expected to fall from a peacetime high of £247 billion (11.8 per cent of GDP) in 2020-21 to £123 billion (5.3 per cent of GDP) in 2021-22, and then fall sharply again to £16 billion in 2022-23 as pandemic-related public spending is assumed to end. Thereafter, the increase in receipts over the medium term sees the current budget move into surplus in 2023-24, with larger surpluses thereafter reaching £33 billion (1.1 per cent of GDP) in 2026-27.
- 3.117 The cyclically adjusted current budget (CACB)** is the current budget we would see if the output gap were zero. As with headline current borrowing, the CACB deficit declines sharply in 2021-22 and 2022-23, moving to a slightly smaller surplus than the headline measure in 2023-24, but also reaches a surplus of 1.1 per cent of GDP in 2026-27.
- 3.118 The primary deficit** refers to the difference between non-interest spending and non-interest receipts. The measure gives an idea of the underlying fiscal position by removing non-

discretionary debt interest spending. The primary deficit therefore tracks PSNB closely throughout, declining from £147 billion in 2021-22 to reach £14 billion in 2026-27.

3.119 Public sector net investment (PSNI) is the difference between gross capital spending and depreciation and represents the change, in cash terms, of the public sector's net capital stock. It is the subject of the Government's new investment cap. PSNI remains at a fairly steady level just below 3 per cent of GDP from 2021-22 onwards.

Box 3.2: Higher inflation: effects on our central forecast and alternative scenarios

Historically, bouts of unanticipated inflation have benefited the public finances, allowing successive governments to 'inflate away' much of the debt from World War 2. In our 2021 *Fiscal risks report* we showed that this historical experience may no longer be a good guide to the effect of higher inflation on the public finances today. This is because inflation raises the cost of servicing the government's large stock of index-linked gilts, which has grown from nothing in 1980 to 24 per cent of all gilts in 2020-21. Assuming that higher inflation is associated with higher nominal interest rates, it also feeds through rapidly to the cost of central bank reserves, which have risen to 38 per cent of GDP over the past 13 years to finance the Bank of England's quantitative easing. An inflation shock now feeds quickly into the cost of these instruments: instantly in the case of index-linked gilts and as Bank Rate is increased to bring inflation back to target in the case of central bank reserves. But it remains the case that the fiscal consequences of higher inflation depend crucially on the source of that inflation – imported inflation that reduces real wages is fiscally costly; domestically generated inflation driven by rising wages is beneficial.

The direct effect of higher inflation on our latest forecast

Inflation has picked up sharply this year. We have revised up our near-term forecasts materially since March. CPI inflation, which features in many parts of the tax and spending systems, now peaks at 4.4 per cent in the second quarter of 2022, rather than rising steadily back to the 2 per cent target from below it. RPI inflation, which determines the cost of servicing index-linked gilts, reaches 5.4 per cent in the first and second quarters of 2022. In terms of the price level, which determines the medium-term fiscal consequences of inflation on the public finances, CPI has been revised up by 3.8 per cent in 2025-26 relative to March, and RPI by 4.9 per cent.

In isolation, these developments have raised borrowing, particularly in 2021-22 and 2022-23. The channels along which they manifest can be split into four groups:

- **Income tax and NICs.** On its own, inflation reduces income tax and NICs receipts by raising thresholds in the tax system and thereby reducing fiscal drag (where more income is taxed at higher rates as wages rise relative to thresholds). In normal circumstances, higher inflation would have reduced receipts by around £6 billion a year by 2025-26 relative to our March forecast. But in this forecast that is almost entirely offset by the March 2021 Budget threshold freezes raising correspondingly more than expected. Coupled with higher wage growth and other factors, our pre-measures income tax and NICs forecast in 2025-26 has been revised up £27.6 billion, illustrating the importance of understanding the interaction between the economic context and policy developments.

- **Other taxes and accrued interest on student loans.** For most excise duties, business rates, and interest on student loans, CPI or RPI determines the tax rate or interest rate charges. Higher inflation since March adds £5.7 billion to these receipts in 2025-26.
- **Debt interest.** With nearly £500 billion of index-linked gilts outstanding, higher near-term RPI inflation has added £13.8 billion to spending in 2021-22 and £10.3 billion in 2022-23. The upward revisions diminish quickly thereafter as inflation subsides.
- **Welfare spending and public service pensions.** Most working-age welfare payments and public service pensions in payment are linked to CPI inflation. Spending on these items is therefore ultimately linked to the price level, the upward revision to which has added £7.3 billion a year to spending by 2025-26.

Table A: Direct effects of higher inflation on borrowing since March

	£ billion				
	2021-22	2022-23	2023-24	2024-25	2025-26
Receipts (a)	0.2	4.1	6.0	5.0	5.0
<i>of which:</i>					
Income tax and NICs	0.0	-0.4	-1.0	-1.5	-0.7
<i>Normal indexation</i>	0.0	-2.0	-5.2	-6.3	-5.9
<i>Thresholds frozen</i>	0.0	1.7	4.2	4.8	5.2
Indirect taxes	0.2	2.4	3.2	3.3	3.2
Business rates	0.0	0.4	1.0	1.2	1.2
Student loans	-0.1	1.3	1.9	0.9	0.1
Other receipts	0.0	0.4	0.9	1.1	1.2
Spending (b)	13.8	12.7	9.9	7.6	8.2
<i>of which:</i>					
Welfare spending	-0.1	1.9	4.7	5.2	5.5
Public service pensions	0.0	0.5	1.4	1.6	1.7
Debt interest	13.8	10.3	3.9	0.8	0.9
Borrowing (b-a)	13.6	8.6	3.9	2.7	3.2

Alternative inflation scenarios

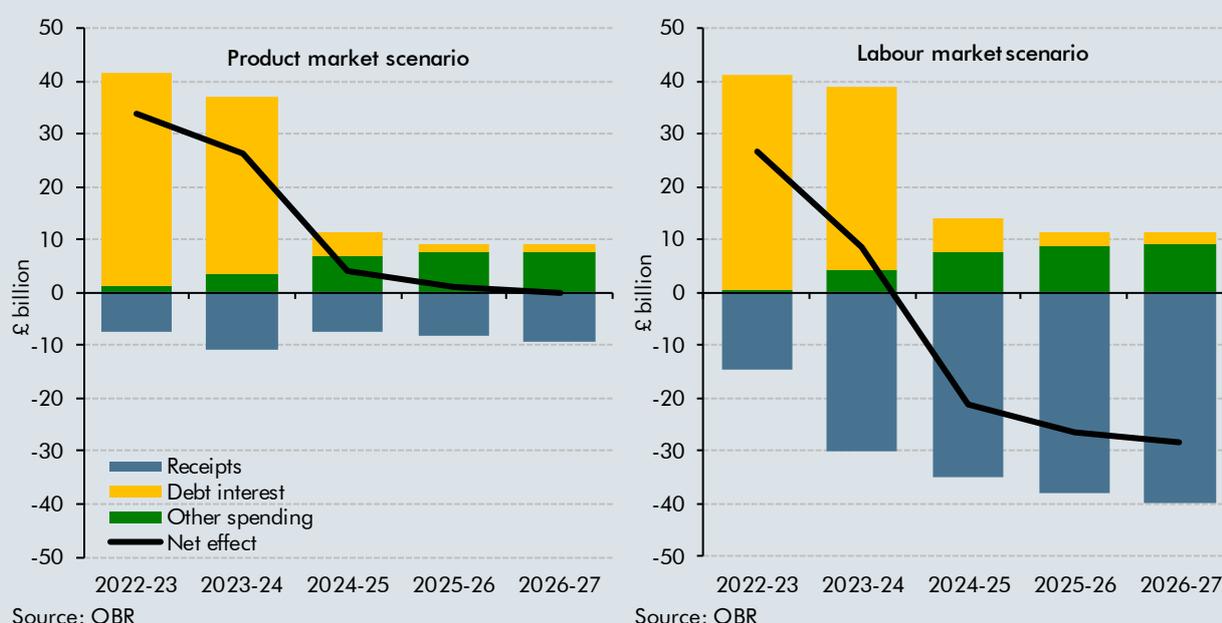
In Box 2.6 we set out two alternative inflation scenarios. In each, inflation is both higher and more persistent, but the underlying drivers differ. As a result, their fiscal consequences differ too:

- In the **product market scenario** (shown in the left-hand panel of Chart B), cost-driven inflation requires materially higher interest rates to return inflation to target, but with limited pass-through into higher wages and consumption (and therefore income tax, NICs, and VAT). This leaves borrowing higher in the short term thanks to higher debt interest spending (due to both higher Bank Rate and higher inflation). Welfare spending also rises materially. But as the initial inflation and associated Bank Rate rises pass, the debt interest impact falls away. By the end of the scenario, higher receipts almost exactly offset higher spending with no net effect on borrowing.
- In the **labour market scenario** (shown in the right-hand panel of Chart B), higher inflation is driven by stronger wage growth, raising both the price level and the labour share of national income. This lowers borrowing significantly over the medium term. While

spending is broadly in line with the product market scenario, income tax and NICs receipts are much stronger thanks to higher wages. This feeds through into higher consumption (boosting VAT and excise duties) and higher houses prices (boosting stamp duty and CGT receipts). By the end of the scenario, higher receipts more than offset higher spending and borrowing is almost £30 billion lower.

These scenarios illustrate the importance of considering the underlying drivers of any economic news when assessing its likely fiscal consequences. For now, the energy and supply bottleneck-driven burst of inflation underway looks more like the product than the labour market scenario, entailing a net increase in pressures on the public finances in the near term. However, if this inflation pressure feeds through into wages, consumption, and house prices, on unchanged policies this could provide some offsetting benefit to the public finances in the medium term.

Chart B: Public sector net borrowing effects of our alternative inflation scenarios



Balance sheet aggregates

Generating our balance sheet forecasts

3.120 We forecast several measures of the public sector balance sheet to help understand the sustainability of the public finances and elucidate the impact of financial transactions not captured in conventional measures 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).

3.121 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.

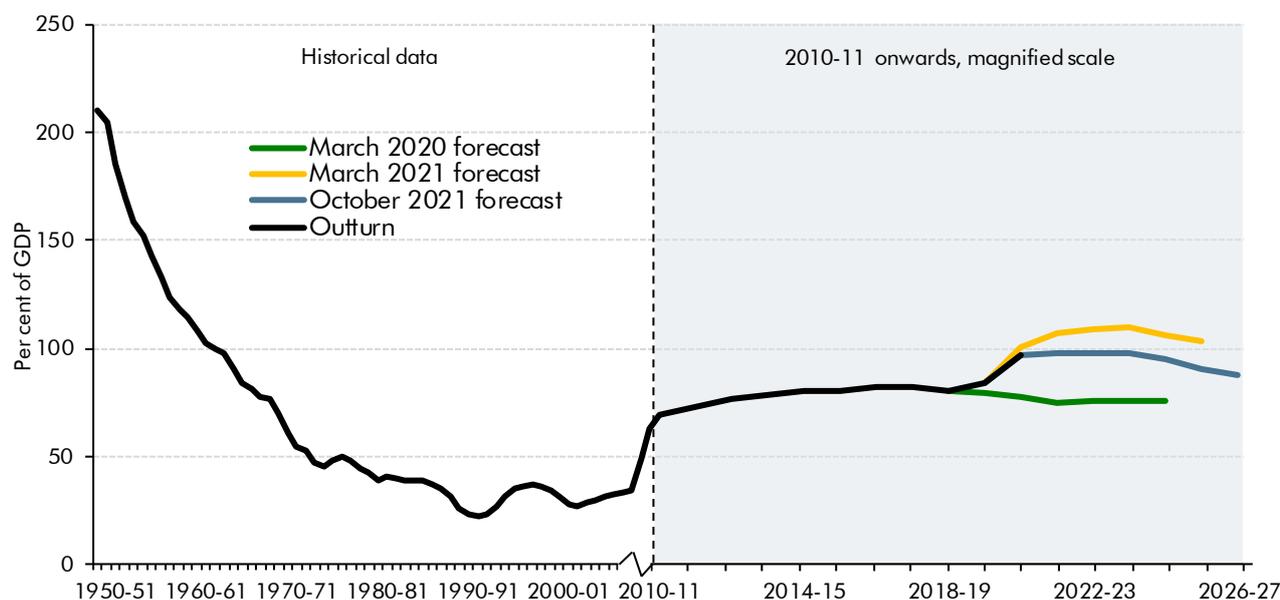
3.122 We use similar approaches to forecast three other balance sheet measures – PSND excluding the Bank of England, public sector net financial liabilities (PSNFL), and, for the first time in this *EFO*, public sector net worth. In each case we start from the relevant balance sheet and deficit measures and add other elements as required.

Summary of our debt forecast

3.123 Headline PSND (including the Bank of England) rises by 1.6 per cent of GDP this year to reach 98.2 per cent of GDP, its highest level since 1962-63, having jumped by 16.7 per cent of GDP over the preceding two years as a result of the pandemic (Chart 3.16).²⁰ The 18.3 per cent of GDP rise over those three years is nearly a third smaller than the 27.5 per cent of GDP rise we forecast in March 2021, thanks to lower borrowing and higher nominal GDP. It is also over a third smaller than the 28.4 per cent of GDP rise in only the first two years following the financial crisis. Debt peaks this year – no longer breaching 100 per cent of GDP in the post-pandemic period, in contrast to our previous forecasts – and falls from 2023-24 onwards to reach 88.0 per cent of GDP in 2026-27. However, the debt-to-GDP ratio in 2024-25 is nearly 20 percentage points higher than in our pre-pandemic March 2020 forecast.

²⁰ Due to the denominator for PSND being nominal GDP centred around the end of the 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.

Chart 3.16: Public sector net debt



Note: Both outturn and forecast are based on the vintage of nominal GDP data that was available when we closed the pre-measures forecast, so do not reflect upward revisions in the latest Quarterly National Accounts. All else equal, applying the upward revision to 2020-21 nominal GDP of 2.3 per cent to all years of the forecast would reduce the debt-to-GDP ratio by an average of 2.1 per cent of GDP across the forecast.

Source: ONS, OBR

3.124 The 10.2 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 8.4 per cent of GDP. In particular, the Term Funding Scheme (TFS) shrinks from £180 billion in 2022-23 to £5 billion in 2026-27. PSND excluding the Bank of England falls by a more modest 1.9 per cent of GDP.

Changes since March 2020

3.125 Relative to our pre-pandemic March 2020 forecast, debt is between 19 and 23 per cent of GDP higher in each year between 2020-21 and 2024-25 (Chart 3.17 and Table 3.31). This is largely driven by higher borrowing to fund the Government's response to the pandemic (which adds an average of 8 per cent of GDP in each of these years), as well as the effects of underlying economic forecast revisions. The introduction of the new TFS also contributes significantly to financial transactions, particularly earlier in the period. Debt rises more slowly in 2024-25 as repayment of TFS loans begins, but is still nearly 20 per cent of GDP above our pre-pandemic forecast.

Chart 3.17: Changes to debt since March 2020

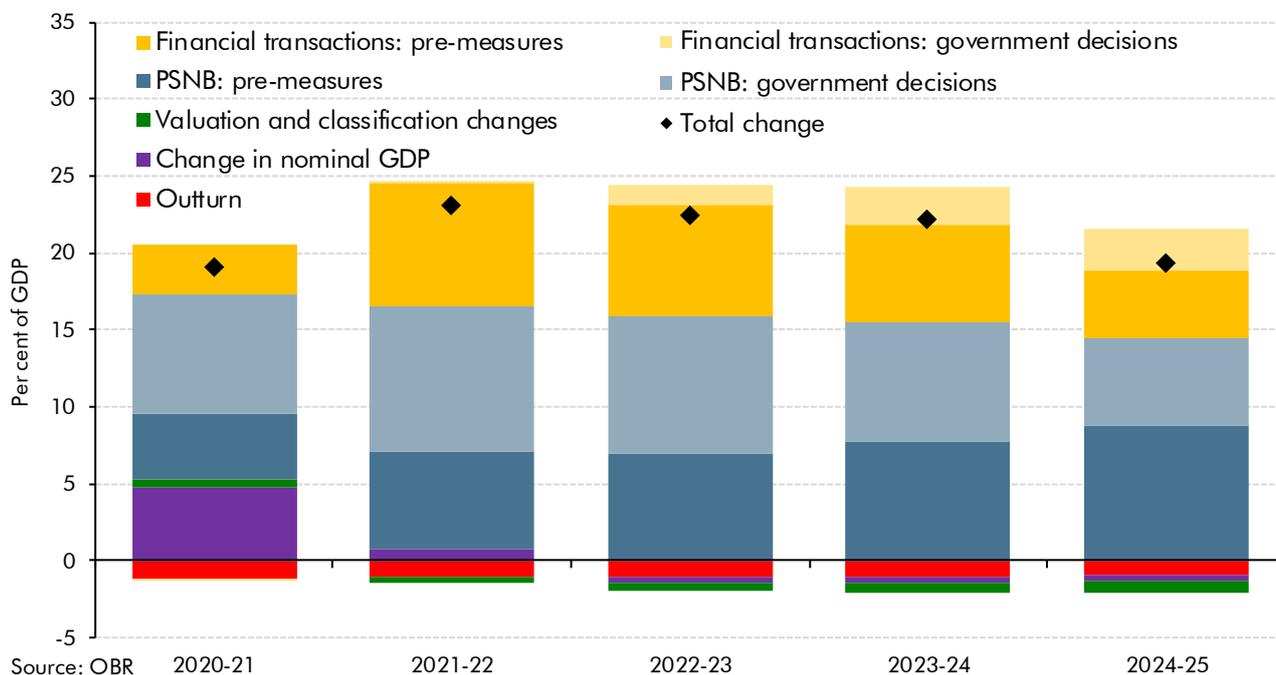


Table 3.30: Change to debt since March 2020

	Per cent of GDP				
	Outturn	Forecast			
	2020-21	2021-22	2022-23	2023-24	2024-25
March 2020 forecast	77.4	75.0	75.4	75.6	75.3
October 2021 forecast	96.6	98.2	97.9	97.8	94.7
Difference	19.2	23.2	22.5	22.2	19.4
<i>of which:</i>					
Change in nominal GDP ¹	4.8	0.7	-0.4	-0.4	-0.3
Change in cash level of net debt	14.4	22.5	22.8	22.6	19.7
	£ billion				
March 2020 forecast	1,818	1,828	1,900	1,970	2,032
October 2021 forecast	2,136	2,369	2,479	2,561	2,567
Difference	317	542	579	591	535
<i>of which:</i>					
Underlying forecast revisions	150	310	318	327	307
PSNB	96	153	175	203	238
Financial transactions	72	192	184	168	117
Valuation changes	10	-8	-13	-18	-21
Outturn	-27	-27	-27	-27	-27
Effect of Government decisions	168	232	261	265	228
Affecting public sector net borrowing	170	228	228	201	155
Affecting financial transactions	-2	4	32	63	74

¹ Non-seasonally adjusted GDP centred end-March.

Changes since March 2021

3.126 Relative to our March 2021 forecast (Table 3.32), debt is lower as a share of GDP in all years. This is due in part to higher nominal GDP increasing the denominator in the debt-to-GDP ratio, reducing the ratio by around 4 percentage points by 2025-26 relative to our March 2021 forecast. A larger contribution comes from debt being materially lower in cash terms (which reduces debt by 9.2 per cent of GDP by the end of the forecast). This is largely explained by lower pre-measures borrowing across all years of the forecast, with the cumulative effect reaching £227 billion by 2025-26. Measures announced in the Budget and Spending Review offset £42 billion of that, more than explained by higher departmental spending. Financial transactions have a comparatively small effect on revisions since our March forecast, with reprofiling of the repayment of loans in the TFS being the largest contributor.

Chart 3.18: Changes to debt since March 2021

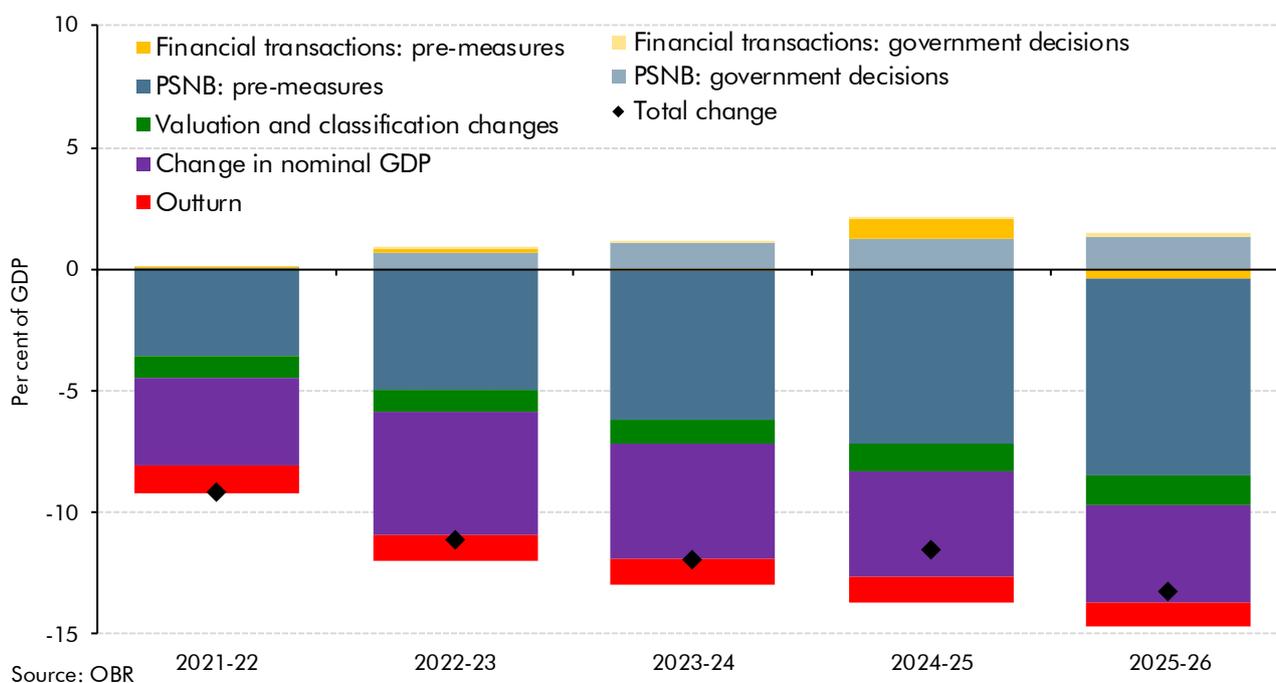


Table 3.31: Change to debt since March 2021

	Per cent of GDP					
	Outturn	Forecast				
		2020-21	2021-22	2022-23	2023-24	2024-25
March 2021 forecast	100.2	107.4	109.0	109.7	106.2	103.8
October 2021 forecast	96.6	98.2	97.9	97.8	94.7	90.5
Difference	-3.6	-9.2	-11.1	-11.9	-11.5	-13.2
<i>of which:</i>						
Change in nominal GDP ¹	-0.8	-3.6	-5.1	-4.8	-4.3	-4.0
Change in cash level of net debt	-2.8	-5.5	-6.0	-7.1	-7.2	-9.2
	£ billion					
March 2021 forecast	2,198	2,503	2,631	2,747	2,761	2,804
October 2021 forecast	2,136	2,369	2,479	2,561	2,567	2,546
Difference	-62	-134	-152	-186	-194	-258
<i>of which:</i>						
Underlying forecast revisions	-62	-134	-169	-215	-230	-300
PSNB	-35	-86	-126	-161	-194	-227
Financial transactions		1	5	0	23	-11
<i>of which:</i>						
Bank of England		27	27	27	56	27
Loan guarantee schemes		-17	-6	-6	-6	-6
Other accruals adjustments		-9	-16	-21	-27	-32
Valuation and classification changes		-21	-22	-26	-31	-35
Outturn	-27	-27	-27	-27	-27	-27
Effect of Government decisions		0	18	29	36	42
Affecting public sector net borrowing		0	21	39	48	54
Indirect effects on borrowing		1	-5	-12	-15	-15
Affecting financial transactions		0	2	1	3	4

¹ Non-seasonally adjusted GDP centred end-March.

Year-on-year change in PSND

3.127 Tables 3.33, 3.34 and 3.35 detail our forecast for year-on-year changes in PSND, and how this profile differs from our March 2020 and March 2021 forecasts.

3.128 Table 3.33 shows that PSND rises by £233.5 billion in cash terms this year, by a further £109.5 billion in 2022-23 and by £82.1 billion in 2023-24, then has a more uneven profile over the final three years of the forecast. This largely reflects public sector borrowing, which adds £183.0 billion to debt this year, falling to £44 to £46 billion a year in the final years of the forecast. Financial transactions raise debt this year and in the following two years, then reduce it over the final three years of the forecast – largely related to the TFS.

3.129 Relative to our pre-pandemic forecast in March 2020 (Table 3.34), year-on-year increases in debt are much larger in the first three years of the forecast. This reflects higher borrowing and TFS lending. In 2024-25, year-on-year increases in debt are lower, again due to the TFS. Relative to our March 2021 forecast (Table 3.35), year-on-year increases in debt are lower in all years, primarily reflecting the lower path for borrowing.

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

	£ billion					
	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Year-on-year change in PSND (a+b+c+d)	233.5	109.5	82.1	5.9	-21.0	21.4
Public sector net borrowing (a)	183.0	83.0	61.6	46.3	46.4	44.0
Financial transactions (b)	53.9	23.9	21.6	-26.4	-65.6	-30.4
<i>of which:</i>						
DEL net lending	4.0	3.6	1.8	2.4	2.4	2.5
Help to Buy outlays	2.7	3.2				
Other DEL	2.8	1.0	2.2	3.0		
DEL beyond current Spending Review					3.0	3.1
Allowance for shortfall	-1.6	-0.6	-0.4	-0.6	-0.6	-0.6
Other government net lending	8.9	9.5	9.2	9.0	8.4	8.4
Student loan outlays ¹	10.2	10.4	11.0	11.7	12.4	13.2
Student loan repayments ²	-3.5	-3.9	-4.2	-4.5	-5.1	-5.8
Scottish Government	0.4	0.5	0.2	0.2	0.2	0.2
UK Infrastructure Bank	0.1	1.4	1.7	1.8	1.7	1.0
UK Export Finance	1.2	1.4	1.1	0.4	-0.3	-0.3
Other AME	2.3	2.0	1.7	1.9	2.0	2.2
Help to Buy repayments	-1.8	-2.1	-2.3	-2.5	-2.4	-2.2
Sales or purchases of financial assets	-3.5	-3.0	-3.2	-3.0	-3.0	0.0
NatWest Group	-3.0	-3.0	-3.0	-3.0	-3.0	0.0
UKAR asset sales and rundown	-0.5	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	87.2	0.1	1.7	-47.7	-76.5	-38.0
Term Funding Scheme	76.9	0.0	0.0	-55.6	-79.4	-40.0
Other effects	10.2	0.1	1.7	7.9	2.9	2.0
Cash flow timing effects	-42.7	13.7	12.1	12.8	3.1	-3.3
Student loan interest ²	2.5	4.2	5.5	5.0	5.1	5.6
Corporation tax	-1.1	3.0	10.3	5.5	2.6	1.4
Other receipts	-18.4	7.7	3.9	3.6	4.3	4.3
Funded public pension schemes	-5.5	-6.4	-5.7	-5.1	-4.6	-4.7
Index-linked gilt uplift ³	-24.3	-12.2	-10.0	-2.6	-10.1	-15.1
Other gilt accruals	8.0	7.8	8.0	8.3	8.0	7.9
Guarantee schemes write offs	0.6	12.6	3.8	1.2	0.9	0.4
Other expenditure	-4.4	-2.9	-3.7	-3.1	-3.1	-3.1
Public sector net cash requirement (a+b)	236.9	107.0	83.2	19.9	-19.2	13.5
Valuation effects (c)	-3.3	2.6	-1.1	-14.0	-1.8	7.9
<i>of which:</i>						
Gilt premia	-8.0	-9.7	-9.5	-8.7	-9.0	-5.2
Asset Purchase Facility gilt premia	2.1	-0.1	-1.7	-7.9	-2.9	-2.0
Index-linked gilts uplift ³	24.3	12.2	10.0	2.6	10.1	15.1
International reserves	-21.7	0.1	0.1	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

	£ billion			
	Forecast			
	2021-22	2022-23	2023-24	2024-25
Year-on-year change in PSND (a+b+c+d)	224.6	37.1	12.8	-56.3
Public sector net borrowing (a)	116.3	21.5	1.3	-11.6
Financial transactions (b)	114.2	13.2	15.3	-39.3
<i>of which:</i>				
DEL net lending	-0.3	-0.9	-0.2	0.4
Help to Buy outlays	0.5	0.8		
Other DEL	0.1	-1.7	-0.4	
DEL beyond current Spending Review				0.4
Allowance for shortfall	-1.0	0.0	0.2	0.0
Other government net lending	1.6	2.5	3.7	4.2
Student loan outlays ¹	0.1	-0.1	-0.1	0.1
Student loan repayments ²	0.7	0.7	0.8	0.9
Scottish Government	-0.4	-0.4	-0.7	-0.7
UK Infrastructure Bank	0.1	1.4	1.7	1.8
UK Export Finance	-0.2	0.1	0.7	0.2
Other AME	1.1	0.6	0.9	1.5
Help to Buy repayments	0.2	0.3	0.4	0.3
Sales or purchases of financial assets	0.1	1.2	0.4	0.3
NatWest Group	0.6	1.2	0.4	0.4
UKAR asset sales and rundown	-0.5	0.0	0.0	0.0
Other sales	0.0	0.0	0.0	0.0
Bank of England schemes	150.5	0.1	1.7	-47.7
Term Funding Scheme	140.3	0.0	0.0	-55.6
Other effects	10.2	0.1	1.7	7.9
Cash flow timing effects	-37.7	10.4	9.7	3.6
Student loan interest ²	-0.7	0.4	1.0	0.2
Corporation tax	-3.6	1.1	8.6	3.9
Other receipts	-23.6	3.7	-0.6	-0.8
Funded public pension schemes	-3.6	-4.4	-3.6	-3.0
Index-linked gilt uplift ³	-10.4	-5.2	-0.6	0.3
Other gilt accruals	3.6	2.8	2.6	2.6
Guarantee schemes write offs	0.6	12.6	3.8	1.2
Other expenditure	0.0	-0.6	-1.5	-0.9
Public sector net cash requirement (a+b)	230.5	34.7	16.6	-50.9
Valuation effects (c)	-5.9	2.4	-3.8	-5.4
<i>of which:</i>	0.0	0.0	0.0	0.0
Gilt premia	0.0	-2.2	-2.3	-0.1
Asset Purchase Facility gilt premia	5.3	-0.9	-2.2	-5.0
Index-linked gilts uplift ³	10.4	5.2	0.6	-0.3
International reserves	-21.6	0.2	0.1	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 March 2021

