Office for
Budget Responsibility

Economic and fiscal outlook

March 2020

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Office for Budget Responsibility: Economic and fiscal outlook

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

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Supplementary information and charts and tables data are available on our website.

Foreword

The Office for Budget Responsibility (OBR) was established in 2010 to provide independent and authoritative analysis of the UK's public finances.

In this *Economic and fiscal outlook* (*EFO*) we set out forecasts to 2024-25. We also assess whether the Government is on course to meet the medium-term fiscal and welfare spending targets that it has set itself. 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.

As set out below, we agreed to close the pre-measures forecasts for the economy and public finances on 18 and 25 February respectively, to provide a stable base against which to assess the impact of the large Budget package. This was before the spread of the coronavirus was expected to have a significant effect on economic activity outside China. As discussed in the document, the outlook is therefore likely to be significantly less favourable than this central forecast suggests – especially in the short term – but to a degree that remains highly uncertain even now.

We have been hugely supported in the work on this *EFO* by the staff of the OBR. We are enormously grateful for their hard work, expertise and professionalism. Given the highly disaggregated nature of the fiscal forecasts we produce, we have also drawn heavily on the work and expertise of numerous officials across government, including in HM Revenue and Customs, the Department for Work and Pensions, HM Treasury, the Ministry of Housing, Communities and Local Government, 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, Homes England, UK Government Investments, the Scottish Government and 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 to them all for their time and patience.

Following the cancellation of the November 2019 Budget, this is our first forecast of the current financial year. The Budget Responsibility and National Audit Act 2011 requires us to produce two forecasts a year, so we will fulfil that requirement with a limited forecast update on 13 March.[1]

Given the legal requirement for the OBR to base its forecasts on current Government policy, we asked the Government to provide us with any detail on post-Brexit policies in relation to trade, migration and several direct effects on the receipts and spending forecasts:

- **On future trade regimes**, the Government directed us to the Prime Minister's statement on 3 February and *'The Future Relationship with the EU'*, published on 27 February. These set out its approach to the negotiations with the EU. The Government also directed us towards the public

[1] *Exchange of letters on the OBR's second forecast*, 27 February 2020.

consultation on the future tariff regime, which closed on 5 March. As with the Government's previous publications, securing the outcomes that it seeks will depend on further policy development by the UK authorities and on the continuing negotiations with the EU.

- On the future migration regime, the Government referenced the 19 February policy statement on '*The UK's Points-based Immigration System*'. We have reflected this in our forecast.

- On the direct consequences for the receipts and spending forecasts, the Government clarified assumptions on a range of issues that we have incorporated and described in the Chapter 3, including with respect to the replacement of EU spending and imposing vehicle emissions fines.

Our forecasts are consistent with a range of external estimates of the impact of the UK leaving the EU and moving to a typical free-trade agreement. Our assumptions are set out in Chapter 2 (economy) and Chapter 3 (fiscal) of this document. We will continue to review these assumptions as further details of the new UK-EU economic relationship are confirmed.

Relative to the Brexit-disrupted forecasts of October 2018 and March 2019, and the commission and cancellation of the Autumn 2019 Budget and accompanying forecast, the process for this forecast has been much smoother. We received an initial notification of the Budget date on 20 December 2019, with public confirmation following on 7 January, slightly short of the agreed 10-week notice period. While advance notice is useful for making our own preparations, we cannot plan properly with other departments in the absence of a firm public announcement.

For this event, the Chancellor has asked us to assess the Government against the new fiscal rules set out by the Government in the Queen's Speech, but without him laying a revised *Charter for Budget Responsibility*. (He plans to review the new rules ahead of the Autumn Budget.) We also assess the Government against the rules in the current *Charter*, which formally remain in force.

The full forecast timetable has been as follows:

- On 20 December the Treasury notified us that we should prepare to publish a forecast on 11 March and that a specific date would be confirmed in early January. We began preparations on this timetable and the Budget date was publicly confirmed by the Chancellor on 7 January.

- We began with OBR staff preparing a revised economy forecast, drawing on data released since our previous forecast in March 2019 and with our preliminary judgements on the outlook for the economy. We sent our first economy forecast to the Chancellor on 15 January.

- Using the economic determinants from this forecast (such as the components of nominal income and spending, unemployment, inflation and interest rates) we then commissioned new forecasts from the relevant government departments for the various tax and spending streams that in aggregate determine the state of the public finances. We discussed these in detail with the officials producing them, which allowed us to investigate proposed changes in forecasting methodology and to assess the significance of recent tax and spending outturns. In many cases, the BRC requested changes to methodology and/or the interpretation of recent data. We sent our first fiscal forecast (including a provisional judgement on progress towards meeting

the fiscal targets) on 30 January. We also notified the Chancellor that we intended to revise down our long-term productivity growth assumption alongside this first fiscal forecast.

- As the process continued, we identified 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 the key judgements, allowing the production by OBR staff of a second full economy forecast.

- This provided the basis for a further round of fiscal forecasts. Discussion of these with HMRC, DWP and other departments gave us the opportunity to follow up our requests for further analysis, methodological changes and alternative judgements made during the previous round. We provided our second economy and fiscal forecast to the Chancellor on 13 February.

- We then produced a third economy and fiscal forecast, which took on the latest data and incorporated our judgements on the fiscal forecast. The economy forecast included financial market data based on the average over the ten working days to 11 February. Our global forecast was finalised on 14 February and the UK economy forecast on 18 February. The final pre-measures fiscal forecast was finalised and sent to the Chancellor on 25 February.

- Given the size of the evolving policy package we also prepared a provisional post-measures economy forecast, using an interim list of policy measures, so as to investigate the indirect effects of such a large package as thoroughly as possible. We shared the results of this interim round with the Treasury alongside the final pre-measures forecast on 25 February.

- The BRC met the Chancellor to discuss the forecast on 26 February.

- In line with the agreed forecast timetable, we were provided with details of the final policy decisions with a potential wider impact on the economy forecast on 28 February.

- Meanwhile, we were scrutinising the costing of Budget tax and spending measures and others that had been announced since the March 2019 forecast. As usual, the BRC requested changes to almost all the draft costings prepared by departments. Three costings have not been certified – one due to modelling difficulties, one due to lack of notice and one due to a lack of supporting information upon which to judge its reasonableness.

- In the Budget, the Chancellor announced a number of policy measures in response to the recent spread of the coronavirus (discussed in Box 2.3). Events have moved quickly, and this announcement was unavoidably finalised after we closed our forecast to new measures.

- 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 6 March. This allowed the Treasury to prepare the Chancellor's statement. We also provided 24 hours pre-release access to the full and final *EFO* on 10 March.

During the forecasting period, the BRC held around 40 scrutiny and challenge meetings with officials from other departments, in addition to numerous further meetings at staff level. 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 6 March.

Our non-executive members, Sir Christopher Kelly and Bronwyn Curtis OBE, provide additional assurance over how we engage with the Treasury and other departments by 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 will take place over the next two weeks and any concerns our non-executive members have will be raised with the Treasury's Permanent Secretary or the Treasury Select Committee, if they deem that appropriate.

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

Robert Chote

Sir Charles Bean

Andy King

The Budget Responsibility Committee

1 Executive summary

Overview