	£ billion				
	Forecast				
	2021-22	2022-23	2023-24	2024-25	2025-26
Year-on-year change in PSND (a+b+c+d)	-71.4	-18.2	-34.5	-8.0	-64.1
Public sector net borrowing (a)	-50.9	-23.9	-23.8	-28.1	-27.3
Financial transactions (b)	-11.5	-0.6	-7.0	26.3	-30.8
<i>of which:</i>					
DEL net lending	0.0	0.2	-0.3	0.4	0.4
Help to Buy outlays	0.5	0.5			
Other DEL	-0.5	-0.3	-0.5	0.4	
DEL beyond current Spending Review					0.4
Allowance for shortfall	0.0	0.0	0.2	0.0	0.0
Other government net lending	0.3	-0.2	0.7	1.8	1.8
Student loan outlays ¹	0.5	0.7	1.1	1.4	1.7
Student loan repayments ²	-0.4	-0.4	-0.3	-0.2	-0.2
Scottish Government	0.2	-0.1	-0.1	-0.1	-0.1
UK Infrastructure Bank	-0.6	0.1	0.1	0.2	0.3
UK Export Finance	-0.5	0.0	-0.1	0.3	-0.1
Other AME	1.2	-0.3	0.1	0.4	0.4
Help to Buy repayments	-0.1	-0.2	-0.2	-0.2	-0.2
Sales or purchases of financial assets	-0.4	-0.4	-0.3	-0.4	-0.4
NatWest Group	-0.4	-0.4	-0.4	-0.4	-0.4
UKAR asset sales and rundown	0.0	0.0	0.1	0.0	0.0
Other sales	0.0	0.0	0.0	0.0	0.0
Bank of England schemes	26.9	0.0	0.0	29.5	-29.5
Term Funding Scheme	26.9	0.0	0.0	29.4	-29.4
Other effects	0.0	0.0	0.0	0.1	-0.1
Cash flow timing effects	-38.3	-0.2	-7.2	-5.0	-3.2
Student loan interest ²	-0.1	1.5	2.2	1.1	0.4
Corporation tax	-3.2	-1.8	-1.7	-0.4	0.1
Other receipts	0.1	2.3	-0.6	-1.4	0.1
Funded public pension schemes	-3.4	-3.4	-3.5	-3.6	-3.7
Index-linked gilt uplift ³	-13.5	-8.4	-1.8	1.3	1.1
Other gilt accruals	0.2	0.0	-0.3	-0.6	-0.9
Guarantee schemes write offs	-16.6	10.5	0.0	-0.4	0.7
Other expenditure	-1.9	-0.8	-1.7	-1.1	-1.1
Public sector net cash requirement (a+b)	-62.4	-24.5	-30.8	-1.8	-58.1
Valuation effects (c)	-9.0	6.3	-3.7	-6.2	-6.0
<i>of which:</i>					
Gilt premia	5.1	-1.6	-3.5	-2.0	-2.3
Asset Purchase Facility gilt premia	-5.9	-0.7	-2.1	-2.9	-2.5
Index-linked gilts uplift ³	13.5	8.4	1.8	-1.3	-1.1
International reserves	-21.7	0.1	0.0	0.0	0.0
ONS statistical changes (d)	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

3.130 Government net lending to the private sector generally declines over the forecast period as increasing outlays on student loans are offset by increasing repayments on those loans, repayments on Help to Buy loans, and the front-loading of outlays in respect of several other schemes. Differences are small relative to our pre-pandemic March 2020 forecast. Relative to our March 2021 forecast, the main changes include somewhat higher Help to Buy lending in the near term and materially higher student loan outlays reflecting, in particular, another year of higher student numbers. Several relatively small changes to eligibility for student loans add modest sums to outlays.

Sales and purchases of financial assets

3.131 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 a higher share price has increased expected proceeds. We continue to assume a flat profile of proceeds over the forecast. In the past, progress has slowed during periods of market volatility. But it is also possible that sales could proceed faster than assumed. In July, the Government announced a trading plan by an appointed broker that sells shares on a daily basis, subject to value-for-money conditions. A similar 'dribble out' plan for Lloyds Banking Group played a significant role in exiting the Government's shareholding completely.

Bank of England schemes

- 3.132 The 'Term Funding Scheme with additional incentives for SMEs' (TFSME) 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 meant many lenders repaying TFS loans also took out TFSME loans, in effect rolling funding into the new scheme.
- 3.133 Since our previous forecast in March we have made several changes to the expected path of the TFS.²¹ The eventual size is expected to be £10 billion larger (at £180 billion) and just over £26.9 billion more of the borrowing is expected to take place in 2021-22 (with £16.9 billion less having taken place in 2020-21). This also adds a corresponding £10 billion to repayments in the final three years of the forecast. But we have also revised the repayment profile in light of the ability of TFS participants who are also accredited under the Bounce Back Loan Scheme to extend a portion of their TFS drawings from four to six years. We have also introduced an assumption about the proportion of loans that will take advantage of a further extension to 10 years. The overall impact of these changes relative to March reduces loan repayments by £29.4 billion in 2024-25 and increases them by a corresponding £29.4 billion in 2025-26.

²¹ We use 'Term Funding Scheme' in our forecast to refer to the total of the original Term Funding Scheme and the Term Funding Scheme with additional incentives for SMEs introduced in March 2020.

Cash payments on guarantees and other timing effects

3.134 Abstracting from the uplift on index-linked gilts (for which there is an offsetting valuation effect), timing effects reduced the PSNCR by £24.9 billion more in 2021-22 than we expected in March, and by a further £7.9 billion across the rest of the forecast. Of this:

- The downward revision to expected cash pay-outs on **government guaranteed loan schemes** reduces cash outlays by £5.6 billion in total over the forecast. We now expect the bulk of these outlays to fall in 2022-23 rather than this year, reducing cash outlays by £16.6 billion this year and increasing them by £10.5 billion next year.
- Changes to the cash requirements of **funded public sector pension schemes** reduce net cash outlays by £3.4 to £3.7 billion a year. These changes largely reflect taking on the latest ONS data on the composition of the assets held by these funds.
- Revisions to the forecast for '**other receipts**' since March 2020 reflect the introduction of tax deferral schemes during the pandemic, which moved cash payments from 2020-21 into 2021-22, increasing cash received (and so reducing debt) this year by £23.6 billion (having had the opposite effect of raising debt in 2020-21). Our forecast is little changed relative to March 2021.

Valuation effects

3.135 Valuation effects (excluding the uplift on index-linked gilts, for which there is an equal and offsetting entry under timing effects) have been revised down by £39.9 billion from our March 2021 forecast, with £22.5 billion of that falling in 2021-22. This is driven by:

- A downward revision of £21.7 billion in respect of the **foreign exchange reserves** in 2021-22 compared to both our March 2020 and March 2021 forecasts. This follows the issuance of a large tranche of Special Drawing Rights (SDRs, an international reserve currency) by the International Monetary Fund (IMF). These SDRs represent an equal-sized asset and liability for the UK (since the IMF has issued them to its members, but is also funded by its members). However, under the ONS's rules for the calculation of PSND, the liability is not a 'Maastricht debt liability' so does not count towards gross debt, whereas the asset is liquid, so nets off. This produces the fiscal illusion of lowering PSND when more SDRs are issued, but has no effect on wider balance sheet aggregates such as PSNFL and PSNW.
- A £5.9 billion downward revision related to the **value of gilts held by the Asset Purchase Facility (APF)**. Higher gilt yields across the first two years of the forecast mean lower market prices, and so a smaller difference between the value of the reserves created to purchase the APF assets and the nominal value of the gilts purchased. In addition, a lower than expected outturn in respect of recent purchases further lowers valuation effects in 2021-22. Relative to March 2020, this effect is reversed, with debt £5.3 billion higher in 2021-22 due to the impact of the pandemic in lowering gilt yields (and so raising market prices), and due to higher than forecast gilt purchases as the Bank of England undertook additional quantitative easing during the pandemic.

Alternative balance sheet aggregates

3.136 Our *Fiscal risks reports* have discussed how PSND provides only a partial picture of the public finances. It includes only a limited range of debt and debt-like liabilities and an even smaller range of liquid financial assets. This makes it susceptible to ‘fiscal illusions’ – when movements in a fiscal aggregate do not reflect true changes in the underlying health of the public finances. With PSND, this is particularly the case when government creates, acquires, or sells illiquid assets like loans, shares, or real estate, or when it increases or reduces non-debt liabilities like pension entitlements. (It has also been illustrated in this forecast by the effect of the issuance of IMF Special Drawing Rights, which do not alter the underlying health of the public finances, but nevertheless reduce PSND.)

3.137 Alternative metrics often do a better job than PSND of reflecting the true state of the government finances, although none is perfect:

- **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). The Government has proposed a new fiscal mandate based on this measure, requiring it to be falling as a percentage of GDP by the third year of our rolling forecast period (as discussed in Chapter 4).
- **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.
- **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. For the first time in this *EFO*, we have produced an illustrative forecast of PSNW. Our motivation for doing so and the methodology deployed are described in a working paper released alongside this *EFO*.²²

3.138 Compared to headline debt, PSND ex BoE peaks one year earlier in 2020-21, but at a lower level. It falls in 2021-22, then rises for two years before peaking again in 2023-24. From there it falls by 2.5 per cent of GDP in the final four years of the forecast, considerably less than the 9.8 per cent fall in PSND over that period since it is not flattered by the effect of TFS loans being repaid and the associated reserves being withdrawn.

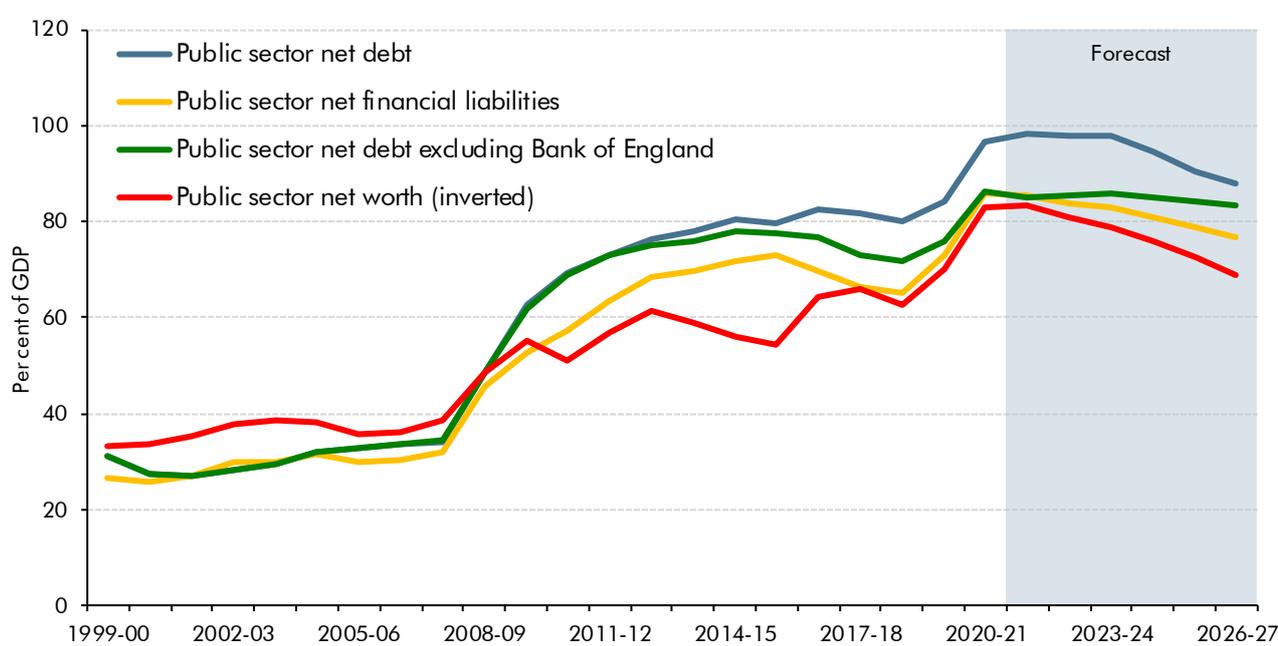
3.139 Public sector net financial liabilities peak just 0.1 per cent of GDP below PSND ex BoE in 2020-21, then decline faster to stand 6.4 per cent lower by 2026-27. The increasing gap between the two measures over that period reflects the net acquisition of illiquid financial

²² OBR, *Forecasting the balance sheet: Public sector net worth*, 2021.

assets from government lending, increases in the value of equity holdings, and differences between cash and accruals recording of debt interest and taxes.

3.140 Public sector net worth is a measure of net assets rather than net liabilities, so is inverted in Chart 3.19 to be comparable with the other balance sheet measures. Net worth in 2021-22 is negative at minus 83.4 per cent of GDP. This marks its trough, with the position improving steadily across the forecast to reach minus 68.9 per cent of GDP in 2026-27. It therefore improves by 14.5 per cent of GDP over five years – a larger improvement than PSNFL, which falls 8.6 per cent. This difference 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.

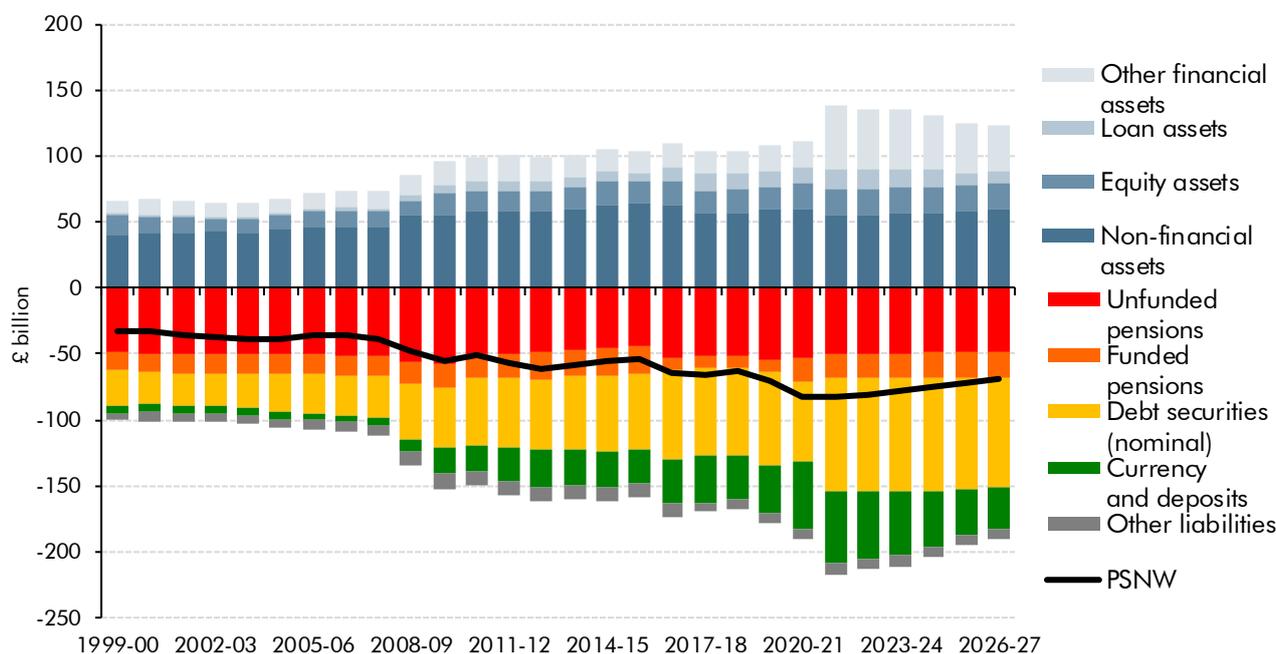
Chart 3.19: Four measures of the public sector balance sheet



Source: ONS, OBR

3.141 As set out in our working paper, the historical path of net worth was significantly shaped by the financial crisis, during which PSNW deteriorated by nearly 17 per cent of GDP. This was largely due to an increase in liabilities of nearly 41 per cent of GDP, offset by assets purchased under QE and the acquisition of the assets held by Bradford & Bingley and Northern Rock. The crisis also coincided with the reclassification of housing associations onto the public sector balance sheet, which brought more assets (in the form of social housing) onto the public sector balance sheet. Net worth also deteriorated during the pandemic (by 13.0 per cent of GDP in 2020-21) as borrowing surged, but this was not matched with the same levels of asset accumulation seen during the financial crisis. This partly reflects a different approach to policy support, with guarantees featuring more heavily in the pandemic response, rather than loans and equity injections. This distinction is described in Annex B, which details the balance sheet impacts of both the financial crisis and the pandemic.

Chart 3.20: Composition of public sector net worth



Central government net cash requirement

3.142 The central government net cash requirement (CGNCR) is a key determinant of the government's overall net financing requirement. Table 3.36 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.

3.143 PSNCR has a very uneven profile, largely a result of the Bank of England's TFS and even turns negative in 2025-26 as a result of loan repayments. By contrast, CGNCR has a smoother path across the forecast, declining from £157.8 billion in 2021-22 to £52.9 billion in 2026-27.

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)	236.9	107.0	83.2	19.9	-19.2	13.5
<i>of which:</i>						
Local authorities and public corporations NCR	82.2	-0.6	1.1	-51.7	-79.6	-38.3
Central government (CG) NCR own account	154.6	107.6	82.0	71.6	60.4	51.8
CGNCR own account	154.6	107.6	82.0	71.6	60.4	51.8
Net lending within the public sector	3.2	1.0	1.0	1.0	1.0	1.0
CG net cash requirement	157.8	108.6	83.1	72.6	61.4	52.9
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	157.6	107.9	82.8	72.7	61.2	52.3

Financing and the balance sheet

3.144 The Government has revised its financing remit for 2021-22 and given us indicative estimates of the level of NS&I and Treasury-bill financing over the forecast period. Due to a lower net cash requirement than forecast in 2020-21, the Debt Management Office held nearly £60 billion in over-financing coming into this year. The resulting adjustment to this year's financing remit is shown as the 'change in DMO cash position' in Table 3.37. The downward revision to the net cash requirement this year of nearly £83 billion means the remit has been revised to issue £25 billion fewer Treasury bills and nearly £100 billion fewer gilts, compared to March. As usual, we assume a proportional distribution of 'unallocated' gilt auctions across index-linked and conventional gilts to finance the 2021-22 gross financing requirement in full. In the absence of a medium-term policy statement on the composition of financing, we assume the ratio of conventional to index-linked gilts is held constant over the forecast.

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	157.6	107.9	82.8	72.7	61.2	52.3
Gilt redemptions	79.3	107.1	117.0	108.6	126.2	57.7
Change in DMO cash position ²	-58.8	0.0	0.0	0.0	0.0	0.0
Total gross financing	178.1	215.0	199.8	181.3	187.3	110.0
of which:						
Conventional gilts	169.0	179.9	169.1	151.7	157.1	89.8
Index-linked gilts	25.4	27.0	25.4	22.8	23.6	13.5
Treasury bills	-23.2	0.0	0.0	0.0	0.0	0.0
NS&I	6.5	7.8	5.1	6.6	6.6	6.6
Other central government	0.5	0.2	0.2	0.1	0.0	0.0

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

² Change in Debt Management Office cash position.

3.145 The consequences of the financing remit, our forecast for the Bank of England schemes, and assumptions about financing in local authorities and public corporations produces the balance sheet composition shown in Table 3.38. The 8.6 per cent of GDP fall in PSND between 2020-21 and 2026-27 reflects a 7.1 per cent of GDP reduction in debt liabilities (excluding the Bank of England), partially offset by a 4.3 per cent of GDP drop in liquid assets. Much of the change in net debt is therefore driven by a reduction in Bank of England liabilities, which fall by 6.2 per cent of GDP over the same period, largely due to the repayment of TFS loans. Within central government liabilities, lower index-linked gilts and Treasury bills are compensated for by higher conventional gilt liabilities.

Table 3.37: The composition of public sector net debt

	Per cent of GDP ¹							
	Outturn		Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Public sector debt liabilities, ex Bank of England (a)	87.0	99.4	95.8	95.6	95.6	94.7	93.5	92.2
Central government	87.1	99.6	96.0	95.8	95.9	95.0	93.9	92.6
of which:								
Conventional gilts	50.0	63.7	62.1	62.8	63.3	63.1	62.5	61.3
Index-linked gilts	21.0	20.5	20.5	20.0	19.7	19.3	19.0	19.1
Treasury bills	3.9	2.3	1.2	1.1	1.1	1.1	1.0	1.0
NS&I	8.4	9.1	8.6	8.5	8.4	8.4	8.3	8.3
Other central government	3.8	3.9	3.6	3.4	3.3	3.2	3.1	3.0
Local government ²	0.9	1.0	0.9	0.9	0.9	0.8	0.8	0.8
Public corporations ex Bank of England ³	-1.0	-1.2	-1.1	-1.1	-1.1	-1.1	-1.2	-1.2
Public sector liquid assets, ex Bank of England² (c)	11.1	13.2	10.6	10.1	9.8	9.6	9.3	9.0
Central government	8.7	10.4	8.0	7.6	7.3	7.1	6.8	6.5
of which:								
Reserves	6.4	5.9	6.3	6.0	5.8	5.6	5.4	5.3
Other central government	2.3	4.5	1.7	1.6	1.5	1.4	1.4	1.3
Local government ²	1.5	1.6	1.5	1.4	1.3	1.2	1.1	1.1
Public corporations ex Bank of England ³	0.9	1.2	1.2	1.2	1.2	1.4	1.4	1.3
Public sector net debt ex Bank of England (a-c=d)	75.9	86.1	85.2	85.4	85.7	85.1	84.2	83.3
Bank of England gross debt liabilities (e)	9.1	11.3	13.7	13.1	12.6	10.0	6.8	5.1
of which:								
Due to quantitative easing	3.4	6.1	5.7	5.4	5.2	4.7	4.4	4.2
Due to the Term Funding Scheme	5.0	4.7	7.5	7.1	6.9	4.6	1.6	0.2
Due to other activities	0.6	0.5	0.5	0.5	0.6	0.7	0.7	0.7
Bank of England liquid assets (f)	0.8	0.8	0.7	0.6	0.6	0.4	0.5	0.4
Bank of England net debt (e-f=g)	8.3	10.5	13.0	12.5	12.1	9.6	6.3	4.7
Public sector net debt (PSND)(d+g)	84.2	96.6	98.2	97.9	97.8	94.7	90.5	88.0
<i>Memo: general government gross debt (a-b)</i>	<i>88.0</i>	<i>100.6</i>	<i>96.9</i>	<i>96.7</i>	<i>96.7</i>	<i>95.9</i>	<i>94.7</i>	<i>93.4</i>

¹ Non-seasonally adjusted GDP centred end-March.

² Net of debt liabilities / liquid assets held by central government.

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

Contingent liabilities

3.146 As usual, we have asked the Treasury to identify any changes to future contingent liabilities since our March forecast. According to its dedicated reporting system 27 were recorded in that period, with a total maximum exposure of £466 million for those that have been quantified and approved, of which £395 million had become 'live' since our March forecast. Expected losses for schemes approved since March, where quantified, are actually negative, with a expected net profit of £54 million due to the fees expected to be charged. This is very different to the £22.8 billion quantified expected losses on pandemic-related contingent liabilities entered into over the equivalent period in 2020-21.

3.147 This largely reflects the impact of the pandemic – most notably government guarantees on tens of billions of pounds worth of business loans. The maximum exposure of pandemic-related contingent liabilities amounts to nearly £90 billion in total and the expected losses factored into our forecast to £23.1 billion. Few of these losses have crystallised so far, as reported in Annex B, which breaks down the cash flows to date relating to these schemes, including their total size and expected losses (alongside the legacy balance sheet interventions from the financial crisis that we have published in previous EFOs).

Table 3.38: Fiscal aggregates: central forecast

	Per cent of GDP, unless otherwise stated							
	Outturn		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)	37.2	37.9	37.2	38.8	39.6	39.8	39.9	40.0
Total managed expenditure (b)	39.8	53.1	45.1	42.1	41.9	41.6	41.6	41.6
<i>of which:</i>								
Public sector current expenditure (c)	35.5	47.1	40.1	37.1	36.8	36.6	36.6	36.6
Public sector net investment (d)	1.9	3.5	2.6	2.7	2.9	2.7	2.7	2.7
Depreciation (e)	2.4	2.5	2.4	2.3	2.3	2.3	2.3	2.3
Legislated fiscal mandate and supplementary target								
Cyclically adjusted net borrowing	2.6	15.1	8.3	3.9	2.7	1.8	1.7	1.5
Public sector net debt ¹	84.2	96.6	98.2	97.9	97.8	94.7	90.5	88.0
Budget 2020 fiscal targets								
Current budget deficit (c+e-a)	0.7	11.8	5.3	0.6	-0.5	-0.9	-1.0	-1.1
Debt interest to revenue ratio (per cent)	3.7	2.5	4.3	3.6	2.9	2.7	2.7	2.6
Other deficit measures								
Public sector net borrowing (b-a)	2.6	15.2	7.9	3.3	2.4	1.7	1.7	1.5
Cyclically adjusted current budget deficit	0.8	11.6	5.7	1.2	-0.2	-0.9	-1.0	-1.1
Primary deficit	1.2	14.3	6.3	2.0	1.3	0.7	0.6	0.5
Cyclically adjusted primary deficit	1.3	14.2	6.7	2.5	1.6	0.8	0.6	0.5
Financing								
Central government net cash requirement	2.5	16.1	6.8	4.4	3.2	2.7	2.2	1.8
Public sector net cash requirement	0.8	16.1	10.2	4.3	3.2	0.7	-0.7	0.5
Alternative balance sheet metrics								
Public sector net debt ex. Bank of England	75.9	86.1	85.2	85.4	85.7	85.1	84.2	83.3
Public sector net financial liabilities	73.2	86.0	85.4	83.9	82.8	80.8	78.9	76.8
International comparisons								
General government net borrowing	2.8	15.4	8.1	3.3	2.3	1.8	1.8	1.5
Cyclically adjusted GGNB	2.8	15.3	8.4	3.8	2.7	1.9	1.8	1.5
£ billion								
Current budget deficit	15.1	247.3	122.9	15.8	-12.5	-25.1	-28.1	-32.9
Public sector net investment	41.8	72.7	60.1	67.2	74.1	71.4	74.5	76.9
Public sector net borrowing	56.9	319.9	183.0	83.0	61.6	46.3	46.4	44.0
Cyclically adjusted net borrowing	58.6	316.7	191.2	96.1	69.7	48.4	46.5	44.0
Cyclically adjusted current budget deficit	16.8	244.0	131.1	28.9	-4.3	-23.1	-28.0	-32.9
Public sector net debt	1,793	2,136	2,369	2,479	2,561	2,567	2,546	2,567
Net debt interest	30.0	19.4	36.0	33.7	28.8	27.7	28.8	29.5
Non-interest receipts	805.0	771.9	837.6	934.6	989.1	1,030	1,070	1,114
Memo: Output gap (per cent of GDP)	0.1	-0.3	0.8	0.7	0.3	0.0	0.0	0.0

¹ Debt at end March; GDP centred on end March.

Risks and uncertainties

3.148 In our 2021 *Fiscal risks report*, we discussed three sources of potentially ‘catastrophic’ fiscal risk (one which had crystallised): the coronavirus pandemic, climate change, and the cost of government debt. These three sources of risk share a set of common features including a high degree of uncertainty around their impact and timing, their potential to generate rapidly ‘snowballing’ fiscal effects if left unchecked, and their global impact, with the potential for contagion between countries. All three remain key sources of risk to our central forecast and are reflected in our analysis throughout this document:

- **Coronavirus pandemic.** The path of the pandemic remains a key source of uncertainty. Relative to our March assumptions, the faster rollout of more effective than expected vaccines provides positive news, but this has largely netted off against the impact of the emergence of the more transmissible Delta variant. Looking ahead, key sources of uncertainty remain, including the path of the virus through this winter, with risks skewed to the downside. These include: the emergence of a vaccine-resistant variant; waning vaccine immunity; and a stronger seasonal spike in infections requiring the reintroduction of restrictions – which effective vaccine boosters could mitigate.
- **Climate change.** The fiscal risks presented by climate change include both ‘physical risks’ stemming from global warming itself, as well as ‘transition risks’ relating to the shift towards a low-carbon economy. Since our report in July, the physical risks are largely unchanged and subject to the outcome of the COP26 negotiations, but will remain highly uncertain and particularly difficult to forecast and quantify even after that. However, as Box 3.3 sets out, the Spending Review does crystallise some transition risks in respect of significant net zero public investment funded within the 2021 Spending Review envelope. Our fuel duty forecast also reflects faster than expected take-up of electric vehicles reducing revenues. But the largest risks from the transition to net zero remain beyond our forecast horizon. And they continue to be dwarfed by the potentially catastrophic risks that unmitigated climate change would bring.
- **The cost of government debt.** Debt interest costs have been revised up in this forecast reflecting higher inflation in the short term, as well as higher interest rates across the forecast. But despite recent rises, global real interest rates remain very low, and a more persistent rise in the cost of debt continues to represent a material risk to the fiscal outlook. Indeed, interest rates have continued to rise since our forecast was closed (as discussed in Chapter 4). As the scenarios in our *Fiscal risks report* illustrated, the risks associated with higher interest rates depend crucially on what drives them. At the benign end would be rises associated with stronger underlying productivity growth, which would lift tax receipts too. At the malign end would be rises associated with risk premia on UK debt that raise the cost of borrowing and weigh on growth and receipts.

3.149 Beyond these three major sources of risk, there are also more conventional fiscal risks that could have adverse consequences over and above our central forecast. These include:

- **The risk of another recession.** The fact that the UK is emerging from an unprecedented economic shock from the pandemic does not mean that it will be spared from further shocks hitting in the coming years. History warns that there is a roughly one-in-two chance of a recession in any five-year period.
- **Energy price and inflation risks.** Rising wholesale energy prices and the prospect of inflation rising by even more than we forecast provides a challenging backdrop to this Budget, and a downside risk to our fiscal forecast. Our alternative scenario for higher and more persistent inflation point to adverse consequences of shocks that emanate from product or energy markets (with our scenario adding 1.4 per cent of GDP to borrowing for a 2.4 percentage point increase in inflation and sharp rise in Bank Rate next year). Indeed, market movements since we closed our forecast would be sufficient to add £3.6 billion to borrowing in 2024-25. Rising energy prices also incur the additional risk of government intervention being deemed necessary to protect businesses and consumers from rising costs, which could raise borrowing or create new liabilities on the government's balance sheet.
- **Policy risks.** As well as 'exogenous' fiscal risks relating to the economy, there are also 'endogenous' risks, where government policy could raise borrowing above our central forecast. Several sources of risk are described in Annex A, including the historical precedent that suggests that temporary policies, such as fuel and alcohol duty freezes and the HGV levy suspension, have a tendency to be rolled over each year, effectively becoming long-term policies. In addition, the IFS has argued that health spending could be topped up even beyond the extra resources committed through the new health and social care levy (calculating that historical precedent would point to a further £5 billion by the end of the Parliament).²³ Finally, there remains as yet largely unquantified costs of achieving aspirations on climate change and levelling up.

3.150 This points to the risks all Chancellors face when managing the public finances – the need to address slowly building pressures, while being mindful of the risk of being thrown off course by unexpected events. That is why Chancellors tend to aim to meet their fiscal targets with a degree of headroom – an issue we turn to in Chapter 4.

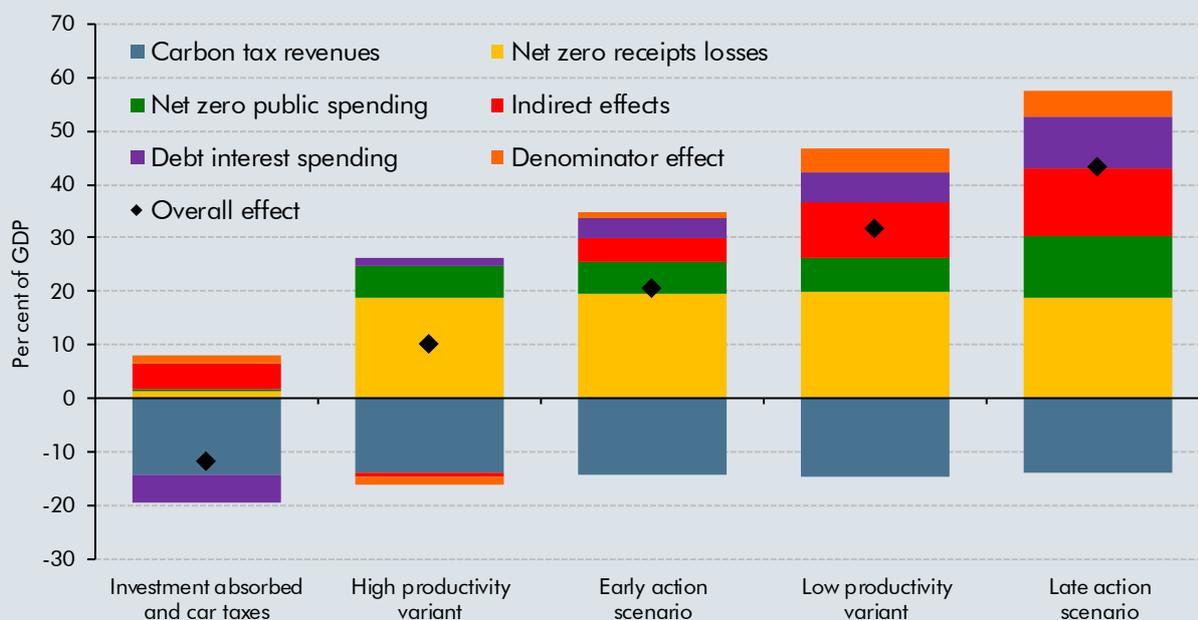
Box 3.3: Climate-related measures in the Budget and Spending Review

Our 2021 *Fiscal risks report (FRR)* explored the fiscal risks posed by climate change and the Government's commitment to reduce the UK's net carbon emissions to zero by 2050. We concluded that unmitigated climate change would ultimately have catastrophic economic and fiscal consequences for the UK. By contrast, while the fiscal costs of getting to net zero could be significant, adding around 21 per cent of GDP to public debt by 2050 in our 'early action scenario', they are not exceptional relative to the costs of other recent global shocks, such as the financial crisis and the pandemic. And there is a range of scenarios for getting to net zero, some of which could even improve the public finances over the next thirty years were the Government

²³ IFS, *An ever-growing NHS budget could swallow up all of this week's tax rise, leaving little for social care*, September 2021.

to accommodate net zero investment within its existing spending plans and find a replacement for declining fuel and other hydrocarbon revenues. We also concluded that acting early could halve the net fiscal cost of getting to net zero by 2050 compared to acting late (Chart C).

Chart C: Climate change scenarios: impact on public sector net debt in 2050-51



Source: OBR

Since our *FRR* was published, the Government has released its long-awaited Net Zero Strategy (NZS), which provides a comprehensive plan for the UK to achieve net zero.^a The Treasury’s accompanying Net Zero Review (NZR) provides additional analysis of the economic, fiscal, and distributional issues this raises.^b Our *FRR* scenarios provided an illustration of what the long-term fiscal impact of getting to net zero *could be*, not what it *should be*. But it is nevertheless useful to consider how the cost of policies announced in the NZS, Budget and Spending Review compare with our own estimates and assess the residual risk to the public finances after these policies are taken into account.

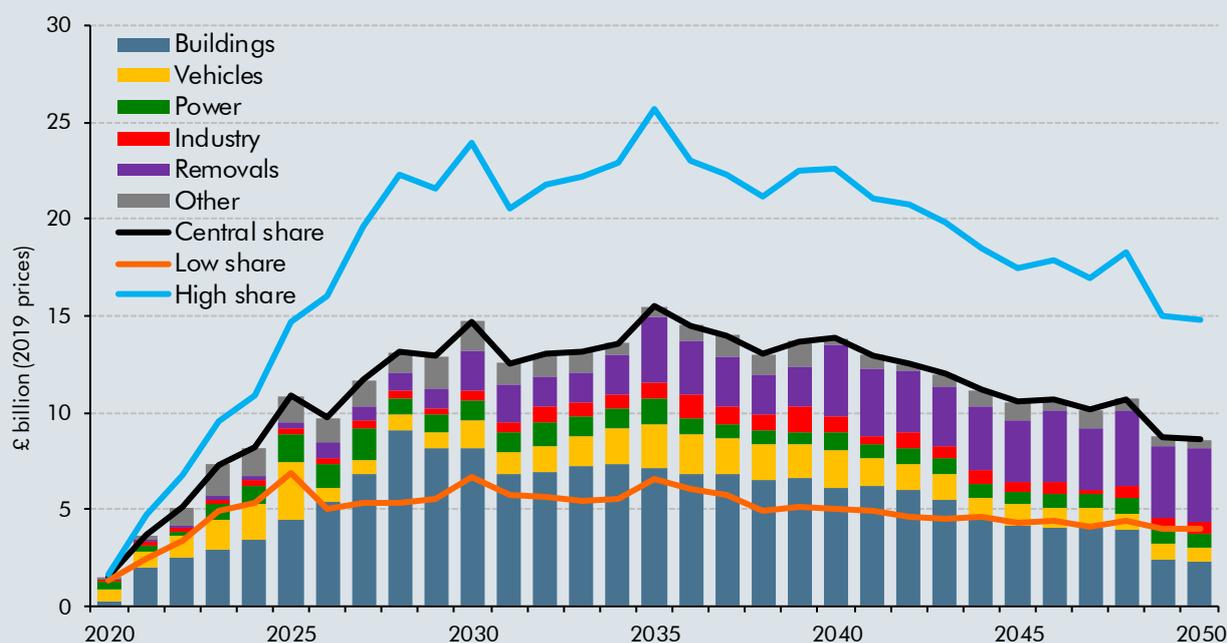
In the Spending Review, the Treasury has estimated that net zero spending between 2021-22 and 2024-25 – spanning the 2020 and 2021 Spending Reviews – will total £25.5 billion, rising from £4.4 billion this year to £7.7 billion in 2024-25 (from 0.4 to 0.7 per cent of total public spending). This down payment toward the overall investment cost of getting to net zero has been found from within existing spending totals (which saves some net fiscal costs relative to our central scenario which assumed all net zero investment was additional to existing plans).

The £25.5 billion figure is broadly in line with the investment assumed in the early period of the ‘central spending variant’ of our early action scenario (Chart B), which was based on whole economy cost estimates from the Climate Change Committee’s (CCC) ‘balanced net zero pathway’ and totalled £28.4 billion between 2021-22 and 2024-25. However, these estimates are not like for like in that:

- The Treasury's investment estimates are the sum of amounts allocated to individual schemes funded in this and the previous Spending Review (plus the continuing cost of the Renewable Heat Incentive). As such, they reflect the gross investment allocated to spending on these activities (i.e. the purchase of an electric bus) and do not net off the amounts that would have been spent in a carbon-intensive counterfactual world (i.e. the purchase of a diesel bus).
- The CCC's investment estimates used in our scenario relate to the *marginal* (additional) costs of decarbonisation over and above the costs that would have been incurred in a carbon-intensive counterfactual world (i.e. the cost of installing a heat pump over and above that of installing a gas boiler in the counterfactual).

In some cases, the Treasury figures will clearly be higher – the amount allocated to purchasing zero-emissions buses will exceed the marginal cost of purchasing them rather than diesel ones. In others, the Treasury figures will be lower – £5,000 grants for domestic heat pumps being offered via the 'Boiler Upgrade Scheme' is less than the £10,000 marginal cost of installing one relative to a gas boiler assumed in the CCC figures. The net effect of these differences cannot be calculated without knowing what counterfactual spending would have been in these areas.

Chart D: *FRR* scenarios for public investment in the transition to net zero



As foreshadowed in our *FRR* scenario, the decarbonisation of buildings is the largest recipient of net zero spending identified by the Treasury (at £9.7 billion it accounts for 38 per cent of the total over four years). In our *FRR* scenario, which assumed that the Government would cover all of the cost of decarbonising its own estate, plus half the costs of decarbonising the more than 28 million private residences with gas boilers and other fossil-fuel heating systems, the real terms cost of decarbonising buildings totalled £165 billion by 2050 (nearly half the total).

The *FRR* identified decarbonising domestic heating as a particular challenge (see Box 3.3). The Heat and Buildings Strategy,^c published alongside the NZS, announced a ‘Boiler Upgrade Scheme’ that will provide £450 million in £5,000 grants to replace household gas boilers with heat pumps over the next three years.^d If each heat pump cost £10,000, this would be sufficient to cover half the cost of installing around 90,000, decarbonising around 30,000 houses a year. But this represents one-twentieth of the 600,000 heat pump installations a year by 2028 assumed in the CCC’s balanced pathway – a figure endorsed in the Heat and Buildings Strategy itself. The Government expects 200,000 heat pumps a year to be installed in new build homes by 2027 (although it has yet to put in place the regulations to mandate this). It seems clear that this will remain a potential source of pressure on public spending for many years to come.

Public spending is not the only policy lever available to support the transition to net zero, with carbon taxes and regulatory levers among others that can be pulled. The NZS emphasises the use of public money to catalyse a private sector response. It aims to further incentivise this response with regulatory deadlines for phasing out petrol vehicles and coal-fired power plants. In addition, it documents several less-concrete goals for things like zero-emission aviation, the production of hydrogen fuel, and the ending of fossil-fuel boiler installations.

The Government made no firm statements concerning the revenue opportunities and challenges of climate change in the NZS, though it did note the potential for greater use of the UK Emissions Trading Scheme. The Treasury’s NZR did, however, highlight the looming loss of 1.7 per cent of GDP (£37 billion in today’s terms) in revenue from fuel duty, VED and other high-carbon taxes, resulting from rising take-up of electric vehicles and other low-carbon technologies, and floated the option of extending carbon pricing.

In addition, the Budget included several tax measures likely to reduce emissions, including:

- **An expanded business rates relief for green energy equipment.** This costs £140 million in the period to 2026-27. This cost does not reflect an explicit estimate of the behavioural response to the incentive it creates, with assumed growth in the tax base instead reflecting the NZS more broadly rather than isolating the effect of individual policy interventions.
- **Reinstating a third band in air passenger duty (APD) for the longest long-haul flights.** This raises £145 million in the period to 2026-27. It is assumed to result in around 23,000 fewer passenger journeys a year to destinations more than 5,500 miles away (a fall of less than 1 per cent).

But the Budget also included two more costly tax measures likely to increase emissions:

- **The twelfth successive one-year fuel duty freeze.** This costs £7.9 billion over the five years to 2026-27. Lowering the price of motoring in real terms is expected to increase fuel purchases over the next five years by 450 million litres (a 0.2 per cent increase).
- **Introducing a lower rate of APD for domestic flights.** This costs £275 million in the period to 2026-27. It is assumed to result in around 410,000 more passenger journeys a year (a

3.5 per cent rise), with that increase split evenly between genuinely additional flights taken and those displacing journeys that would otherwise have been taken by car.

From an overall fiscal perspective, as summarised in Table B, the Government's Net Zero Strategy and Review, Budget, and Spending Review, make a material initial contribution to the overall economy-wide investment costs of getting to net zero emissions by 2050. And while the Budget includes tax measures that could assist on the path to net zero, it also includes tax measures that will make the job of getting there more difficult (and more expensive for the Treasury) by lowering the price of motoring and domestic air travel over the next five years. The Government has not yet quantified the individual or net effect on emissions of these measures.

Table B: Emissions-related spending versus Budget tax measures

	£ billion						Total
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
Emissions-reducing spending	4.4	5.5	8.0	7.7			25.5
<i>of which:</i>							
Buildings	2.5	2.0	2.5	2.7			9.7
Transport	1.5	1.9	2.0	1.8			7.2
Power	0.2	0.8	2.1	1.3			4.4
Net zero innovation	0.0	0.4	0.4	0.7			1.5
Industry, CCS and hydrogen	0.0	0.1	0.5	0.8			1.4
Natural environment and waste	0.1	0.2	0.6	0.4			1.3
Emissions-reducing tax reforms¹		0.00	0.01	0.00	-0.01	0.00	0.00
<i>of which:</i>							
Business rates relief		0.00	0.03	0.03	0.04	0.04	0.14
APD higher rate for long haul		0.00	-0.02	-0.04	-0.04	-0.04	-0.14
Emissions-increasing tax reforms¹		1.51	1.61	1.65	1.67	1.69	8.12
<i>of which:</i>							
Fuel duty freeze		1.51	1.55	1.58	1.59	1.62	7.85
APD lower rate for domestic		0.00	0.06	0.07	0.07	0.07	0.27

¹Some other tax measures that could affect emissions have not been included because their effects are small, temporary or uncertain.

Of course, Government policy is not the only factor influencing the decisions that households and businesses make in respect of the transition to net zero. Market prices are constantly changing too and the changes since our previous forecast in March have encouraged more rapid decarbonisation. Sharp rises in wholesale gas prices will reduce demand, with the incentive felt more quickly for businesses than for households since they are not protected (temporarily) by a price cap. Similarly, higher traded carbon prices have significantly raised the cost of carbon allowances issued under the UK Emissions Trading Scheme, revenue from which has trebled in 2022-23 relative to our March forecast, again discouraging higher-carbon activity in the sectors it covers.

Taken together, the policies announced in the Budget, Spending Review, and Net Zero Strategy, and the significant rises in market prices for hydrocarbons since we completed our *Fiscal risks report* in the summer, are likely to spur further reductions in carbon emissions and help to move the UK further along the path to net zero. But the whole economy costs involved in getting the rest of the way by 2050 remain significant and their apportionment between businesses,

households, and government beyond the next few years, remains largely unclear. This leaves the costs associated with the transition to net zero as a major source of longer-term fiscal risk.

^a BEIS, *Net Zero Strategy: Build Back Greener*, October 2021.

^b HM Treasury, *Net Zero Review: Analysis exploring the key issues*, October 2021.

^c BEIS, *Heat and Buildings Strategy*, October 2021.

^d BEIS, *Future Support for Low Carbon Heat: Boiler Upgrade Scheme*, October 2021

4 Performance against the Government's fiscal targets

Introduction

4.1 This chapter:

- sets out **the current legislated fiscal targets** and assesses their likelihood of being met on current policy under our central forecast (from paragraph 4.2);
- sets out **the Government's proposed fiscal targets** and assesses their likelihood of being met, as well as discussing the broader indicators that are intended to guide fiscal management (from paragraph 4.4); and
- considers **uncertainty around our fiscal forecast** and the risks to the Government meeting its proposed fiscal rules based on both historical forecast errors and potential shocks to key macroeconomic and fiscal determinants (from paragraph 4.36).

The legislated fiscal targets

4.2 The Government has proposed new fiscal rules in a revised draft *Charter for Budget Responsibility* published alongside the October 2021 Budget and Spending Review. However, until it has been voted on by Parliament, the existing *Charter*, proposed by Chancellor Philip Hammond in his 2016 Autumn Statement, remains in force. It requires the OBR to judge whether the Government has a greater than 50 per cent chance under current policy of meeting the following set of fiscal targets:

- A near-term **fiscal mandate** that requires the structural deficit (cyclically adjusted public sector net borrowing) to be less than 2 per cent of GDP by 2020-21.
- A near-term **supplementary debt target** that requires the ratio of public sector net debt to GDP to be falling in 2020-21.
- A medium-term **welfare cap** that requires a subset of welfare spending to be less than a ceiling of £127 billion in 2024-25, with that cap adjusted for subsequent changes in our inflation forecast, and for the effects of welfare spending devolution in Scotland.
- A longer-term **fiscal objective** to “return the public finances to balance at the earliest possible date in the next Parliament”. In practice this has been interpreted as bringing public sector net borrowing to balance by 2025-26.

The implications of our central forecast

4.3 Table 4.1 summarises performance against the legislated fiscal targets – two of which now relate to a year for which outturn data are available and two of which are still in the future. All four targets are missed by significant margins:

- The **fiscal mandate** was missed by £274.7 billion (13.1 per cent of GDP).
- The **supplementary debt target** was missed by 12.5 per cent of GDP.
- Spending subject to the **welfare cap** is on course to exceed the legislated cap in 2024-25 by £7.9 billion and to exceed the cap plus margin by £4.1 billion (Table 4.2). These figures compare with £6.9 billion and £3.1 billion respectively in March 2021.
- The legislated **fiscal objective** is on course to be missed by £46.4 billion (1.7 per cent of GDP). This is narrower than the 2.8 per cent deficit we predicted in March 2021, thanks to pre-measures forecast improvements that outweigh the net fiscal giveaway announced in the Budget. Our March 2020 forecast did not extend to 2025-26, but it predicted a deficit of 2.2 per cent of GDP in 2024-25.

Table 4.1: Performance against the Government's legislated fiscal targets

		Per cent of GDP		£ billion	
		Forecast	Margin	Forecast	Margin
Fiscal mandate: Cyclically adjusted public sector net borrowing in 2020-21					
March 2020 forecast	Not Met	2.4	-0.4	55.3	-9.2
March 2021 forecast	Not Met	16.5	-14.5	345.4	-303.4
October 2021 forecast ¹	Not Met	15.1	-13.1	316.7	-274.7
Supplementary target: Year-on-year change in public sector net debt in 2020-21					
March 2020 forecast	Met	-2.0	2.0		
March 2021 forecast	Not Met	15.8	-15.8		
October 2021 forecast ¹	Not Met	12.5	-12.5		
Welfare cap: Specified welfare spending in 2024-25					
March 2020 forecast	Met			133.5	4.1
March 2021 forecast	Not Met			127.9	-3.1
October 2021 forecast	Not Met			134.2	-4.1
Public sector net borrowing in 2025-26²					
March 2021 forecast	Not Met	2.8	-2.8	73.7	-73.7
October 2021 forecast	Not Met	1.7	-1.7	46.4	-46.4

¹ Outturn based on the latest vintage of public finances data and nominal GDP data available at the time our forecast was closed.

² The forecast horizon did not extend up to 2025-26 in March 2020.

Table 4.2: Performance against the legislated welfare cap

	£ billion, unless otherwise stated					
	Outturn 2019-20	Forecast				
		2020-21	2021-22	2022-23	2023-24	2024-25
Welfare cap						126.8
Pathway	119.2	119.4	119.2	121.2	124.1	
Margin (per cent)	0.5	1.0	1.5	2.0	2.5	3.0
Margin	0.6	1.2	1.8	2.4	3.1	3.8
Welfare cap and pathway plus margin	119.8	120.6	121.0	123.6	127.2	130.6
Latest forecast and update on performance against cap and pathway						
October 2021 forecast	118.7	123.4	123.6	126.2	131.0	134.2
Inflation adjustment	0.0	0.0	1.1	-0.5	-3.0	-3.7
Scottish welfare block grant adjustment	0.3	3.2	3.3	3.6	3.9	4.1
October 2021 forecast after adjustments	118.9	126.6	128.0	129.3	131.9	134.7
<i>Difference from:</i>						
Cap and pathway	-0.3	7.2	8.7	8.1	7.7	7.9
Cap and pathway plus margin	-0.9	6.0	6.9	5.7	4.6	4.1
<i>Memo: cumulative percentage point change in preceding September (Q3) rates of inflation since our March forecast.</i>						
	-1.6	-1.6	-1.2	-2.6	-0.2	1.0
Note: The inflation adjustment is positive for future years as inflation is lower in forecast years than forecast in our March 2020 EFO. This takes the effect of the change in inflation out of the spending forecast.						

Proposed fiscal targets

4.4 The Government has published a draft update to the *Charter* alongside the Budget, which will need to be debated and voted on by Parliament to come into legal force. The draft *Charter* proposes a new fiscal mandate:

- To have **public sector net debt excluding the Bank of England** as a percentage of GDP falling by the third year of the rolling forecast period.

4.5 The draft *Charter* also proposes three supplementary targets.

One is a target for a measure of the fiscal balance:

- To balance the **current budget** by the third year of the rolling forecast period.

And two are expenditure caps:

- To ensure that **public sector net investment** does not exceed 3 per cent of GDP on average over the rolling five-year forecast period.
- To ensure that **expenditure on welfare** is contained within a predetermined cap and margin set by the Treasury. (The cap continues to exclude the state pension and payments that are most closely linked to the economic cycle.)

- 4.6 In the event of a significant negative shock to the UK economy, the Treasury will temporarily suspend the fiscal mandate and supplementary 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.
- 4.7 The draft *Charter* also includes a new section identifying 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 a range of:
- **Debt affordability metrics**, and their sensitivity to changes in the economic outlook, as well as wider risks such as the share of debt held overseas.
 - **Wider public sector balance sheet metrics** such as public sector net financial liabilities and net worth, alongside the debt measure that is targeted in the fiscal mandate.
- 4.8 With the *Charter* now including four fiscal targets to assess and at least five additional fiscal indicators to monitor, we focus on the two fiscal targets that feature most prominently in the Chancellor's own presentation: to have debt falling and to achieve current balance. We provide a briefer assessment of the caps on welfare spending and net investment, and a summary discussion of what our central forecast implies for the supplementary indicators.
- 4.9 In many respects, the proposed fiscal targets are similar to those included in the 2019 Conservative manifesto that framed the Chancellor's March 2020 Budget and to the fiscal principles he set out subsequently that framed his March 2021 Budget. And as we noted in our March *EFO*, fiscal targets for the current balance and public sector net debt have proved by far the most durable of the targets that successive Chancellors have adopted over the past quarter of a century: together, Gordon Brown's 'golden rule' and 'sustainable investment rule' (in place from 1997 to 2008) and George Osborne's 'fiscal mandate' and 'supplementary debt target' (in place from 2010 to 2015) cover two-thirds of that period.
- 4.10 The *Charter* retains the aims of balancing the current budget and limiting net investment to 3 per cent of GDP from the manifesto targets. But it also incorporates the Chancellor's March 2021 fiscal principles by including a specific target for the trajectory of debt, whereas the manifesto contained a threshold on debt interest as a share of revenues (while stating that the pursuit of the targets therein would mean that "*debt will be lower at the end of the Parliament*"). While the manifesto rule to keep the debt-interest-to-revenue ratio below 6 per cent has been dropped, the metric itself will continue to be monitored as an affordability indicator. The *Charter* also builds on Philip Hammond's expanded monitoring of the government's *financial* balance sheet (a requirement to forecast 'public sector net financial liabilities' was added to the *Charter* in Autumn Statement 2016) by adding consideration of broader balance sheet metrics that now extend to the *entire* balance sheet in the form of 'public sector net worth', a forecast of which is included in this *EFO* for the first time.

The implications of our central forecast

4.11 In our central forecast, the proposed fiscal mandate and all three supplementary targets are more likely to be met than missed (as summarised in Table 4.3):

- 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 0.6 per cent of GDP (£17.5 billion). The measures in this Budget almost halve the 1.1 per cent of GDP by which it would have been met on a pre-measures basis. This target was also on course to be met in both our March 2021 and March 2020 forecasts, although by smaller margins in each.
- The target to balance the **current budget** in 2024-25 is met by a margin of £25.1 billion (0.9 per cent of GDP). On a pre-measures basis, the margin would have been £31.6 billion, but Budget measures reduce it by £6.5 billion. Even so, it is greater than would have been the case in our March 2021 forecast, when this target would have been on course to be missed by £3.2 billion. And remarkably, the margin is £3.9 billion *larger* than would have been the case in our pre-pandemic March 2020 forecast, thanks to the significant net tax rises announced since then.
- **Public sector net investment (PSNI)** remains below 3 per cent of GDP on average over the forecast (by £7.3 billion a year on average). In our latest forecast, PSNI averages 2.7 per cent of GDP, down slightly from our March 2020 and March 2021 forecasts.
- The **welfare cap** has been reset in line with our central forecast, so is met by £2.8 billion due to the 2 per cent headroom that the cap affords.

Table 4.3: Performance against the Government's proposed targets

		Per cent of GDP		£ billion	
		Forecast	Margin	Forecast	Margin
Year-on-year change in public sector net debt excluding Bank of England in 2024-25					
March 2020 forecast	Met	-0.2	0.2		5.7
March 2021 forecast	Met	-0.0	0.0		0.8
October 2021 pre-measures forecast	Met	-1.1	1.1		28.6
October 2021 forecast	Met	-0.6	0.6		17.5
Current budget surplus in 2024-25					
March 2020 forecast	Met	0.8	0.8	21.2	21.2
March 2021 forecast	Not Met	-0.1	-0.1	-3.2	-3.2
October 2021 pre-measures forecast	Met	1.2	1.2	31.6	31.6
October 2021 forecast	Met	0.9	0.9	25.1	25.1
Public sector net investment average over the five year forecast					
March 2020 forecast	Met	2.9	0.1		2.7
March 2021 forecast	Met	2.8	0.2		5.2
October 2021 pre-measures forecast	Met	2.7	0.3		6.8
October 2021 forecast	Met	2.7	0.3		7.3
Welfare cap: specified welfare spending in 2024-25					
October 2021 forecast	Met			138.3	2.8

Box 4.1: The impact of post-forecast developments on fiscal target headrooms

The Foreword to this document describes how our pre-measures fiscal forecast was finalised earlier than usual, on 1 October, in order to give the Chancellor a stable base on which to make decisions for the Budget and Spending Review. And Box 2.3 describes the news that has accumulated over the intervening period. We conclude that upside news in historical GDP data was broadly offset by more recent downside news in terms of the outlook for real GDP, but that higher energy prices point to a higher near-term path for inflation, while market expectations for interest rates have risen materially. Using ready-reckoners drawn from relevant fiscal forecast models, we can calculate the direct effect of these developments on the headroom against debt falling and balancing the current budget in 2024-25. As Table A reports, headroom would be slightly smaller, but still positive, for both.

The £1.9 billion loss of headroom against debt falling and £3.6 billion loss relative to the current balance are largely explained by the net effect of higher interest rates on debt interest spending and interest receipts. North Sea revenues are also boosted by the higher energy prices, while welfare and public service pensions spending are lifted by higher inflation. The fact that income tax thresholds are frozen in cash terms means higher inflation does not lead to a loss of fiscal drag (with the cost instead being borne by taxpayers).

Table A: Indicative effects on target headrooms of news since closing the forecast

	Difference from forecast	£ billion in 2024-25			
		Receipts	Spending	Current budget surplus	Change in PSND ex BOE
Oil prices (\$/barrel) ¹	6.2	0.2	0.0	0.2	
Wholesale gas prices (p/therm) ¹	23.7	0.7	0.0	0.7	
Market-implied Bank Rate (percentage points) ²	0.3	1.1	3.6	-2.5	
Gilt yields (percentage points)	0.2	0.0	1.1	-1.1	
CPI and RPI inflation (percentage points) in 2022-23 ³	0.4	0.1	1.1	-0.9	
Total		2.2	5.8	-3.6	-1.9

Note: Market determinants as of 22 October.

¹ Direct impact on North Sea revenues.

² Combined impact on debt interest spending, interest receipts and tax on savings income.

³ Effect of higher fuel and utility bills on inflation (impact on welfare and tax indexation and debt interest from index-linked gilts).

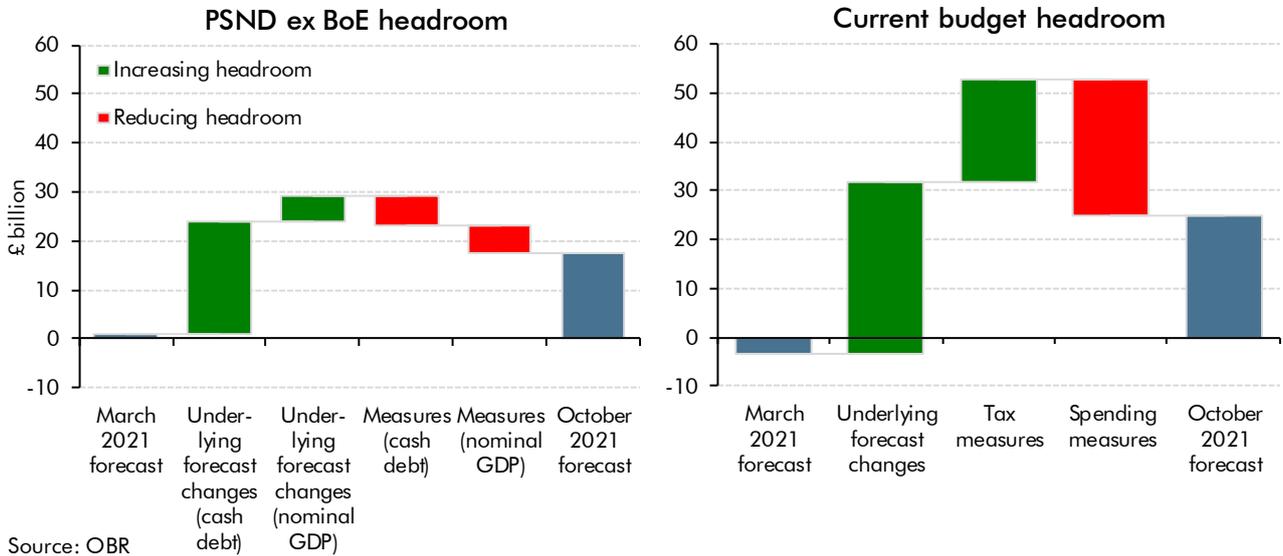
Changes in headroom against the fiscal targets

Debt falling and current balance

- 4.12 Several factors explain the modest improvement in the headroom to the debt falling and current balance targets relative to our March 2021 forecast (Chart 4.1). Factors raising headroom include underlying forecast changes (reducing real GDP scarring from 3 to 2 per cent and the effect of higher inflation on nominal tax bases) and net tax rises (the introduction of the health and social care levy, which outweighs the cost of freezing fuel duty

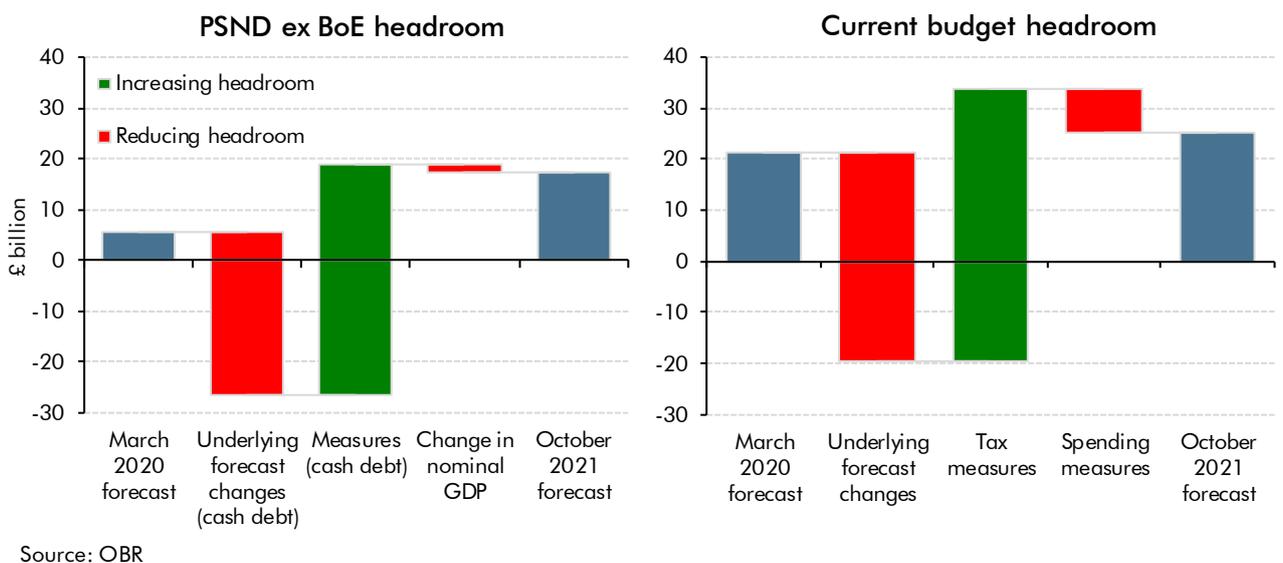
again). These are partially offset by the large spending increases announced in this Budget and Spending Review (dominated by the increases to departmental resource spending).

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



4.13 Chart 4.2 presents the same breakdown relative to our pre-pandemic March 2020 forecast. The increase in headroom, despite having experienced a once-in-a-century peacetime fiscal shock in the interim, is the result of large net tax rises (which include the higher main rate of corporation tax and frozen income tax thresholds, as well as the new health and social care levy). These offset the cost of pandemic-related economic scarring and the increases in public spending announced since March 2020.

Chart 4.2: Fiscal target headrooms in 2024-25: latest forecast versus March 2020



Investment cap

4.14 The increased headroom against the investment cap largely reflects higher nominal GDP over the forecast period, which increases the denominator in the targeted ratio. While there have been only modest changes to the Government’s gross capital spending plans, depreciation has been revised up, so net investment is lower on average in cash terms.

Welfare cap

4.15 The Government first introduced a welfare cap in Budget 2014. It has been reset frequently since then. Some changes were technical ones reflecting the classification of spending, but most represented genuine changes in the amount of spending permitted under the cap. Only one made the cap harder to meet – Chancellor George Osborne’s Summer Budget 2015 reduction in the cap to lock in the welfare cuts that he announced in that Budget (large elements of which were subsequently dropped or partly reversed). Since then, the cap has been raised at each of the four occasions that it has been substantively reset: twice under Chancellor Philip Hammond (in Autumn Statement 2016 and in Autumn Budget 2017); and twice under Chancellor Rishi Sunak (in Spring Budget 2020 and in this Budget).

4.16 The proposed new cap applies in 2024-25 – the same year as the existing cap, and uses the same methodology, including an inflation adjustment stipulated in the *Charter* and the Scottish block grant adjustment (Table 4.4). The new cap is £11.6 billion higher than the one it replaces. But it provides a smaller margin of 2 per cent rather than 3 per cent, so the effective cap (i.e. the cap plus margin), is £10.5 billion higher than the one it replaces. The new *Charter* allows the Government to amend the cap without a House of Commons vote in the event of a “significant negative shock” that results in the fiscal mandate being suspended. Given how frequently the cap has been reset in the past, it seems unlikely that this additional flexibility represents a material additional risk to our welfare forecast.

Table 4.4: The new welfare cap and margin

	£ billion, unless otherwise stated				
	Outturn 2020-21	Forecast			
		2021-22	2022-23	2023-24	2024-25
Welfare cap					138.3
Pathway	126.6	126.9	129.8	134.9	
Margin (per cent)		0.5	1.0	1.5	2.0
Margin		0.6	1.3	2.0	2.8
Welfare cap and pathway plus margin	126.6	127.5	131.1	136.9	141.1

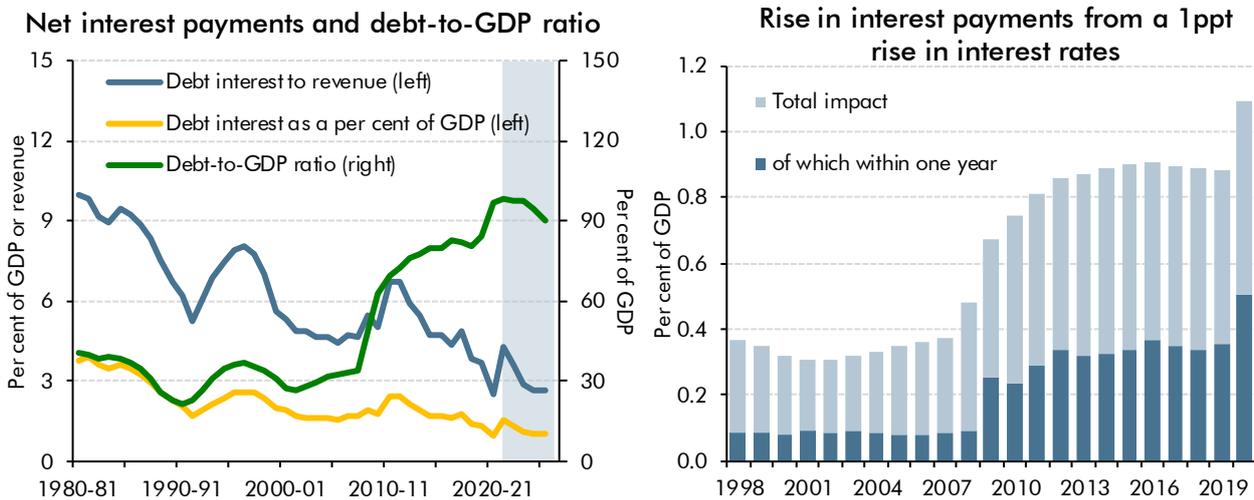
Broader fiscal indicators

4.17 The new *Charter* commits the Treasury to monitoring a broader set of indicators in respect of the affordability of public debt and the whole of the public sector balance sheet “with the aim of supporting the achievement of the fiscal objectives”.

The affordability of public debt

- 4.18 The cost of servicing public debt is at its lowest level in the past century despite the debt-to-GDP ratio in 2020-21 hitting its highest since 1962-63. The left-hand side of Chart 4.3 shows debt interest spending as a percentage of revenue and of GDP, two common affordability metrics. Net interest payments as a per cent of GDP have fallen fourfold from 3.8 per cent of GDP in 1980-81 to 0.9 per cent in 2020-21, despite the debt-to-GDP ratio more than doubling from 40 to 97 per cent over that period. This is mainly due to falling interest rates on high-quality government debt globally. But it is also due to around a third of gilts now being held in the Bank of England whose purchase was financed by the creation of central bank reserves which pay interest at Bank Rate rather than gilt rates (saving the public sector as a whole £17.1 billion in debt interest in 2021-22).¹
- 4.19 While debt servicing costs have fallen, the higher level of public debt and its shorter effective maturity (a by-product of quantitative easing) leave the public finances more exposed to changes in interest rates than they were pre-pandemic and much more so than pre-financial crisis. The right-hand side of Chart 4.3 shows how the overall sensitivity of debt interest spending to a 1 percentage point rise in interest rates trebled between 1998 and 2020 (as the debt-to-GDP ratio trebled), while the proportion of the hit felt in the first year has risen six-fold (largely due to quantitative easing roughly doubling the proportion of debt that responds to interest rate changes within a year). The Government's debt interest spending has also become more sensitive to higher inflation due to the share of index-linked debt rising from 14 per cent of all gilts in 1989-90 to 24 per cent gilts in 2020-21.

Chart 4.3: Debt interest spending chart and sensitivities



Note: The total impact of a one percentage point rise in interest rates is on consolidated public sector liabilities proxied here by the stock of Bank reserves, Treasury bills, NS&I products and gilts net of those held in the APF. The impact within one year is on liabilities with a maturity of less than 1 year (gilts net of APF holdings with a remaining maturity of under one year, Bank reserves, Treasury bills and NS&I).

Source: Bank of England, Heriot-Watt/Faculty and Institute of Actuaries Gilt Database, ONS, OBR

¹ See Chapter 4 of our 2021 *Fiscal risks report* for a detailed discussion of the causes of lower borrowing costs.

Broader measures of the public sector balance sheet

- 4.20 As described in a working paper published alongside this *EFO*,² we have added a new balance sheet measure to our forecasts, public sector net worth (PSNW), to complement our existing suite of balance sheet measures: public sector net debt (PSND), public sector net debt excluding the Bank of England (PSND ex BoE), and public sector net financial liabilities (PSNFL). PSNW is the broadest measure of the balance sheet available in the National Statistics, completing the picture by including non-financial assets and accrued public service pension liabilities, and the liabilities associated with all public-private partnerships. The proposed *Charter* names PSND, PSNFL and PSNW as balance sheet indicators that will be monitored by the Treasury to provide a fuller picture of fiscal sustainability.
- 4.21 As shown in Chart 3.19 in Chapter 3, PSND, PSND ex BoE, PSNFL and PSNW are all on improving paths in the later years of this forecast, with PSNW improving faster than PSNFL, which in turn improves faster than PSND ex BoE:
- The more favourable path for **PSNFL versus PSND ex BoE** reflects the wider range of financial assets included within PSNFL, the value of which is assumed to rise relative to GDP over time (in part due to the continuing issuance of new student loans).
 - The more favourable path for **PSNW versus PSNFL** reflects growth in non-financial assets relative to GDP, including as a result of the flow of public sector net investment, that is partially offset by the growth in unfunded pension liabilities.
- 4.22 One role the *Charter* identifies for broader balance sheet metrics is to help in evaluating the long-term impact of government activity. We have not yet produced long-term projections for PSNW or PSNFL, but our most recent projections for PSND (published in our 2020 *Fiscal sustainability report*) show that the public finances are not on a sustainable path on current policy settings due to a combination of population ageing and other cost pressures in health and adult social care. Our 2021 *Fiscal risks report* discussed some major downside risks to those projections from the coronavirus pandemic, climate change, and the cost of debt.

Summary of the broader fiscal indicators

- 4.23 These broader fiscal indicators are not formal targets, so we do not assess performance against them. Instead, to facilitate monitoring, Figure 4.1 presents those that feature in our forecast in a dashboard that shows: first, their levels and how these compare with the average that prevailed in the decade up to 2007-08, before debt ratcheted higher as a result of the financial crisis (as has happened again as a result of the pandemic); and second, whether they are improving or deteriorating in each year of the forecast.
- 4.24 The dashboard shows how the balance sheet metrics are all currently in a much worse position across the entire forecast than ahead of the financial crisis (the sea of reds and oranges). But also that they are all on an improving path, and increasingly so by the forecast horizon (turning increasingly yellow and green over time). In contrast, the two debt affordability measures are both in a better position than prior to the financial crisis (as lower

² Ebdon, J., and F. Khatun, *OBR Working Paper No. 16: Forecasting the balance sheet: public sector net worth*, October 2021.

interest rates more than offset the effect of higher debt), improving in the first half of the forecast (as inflation subsides) and then stabilising over the medium term.

Figure 4.1: Dashboard of fiscal affordability and balance sheet indicators

	Pre-crisis average	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Level (per cent of GDP, unless otherwise stated)							
Debt affordability metrics							
Net interest costs	1.8	1.6	1.4	1.1	1.0	1.0	1.0
Net interest costs (per cent of revenue)	5.1	4.3	3.6	2.9	2.7	2.7	2.6
Balance sheet metrics							
PSND	30.8	98.2	97.9	97.8	94.7	90.5	88.0
PSND ex BoE	31.0	85.2	85.4	85.7	85.1	84.2	83.3
PSNFL	29.1	85.4	83.9	82.8	80.8	78.9	76.8
PSNW	36.3	83.4	80.9	78.7	75.8	72.6	68.9
Year-on-year change (percentage point of GDP)							
Debt affordability metrics							
Net interest costs		0.6	-0.2	-0.2	-0.1	0.0	0.0
Net interest costs (per cent of revenue)		1.8	-0.7	-0.7	-0.2	0.0	0.0
Balance sheet metrics							
PSND		1.6	-0.3	-0.1	-3.1	-4.1	-2.6
PSND ex BoE		-1.0	0.3	0.3	-0.6	-0.9	-0.9
PSNFL		-0.6	-1.5	-1.1	-2.0	-1.9	-2.0
PSNW		0.4	-2.5	-2.2	-2.9	-3.2	-3.7

Note: Pre-crisis average is 1998-99 to 2007-08. For PSNFL and PSNW, pre-crisis average is 1999-00 to 2007-08 due to data availability. PSNW has been inverted to facilitate comparisons with the other three metrics.

Features of the Government's new fiscal policy framework

4.25 In this section we consider the key features of the Government's proposed targets and indicators, the lessons of history, and the resulting incentives that the Chancellor will face in operating fiscal policy within them. This provides a broader perspective on the Government's chance of meeting its targets over time, factoring in the kind of policy responses they have historically engendered, and adds to the technical analysis of risks and uncertainties set out later in the chapter. We consider:

- the choice of a target for debt falling (rather than the traditional balance target) as the fiscal mandate;
- the choice of rolling targets versus fixed targets and the lead time to the target year;
- the headroom against the chosen target relative to the uncertainty around forecasts; and
- and the range of targets and indicators and the relationships between them.

The choice of a 'debt falling' target

- 4.26 The fiscal mandate is for the trajectory of debt, not a ceiling on the debt-to-GDP ratio. This type of target is similar in some respects to the MPC's inflation target, focusing on the appropriate policy for the future rather than correcting for past surprises. With the inflation target, the price level varies as a result of these surprises; with the fiscal mandate, the debt-to-GDP ratio would vary. But while the price level is not economically meaningful, higher levels of public sector debt can in some circumstances lead to an adverse feedback loop between higher debt and higher interest rates, as we set out in our 2021 *Fiscal risks report*.
- 4.27 The trajectory of the debt-to-GDP ratio is influenced by both the deficit and several other factors known as 'stock-flow adjustments'. These include the issuance of loans to the private sector, where the financing of the loan adds to debt but not the deficit since they are matched by an asset, such as student loans. So Chancellors can pull more policy levers beyond changing the deficit in order to affect the trajectory of debt. But these extra levers can give rise to incentives to influence the target variable in ways that are inconsistent with broader fiscal sustainability (succumbing to what the IMF terms 'fiscal illusions'). The most straightforward example of such a 'perverse incentive' engendered by a 'debt falling' target in particular is the incentive to increase the level of debt in the first two years of the forecast (for example through the issuance of loans) to ensure that it falls in the third year, albeit from a higher level.
- 4.28 History provides several examples of perverse incentives in action as Governments have sought to take advantage of the incomplete balance sheet coverage of PSND. This was most clearly illustrated with respect to sales of student loans, which swapped an asset that is not reflected in PSND for one that is (cash) – thereby creating the 'fiscal illusion' of an improved balance sheet via a reduction in PSND. Accounting treatment changes that meant this illusion came at a cost in terms of higher borrowing led to the sales programme being cancelled.³ The revised *Charter* recognises these risks by requiring the Government to "aim to strengthen over time" more complete public sector balance sheet measures, such as PSNFL and PSNW, which reduces the scope for fiscal illusions.

Rolling versus fixed target horizons

- 4.29 Both the Government's debt-falling mandate and supplementary current balance target are rolling targets to be achieved in the third year of each forecast. By choosing a rolling three-year target and putting in place an escape clause, the Chancellor has implicitly chosen a three-year horizon over which policy can be adjusted in light of 'normal' future surprises, with the escape clause providing more space to deal with larger 'exceptional' shocks.
- 4.30 By contrast, with targets for fixed dates, as the target year gets closer, the shorter the period over which any fiscal surprises must be offset by policy or (as history has shown) the greater the risk that the targets will be missed or abandoned in the face of a shock. Late in its life, Gordon Brown's 'golden rule' to balance the current budget on average over the economic cycle became in effect a short-term fixed date target. In 2005, the start and end dates of the

³ HM Treasury, *Review of the student loan sale programme – Budget 2020*, March 2020.

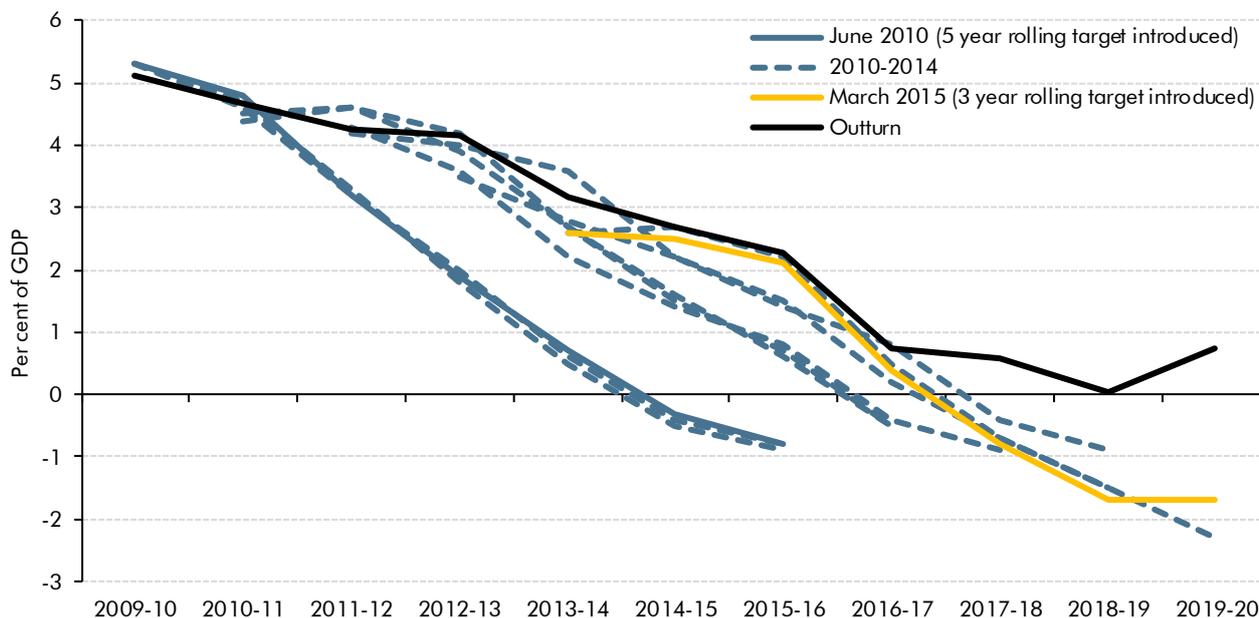
cycle were revised in ways that made the target easier to hit, then in 2008 the targets were abandoned as the financial crisis hit. In 2016, George Osborne chose to shift the timing of a change to quarterly corporation tax payments to boost receipts in 2019-20, which had the effect of helping him to deliver his desired budget surplus in that fiscal year.⁴ The target was abandoned after the EU referendum. Philip Hammond replaced it with a target for the structural deficit to be below 2 per cent of GDP in the fixed year of 2020-21. It was not formally abandoned when the pandemic hit, but was missed by £275 billion.

- 4.31 While rolling targets avoid many of these issues, the fact that the date for meeting them never arrives means that the fiscal position can progressively deteriorate. History tells us that Chancellors tend to take advantage, over successive Budgets, of the additional year to meet their targets by loosening fiscal policy, while planning a sufficiently large fiscal tightening to hit the target in the target year. Chart 4.4 shows the example of the Coalition's rolling structural current balance target (a five-year target from 2010 to 2014, then a three-year target until 2015), which yielded no structural current surpluses in outturn.⁵
- 4.32 This upward drift in the forecast level of borrowing reflects two tendencies that we discussed in our 2019 *Fiscal risks report*. The first is the asymmetric reaction of fiscal policy to shocks in which adverse forecast surprises tend to be accommodated while beneficial surprises are at least partly spent (as has been the case again in this Budget). The second is the 'Augustinian' nature of fiscal policy-setting, where Budgets announce near-term giveaways and promise medium-term takeaways. The latter includes the tendency for spending plans to be tighter when they are first announced as unspecified totals, but then to be relaxed when detailed plans have to be set in a Spending Review (see Chart 3.13 in Chapter 3).

⁴ Our March 2016 *EFO* documented the steps taken to retain a £10 billion margin against this rule, including shuffling capital spending between years, announcing unidentified resource spending cuts via an 'efficiency review', cutting disability benefits, and the corporation tax timing change. The efficiency review never materialised, the disability benefit cut was dropped before it was implemented, and the effect of the corporation tax change was removed when the ONS changed the accounting treatment of corporation tax receipts.

⁵ The headline current balance moved into surplus briefly in 2018-19 (by £2.4 billion), but on our latest estimate the *structural* current balance remained in deficit by £0.7 billion in that year.

Chart 4.4: The Coalition's cyclically adjusted current budget balance rolling target



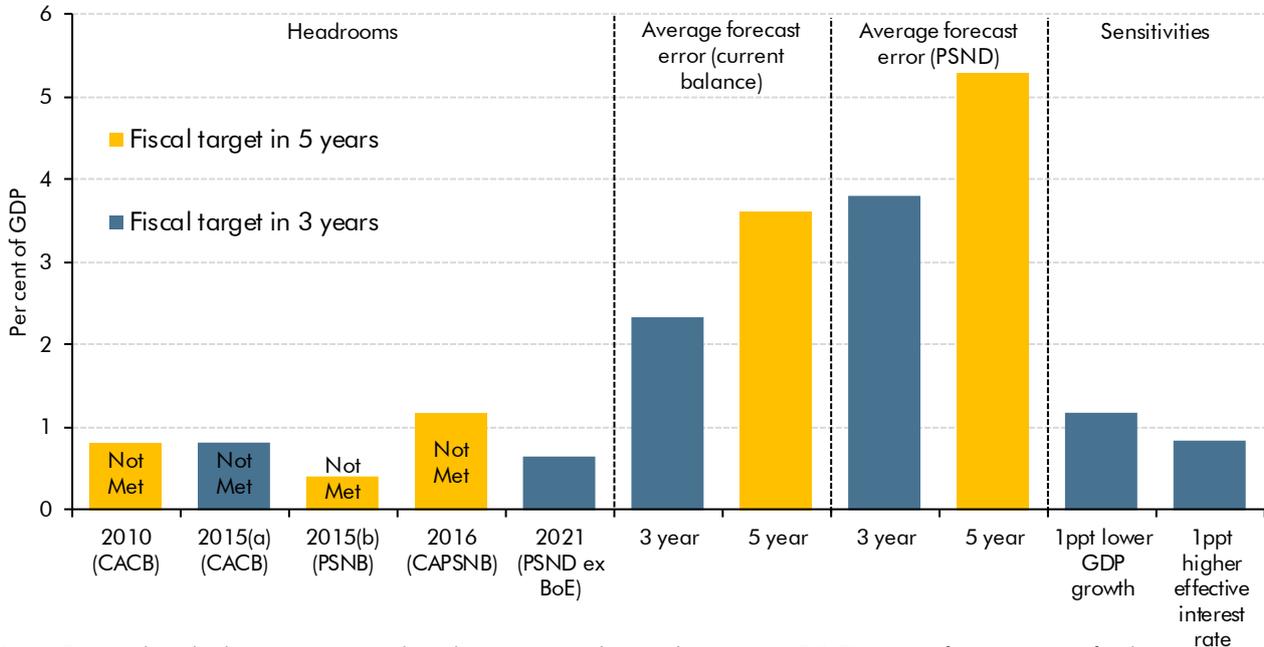
Source: OBR

Headroom against fiscal targets

4.33 Given the uncertainty surrounding our forecast, and the volatility that has characterised the past few years, it is instructive to consider the headroom the Chancellor has left himself against achieving his proposed fiscal targets in the context of different benchmarks. Chart 4.5 shows that although the mandate and supplementary current balance target are met in our central forecast, the headroom he has left himself is small relative to:

- The headroom sought by previous Chancellors.** The Chancellor's headroom against debt falling in 2024-25 is smaller than the headroom George Osborne gave himself when setting his first fiscal mandate in 2010 and smaller than Philip Hammond gave himself in 2016, but is larger than George Osborne gave himself when setting his second fiscal mandate in 2015. None of these previous fiscal mandates were met.
- Typical forecast errors.** Headroom of 0.6 per cent of GDP in three years' time is only a sixth the size of the average three-year ahead forecast error in respect of the year-on-year change in the debt-to-GDP ratio over the past 23 years of official Treasury and OBR fiscal forecasts.
- Sensitivities to individual determinants of the public finances.** With both tax and spending totalling around 40 per cent of GDP, modest changes in either could wipe out the Chancellor's headroom. For every 1 percentage point shortfall in GDP, 1.2 per cent of GDP would be subtracted from headroom. And for every 1 percentage point rise in interest rates at all maturities, 0.8 per cent of GDP would be lost.

Chart 4.5: Headroom to fiscal rules at introduction relative to typical forecast errors and fiscal sensitivities



Note: Targets described as met or not met based on outturn in the initial target year. PSND average forecast error is for the year-on-year change as a percentage of GDP. Sensitivities show the change in the proposed fiscal mandate headroom in 2024-25.
Source: OBR

The choice of a suite of targets and indicators

- 4.34 Since fiscal rules were introduced in the UK in 1997, no Chancellor has targeted only one metric. For most of the period, two targets were in operation (one for the deficit, one for debt). Since 2014, there has also been a welfare cap. The latest draft *Charter* adds a fourth target, a cap on net investment, plus at least five further indicators identified for monitoring. Looking at a broader set of indicators provides a fuller picture of the Government's fiscal position. Specifically, the broader balance sheet indicators seek to overcome the weaknesses of PSND by recognising the Government's assets as well as its liabilities. Others try to overcome the partial view of sustainability that comes from focusing on the stock of debt but not its cost, which have moved in opposite directions in recent decades.
- 4.35 But one feature of a proliferation of targets (as opposed to merely indicators) is that the more of them there are, the more demanding it is to meet them all simultaneously (because shocks will affect each in different ways). Consequently the more targets that are put in place, the greater the likelihood that at least one will be missed. By way of illustration, Box 4.2 uses a newly developed 'stochastic simulation' tool to provide estimates of the probability of meeting the Chancellor's debt-falling mandate *and* his supplementary current balance target at the same time. Although both targets are met in our central forecast and individually the chance of meeting each is 54 and 61 per cent, respectively, the probability of them *both* being met simultaneously is only 40 per cent.

Recognising uncertainty

4.36 The preceding discussion has highlighted 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 objectives. As we discussed in our March *EFO*, the exceptional economic and fiscal shock of the pandemic renders our forecasts unusually uncertain. This has been illustrated once again by the historically very large revisions to our pre-measures forecast since March and the significant economic volatility since we closed that forecast. This means that assessing the chances of meeting the Government's fiscal targets is a more challenging task than usual. In this section, we look at fan charts based on both historical forecast errors and a new methodology that utilises 'stochastic simulations', as well as exploring the sensitivity of the underlying debt-to-GDP ratio and the current balance to key forecast parameters.

Historical forecast errors

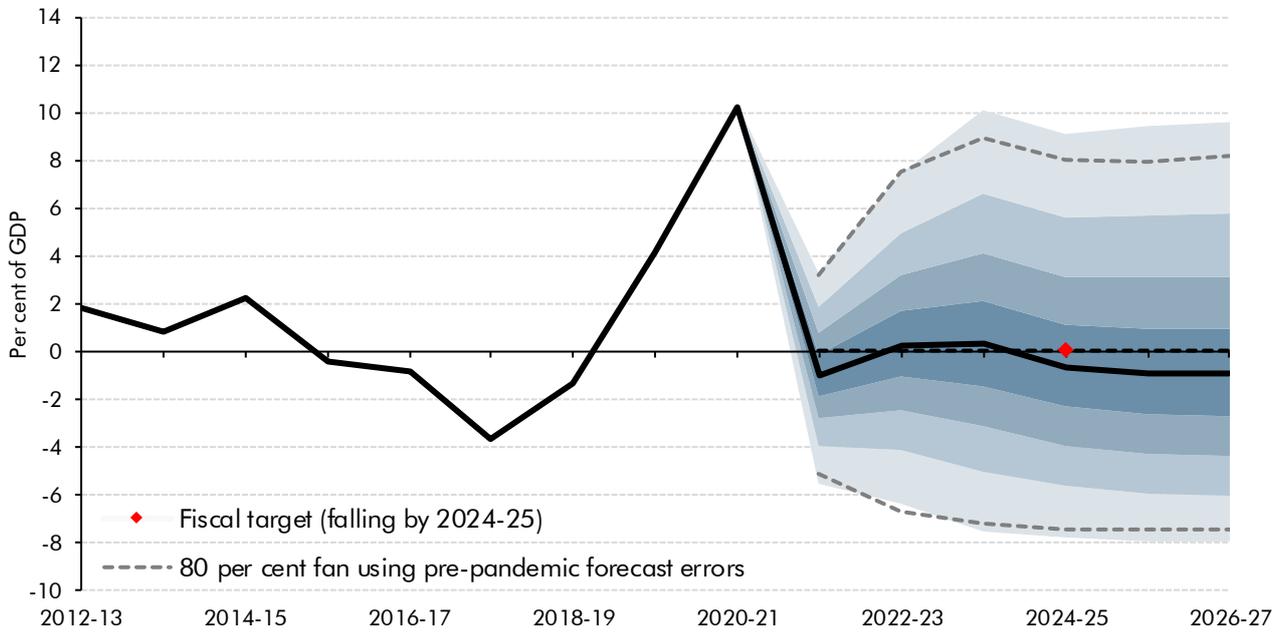
4.37 Our pre-pandemic approach was to present uncertainty around our forecasts using past differences between official public finance forecasts and outturns to generate a fan chart showing the probability distribution around our central forecast. The problem with applying this approach during the pandemic is the sample of forecast errors, which ran from 1998 to 2019. Despite including the financial crisis, that represented a period of *relative* fiscal and economic stability compared to the massive disruption associated with the pandemic. In our March 2021 *EFO*, we discussed how fan charts produced in this way were therefore not a useful guide to uncertainty associated with the pandemic, although they were useful for illustrating the consequences of other sources of uncertainty.

4.38 The forecast errors used to generate the fan now include 2020-21, so the distribution incorporates the consequences of the first year of the pandemic. This extremely large shock has predictably made the bands around our central forecast wider than our pre-pandemic fan charts – providing a better, if still incomplete, representation of current uncertainty. Charts 4.6 and 4.7 show fans around our central forecast for the debt-falling mandate and the current balance target. Based on past performance, the probability of the underlying debt-to-GDP ratio falling in the target year is around 55 per cent,⁶ while the chance of the current budget being in surplus in the target year is around 60 per cent. As shown in Chart 4.8, for debt falling this is a lower chance than we have reported any previous *EFO* in respect of the successive fiscal mandates that have been in place, with only George Osborne's £10 billion headroom in 2015 and 2016 being comparable.⁷

⁶ For the PSND excluding Bank of England fan chart, we use the historical forecast errors for PSND to generate the fan given the longer time series available.

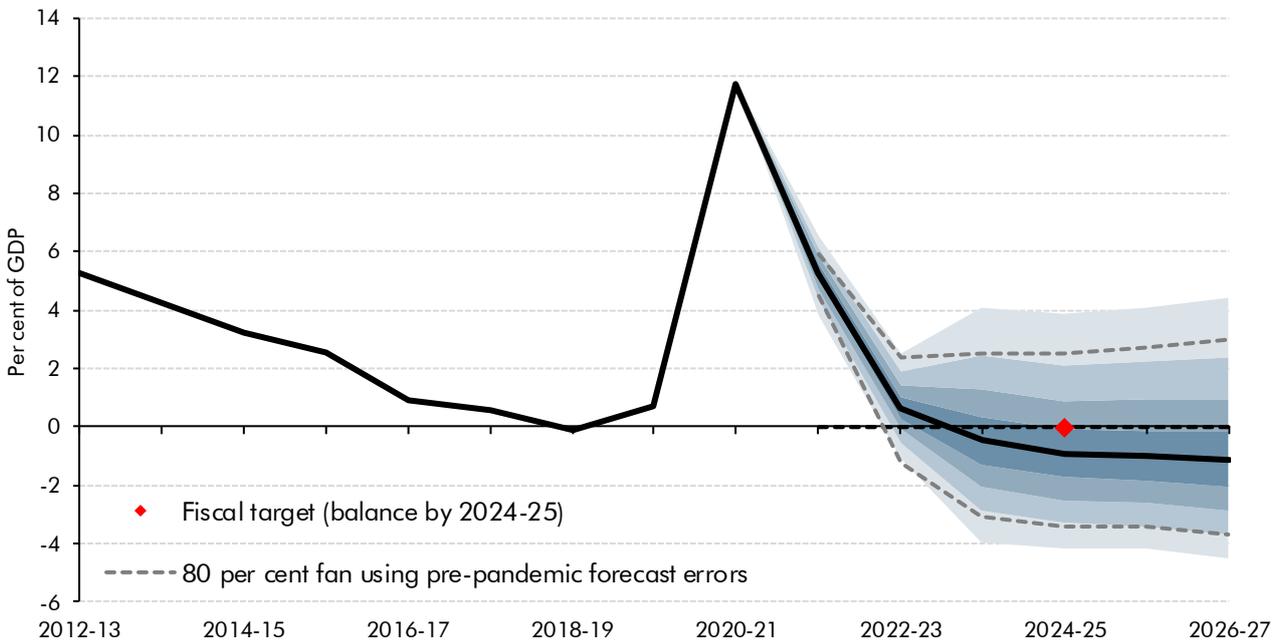
⁷ This comparison excludes our three forecasts between March 2020 and March 2021, where the legislated fiscal mandate was that set by Philip Hammond for the structural deficit in 2020-21, which played no role in framing the policy decisions made at those fiscal events.

Chart 4.6: Fan chart around our forecast for the year-on-year change in PSND excluding the Bank of England



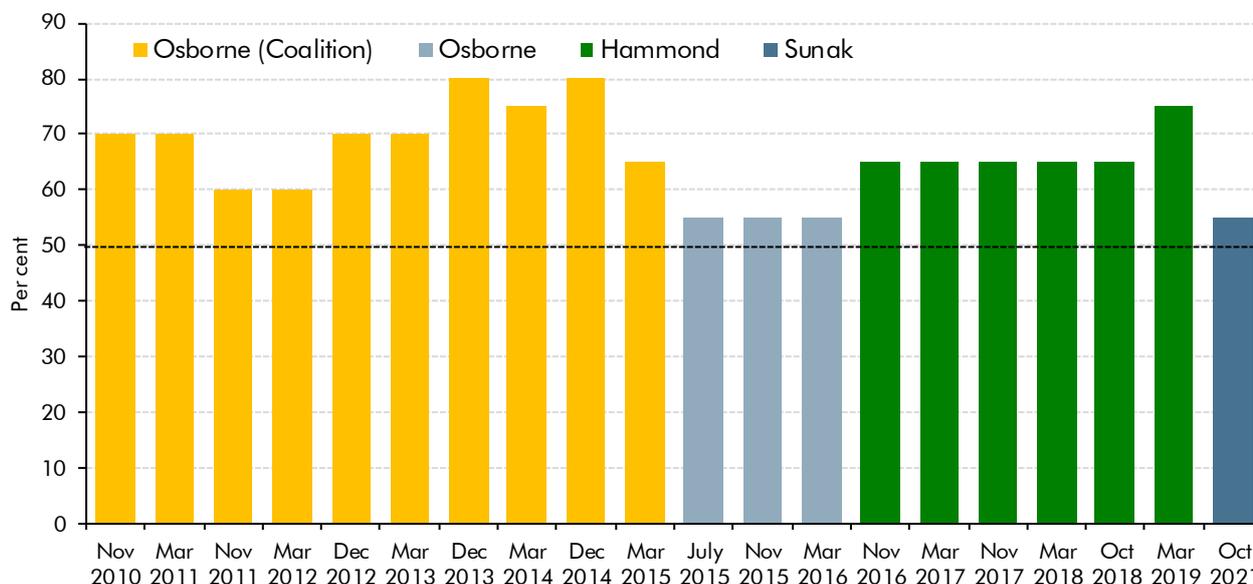
Source: ONS, OBR

Chart 4.7: Fan chart around our forecast for the current budget deficit



Source: ONS, OBR

Chart 4.8: The probability of hitting the Government's fiscal mandate



Note: Target metric varies depending on the fiscal mandate. The date is the *EFO* at which the rule was assessed. In October 2021, the proposed fiscal mandate was changed from a borrowing target to a falling debt target.
Source: OBR

Stochastic simulations

4.39 We are currently developing a new approach to producing probabilistic fan charts using stochastic simulations, a technique widely used in academic research and by some other official bodies, including the International Monetary Fund. The approach, detailed in Box 4.2, will: offer greater flexibility in how we calibrate the degree of uncertainty; allow us to derive fan charts easily for stock variables, such as the debt-GDP ratio, and for new fiscal indicators not previously forecast; and allow us to calculate the joint probability of multiple events or conditions occurring together. We plan to publish a discussion paper shortly with further details and, after taking account of any feedback, expect to adopt this approach formally at our next forecast. While we refine the underlying modelling, we present both approaches to illustrate the uncertainty around meeting the Government's fiscal targets.

Box 4.2: Using stochastic simulations to produce fan charts

We currently illustrate the uncertainty around our central forecasts using a combination of: (i) probabilistic fan charts based on historical forecast errors for key macroeconomic and fiscal aggregates; (ii) sensitivity analysis, which looks at the fiscal implications of shocks to individual forecast determinants; and (iii) scenarios that explore the fiscal implications of a plausible combination of shocks to multiple forecast determinants. All this analysis is informed by our annual *Forecast evaluation report*, which looks at the scale and sources of our economic and fiscal forecast errors, and identifies lessons for future forecasts.

To enhance the presentation of uncertainty in future *EFOs*, we have been investigating the use of stochastic simulations to generate fan charts. The approach works by generating a very large number (thousands) of scenarios that are each driven by randomly selected shocks that are

typical of 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 scenarios in which some target criterion is satisfied. This approach is widely used in the academic literature and by other organisations, including by the IMF in its 'Article IV' assessments of countries' public debt sustainability.^a

Using stochastic simulations has several advantages over using historical forecast errors. These include allowing us to capture a longer, and perhaps therefore more representative, history of shocks that have hit the UK economy, or to calibrate against particular sub-periods, such as the particularly benign period running from 1993 to 2006 (the 'Great Moderation'). The approach ensures greater consistency between fan charts for different variables. It also allows us to produce a fan chart for the level of PSND as it captures the persistence and skew in debt. Finally, it allows us to assess the probability of meeting different types of target more easily, and facilitates the calculation of the probability of meeting more than one target at the same time.

We start by estimating a small vector autoregression (VAR) model that captures the dynamic interrelationships between real GDP, inflation, interest rates, and the primary balance, to which we append the public sector budget identity that relates public sector debt to these variables. The model therefore incorporates an average historical response of both fiscal and monetary policies to economic developments, as well as the impact of those policies on the economy.

This structure can then be used to trace through the consequences of a shock to, say, GDP or inflation. However, rather than draw these shocks from some normal distribution, informed by historical forecast errors we draw our shocks from the vectors of historical residuals in the VAR (the estimated equations of the VAR do not fit exactly, leaving an unexplained 'residual'). Consequently, our simulations match the historical distribution of the residuals, including any skewness and 'fat tails', as well as replicating the empirical correlations between them.

For each period of each simulation, we draw the shocks from a suitable sample period; in the example here that extends from the mid-1950s to the present. We can, though, vary the sample period from which shocks are chosen; for example, a period spanning the 'Great Moderation' would produce much narrower fans, while one running from the financial crisis to the pandemic and including both would produce wider ones. We then repeat this process several thousand times, allowing us to generate probability distributions for each of the variables.

As a final step, we align the median of the distributions from the stochastic simulations with our central forecast that embodies our own forecast judgements and explicitly factors in current stated policies. This means that the central forecast reflects our own judgements, while the size and shape of the uncertainty fan around it is determined by the long run of history captured in the VAR. We will publish further detail on the methodology in a forthcoming discussion paper.

Chart A shows some initial experimental results from the analysis for public sector net debt (excluding the Bank of England). The centre of the fan (our central forecast) is the median, meaning there is a 50 per cent chance of debt being above or below it. Each of the four bands on each side of the median represents 10 percentage points within the overall probability distribution, implying an 80 per cent chance that debt will be within the fan in each year. So for example, in the fiscal target year of 2024-25 there is a 20 per cent chance that debt will be between 80 and 90 per cent of GDP and an 80 per cent chance that it will be between 60 and

118 of GDP. The width of the fan increases over time, with the 80 per cent interval widening from 26 per cent of GDP in 2022-23 to 92 per cent of GDP in 2026-27. A similar pattern can be seen in the case of the fan around the current budget deficit forecast (Chart B).

The fans generated by this approach are somewhat wider than those based on historical forecast errors, particularly in the near term. The current budget balance fan has less of a negative skew in this approach, reflecting the inclusion of pre-1980 shocks, most notably the unanticipated very high levels of inflation experienced in the 1970s. But the two approaches both produce fans with similar upward skews for changes in PSND, as the simulation approach captures 'stock-flow adjustments' (changes in debt that are not from borrowing, such as net acquisition of financial assets) that have historically had an upward skew.

Chart A: Fan chart around PSND forecast excluding Bank of England

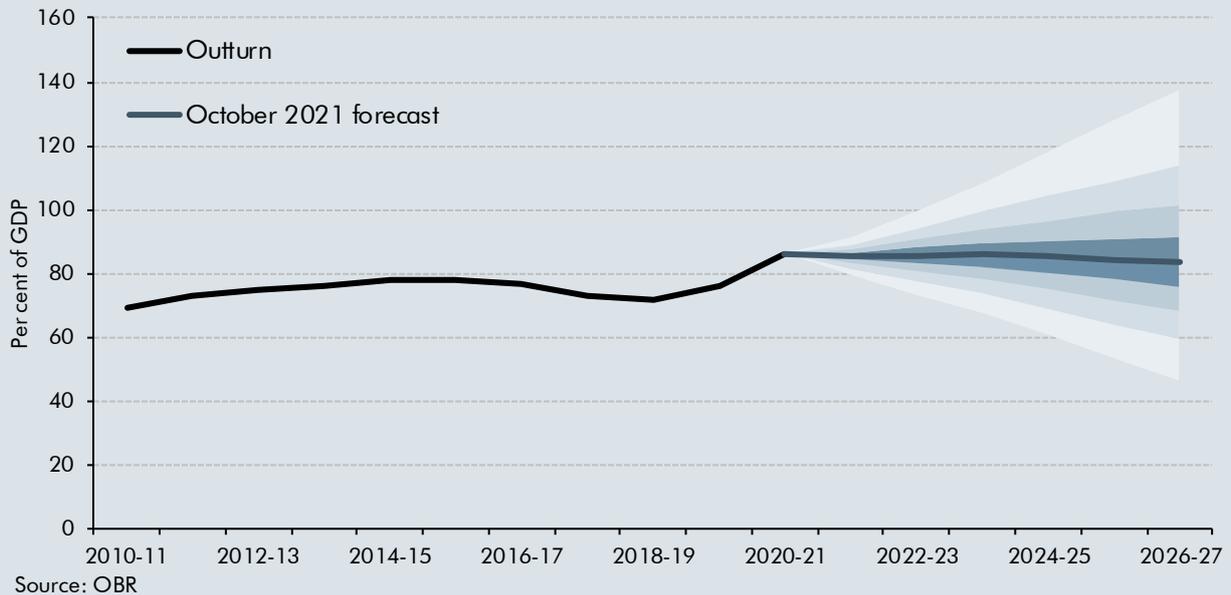
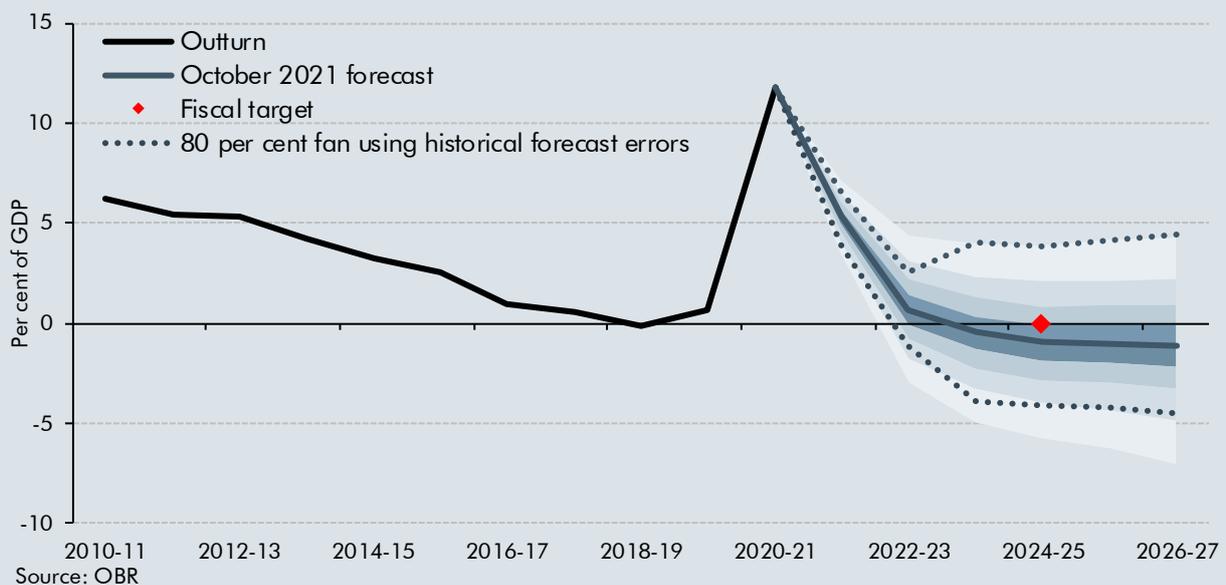


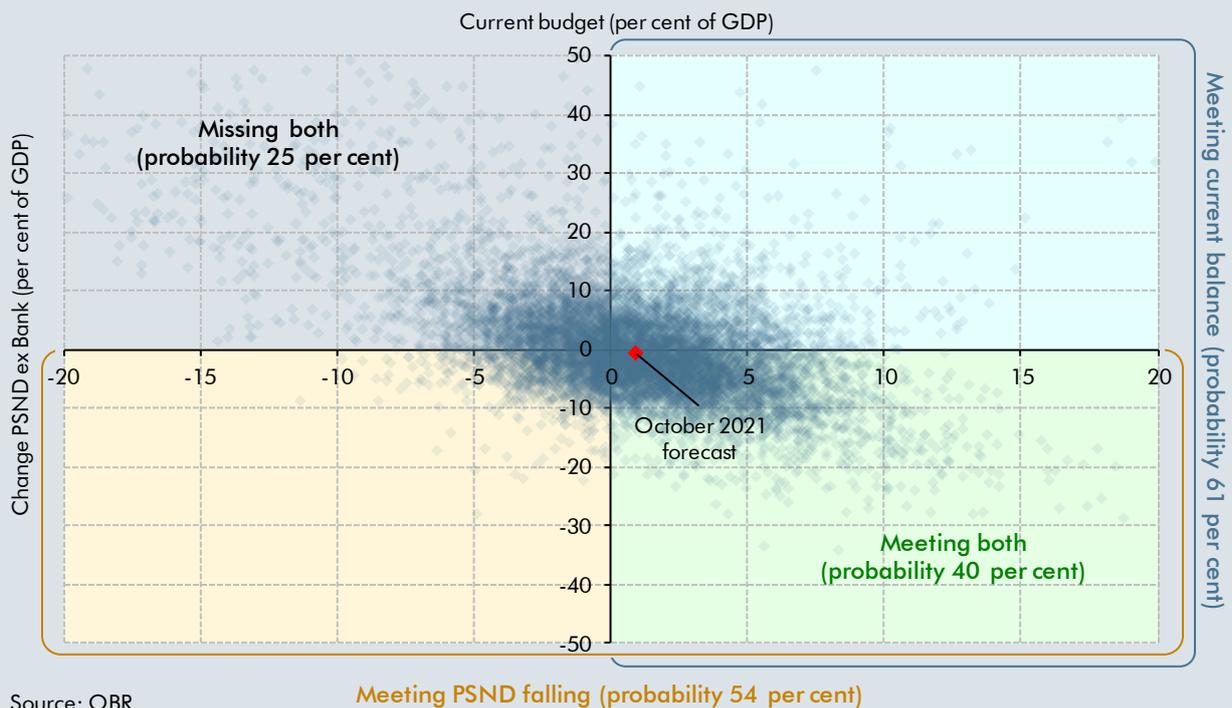
Chart B: Fan chart around current budget deficit



The simulations underpinning these fan charts can also be used to produce an assessment of the probability of meeting the new fiscal targets. To assess the probability of debt falling in 2024-25, we can calculate the fraction of simulations in which debt falls in that year. This suggests a 54 per cent chance of debt falling and the fiscal mandate being met. For the current budget balance target in 2024-25 the probability is 61 per cent.

We can also use the simulations to show the combined probability of meeting *both* of these targets in 2024-25 (the fraction of simulations where debt falls as a share of GDP *and* the current budget is in balance). Chart C shows a scatter plot of the different simulation values for the current budget and change in debt in 2024-25, where the darker the area the more simulations point to that outcome. The bottom two quadrants show where PSND is falling (in 54 per cent of simulations), the two quadrants on the right show the current budget in surplus (61 per cent of simulations), while the bottom right quadrant shows where both targets are met at the same time (just 40 per cent of simulations). 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 where one or both targets are missed than there are where both are met.

Chart C: 10,000 simulations of current balance and change in PSND in 2024-25



Source: OBR

^a Examples of use in the academic literature include: Výškrabka, M., *Stochastic forecast of the Slovak public debt*, February 2016; Carton, B., and A. Fouejieu, *Assessing Dutch fiscal and debt sustainability*, December 2020; and Cherif, R., and F. Hasanov, *Public debt dynamics: the effects of austerity, inflation and growth shocks*, September 2012.

^b To calculate PSND excluding the Bank of England we assume that the size of the Bank's contribution to net debt is exogenous and therefore subtract our central forecast from each simulation of PSND. Similarly, to calculate the current balance we assume that public sector net investment is exogenous and therefore subtract our central forecast from each simulation of PSNB.

Sensitivities

4.40 Stochastic simulations allow us to produce a probability distribution for the Government's target fiscal metrics, but they do not tell us about shocks to individual economic and fiscal

determinants. In this section we consider what would need to happen to selected variables to reduce the headroom against different targets to zero. We consider:

- The **sensitivity of the current balance** to changes in the level of GDP, interest rates, inflation, current departmental spending (RDEL) and the effective tax rate.
- The **sensitivity of the change in the debt-to-GDP ratio** (excluding the Bank of England) to the primary deficit, the effective interest rate, nominal GDP growth and the cost of financial transactions.

4.41 On our website we publish ready-reckoners that show how elements of the public finances could be affected by changes in some key determinants. It is important to note that 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 pandemic and recovery, which has required more judgement to be applied to the raw outputs of forecast models than is usual.

The current budget deficit

4.42 We use the ready-reckoners to calibrate several possible adverse surprises relative to our central forecast that would be sufficient to push the current budget into deficit in 2024-25. Our central forecast has the current budget in surplus by 0.9 per cent of GDP in 2024-25. This could fall to zero if:

- **Potential GDP** was 1.9 per cent lower. If we had retained the 3 per cent long-term scarring assumption that underpinned our March forecast, the current surplus would be reduced to around 0.4 per cent of GDP, reducing headroom against the target by £13 billion. If we assumed no long-term scarring at all, the current balance would instead be in surplus by 1.9 per cent of GDP in 2024-25.
- **Effective interest rates** on central government gross debt were 1.0 percentage points higher. This would bring the effective interest rate in line with levels seen in 2017-18.
- **RPI inflation** was 4.9 percentage points higher than expected in 2024-25 due to the increase in accrued interest on index-linked gilts. This compares to an increase of 2.0 percentage points in our 2021-22 RPI forecast versus our March 2021 forecast (the broader implications of higher inflation are discussed in scenarios below).
- **Current departmental spending (RDEL)** was £25.1 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 at this Budget and Spending Review.

- **The effective tax rate** (as measured by the tax-to-GDP ratio) were 0.9 percentage points lower. This is just a third of the rise of 2.7 percentage points between 2019-20 and 2026-27 in our central forecast, which is largely the result of tax measures, including raising the main rate of corporation tax, freezing income tax thresholds, and introducing the new health and social care levy.

The change in the debt-to-GDP ratio

4.43 In our central forecast, the debt-to-GDP ratio (excluding the Bank of England) falls by 0.6 percentage points in 2024-25. The path of debt depends on the primary balance, the net cost of financial transactions and the effective interest rate relative to the rate of nominal GDP growth. The debt-to-GDP ratio would increase in 2024-25 if:

- The **primary deficit** were 0.6 per cent higher. A change of this magnitude is around a third the size of our average three-year ahead forecast error for current borrowing. And as discussed above 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 0.8 percentage points lower (assuming borrowing in line with our central forecast at 1.7 per cent of GDP). This is around half the size of our average three-year ahead forecast error for nominal GDP growth.
- **Effective interest rates** were 0.8 percentage points higher. This would take the effective interest rate on government debt back to levels seen in 2017-18. Bank Rate expectations have risen since we closed our forecast. As of 22 October, expectations for 2024-25 were 0.3 percentage points higher than assumed in our central forecast.
- The **cost of financial transactions** were 0.6 per cent of GDP higher.

Scenarios

4.44 In Box 3.3, we considered the fiscal implications of two different scenarios for higher inflation (a product market and a labour market scenario). In both, the headroom against the fiscal mandate to get debt falling by 2024-25 increases compared to our central forecast. In the labour market scenario, this is because nominal GDP growth is higher and borrowing is significantly lower in 2024-25 (due to the impact of higher real and nominal wages on tax receipts). In the product market scenario, borrowing is higher in 2024-25, which pushes the level of debt up compared to our central forecast. But because nominal GDP growth is also higher, the debt-to-GDP ratio falls by more than it does in our central forecast in the target year.

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. 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 costings process worked reasonably efficiently, with initial information being submitted in a timely manner and requests for additional information generally being met promptly too. Some measures went through many rounds of scrutiny and we are grateful to the analysts involved for their patience in answering our questions. This has allowed us to certify all tax and AME measures announced since March as reasonable and central.
- A.3 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 October 2021 Budget and Spending Review

- A.4 In the first multi-year Spending Review since 2015, the Chancellor has announced a large and sustained increase in departmental resource spending that is financed partly by higher taxes (particularly the new health and social care levy) but partly also by higher borrowing. Net giveaways increase borrowing by a peak of £15.5 billion in 2022-23, before declining steadily to £4.8 billion by 2026-27, as the yield from net tax rises continues to build whereas the scale of spending increases diminishes.

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.

A.5 Table A.1 presents the aggregate direct and indirect effects of new policy announcements since March. It shows:

- A significant increase in **departmental resource spending and equivalent Scottish Government spending** of £37.9 billion in 2022-23 and an average of £26.9 billion a year from 2023-24 onwards. These increases more than reverse the unspecified cuts relative to pre-pandemic plans that were announced at the November 2020 Spending Review and increased in the March 2021 Budget. We assume that between 5 and 10 per cent of these additions to budgets will go unspent – a smaller margin than the large shortfalls recorded this year and last.
- Modest net changes to **other spending** that are uneven across years and reflect larger, but mostly offsetting, measures. The largest takeaway relative to the pre-measures position comes from uprating state pensions with CPI inflation of 3.1 per cent rather than with average earnings growth of 8.3 per cent. The largest giveaway relates to universal credit, where a more generous taper rate and a £500 a year increase in the work allowance have been announced.
- Significant further **net tax rises**, which lower borrowing by £17.4 billion in 2022-23, rising to £24.3 billion in 2026-27. These are dominated by the new health and social care levy – the direct effect of which raises an average of £17.3 billion a year² from 2022-23 onwards (although net of its effect on wages, it raises £14.7 billion a year). The largest tax cut is the traditional one-year fuel duty freeze. The latest net tax rises come on top of others announced since the start of the pandemic, in particular the March 2021 Budget measures raising the main rate of corporation tax and freezing income tax thresholds for five years.
- The **indirect fiscal effect of policy decisions** via their implications for the wider economy lowers borrowing by a peak of £7.1 billion in 2023-24, when the boost to nominal GDP from the discretionary fiscal loosening is at its greatest. This effect dissipates over time, though the higher price level continues, raising receipts in the medium term. By 2026-27, it is largely offset by lower receipts as the additional payroll costs for employers associated with the health and social care levy are passed through into lower wages, reducing the take from income tax and NICs by £2.9 billion in that year (see paragraph A.10 for further discussion).

² This is just referring to the tax element, which is marginally different to the scorecard costing, which also includes some spending.

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

	£ billion					
	Forecast					
	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total effect of Government decisions	0.7	15.5	11.4	5.4	5.4	4.8
<i>of which:</i>						
Direct effect of scorecard policies	3.0	25.4	21.9	9.8	7.5	7.7
Direct effect of non-scorecard policies	-3.2	-4.3	-3.3	-1.4	-1.5	-1.6
Indirect effect of Government decisions	0.9	-5.5	-7.1	-3.0	-0.6	-1.3
Direct effect of scorecard policies	3.0	25.4	21.9	9.8	7.5	7.7
<i>of which:</i>						
Resource DEL and Scottish AME	1.2	41.8	32.9	27.0	26.4	27.5
Capital DEL and Scottish AME	0.0	-0.5	2.9	-1.2	-0.5	-0.5
AME spending (excluding Scottish)	0.6	-2.3	-0.7	-0.6	-2.6	-2.6
<i>of which:</i>						
State pensions triple-lock	0.0	-5.4	-5.8	-6.1	-6.5	-6.7
UC taper and work allowance	0.7	2.2	2.4	2.5	2.8	3.0
Other AME spending	-0.1	0.9	2.7	3.1	1.1	1.1
Receipts	1.1	-13.7	-13.2	-15.4	-15.7	-16.7
<i>of which:</i>						
Health and social care levy	0.0	-16.7	-17.0	-17.1	-17.6	-18.2
Other tax rises	-0.5	-0.7	-5.4	-5.0	-5.7	-6.1
Tax cuts	1.6	3.7	9.2	6.8	7.5	7.6
Direct effect of non-scorecard policies	-3.2	-4.3	-3.3	-1.4	-1.5	-1.6
<i>of which:</i>						
Resource DEL	-2.7	-3.9	-2.3	-1.3	-1.3	-1.3
Other tax and spending decisions	-0.5	-0.4	-1.0	-0.1	-0.2	-0.3

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

A.6 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

	Head ²	£ million ¹						Uncertainty	
		2021-22	2022-23	2023-24	2024-25	2025-26	2026-27		
		Spending Review 2021							
1	Resource DEL: adjustment to spending envelope and spending assumption ³	Spend	0	-24,820	-19,165	-12,010	-10,165	-10,755	NA
2	Memo: returning ODA spend to 0.7% GNI		0	0	0	-5,220	-5,410	-5,615	NA
3	Capital DEL: adjustment to spending envelope and spending assumption ⁴	Spend	0	-540	-3,940	+170	+540	+525	NA
Local government									
4	Local Authorities: reserves implications of Council Tax referendum principles	Spend	0	+20	+35	+55	+55	+60	Medium
5	Business Rates: continuation of retention pilots between 2022-23 and 2024-25	Spend	0	-105	-130	-155	-15	0	Low

Policy measures

Build Back Better: Plan for Health and Social Care

6	Plan for Health and Social Care: spending	Spend	0	-14,050	-11,880	-13,035	-13,415	-13,910	NA
7	Health and Social Care Levy introduced from April 2022: gross yield ⁵	Tax	+45	+16,505	+16,805	+16,905	+17,290	+17,875	Medium-High
8	<i>Memo: reduction in yield due to passthrough to wages by employers</i>		0	-2,060	-2,620	-2,720	-2,825	-2,935	NA
9	<i>Memo: compensation for the additional cost to public sector employers</i>	Spend	0	-1,735	-1,765	-1,800	-1,865	-1,935	NA
10	<i>Memo: net yield available to allocate to health and social care⁶</i>		0	+12,710	+12,420	+12,385	+12,600	+13,005	NA
11	Increase rates of dividend tax by 1.25% from April 2022	Tax	-15	+1,340	-540	+650	+815	+905	High

Raising living standards across the UK

12	Universal Credit: reduce taper rate from 63p to 55p and £500 p.a. increase in work allowances from 1 December 2021	Spend	-745	-2,220	-2,385	-2,490	-2,755	-2,980	Medium
13	Fuel Duty: one year freeze in 2022-23	Tax	0	-1,510	-1,550	-1,580	-1,595	-1,615	Medium-Low
14	Alcohol Duty: reform to alcohol duties	Tax	0	-20	-115	-125	-140	-155	High
15	Alcohol Duty: one year freeze from February 2022	Tax	-80	-545	-560	-585	-600	-620	Medium-Low
16	Universal Credit: maintain the surplus earnings de minimis threshold at £2,500 per month in 2022-23	Spend	0	-70	0	0	0	0	Medium-High
17	Shared Accommodation Rate (SAR): exemptions for victims of domestic abuse and victims of modern slavery	Spend	0	-5	-10	*	0	0	Medium

Supporting businesses and jobs

18	Business Rates: 50% relief for Retail, Hospitality and Leisure sectors in 2022-23, £110,000 cash cap ⁷	Tax	+35	-1,860	+40	-10	0	0	Medium
19	Business Rates: freezing the multiplier in 2022-23	Tax	+15	-845	-900	-965	-965	-970	Low
20	Business Rates: relief for property improvements from 2023-24	Tax	0	+5	-145	-140	-145	-150	Medium-Low
21	Business Rates: support for green technology from 2023-24	Tax	0	*	-40	-40	-45	-50	Medium
22	Business Rates: extending the supporting small business and transitional relief schemes in 2022-23	Tax	*	-30	*	0	0	0	Medium
23	Business Rates: administrative changes to clarify eligibility for the smaller business multiplier	Tax	0	0	0	-5	-5	-5	Medium-Low
24	Annual Investment Allowance: extension of £1m level until 31 March 2023	Tax	-65	-240	-165	+115	+60	+50	Medium
25	Museum, Galleries and Exhibition Tax Relief (MGETR) sunset clause: extend to March 2024	Spend	0	0	-5	-10	-5	0	Medium-High
26	Theatre, Orchestra & MGETR Tax Relief: two-year tapered rate increase from April 2022	Spend	-5	-40	-115	-70	-15	0	Medium-High
27	HGV Road User Levy: suspend from August 2022 to 31 July 2023	Tax	0	-145	-80	-10	-10	-10	Medium-Low
28	Vehicle Excise Duty: freeze rates for HGVs in 2022-23	Tax	0	-10	-10	-15	-15	-15	Low
29	Bank Surcharge: set at 3% and raise the surcharge allowance to £100m	Tax	0	-220	-830	-975	-995	-1,020	Medium
30	Asset Holding Companies tax regime from April 2022	Tax	0	0	-5	-10	-15	-20	High

Other measures									
31	Air Passenger Duty: introduction of a new reduced domestic band and ultra-long haul distance band	Tax	0	0	-35	-35	-30	-30	Medium-Low
32	Capital Gains Tax: increase property disposal payment window from 30 to 60 days	Tax	-60	-5	-5	-5	-5	-5	Medium
33	Starting rate for savings tax band: maintain at £5,000 for 2022-23	Tax	0	0	+5	+5	+5	+5	Medium-Low
34	Adult ISA subscription limit: maintain at £20,000 for 2022-23	Tax	0	0	+5	+10	+15	+20	Medium-Low
35	Carbon Price Support rates: maintain in 2023-24	Tax	0	0	-15	-15	-10	-10	Medium
36	Car fuel benefit charge: uprate by CPI in 2022-23	Tax	+5	+5	+5	+5	+5	0	Low
37	Van benefit charge: uprate by CPI in 2022-23	Tax	0	+5	+5	+5	+5	+5	Low
38	Aggregates Levy: freeze in 2022-23	Tax	0	-25	-25	-25	-25	-25	Low
39	Tobacco Duty: increase hand rolling tobacco duty by an additional 4% and minimum excise duty by an additional 1% in 2022-23	Tax	+15	+25	+25	+25	+25	+25	Medium-High
40	Moving back the Pension Credit to Housing Benefit merger date from April 2023 to April 2025	Spend	0	0	+5	+50	+95	+125	Medium-Low
41	Net Pay pension schemes: 20% top-up for eligible individuals on contributions from April 2024	Spend	0	0	0	0	-10	-15	Medium
42	BBC commercial arm borrowing limit: stepped increase from £350m to £750m	Spend	0	-15	-45	-40	+20	+95	Medium
43	HM Land Registry: increase caseworker capacity	Tax	-5	+65	+50	+35	+35	+40	Medium
44	Removing cross-border group relief	Tax	*	+5	+5	+5	+5	+5	Medium
45	Residential Property Developer Tax: 4% rate	Tax	0	+200	+215	+225	+235	+250	Medium-High
Previously announced									
46	State Pension and Pension Credit: uprate with Double Lock in 2022-23	Spend	0	5415	5780	6115	6455	6730	Medium-Low
47	Economic Crime (Anti-Money Laundering) Levy	Tax	0	95	100	100	105	105	Medium-High
48	Freeports (reliefs on Stamp Duty, Enhanced Capital Allowances, Structures and Buildings Allowance, NICs and Business Rates)	Tax	-5	-25	-40	-60	-75	-65	High
49	Self-Employment Income Support Scheme fifth grant: design choices relating to the financial impact declaration	Spend	-170	20	0	0	0	0	Medium-High
50	Business Rates: Covid-19 additional relief fund	Tax	-1555	35	-10	0	0	0	Low
51	Business Rates: ruling out Covid-19 as a Material Change in Circumstance	Tax	-485	0	0	0	0	0	Medium-Low
52	Right to Buy: changes to rules under which Local Authorities can retain and spend receipts from Right to Buy sales	Spend	245	250	195	90	0	-30	Medium-High
53	Super-deduction: extension to background plant and machinery	Tax	-115	-120	-35	5	15	20	High
54	Real Estate Investment Trusts: amendments	Tax	0	-5	-5	-5	-5	-5	Medium
55	Extension of eligibility for bereavement benefits to cohabitants with children	Spend	0	-120	-30	-25	-25	-20	Medium
56	DWP Disability Green Paper: measures	Spend	0	15	40	15	-15	-5	Medium-High
57	Universal Credit: reintroduce Minimum Income Floor from 1 August 2021	Spend	-10	-15	-20	0	0	0	Medium-Low

Policy measures

58	Reform of penalties for late submission and late payment of tax for Income Tax Self Assessment: change to implementation date	Tax	0	0	0	-15	+30	+80	Medium-High
59	Making Tax Digital for Income Tax Self Assessment: change to implementation date and digital prompts	Tax	0	0	-25	-195	-205	-15	High
60	Income Tax: basis periods reform for the self-employed from April 2024 with transition year in 2023-24	Tax	0	0	+25	+820	+510	+360	Medium-High
61	Notification of uncertain tax treatment: changes to scope	Tax	-5	-10	-15	-15	-20	-15	Medium-High
62	Access to benefits for arrivals under the Afghan Relocations and Assistance Policy and the Afghan Citizens Resettlement Scheme	Spend	-5	-5	-5	-5	*	*	Medium-Low
63	Clamping down on promoters of tax avoidance	Tax	+5	+25	+30	+25	+25	+20	High
64	Public Service Pensions Remedy (McCloud)	Spend	0	0	-585	-740	-610	-550	Very High
Financial Transactions									
65	Public sector net borrowing impact of changes to financial transactions and guarantees	Spend	-25	-20	+5	*	*	-5	Medium
Total policy decisions ⁸			-2,985	-25,345	-21,855	-9,780	-7,455	-7,705	
Total spending policy decisions ⁸			-715	-38,040	-34,020	-23,885	-21,730	-22,670	
Total tax policy decisions ⁸			-2,270	+12,695	+12,165	+14,105	+14,275	+14,965	

*Negligible.

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 Includes funding for the remaining response to Covid-19 in the immediate term and for cost pressures as a result of the updated inflation forecast.

⁴ Adjusted to reflect updated estimates of the spending profiles for planned major capital programmes and projects.

⁵ Gross yield reflects total direct tax raised from the Health and Social Care Levy.

⁶ Net yield reflects total amount available to allocate after accounting for (1) the reduction in yield due to passthrough to wages by employers and (2) compensation for the additional cost to public sector employers.

⁷ Business rates are deductible for corporation tax and income tax self-assessment. Increased business rates relief reduces the amount of business rates paid and so increases these other tax receipts.

⁸ Totals may not sum due to rounding.

Policy decisions not on the Treasury scorecard

A.7 Our forecasts include the effect of three policy decisions that the Treasury has chosen not to present on its scorecard:

- **Correcting tariff code legislation.** This measure corrects an error in the UK global tariff legislation whereby tariffs for certain commodity codes were erroneously set to zero (they were either missing or omitted). HMRC's systems subsequently applied the intended tariff rates, but since the legislation did not specify the applied rates there was no legal basis for traders to be charged. As such they are entitled to full reimbursements for payments made. The correcting of the legislation raises yield relative to the erroneous zero-tariff baseline.
- **Further delay in introducing full customs checks.** The Government has announced that the introduction of full customs checks on goods arriving from the EU will be delayed by a further six months, to 31 December 2021.

- **Other spending decisions.** These primarily consist of updated departmental plans, as set out in the Treasury's *Public Expenditure Statistical Analyses* publication in July, and our assumptions regarding underspending relative to the large increases in departmental budgets announced in the Spending Review.

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

	Head	£ million						Uncertainty
		2021-22	2022-23	2023-24	2024-25	2025-26	2026-27	
Correcting tariffs codes	Tax	-10	20	20	25	25	25	Low
Delay in introducing customs checks	Tax	-40	5	0	0	0	0	Medium
Other spending decisions	Spend	3,265	4,270	3,245	1,365	1,485	1,560	N/A
Direct effect of Government decisions		3,215	4,295	3,265	1,385	1,510	1,580	

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

Policy costings and uncertainty

A.8 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.9 Using this approach, we have judged 8 scorecard measures to have 'high' or 'very high' uncertainty around the central costing. Together, these represent 12 per cent of the scorecard and non-scorecard measures by number, or 13 per cent of the tax and AME measures we have certified (as we do not certify the cost of DEL spending measures). They represent 5 per cent of certified measures by absolute value.³

Health and social care levy

A.10 On 7 September, the Government announced the introduction of a new health and social care levy of 1.25 per cent each on employees, employers and the self-employed. It will take effect from 2023-24 and revenues from it will be ringfenced to support health and social care spending. The Government also announced that in 2022-23, while HMRC's systems are readied to administer the new tax, the main and additional rates of Classes 1, 1A, 1B and 4 of NICs will be temporarily increased by 1.25 per cent. Individuals over State Pension age with qualifying earned income will not be affected by the NICs increase in 2022-23, but will be liable to pay the levy from 2023-24 onwards.

³ The absolute value refers to the magnitude of the costing irrespective of whether it is an Exchequer cost or a gain.

Policy measures

- A.11 The net effect of the new levy on the public finances will differ materially from the revenue it raises directly because the cost of the employer element of it is expected to be passed through quite quickly into lower pay for employees in the private sector but not in the public sector, because the Treasury is compensating employers with higher RDEL budgets. Here we set out what is factored into the direct scorecard costing, how that relates to the revenue we expect to be raised directly by the levy itself, and the wider impact on income taxes and NICs of the pass-through to wages and salaries.
- A.12 The levy will have further indirect effects on the public finances that we have not isolated and quantified because they are wrapped up in our broader judgements about the overall effects of the Budget and Spending Review on the economy. These include increases in debt interest and welfare spending from pass-through to inflation, short-term reductions in corporation tax from costs absorbed in lower profits until pass-through to real wages is complete, and reductions in VAT and duties associated with lower household consumption as a result of lower take-home pay. On top of these effects, the Treasury's decision to compensate public sector employers comes at a cost of around a tenth of the revenue it is expected to raise.

Scorecard costing

- A.13 The direct scorecard yield from the measure rises from £16.5 billion in 2022-23 to £17.9 billion in 2026-27. On this basis, it is an even larger tax rise than the £17.2 billion in 2025-26 that was raised by the 6 percentage point increase in the main rate of corporation tax that the Chancellor announced in his March 2021 Budget.
- A.14 The tax base is all income subject to NICs from either employment or self-employment. It is estimated using HMRC's personal tax model, based on data from the 2018-19 Survey of Personal Incomes (SPI), and projected forward using determinants drawn from our economy forecast. The main uncertainties specific to this dataset relate to sampling error in the SPI, and errors projecting the data forward to the scorecard period. But these are small relative to the uncertainties around our forecast for income growth over the next five years.
- A.15 The costing starts with an estimate of the 'static' impact of the measure – what it would raise if it did not prompt any behavioural response. It reflects the increase in receipts from the higher rate on employee, employer and self-employed NICs in 2022-23 and the imposition of the levy from 2023-24 onwards (including on those over State Pension age). This is adjusted for an interaction with the employment allowance, which reduces employer NICs liabilities and consequently reduces the yield of the levy slightly, as well as for a small increase in universal credit and housing benefit spending as a result of lower net incomes. The static yield of the levy is £18.1 billion in 2023-24 rising to £19.9 billion in 2026-27.
- A.16 The scorecard impact of the measure includes modest taxable income elasticity-based behavioural effects. These link the change in the marginal and average tax rates to income subject to NICs declared based on past experience and various academic studies. This can reflect genuine changes in income (for example due to changes in hours worked), but also avoidance-style behaviour that reduces declared taxable income by other means. As there

are relatively limited opportunities to adjust taxable income to avoid NICs (and thus the levy), these impacts are modest. A small effect is also included for tax-motivated incorporations and for bonus payments being brought forward from the 2022-23 financial year into 2021-22. These behavioural effects reduce the static yield of the levy by £1.3 billion in 2023-24 rising to £2.1 billion in 2026-27. Table A.4 shows the static yield of the levy, these 'direct' behavioural effects, and the final scorecard yield reported in Table A.2.

Table A.4: Scorecard yield from NICs and the health and social care levy

	Forecast				
	£ million				
	2022-23	2023-24	2024-25	2025-26	2026-27
Static yield	17,515	18,135	18,535	19,150	19,945
Less direct behavioural effect	-1,010	-1,330	-1,630	-1,860	-2,070
Post-behavioural	16,505	16,805	16,905	17,290	17,875

Implications of pass-through to real wages

- A.17 In addition to the direct behavioural effects described above, our forecast reflects the impact of this policy on economy-wide determinants. The largest of these relates to the incidence of the employer element of the tax. As described in Box 2.1, we assume this element is passed through entirely on to real wages in the medium term, with 80 per cent via nominal wages rising more slowly than would otherwise have been the case and 20 per cent via higher prices. (In the first year we assume that 20 per cent is absorbed temporarily in lower profits.)
- A.18 To quantify the effect of this pass-through to private sector wages on all income taxes, we have used a simple ready-reckoner based on the effective tax rate of each tax line in our forecast multiplied by the reduction in wages and salaries attributable to the pass-through to wages in the private sector. Because the thresholds for income tax, NICs, the health and social care levy and the apprenticeship levy are not indexed, only the nominal wage element affects the overall receipts from these taxes. Our pass-through assumptions result in a 0.5 per cent reduction in nominal wages in the private sector in 2022-23, rising to 0.6 per cent in the following years, which translates into a 0.5 per cent reduction on whole economy wages and salaries (increasing to around £6 billion a year).
- A.19 As Table A.5 shows, pass-through to lower wages results in a £2.1 billion loss of receipts on all employment income taxes in 2022-23, rising to £2.9 billion in 2026-27. 57 per cent of the loss in receipts hits income tax and 42 per cent reduces NICs (with less than 1 per cent hitting the apprenticeship levy).

Table A.5: The impact of wage pass-through on employment income taxes

	Forecast				
	2022-23	2023-24	2024-25	2025-26	2026-27
Reduction in wages and salaries (£ million)	-4,375	-5,550	-5,680	-5,865	-6,075
Effective tax rates (per cent)					
Income tax	26.7	26.8	27.2	27.5	27.7
NICs	20.0	20.0	20.2	20.3	20.2
Apprenticeship levy	0.4	0.4	0.4	0.4	0.4
Reduction in total receipts (£ million)	-2,060	-2,620	-2,720	-2,825	-2,935
of which:					
Income tax	-1,170	-1,490	-1,545	-1,615	-1,680
NICs	-875	-1,110	-1,150	-1,190	-1,230
Apprenticeship levy	-20	-25	-25	-25	-25

Freeports

A.20 In his March 2021 Budget, the Chancellor announced the eight sites in England that had been successful in bidding for ‘freeport’ status: East Midlands Airport, Felixstowe & Harwich, Humber, Liverpool City Region, Plymouth and South Devon, Solent, Teesside and Thames. The Government also intends to introduce freeports in each of Scotland, Wales, and Northern Ireland.⁴ The first wave of freeports are due to begin operating from November.

A.21 A freeport is a designated area within a country where the prevailing rules around customs procedures and duties are suspended, often in conjunction with other tax reliefs. They aim to create a zone in which lower direct and indirect costs of doing business will generate additional activity, investment and jobs.⁵ The Government’s objectives for its freeports are to “establish Freeports as national hubs for global trade and investment across the UK [...] promote regeneration and job creation [...] and] create hotbeds for innovation”.⁶

A.22 Imports into England’s freeports will be exempt from customs duties or import VAT until the goods depart the freeport. This allows for ‘tariff inversion’ where importers can choose to pay duties on intermediate goods individually or, after assembly in the freeport, on the final product at a lower tariff. The freeports also benefit from several tax reliefs, including:

- **full relief from stamp duty land tax** on commercial transactions within a freeport, available until September 2026;
- **full business rates relief**, available for up to five years, until September 2026;
- **relief from employer NICs** on the first £25,000 a year of employees’ salaries, initially available from April 2022 to March 2026, at which point it will be reviewed;

⁴ Some of the tax reliefs available within the freeports being established in England come under devolved competency, so require agreements with the devolved administrations if they are to be replicated in Scotland, Wales and Northern Ireland.

⁵ The World Bank, *Special Economic Zones: An operational review of their impacts*, 2017.

⁶ HM Government, *Freeports Consultation*, February 2020.

- an enhanced capital allowance of 100 per cent for investment in plant and machinery for up to five years, available until September 2026; and
- an enhanced structures and building allowance of 10 per cent for ten years, available until September 2026.

A.23 Freeports are expected to cost an average of £50 million a year from 2022-23 onwards, with the largest costs associated with employer NICs and business rates relief. All three aspects of the costings that underpin this figure are uncertain:

- **Data uncertainty.** This is relatively high despite the costing using administrative data. There is uncertainty around the applicability of the data to the specified reliefs and the aggregated nature of much of the underlying information. The quality of available data is also uneven across the different tax aspects of the policy.⁷
- **Modelling uncertainty.** The approach used builds the costing up tax-by-tax rather than by individual freeport. This made best use of the available data, but made ensuring consistency in results across freeports and assessing the interactions across tax reliefs challenging. The modelling applies lessons learned from the initial estimates of the costs of business rates relief in enterprise zones introduced across England over the past decade to reflect the revealed optimism bias in past costings (see Chart A.1).
- **Behavioural uncertainty.** This is the most important and most uncertain aspect of the costing. Freeports are designed to alter businesses behaviour in terms of the location of activity, and – it is hoped – the overall volume of activity too. Costs associated with different tax reliefs will be determined by the degree to which they are taken up. This is subject to uncertainties in respect of each relief (the value of which differs) and each location (where geographical context will differ⁸). It is also uncertain how the behavioural response to the package of reliefs in aggregate might differ from the sum of its parts when viewed individually. There is also broader uncertainty around how much of the economic activity that takes place within a freeport will have been displaced from other UK regions and how much is genuinely additional.

Freeports and additionality

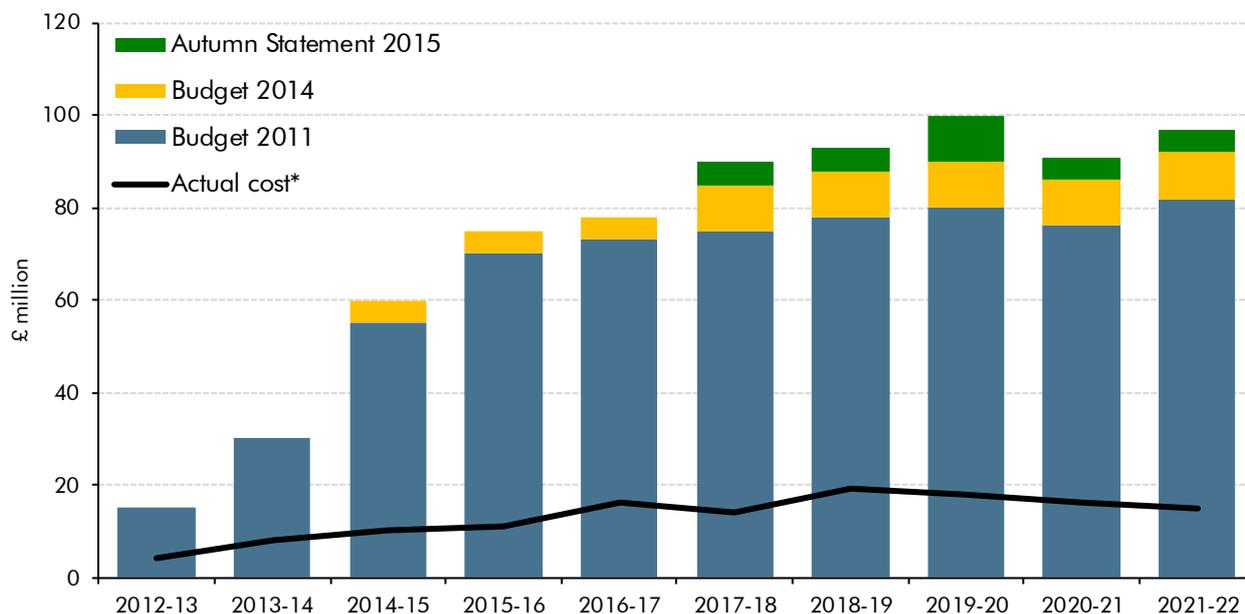
A.24 The impact of freeports on economic activity depends on the degree to which tax reliefs are taken up, and the degree to which that take-up is additional to the activity that would have taken place in the absence of those reliefs (either in the freeport zone or elsewhere in the country). On the former, Chart A.1 compares the estimated costs of the different enterprise zone announcements between 2011 and 2015 with the actual cost.⁹ The costs are around a quarter of the original estimates, suggesting much smaller impacts than initially hoped. As noted, the costing has tried to learn the lessons from this past under-performance.

⁷ For example, SDLT data on properties and transactions is both geolocated and precise, while that associated with tariffs and customs is highly aggregated and less precise.

⁸ For example, in respect of the availability of similar schemes in other parts of the country, such as inward processing relief.

⁹ These enterprise zones were initially launched in the Coalition Government's March 2011 *Plan for Growth*, with the promise of "superfast broadband, lower taxes and low levels of regulation and planning controls" to support investment across the regions.

Chart A.1: Estimated cost versus actual cost for enterprise zones



* 2020-21 and 2021-22 actual costs taken from local authorities' own estimates recorded in NNDR1 returns.
Source: HMT, OBR

- A.25** As regards additionality, an evaluation of the number of jobs created by enterprise zones carried out by the Centre for Cities found that “jobs growth has been underwhelming”, that a significant number were displaced from local areas and from elsewhere in the UK, and that “the jobs created were mainly in low-skilled local service activities”.¹⁰
- A.26** More broadly, experience of enterprise zones around the world points to little difference in performance between cities with zones and those without, with stronger determinants of performance being existing infrastructure and transportation links.¹¹ This suggests that it is those other factors rather than the enterprise zone reliefs themselves that are key to determining levels of activity and that the reliefs act more as a reward than an incentive.
- A.27** International evidence also suggests that enterprise zones tend to be more effective in developing countries, where tariff and non-tariff barriers to trade tend to be higher, making the potential gains greater.¹² Tariff rates in the UK are relatively low, with free-trade agreements covering two-thirds of goods imports (including via the new Trade and Cooperation Agreement with the EU) and low rates applied to other imports under the new UK Global Tariff. This means there is little scope to benefit from tariff inversion.¹³ Furthermore, the UK scores highly on international comparisons of the performance of trade logistics, suggesting limited scope for gains on that front too.¹⁴
- A.28** Nevertheless, the tax incentives available within England’s freeports are more generous than those in the enterprise zones over the past decade, which did not include either stamp duty

¹⁰ Centre for Cities, *In the Zone: Have enterprise zones delivered the jobs they promised?*, 2019.

¹¹ UN, *World Investment Report 2019: Special Economic Zones: Key Messages and Overview*, 2019.

¹² UN, *World Investment Report 2019: Special Economic Zones: Key Messages and Overview*, 2019.

¹³ Holmes and Larbalestier, *Two key things to know about Freeports*, UK Trade Policy Observatory, 2021.

¹⁴ The UK ranked 9th out of 160 countries in the World Bank’s *Logistics Performance Index*, which is a worldwide survey of operators on the logistics ‘friendliness’ of countries.

land tax or employer NICs reliefs, increasing incentives for both displacement of activity from other locations and for truly additional activity. In this context, the Treasury has taken steps to try to reduce displacement through the bidding process, requiring bidders to demonstrate how they would generate additionality and minimise displacement from other locations.

A.29 But given historical and international evidence, we have assumed that the main effect of the freeports will be to alter the location rather than the volume of economic activity, so the costs have been estimated on the basis of activity being displaced from elsewhere. To the extent that activity is genuinely additional, it will be revealed in GDP and receipts data over time, though given the small scale relative to the whole economy, such effects would probably be difficult to discern even in retrospect.

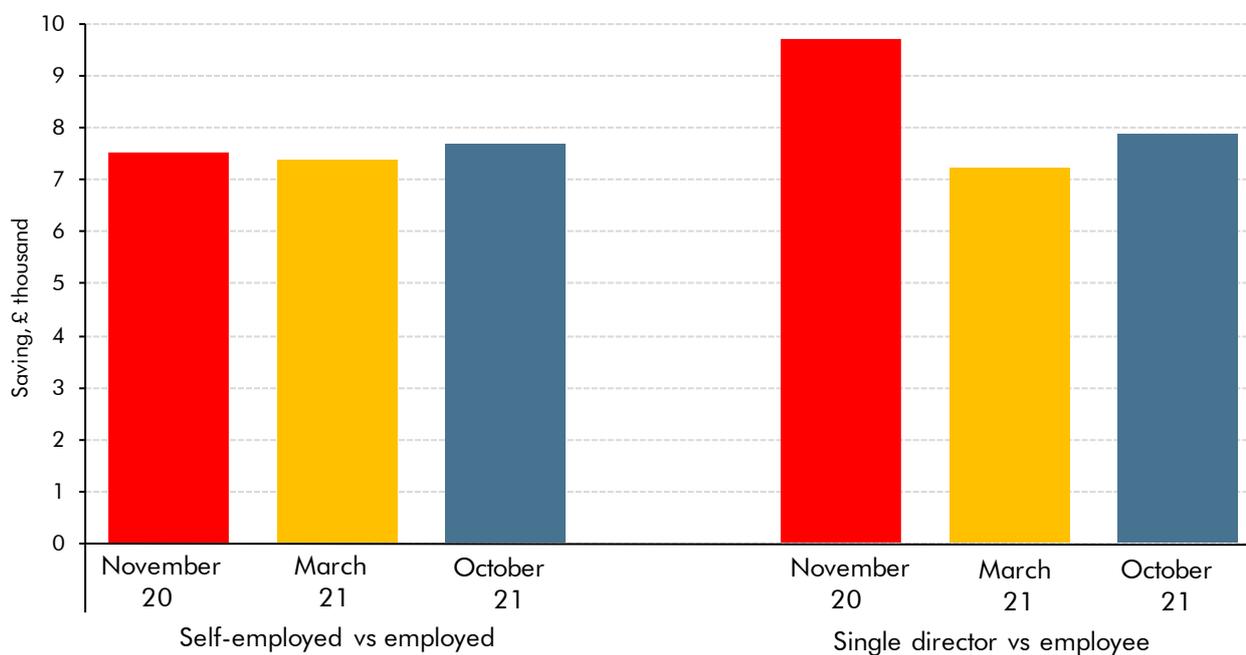
Dividends tax rate increase

A.30 Chart A.2 shows the tax saving in 2025-26 for a self-employed person or single director earning £100,000, relative to the tax they and their employer would pay if they worked as an employee – and shows how that has evolved as a result of tax policies announced this year.¹⁵ These tax savings are one of the factors that lead some people to choose these employment statuses:

- The movement in the saving from being **self-employed** are relatively small, with little change resulting from March 2021 Budget measures and a modest increase resulting from this Budget (as a result of not being liable to the employer element of the new health and social care levy, only the self-employed element).
- The changes in the saving for **single directors**, however, are more material – falling by 26 per cent as a result of March Budget measures, then rising back by 9 per cent as a result of this Budget. The fall due to the March Budget reflects the increase in the main rate of corporation tax, tempered for someone earning this much by the reintroduction of the small profits rate. The 1.25 per cent dividend tax rise in this Budget reduces the tax saving from being a single director, but the effect of that is more than offset by the health and social care levy, which raises the overall tax paid on employee earnings by more (because of its employee *and* employer elements). This Budget therefore reverses around a third of the reduction in the tax incentive to incorporate (at this level of earnings) that had been achieved as a result of the March Budget measures.

¹⁵ These calculations assume the individual has only one source of income. The deduction of employer NICs means that less of an employee's total compensation is made up of their wage, thereby paying less income tax but more NICs than the self-employed. Company directors are assumed to withdraw profits in the most tax efficient way, paying themselves a salary up to the primary threshold for NICs, and taking the rest as dividends, all in the same year. These examples all reflect taxpayers outside Scotland. In Scotland higher tax rates at the top-end of the distribution create a slightly larger incentive to incorporate.

Chart A.2: Tax saving on £100,000 of income in 2025-26 relative to an employee: latest policy settings versus March 2021 and November 2020



Public service pensions remedy ('McCloud')

A.31 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 sets out how the Government will address the age discrimination associated with the transitional protection that was offered to scheme members close to retirement, but not to younger scheme members. Although announced prior to the March Budget, the Government chose not to score the consequences of the remedy measures at that time given the extent of uncertainty over how individual schemes would implement the changes (see Box 3.5 of our March 2021 EFO). That uncertainty has now receded sufficiently to be able to estimate the medium-term consequences for schemes.

A.32 There are three main elements to the costing, which costs an average of £0.6 billion a year between 2023-24 and 2026-27: (i) the remediation payments themselves; (ii) the impact of the remedy on tax receipts; and (iii) the impact on member contributions. We deem the costing to be highly uncertain. The main uncertainties relate to:

- **Modelling uncertainty.** The modelling of remediation payments is done at a scheme level, with assumptions varied as appropriate across schemes. It relies on several key assumptions about the timing of retirements and the remediation options that will be most beneficial and therefore taken up by scheme members at that point. Information on the impact on member contribution rates was only available for two schemes, though the impacts in respect of other schemes are expected to be limited. The tax costing relates to changes in accrual rates between legacy and reformed schemes, which affects annual allowance charges, with an expectation that there will be more cases in which members will be due refunds from HMRC on previous charges due to

the remedy than cases where new or higher charges result. The modelling of this element is also uncertain, for example around the effect of salary progression within schemes. We assign the modelling uncertainty as being ‘very high’ and the most important element in determining overall uncertainty for the costing.

- **Data uncertainty.** The costing for the remediation payments relies on information from the Government Actuary’s Department’s (GAD) scheme valuations in respect of 2016. This generates particular uncertainty around commutation rates and the resulting estimates of lump sum payments in respect of the remedy. GAD’s work on 2020 scheme valuations is underway and is likely to lead to updates to the estimated cost of the remedy once it is complete. The data used for the tax element is also highly uncertain, relying on limited information on average salaries in different schemes and some initial estimates of the number of unprotected annual allowance payers.
- **Behavioural uncertainty.** We assume that individuals will choose to take the benefits of greatest value, but there is some uncertainty around how they choose to take their benefits, for example between lump sum payments and ongoing pension benefits.

Other highly uncertain measures

A.33 The other measures subject to a ‘high’ or ‘very high’ uncertainty rating are:

- **Alcohol duties review.** This measure shifts the taxation of alcohol to a system in which duty is paid by reference to the product’s final alcohol by volume (ABV). It also harmonises tax rates for different types of beverages, reducing the number of main rates from fifteen to six. Duty charged on high-strength wine and cider will be raised, but it will be lowered for lower strength alcohol products, with an additional benefit to draught products in the on-site trade. This costing receives a ‘high’ behavioural uncertainty in respect of the degree to which traders, manufacturers and consumers respond. There is uncertainty around the volumes of purchases that traders will choose either to bring forward or to delay to take advantage of a lower duty rate. Restructuring duty bands will incentivise some manufacturers to reformulate products by reducing the ABV to reduce duty paid, the scale of which is also uncertain.
- **‘Clamping down on promoters of tax avoidance’.** This measure introduces new penalties on UK entities that support offshore promoters of tax avoidance. It grants HMRC the power to freeze suspected promoters’ assets and to wind up companies involved in promoting avoidance. As is common with most costings of anti-avoidance measures, there is a high degree of uncertainty around the quality of data and the size of the potential behavioural response, which as ever is judgement-based. We are, however, able to draw on the evidence gathered from evaluations of costings of similar previous measures when making those judgements. For this measure there is particular uncertainty around how much of a deterrence the powers introduced by this measure will prove to be. This costing receives a ‘high’ uncertainty rating, with data and behaviour both rated ‘high’.

- **Taxation of asset holding companies in alternative fund structures.** This measure introduces a new tax regime for asset holding companies, effective from 1 April 2022. Companies meeting specific qualifying criteria can reduce their corporation tax liability, based on the principle that the investor rather than the asset holding company should be liable. There is a ‘high’ degree of uncertainty relating to both the data (the identification of qualifying companies relies on judgement) and the modelling (which uses several hard-to-verify assumptions).
- **‘Super-deduction: extension to background plant and machinery’.** This measure extends the super-deduction announced in the March 2021 Budget, which allows companies to claim a 130 per cent deduction on new plant and machinery expenditure. The main uncertainty relates to behaviour since, as the measure is temporary, it provides firms with a strong incentive to bring forward investment from future periods to take advantage of the generous allowances. The costing receives a ‘high’ rating, with behaviour rated ‘very high’.
- **Making tax digital for income tax self-assessment and transactional risking.** This measure has two elements. First, the Government’s plans for extending HMRC’s making tax digital (MTD) initiative to self-assessed income tax has been pushed back by a year, to April 2024, to allow HMRC time to change its systems to accommodate the introduction of the health and social care levy. As with previous MTD costings, there is uncertainty in all aspects of the costing, particularly the effectiveness of the software in reducing taxpayer errors, which generates the yield. Second, HMRC will use the MTD platform to provide risk-based feedback and prompts to taxpayers, which is expected to improve compliance. This is also a highly uncertain costing. It relies on assumptions drawn from trials of similar interventions, but it is unclear how applicable the evidence will be in the context of being delivered through MTD software. The costing is sensitive – in both directions – to relatively small changes in assumptions about the proportion of prompts that are successful and how much they yield. We will report on progress in respect of these initiatives at future forecasts.
- **Income tax on dividends: increase tax rates by 1.25 percentage points.** This measure increases the rate of tax paid on dividend income by 1.25 percentage points for each tax band. We have assigned this measure a ‘high’ uncertainty rating, mainly relating to the potential scale of the behavioural response, and in particular the degree of forestalling (the bringing forward of dividend payments) in order to avoid the tax rise, which is not due to come in until April 2022 (it was announced in early September).

Longer-term uncertainties

A.34 For most policy costings, the five-year scorecard period is sufficient to give a representative view of the long-term cost or yield of a policy change. Typically, that effect is either zero – because the policy has only a short-term impact that has passed by the end of the scorecard period – or it would be reasonable to expect the impact at the end of the forecast to rise broadly in line with nominal growth in the economy thereafter.

A.35 The measure ‘**income tax: basis periods reform for the self-employed**’ relates to tax rules for partners and the self-employed, and the timing of when their income is assessed by HMRC. It effectively brings forward the point at which profits are assessed for tax purposes, boosting receipts by £0.8 billion in 2024-25, and generating £1.8 billion in total during the scorecard period, and by diminishing amounts through to 2028-29 (based on the policy’s five-year ‘transition period’). It does not affect the underlying amount of profits that will be taxed, and indeed by removing the possibility of ‘overlap relief’ going unclaimed, reduces revenue overall. This measure therefore generates the ‘fiscal illusion’ of raising revenue when in fact it in the long term it reduces it.

Box A.1: The long-term cost of the social care cap and floor reform

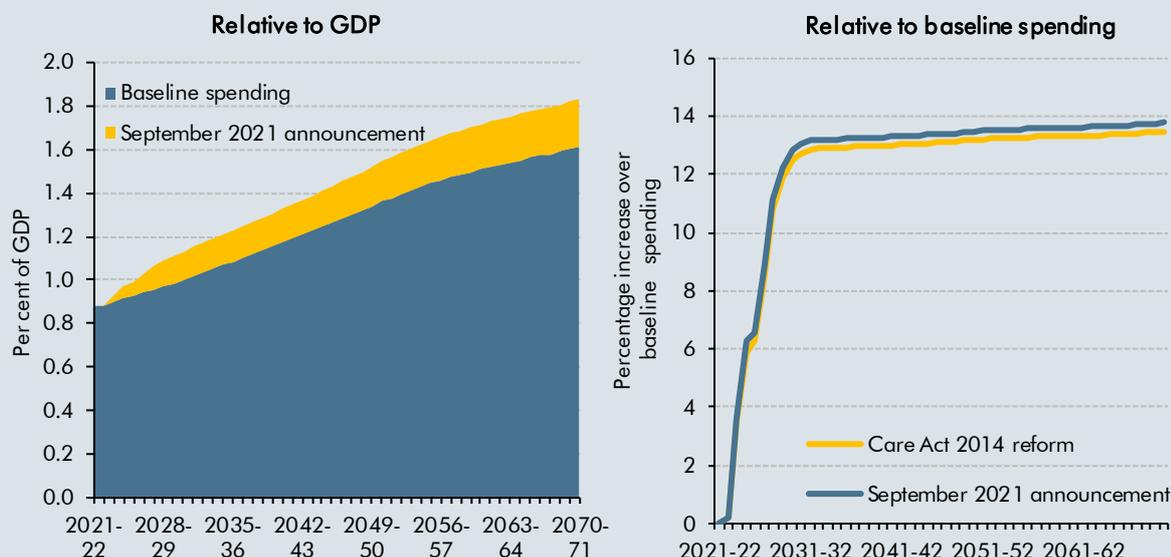
On 7 September 2021, the Government announced a package of reforms to the funding of social care, including a cap on the amount that anyone in England has to spend on adult social care over their lifetime. The cap will be set at £86,000 and take effect from October 2023.^a The cap operates in a similar way to that proposed by the Dilnot Commission in 2011, though it is higher than the original £35,000 proposal (around £46,000 in 2023-24 prices).^b It is, however, similar (after accounting for inflation) to the £72,000 cap set in the Care Act 2014, which was meant to apply from April 2016 but was dropped before it had been implemented.^c

The reforms also include a means-test on local authority contributions to care costs for individuals with assets below £100,000 (known as the ‘upper capital limit’), with no requirement to contribute to costs at all for those with assets below £20,000 (the ‘lower capital limit’). This is a large increase relative to the current system, in which the lower and upper capital limits are £14,250 and £23,250 respectively,^d but the reforms retain the single upper capital limit structure already in place. By contrast, the 2014 reform would have introduced a differential system, with upper capital limits set at £27,000 (£32,000 in 2023-24 prices) for those in domiciliary care and £118,000 (£139,000 in 2023-24 prices) for those in residential care.

Our 2013 and 2018 *Fiscal sustainability reports* showed how the costs of these reforms rise steadily over the longer term. They start relatively low because few individuals reach the lifetime costs cap in the initial years of implementation. It takes several years for the system to reach steady state in terms of numbers of people having their costs covered by the state. The left panel of Chart A presents a provisional long-term profile of the cost of the latest reforms relative to a baseline long-term projection of social care spending, which suggests these reforms will cost around ¼ per cent of GDP a year in the long term, little changed from the 2014 reform.

At the margin, the September 2021 announcement is slightly more expensive than the 2014 reform, adding 13.8 per cent to baseline spending in steady state, compared to 13.5 per cent under the 2014 Act (right-hand panel of Chart A). This is due to the single upper capital limit, which entails slightly more people being entitled to means-tested support (and people with modest assets above the limit receiving means-tested support at an earlier point of asset depletion). But there are still some details of the reforms to be finalised, and so we will consider their long-term implications more closely in our next *Fiscal sustainability report*.

Chart A: Long-term cost estimate of social care funding reforms as a share of GDP and relative to baseline spending



Sources: DHSC, OBR

^a HM Government, *Build back better: our plan for health and social care*, Command Paper CP506, September 2021.

^b Commission on Funding of Care and Support, *Fairer care funding*, July 2011.

^c Department for Health, *The Care Act 2014: consultation on draft regulations and guidance to implement*.

^d However, it is a fifth lower than the original Dilnot-proposed limit in real terms (£100,000 in 2011, equivalent to £129,000 in 2023-24 prices).

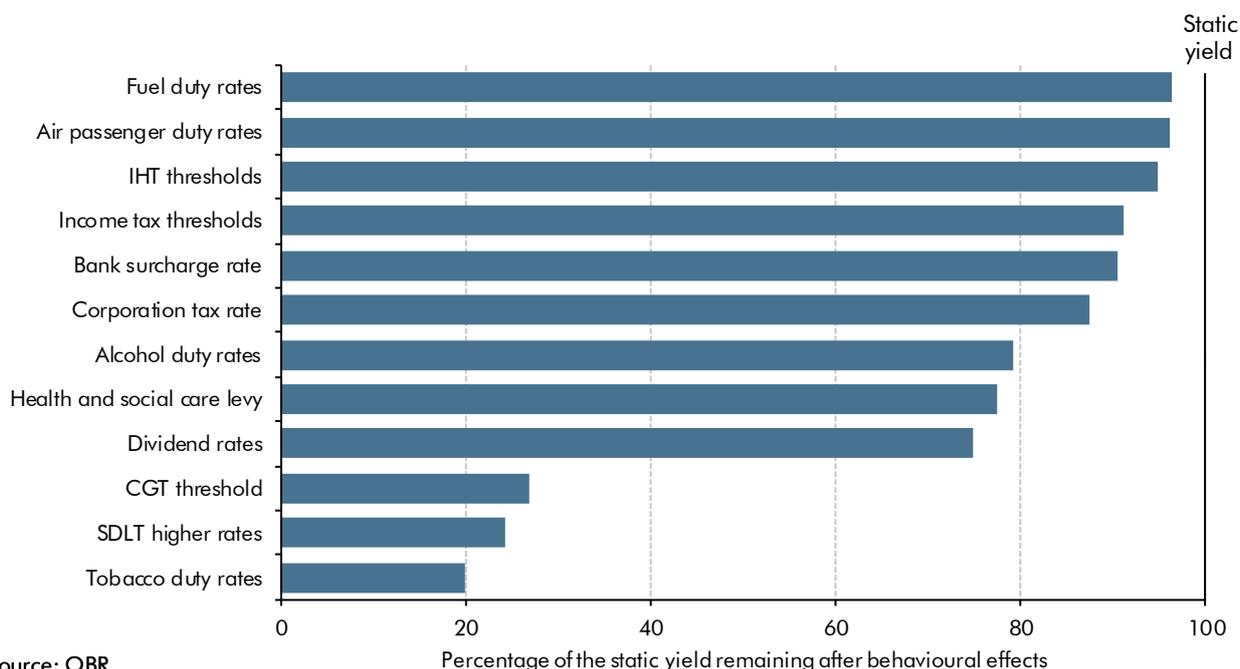
Behavioural responses to changes in tax rates and thresholds

- A.36** Policy costings estimating the cost or yield of a new tax measure will typically be broken down into three sections: (i) an estimate of the size of the underlying tax base that will be affected by the measure; (ii) a static costing, which is the difference between the amount of tax raised by the existing and new regimes when applied to the existing tax base; and (iii) an estimated behavioural effect, which aims to capture the way individuals and businesses change their actions in response to the policy – and thereby change the tax base to which the new regime will be applied. These changes to tax bases often affect more taxes than just the one that is the subject of the measure, so behavioural costs or yields can be large relative to the static cost or yield of the policy change.
- A.37** The scale of the behavioural adjustment depends on the relative ability and willingness of individuals and businesses to respond. It is captured via behavioural elasticities that compare the responsiveness of taxpayers to a given change in the tax rates they face. For some changes these can be based on econometric studies carried out by HMRC or academic institutions based on similar policy changes in the past. For others, judgement has to be relied upon if there is no directly comparable historical or international evidence.
- A.38** Chart A.3 shows the percentage of the cumulative five-year static costing that remains once behavioural responses have been factored in for selected tax policy announcements from the March 2021 Budget and from this Budget and Spending Review. It shows that some

measures are expected to result in proportionately little behavioural response. For example, the demand for fuel is very inelastic with respect to its price, resulting in only a marginal reduction in the static cost of freezing duty rates via increases in fuel purchases. But for some measures the expected behavioural response offsets much of the static effect:

- **Tobacco duty.** At the extreme among these examples, increases in tobacco duty raise remarkably little relative to the static costing. The rate rises announced in this Budget raise £25 million a year, relative to a static yield of £130 million a year. Indeed, evidence suggests cigarettes – the largest component of the tax base – have been past the peak of the ‘Laffer curve’ – the tax rate that maximises tax revenues – for several years. As this is partly due to smokers responding to higher tax rates by switching from cigarettes to hand-rolled tobacco products, tobacco duty overall is not yet at this stage.
- **Stamp duty land tax: higher rates on additional properties.** A 3 per cent surcharge on additional property purchases (second homes and buy-to-let properties) was introduced in April 2016. HMRC has analysed the response to its introduction and found that it was strong.
- **Capital gains tax.** This is another tax that is arguably close to the peak of its Laffer curve, once the consequences of behavioural responses to rate changes for stamp duty receipts in particular are factored in. Like stamp duty and dividends tax, it is also prone to time-related behavioural responses, such as the ‘forestalling’ (bringing forward) or ‘stalling’ (delaying) of activities in response to pre-announced tax changes.
- **The new health and social care levy.** This has relatively modest direct behavioural effects, reducing the static costing by around a tenth. But once we include the indirect behavioural effects of the policy – employers passing through higher costs into lower wages – the downward adjustment increases to around a quarter (see Table A.5).

Chart A.3: Scale of behavioural response for selected tax policy changes



Update on previous measures

A.39 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.

Recostings of pandemic-related support measures

A.40 The cumulative cost of the Government’s pandemic-related support measures has been revised down to £315 billion from the £344 billion we estimated in our March 2021 forecast (which in turn was higher than our November 2020 estimate of £337 billion). Table A.6 shows the main changes since March. They include:

- **A £16.5 billion reduction due to pandemic-related DEL budgets being underspent** by more than expected, largely relating to the NHS. £10.5 billion of this relates to spending in 2020-21, while £6 billion relates to 2021-22. As described in Chapter 3, these latest upward revisions to underspending leave our estimate of overall underspending relative to RDEL plans across 2020-21 and 2021-22 at a historically unprecedented £44 billion.

- The **costs relating to government-guaranteed loan schemes have been revised down by £5.2 billion** to £23 billion overall.¹⁶ Costs for 2020-21 are £6.3 billion lower, matching the £20.9 billion initial estimate published by the ONS, but £1.1 billion higher in later years. The loans are guaranteed by Government, so any that are written off generate a cost to the Exchequer. The largest component of the drop since March is a downward revision to expected loss rates, with a lower value of loans issued and a change in discounting methodology for most of the remainder (see Chapter 3). Since the costs score in the year that the guarantees are issued rather than when the default takes place, the estimate will continue to be revised for several years (see Annex B).
- **Net costs relating to the fourth and fifth round of grants for the Self-Employed Income Support Scheme (SEISS) were £4.4 billion lower than expected.** The grants themselves were £5.0 billion lower than expected in 2021-22, with the tax paid on those grants correspondingly lower in 2022-23 (lagged due to being paid via self-assessment). Take-up rates have been lower than expected, continuing the progressive decline from one grant to the next, and reflecting the faster than expected economic recovery. The fifth grant included a financial impact declaration that might have proved more of a deterrent to claims than assumed. The gross cost across all five grants has been £28 billion (see Chapter 3).¹⁷
- The **net cost of the Coronavirus Job Retention Scheme (CJRS) has been revised down by £5.4 billion** since our March forecast. This reflects near-final outturn data for the AME cost of the scheme, and has two components: (i) the cost for 2020-21 is £3.1 billion lower and relates to an upward revision to the amount of tax due on CJRS payments; and (ii) the cost for 2021-22 has been revised down by £2.3 billion, driven primarily by fewer furloughed employees than we assumed. The gross AME cost of the CJRS is £69 billion (see Chapter 3).¹⁸
- The **extension of the stamp duty holiday on transactions up to £500,000 from March 2021 to 30 June 2021 is due to cost £0.9 billion more in 2021-22** than we expected in March. This reflects higher than expected house prices and residential property transactions, overlaid by a more expensive composition of transactions that is likely to reflect both the 'race for space' and use of pandemic-related savings by the better off.
- The **cost of the temporary cut to VAT for the hospitality, accommodation and attractions sectors has been revised up by £0.6 billion for 2021-22**, due primarily to incorporating the latest economic data, which show a significant increase in activity in these sectors relative to the assumptions made in our March forecast.

¹⁶ Costs from 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 follows the rescue phase of the fiscal policy response.

¹⁷ SEISS grants are taxable, so the net cost includes the subsequent gain in income tax. Since this is paid via self-assessment its impact will tend to be a year later than the grant it relates to. The net cost presentation here is different to that in Chapter 3, which focuses on the gross AME cost.

¹⁸ Payments to furloughed employees are subject to tax (mainly PAYE and NICs), so the net cost includes the receipts that are recouped from Government grants. The net cost presentation here is different to that in Chapter 3, which focuses on the gross AME cost.

- **Costs of the VAT new payment scheme have been revised down £0.7 billion in 2020-21**, due to lower than expected deferrals. The initial estimate of deferrals has been revised down from £34.4 billion to £33.5 billion. The cost of this measure relates to the amount of deferred VAT that is not ultimately repaid. The larger sums deferred and repaid affect the timing of cash receipts but have no effect on accrued receipts.
- **The cost of the £20 a week increase in the standard allowance of universal credit has been revised down by £0.4 billion**, £0.3 billion in 2020-21 and a further £0.1 billion in 2021-22, reflecting lower caseloads than we assumed in March.
- **The cost of business rates relief for the retail, hospitality and leisure sectors has increased for 2020-21 by £0.3 billion and then decreased by a similar amount for 2021-22**. This is primarily due to the incorporation of outturn data for both the original scheme and its extension to 31 March 2022.
- There are **two measures in this Budget that add £1.7 billion to the overall cost** of the Government's pandemic-related support. First, the **business rates relief for sectors outside retail, hospitality and leisure** sectors was announced shortly after the March Budget, on 25 March, and is expected to cost £1.5 billion in total, mostly in 2021-22. Second, a **small change to the financial impact declaration included in the fifth SEISS grant** is expected to cost £0.1 billion.

Table A.6: Recostings of pandemic-related support measures

	Head	£ billion					
		Forecast					
		2020-21	2021-22	2022-23	2023-24	2024-25	2025-26
Measures scored at November 2020 Spending Review							
November 2020 forecast		280.0	52.7	1.9	0.7	0.7	0.5
March 2021 restatement		246.7	50.1	1.2	0.7	0.7	0.5
October 2021 restatement		226.0	45.1	1.7	0.8	0.7	0.4
Difference from March 2021		-20.6	-5.1	0.5	0.1	-0.1	-0.1
of which:							
RDEL underspend	Spend	-10.5	-6.0	0.0	0.0	0.0	0.0
Loan guarantees ¹	Spend	-6.3	0.6	0.5	0.2	0.0	-0.1
CJRS ²	Spend	-3.1	0.0	0.0	0.0	0.0	0.0
VAT: new payment scheme	Tax	-0.7	0.0	0.0	0.0	0.0	0.0
Business rates relief	Tax/ spend	0.3	0.0	0.0	0.0	0.0	0.0
Universal credit £20	Spend	-0.3	0.0	0.0	0.0	0.0	0.0
Other measures	Tax/ spend	-0.2	0.4	0.0	-0.1	0.0	0.0
Measures scored at March 2021 Budget							
March 2021 forecast		3.3	43.2	-1.3	0.1	-0.3	-0.6
October 2021 restatement		3.1	37.0	-0.6	0.1	-0.3	-0.6
Difference from March 2021		-0.1	-6.2	0.7	0.0	0.0	0.0
of which:							
SEISS ²	Spend	0.0	-5.0	0.7	0.0	0.0	0.0
CJRS ²	Spend	0.0	-2.3	0.0	0.0	0.0	0.0
VAT: hospitality	Tax	0.0	0.6	0.0	0.0	0.0	0.0
SDLT holiday	Tax	0.0	0.9	0.0	0.0	0.0	0.0
Business rates relief	Tax/ spend	0.0	-0.3	0.0	0.0	0.0	0.0
Universal credit £20	Spend	0.0	-0.1	0.0	0.0	0.0	0.0
Other measures	Tax/ spend	-0.1	0.0	0.0	0.0	0.0	0.0
Measures scored at October 2021 Budget and Spending Review							
Additional Covid rescue measures ³		0.0	1.7	-0.1	0.0	0.0	0.0
Total cost of pandemic-related support measures							
November 2020 forecast (£336.5bn total)		280.0	52.7	1.9	0.7	0.7	0.5
March 2021 forecast (£344.3bn total)		249.9	93.3	-0.1	0.8	0.4	-0.1
October 2021 forecast (£315.1bn total)		229.2	83.8	1.0	0.9	0.4	-0.2

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

¹ All of the change in costs for the loan guarantees are allocated to the initial November announcement, since it is not possible to split between that and the March extensions.

² Measure has both tax and spend impacts and only the larger is identified.

³ The two new measures are the extension of business rates relief to sectors other than retail, hospitality and leisure, and an amendment to the financial impact declaration within SEISS 5.

State pension underpayment correction

A.41 An administrative error identified in March 2020 suggested that some people had been underpaid in the 'category BL' element of the state pension. The underpayment affected married women whose husbands became eligible for state pension after 17 March 2008 and who were unknowingly entitled to an 'enhanced pension' that would have boosted their payments by up to 60 per cent. DWP investigations between May and December 2020 uncovered a systematic underpayment of state pensions, meaning tens of thousands of

married, over-80s and widowed people were likely to have been underpaid. As well as the category BL underpayments, this includes some underpayments due to ‘missed conversions’ for people whose partner died and their state pension entitlement was not reviewed, and some underpayments for over-80s who should have automatically been entitled to a ‘category D’ state pension when they turned 80 without having to make a separate claim, but who were not awarded one. The repayment programme began on 11 January 2021.¹⁹

A.42 Since March, DWP’s further investigations have revealed that its initial estimate of the cost, which we included in our March forecast, was considerably too high. Total back-payments have been revised down by more than half from £2.7 billion to £1.1 billion, while total continuing costs have halved from £0.6 billion to £0.3 billion. Initial estimates in such cases are always uncertain, reflecting early scans of those potentially eligible pending fuller investigation. But the error in this instance is particularly large. The broader issue has been reviewed by the National Audit Office (NAO).²⁰ As regards the figures included in our forecasts, the downward revision since March is due to:

- **Caseload errors.** The March 2021 Category BL estimate was based on initial sampling by DWP and administrative data. Subsequent analysis of this initial ‘at risk’ estimate revealed that a significant number of cases related to men whose spouse had been born before 6 April 1950 and were therefore ineligible. A sampling exercise undertaken since March 2021 supplemented this by revising down the estimate of average arrears. The NAO audit revealed other errors that reduced the estimate further.²¹ Additionally, the figures for over-80s were not based on detailed Pension Service Computer System (PSCS) scans as the system was undergoing maintenance. They were instead estimated from assumptions and scans of DWP’s General Matching Service (GMS), which is used primarily to identify fraud and error. Review of the sampling audit resulted in substantial downward revisions to estimated caseloads and consequently total arrears costs in both categories.
- **The timetable.** The costs shown in our March 2021 forecast reflected initial expectations that the full exercise to correct the underpayments would take more than six years to complete (extending beyond 2025-26). Subsequently, the Government accelerated the timetable to complete by the end of 2023, bringing cases forward into 2022-23. This shift, combined with the reduction in caseload mentioned above, has significantly reduced the continuing costs for both Category BL and Over 80s costs.²²
- Initial estimates for **missed conversions** were, similarly to the over-80s, based on estimates from DWP’s GMS rather than PSCS. Incorporating new sampling information has also led to lower caseloads, but in this case the revisions are small.

¹⁹ As of 30 September, the repayment programme has repaid a total of £60.8 million: £20.8 million to Category BL cases, £20.2 million to missed conversion cases, and £19.7 million to over 80s cases.

²⁰ National Audit Office, *Investigation into underpayment of State Pension*, September 2021.

²¹ Such as revision to the estimate of pensioners resident in the EU.

²² Continuing costs are largely determined by the volume of active cases at the end of the preceding year.

Table A.7: State pensions underpayments exercise: revised estimates

	March 2021 EFO (extended to 2026-27)	October 2021 EFO	Difference
Category BL			
Overall caseload	78,669	54,869	-23,800
Total arrears costs (£ million)	1,478	350	-1,128
Total continuing costs (£ million)	290	72	-218
Average arrears payment (£ million)	18,787	6,379	-12,409
Average higher continuing payment (£, 2025-26)	1,508	388	-1,120
Missed conversions			
Overall caseload	46,545	43,956	-2,589
Total arrears costs (£ million)	608	567	-41
Total continuing costs (£ million)	125	136	11
Average arrears payment (£ million)	13,054	12,899	-155
Average higher continuing payment (£, 2025-26)	1,846	1,017	-829
Over 80s			
Overall caseload	74,539	36,515	-38,024
Total arrears costs (£ million)	574	147	-427
Total continuing costs (£ million)	139	47	-92
Average arrears payment (£ million)	7,704	4,026	-3,678
Average higher continuing payment (£, 2025-26)	1,424	354	-1,070
Total			
Overall caseload	199,753	135,339	-64,414
Total arrears costs (£ million)	2,660	1,063	-1,597
Total continuing costs (£ million)	554	255	-299
Average arrears payment (£ million)	13,316	7,854	-5,461
Average higher continuing payment (£, 2025-26)	1,549	392	-1,157

Note: Average arrears payments are calculated top down as arrears payments divided by caseload in that year; average continuing payments are calculated as total continuing payments divided by cumulative live cases up to the end of the preceding year.

Policy delays

A.43 To certify costings as central, we need to estimate when – as well as by how much – measures will affect the public finances. As we have 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. Policy delays we have been notified about since March include:

- **Making tax digital (MTD) for self-assessed income tax and penalties reform.** The Government's decision to introduce the health and social care levy as a new tax from April 2023 rather than continue to collect receipts through NICs (which the levy largely

mimics) has led to the delay of two other measures.²³ MTD is a centrepiece of the Government's 10-year tax administration strategy.²⁴ It was due to be extended, from April 2023, for businesses and landlords with income over £10,000 that pay via self-assessed income tax from April 2022. The introduction of the levy requires changes to HMRC systems including those for MTD for self-assessed income tax. HMRC was confident that delivery was on track for an April 2023 introduction, but the Government's decision to prioritise the levy now delays this to April 2024. A second measure – 'penalties reform' – has also been delayed as a consequence. Announced at the March 2021 Budget it introduces new late payment and late submission penalty regimes. The one-year delay to MTD means that the self-assessed income tax element of the penalties measure has also been delayed by a year, to April 2024.

- **Revised timetable of transfer in rent support for pensioners from housing benefit (HB) to pension credit (PC).** Legislation was passed in 2012 to abolish HB and for rent support for pensioners to be delivered through a new housing credit within PC, with a 2016 written ministerial statement suggesting that the transfer would begin in 2020. Delays to universal credit (UC) subsequently revised this to 2023. The Government has informed us that the transfer of HB to PC will now occur after the full rollout of UC. Our forecast assumes that that will happen mid-way through 2026-27 (reflecting almost a decade of delays to the rollout). We therefore assume that the transfer to housing credit will not commence until then.

Policy reversals

A.44 There are two measures in this Budget that fully or partially reverse past policy decisions:

- **Personal independence payment (PIP): reduce frequency of reassessments.** This measure, announced at Budget 2020, was a manifesto commitment to reduce the frequency of health assessments required by PIP recipients. A minimum award review length of 18 months would apply to those whose condition was deemed unlikely to change significantly. It was due to come into force from June 2020, was subsequently delayed to April 2021, and is now being abandoned entirely before coming into effect.
- **Air passenger duty (APD).** This Budget increases the number of APD distance bands from two to three, introducing a new high rate Band C from April 2023. This partially reverses the Budget 2014 decision to abolish the two highest of the four bands that were in place at the time, which the Government argued would *"help British businesses strengthen links with high growth markets, and to go further to make the UK an attractive option for business visitors and tourists"*.

²³ One difference between the levy and NICs is that the former will apply to those working but above the state pension age. That element raises £0.2 billion in 2026-27, around 1 per cent of the total raised by the levy in that year.

²⁴ HMRC and HM Treasury, *Building a trusted, modern tax administration system*, July 2020.

Update on other measures

A.45 Several other measures have been subject to material updates since March:

- Capital allowances: two-year 130 per cent super deduction.** This Budget 2021 measure enables expenditure on new plant and machinery that qualifies as a ‘main rate’ asset to temporarily benefit from a 130 per cent capital allowance super deduction. A 50 per cent deduction is available for ‘special rate’ assets. The normal rates are 18 and 6 per cent respectively, so the measure is extremely generous, and qualifying expenditure is not limited by value. Our March estimate was that the measure would cost £12.3 billion in 2021-22 and £12.7 billion in 2022-23. By bringing forward tax-deductible investment from future years, the measure actually increases yield from 2024-25 onwards when investment is lower than it would otherwise have been. Early evidence suggests that super-deduction claims are building up more slowly than expected, helping to reduce the expected cost in 2021-22 to £9.4 billion. The 2022-23 peak cost has also been revised down to £10.6 billion. Over the full five years of the original costing, the cost is lower by £2.8 billion, which is largely due to a downward revision in the size of the tax base. Updated modelling of losses has also changed the profile of the costing, though not its quantum.
- Offshore receipts from intangible property.** This measure originates from the Autumn Budget 2017 measure ‘*Royalty payments made to low tax jurisdictions: withholding tax*’, which was initially expected to generate an average yield of £0.2 billion a year between 2019-20 and 2022-23.²⁵ Subsequent amendments in 2018 led to the current measure, which we forecast at the time would generate an average of £0.3 billion a year between 2020-21 and 2023-24. The measure targets multinationals resident in certain low-tax jurisdictions that generate income from intangible property, to the extent that the income is connected, directly or indirectly, to sales in the UK market. It applies a 20 per cent income tax charge, effective from April 2019. HMRC outturn data for 2020-21, mostly in respect of 2019-20 liabilities, show that £1.3 billion has been collected, some £0.8 billion (165 per cent) higher than our 2018 estimate. There are two elements of the original costing that were most likely underestimated. Firstly, the tax base – the level of underlying activity – and secondly, the degree to which businesses were expected to restructure to avoid the rules. HMRC intelligence suggests that businesses have subsequently restructured and fallen out of scope of the tax, which implies the first-year yield in effect amounted to a windfall tax. Forecast yield between 2021-22 to 2026-27 is a more modest £25 million a year on average.
- Seller and online marketplace liability and the abolition of low value consignment relief (LVCR).** This Spending Review 2020 measure relates to VAT on imports and was part of the package of changes brought in ahead of the UK’s exit from the EU. It

²⁵ The 2017 measure was itself an extension of a measure announced at Budget 2016. That measure – ‘*Income tax: withholding tax on royalties*’ – widened the scope of royalty payments to include intangible assets and broadened the rules on when royalties are regarded as having a UK source. The 2017 measure expanded the scope of those royalty withholding tax rules, while the 2018 amendments that led to the current measure brought embedded royalties within scope, changed the measure from a withholding tax to a direct income charge, and switched its collection to self-assessed income tax. The definition of intangible property is relatively broad, including goodwill, patents, trademarks and copyrights.

removed LVCR for all non-EU imports into Great Britain (it still applies in Northern Ireland).²⁶ The measure also made VAT payable at the point of sale, effectively moving its collection from the border to online marketplaces that facilitate sales as well as direct sellers (domestic and overseas). The initial costing was expected to yield £0.3 billion a year between 2021-22 and 2025-26, but outturn data for the current year suggest this was a material underestimate. We now expect the measure to generate £1.4 billion in 2021-22, rising steadily to £1.8 billion by 2026-27. The five-fold increase in the average annual yield is largely due to underestimating the tax base.

- **UK global tariff (UKGT):** The UKGT was announced at Spending Review 2020 and was expected to raise around £1 billion a year from 2021-22 onwards.²⁷ This was more than explained by around £1.4 billion a year of receipts on EU imports (revised down to £1 billion in our March forecast) from traders unable or unwilling to take advantage of available preferential tariff rates. The costing captured these via assumptions about 'preference utilisation rates' (PURs). Our latest customs duties forecast has been revised up by £1.1 billion a year from March. One factor, relating to non-EU trade, is higher than expected imports of electric and hybrid vehicles, particularly from China, which contributes £0.2 billion of the surplus. Around £0.5 billion relates to unexpectedly low PURs on EU imports. The original costing assumed PURs between 80 and 90 per cent, whereas in the textiles and clothing sector, which contributes the majority of the extra yield, the current estimate is between 25 and 35 per cent. This is likely to be part of a shifting 'entrepot effect' where goods are offloaded in the EU and then transhipped to the UK, where they become liable for UK customs charges due to not meeting 'rules of origin' requirements of the Trade and Cooperation Agreement (TCA).²⁸ As a result, we estimate that tariff-free trade of goods under the TCA is expected to raise £1.6 billion a year in customs revenue from EU imports. The extent to which the lower PURs observed in outturn will persist is uncertain. Given the sectors in which the effect is largest, we have assumed only modest rises in the average PUR in future.

Policy risks

- A.46 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 (for example, because policy parameters are being consulted on or implementation dates have yet to be set), 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. Risks that are particularly large, have changed materially since our last forecast, or are new, include:

²⁶ LVCR provided VAT relief for imported goods valued at £15 or less.

²⁷ There were four elements to the original £1 billion costing: the UKGT reduced tariffs for non-EU imports, at a cost of around £1 billion; the PUR element raised £1.4 billion from EU imports; a further £0.8 billion came from existing EU trade deals that the UK had yet to rollover (most of which have now been rolled over); and a £0.2 billion cost associated with additional non-compliance.

²⁸ Previously, customs duties would have been due when goods first entered the EU, from where they could then be shipped to the UK without incurring further charges.

- **OECD global corporation tax agreement.** Pillar 1 of the ‘OECD Inclusive Framework’ agreement around the taxation of multinational company profits reallocates taxation rights from the countries where multinationals currently realise residual profits to the markets where their customers are located. It applies to multinationals with global revenues of at least €20 billion and profit margins more than 10 per cent. 25 per cent of profits beyond that margin will be subject to tax in the market jurisdiction. The OECD agreement is not legally binding on countries but is a political commitment to adopt the new rules. The Chancellor has committed to removing the digital services tax (DST, forecast to raise £0.7 billion in 2024-25) once a Pillar 1 solution is in place. Pillar 2 of the agreement is a commitment to a global minimum tax rate of 15 per cent, on a country-by-country basis. The Government expects the agreement to raise revenue overall, but there remain too many uncertainties to determine a reasonable and central estimate at this stage, with initial external estimates varying considerably.
- **Changes to the migration regime.** The Government’s UK Innovation Strategy outlines two new visa routes (‘High Potential Individual’ and ‘Scale-up’) and reintroduces the innovator route. Fees and associated charges (such as the immigration health surcharge) for these categories are yet to be confirmed, so the direct fiscal consequences of this policy are yet to be reflected in our forecast.
- **UK-Australia trade deal.** The UK-Australia trade deal, announced on 15 June 2021, removes tariffs on all UK goods exported to Australia and nearly all Australian exports to the UK, subject to meeting ‘rules of origin’ requirements. It remains an ‘agreement in principle’ at this stage, with details to be finalised, so we have not yet included any impacts in our forecast, though the fiscal impacts are likely to be modest. Australia accounted for 0.8 per cent of total UK imports in 2019-20 and 0.7 per cent in 2020-21, while UK exports to Australia in those years made up 1.7 per cent and 1.6 per cent of total exports respectively. The Government estimates the deal will add around 0.01 per cent to GDP.
- **The border operating model.** The Trade and Cooperation Agreement (TCA) negotiated between the UK and the EU ensures tariff- and quota-free trade, subject to meeting relevant ‘rules of origin’ requirements (which our latest forecast suggests a significant proportion of EU exporters to the UK are either unable or unwilling to do). The TCA does not affect declaration requirements set out in the Government’s border operating model. The border operating model sets out how and when the Government will implement and manage its customs and border control obligations after exiting the EU. Since our March *EFO*, the Government has announced that the introduction of full customs checks on goods arriving from the EU will be delayed by a further six months, to 31 December 2021. The eventual full implementation of the border operating model therefore remains an ongoing risk, with scope for further delays.
- **Northern Ireland Protocol.** The Government’s 21 July 2021 Command Paper stated its intention to renegotiate several aspects of the existing Northern Ireland Protocol that it agreed with the EU, and ratified in 2020. These include the full customs and sanitary and phytosanitary measures that are currently applied to all goods entering Northern

Ireland from Great Britain, regardless of final destination. This month the European Commission has responded, offering “a bespoke solution for Northern Ireland on food, plant and animal health [...] leading to approximately an 80% reduction in checks”. There remains significant uncertainty around the medium- to long-term operation of the protocol, and the Government has not ruled out unilateral measures via the protocol’s Article 16 safeguard mechanism.

- **‘Goodwin’ pensions case.** In July 2021, the Government published its response to what has become known as the ‘Goodwin case’.²⁹ The case successfully challenged that the disparities in rights to survivors benefits in the Teachers’ Pension Scheme (TPS) were discriminatory. Though the challenge was to the TPS, the ruling requires all public service pension schemes that have similar discrimination to provide remediation. Uncertainty over how the remediation will be implemented means that it has not been possible to reflect the associated costs in this forecast, but we expect to include it in our next one. The Treasury estimates that the overall increase in pension liabilities as a result of remediation could be of the order of £3 billion over 40 years. The cost will therefore be on a smaller scale to the ‘McCloud remedy’ that has added an average of £0.6 billion a year to our public service pensions forecast in this EFO.
- **Children’s social care review.** In January 2021, the Government commissioned an independent review into children’s social care. On 5 August, early findings were shared in a letter by the Chair of the Independent Review, to “inform [the Government’s] spending review bid”. The letter suggested that significant reforms were needed, including “significant additional funding for effective family help”, an investment of “additional money” into homes for children in care, and greater investment into mental health provision for children. As the full review will not conclude until 2022, any additional spending implications remain a risk to our forecast.
- **Response to the R&D tax credit consultation.** At March Budget 2021, the Government launched a wide-ranging consultation on R&D tax credits. The consultation has closed but the Government has yet to publish a response or make any new policy decisions.
- **Freeports in Scotland, Wales and Northern Ireland.** The Government announced the locations of eight freeports in England in March and declared its ambition to establish freeports in each of Scotland, Wales, and Northern Ireland. Some of the tax concessions available within freeports fall into devolved competence, requiring negotiation with the relevant devolved administration, which has limited progress to date. The Government can establish freeports without the involvement of devolved administrations, but tax incentives in them would be limited to the reserved taxes.
- **Extended producer responsibility for packaging.** In March, the UK, Scottish and Welsh Governments and the Northern Ireland Executive issued a joint consultation stating “their strong intent to introduce Extended Producer Responsibility for packaging so that

²⁹ *The Teachers’ Pensions (Miscellaneous Provisions) (Amendment) Regulations 2021*, Government consultation response, Department for Education, 8 July 2021.

producers pay the full costs of dealing with the waste they produce". Detailed policy parameters have yet to be set.

Costs of failing to implement the Government's indexation policies

- A.47 The Government decides how different rates and thresholds will rise over time in the absence of specific decisions to the contrary. These 'default indexation' policies are published in the Treasury's *'Policy costings document'* alongside each Budget. Consistent with the requirements placed on us by Parliament, we forecast on the basis of those policies.
- A.48 In some cases, despite Governments restating these policies every year, they are rarely implemented. The biggest revenue effects from these decisions have been related to fuel and alcohol duties, but a similar pattern has been seen with several smaller taxes. Table A.6 shows that the freezing of rates for several taxes in this Budget comes at a cumulative cost of £11.3 billion across the forecast – a figure that equates to the direct contribution of these decisions to the level of public debt in 2026-27.
- A.49 The Government's stated policy for each of these taxes remains to raise rates each year in line with RPI inflation, despite many being frozen for several years. Indeed, the fuel duty and aggregates levy rates have been frozen for more than a decade, while for VED paid in respect of heavy goods vehicles rates have not risen for more than two decades.
- A.50 We estimate that the cumulative cost of freezing fuel duty rates between 2010-11 and 2020-21, relative to increasing them in line with RPI inflation, to be around £65 billion after factoring in the expected fall in demand for fuel from higher duty rates.

Table A.8: Costs of not following the Government's stated indexation policy

Tax	Stated policy	Actual policy	£ billion
			Cumulative scorecard cost
Fuel duty	Increase rates by RPI	Rates frozen since 2010	7.9
Wine duty	Increase rates by RPI	Rates frozen since 2020	0.8
Beer and Cider duty	Increase rates by RPI	Rates frozen since 2017	1.0
Spirits duty	Increase rates by RPI	Rates frozen since 2017	1.2
HGV levy and VED	Increase rates by RPI	Rates frozen since 2019 and 2001	0.3
Aggregates levy	Increase rates by RPI	Rates frozen since 2010	0.1
Total cost			11.3

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 the majority 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 has 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 declined 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 Scheme (CLBILS); and the Recovery Loan Scheme (RLS). Further contingent liabilities have been incurred via the Mortgage Guarantee Scheme (MGS) and the Trade Credit Reinsurance Scheme (TCR). 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 begin a running commentary on the net direct effects of these schemes on the public finances. At this stage, these are just a tiny fraction 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 a counterfactual where the Government did not intervene. The costs of both crises would almost surely 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, £136.6 billion was disbursed by the Treasury during and following the crisis. By end-September 2021, principal repayments and other fees received had amounted to £131.6 billion, up by £7.0 billion relative to our previous update based on data at end-January 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 £5.0 billion. A higher share price raised the value of the Government's NatWest Group shares to £13.0 billion,² up from the £11.5 billion recorded in our March *EFO* despite £2.2 billion worth of shares having been sold in the intervening period.
- B.6** If the Treasury were to receive all loan payments in full and to sell its remaining shares at these values, it would realise an overall cash surplus on all the interventions undertaken during the crisis of £13.5 billion. This is an increase of £7.8 billion from our March estimate, mainly reflecting the above changes in the net cash position and the higher NatWest share price. However, this cash surplus estimate 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 £46.5 billion by September, mainly due to the costs associated with NatWest and UKAR.³ This cost is £3.5 billion larger than estimated in March, partly reflecting eight more months servicing debt on interventions yet to be repaid or sold. Together this implies an overall net cost of £33.0 billion to the Government (2.1 per cent of 2008-09 GDP), £4.3 billion less than we estimated in March.
- B.7** On 26 February 2021 the Government announced that the final £5 billion sale of Bradford & Bingley plc and NRAM Limited and their remaining mortgage assets and loan portfolios to a private consortium had been approved.⁴ The sale effectively ends UKAR's ownership of institutions and assets taken on in the financial crisis. Implementation is taking place in two stages: the first was completed on 10 March 2021 and raised £4.5 billion; the second is expected to complete at the end of October.

² Based on an average of NatWest Group's share price for the ten days to 15 September 2021, 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								Change since March 2021 ²
	Lloyds	NWG ¹	UKAR ¹	FSCS ¹	CGS ¹	SLS ¹	Other	Total	
Cash outlays	-20.5	-45.8	-44.1	-20.9	0.0	0.0	-5.3	-136.6	0.0
Principal repayments	21.1	8.9	43.7	20.9	0.0	0.0	5.3	99.9	2.6
Other fees received ³	3.2	6.4	11.9	3.5	4.3	2.3	0.3	31.8	4.4
Net cash position	3.8	-30.5	11.5	3.5	4.3	2.3	0.2	-5.0	7.0
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	13.0	5.4	0.0	0.0	0.0	0.0	18.4	0.8
Implied balance	3.8	-17.5	16.9	3.5	4.3	2.3	0.3	13.5	7.8
Exchequer financing ⁵	-4.5	-18.0	-14.5	-9.3	0.0	0.4	-0.6	-46.5	-3.5
Overall balance	-0.8	-35.5	2.4	-5.8	4.3	2.7	-0.3	-33.0	4.3
<i>Memo: changes in overall balance since March 2021²</i>	-0.1	3.3	2.9	-0.4	-1.4	0.0	0.0	4.3	

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).

² March 2021 EFO figures were consistent with end-January 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 2020 published in July of that year.

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, and SLS closed in April 2012.

While open

After close

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:

- It starts from the **maximum size** reached by each scheme, which stands at an estimated £143.8 billion in total. This estimate includes the maximum size reached for those schemes that are now closed, and forecasts for those that remain open. It is dominated by the four loan guarantee schemes, which together account for £82.0 billion of the total. Another significant contingent liability is the indemnity provided to the Bank of England's Covid Corporate Financing Facility (CCFF), which has a maximum size of £38.0 billion. However, given this facility was only open to investment-grade rated firms, write-offs are expected to be minimal.
- Next it reports 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 amounts to £138.4 billion, of which £137.2 billion is contingent liability and is 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.

- It then reports the **latest gross contingent or actual liability** as of end-September 2021. This reflects loan repayments and other factors that have taken place since each scheme peaked in size, and shows that while little has changed since the closure of most schemes, repayments in full (and other closures of loans taken out) have reduced the exposures to the three closed loan guarantee schemes by around £6 billion. More significantly, the latest liability relating to the CCFF in respect of currently outstanding commercial paper purchases through the scheme has fallen to £3.4 billion.⁵
- **Expected write-offs** reflect our latest forecasts for write-offs over the lifetime of the schemes in cash terms. This amounts to £23.1 billion – with expected write-offs dominated by the BBLS at £19.7 billion, thanks to both the large size of the scheme and the relatively high expected loss rate. 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.⁶
- **Cash outlays to date** reflect the small sums paid out by end-September (£2.5 billion). The largest component of this covers payments in respect of the 12-month interest holiday offered at the start of two of the loan guarantee schemes, amounting to £1.4 billion across the CBILS and BBLS. The remainder is made up of the £1.1 billion of convertible loans issued through the Future Fund (described below).
- **Cash received to date** reflects the very small sums (£0.1 billion) received by end-September in respect of, for example, fees received in respect of the CBILS and CLBILS.
- **Net cash outlays** are therefore positive as of end-September, but have so far been fiscally small, at just £2.4 billion, in comparison to the size of expected write-offs.

B.9 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-August, 158 of the 1,190 loans had been converted to equity stakes, with the Government now part-owner in entities ranging from manufacturers of Nordic yoghurt bars to providers of at-home spa treatments. 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 back 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. Our latest forecast for expected losses on Future Fund loans is £0.5 billion, but only a very small number of losses have so far crystallised.

⁵ See Bank of England, *Results and usage data*.

⁶ See UK Parliament, *Question for HM Treasury on the Help to Buy Scheme*, tabled on 30 March 2017.

Table B.2: Gross and net cash flows of pandemic-related balance sheet interventions

Scheme status	£ billion										Total
	Equity	Guarantee schemes						Indemnities & insurance			
	FF ¹	CBILS ¹	CLBILS ¹	BBLs ¹	RLS ¹	MGS ¹	UKEF ¹	CCFF ¹	TCR ¹	Other ¹	
	Closed	Closed	Closed	Closed	Open	Open	Open	Closed	Closed	Open	
Maximum scheme size	2.3	26.4	5.6	47.4	2.5	-	10.0	38.0	10.0	1.6	143.8
Maximum gross liability	1.1	21.1	4.4	47.4	1.9	3.9	10.0	38.0	9.0	1.5	138.4
Latest gross liability ²	1.1	18.7	3.3	44.9	1.2	0.0	6.8	3.4	9.0	0.8	89.2
Expected write-offs ³	0.5	2.4	0.4	19.7	0.2	-	0.0	0.0	-	-	23.1
Net cash outlays	1.1	0.7	0.0	0.6	0.0	0.0	0.0	0.0	-	0.0	2.4
<i>of which:</i>											
Cash outlays to date ⁴	1.1	0.8	0.0	0.6	0.0	0.0	0.0	0.0	-	0.0	2.5
Cash received to date	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.1

¹ 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 Facility (CCFF), Trade Credit Reinsurance (TCR) and 'Other' including the Events Reinsurance and the Film and TV Production Restart schemes.

² Figures for CBILS, CLBILS and BBLs do not include standard monthly repayments that also have the effect of reducing the latest gross liability.

³ Expected write-offs for CBILS, CLBILS and BBLs are presented as an estimated cash figure, as opposed to the discounted figures presented elsewhere in this document.

⁴ This comprises both cash paid when guarantees are called and other cash outlays, including the cost of paying borrowers' interest for 12 months at the start of the CBILS and BBLs loan guarantee schemes.

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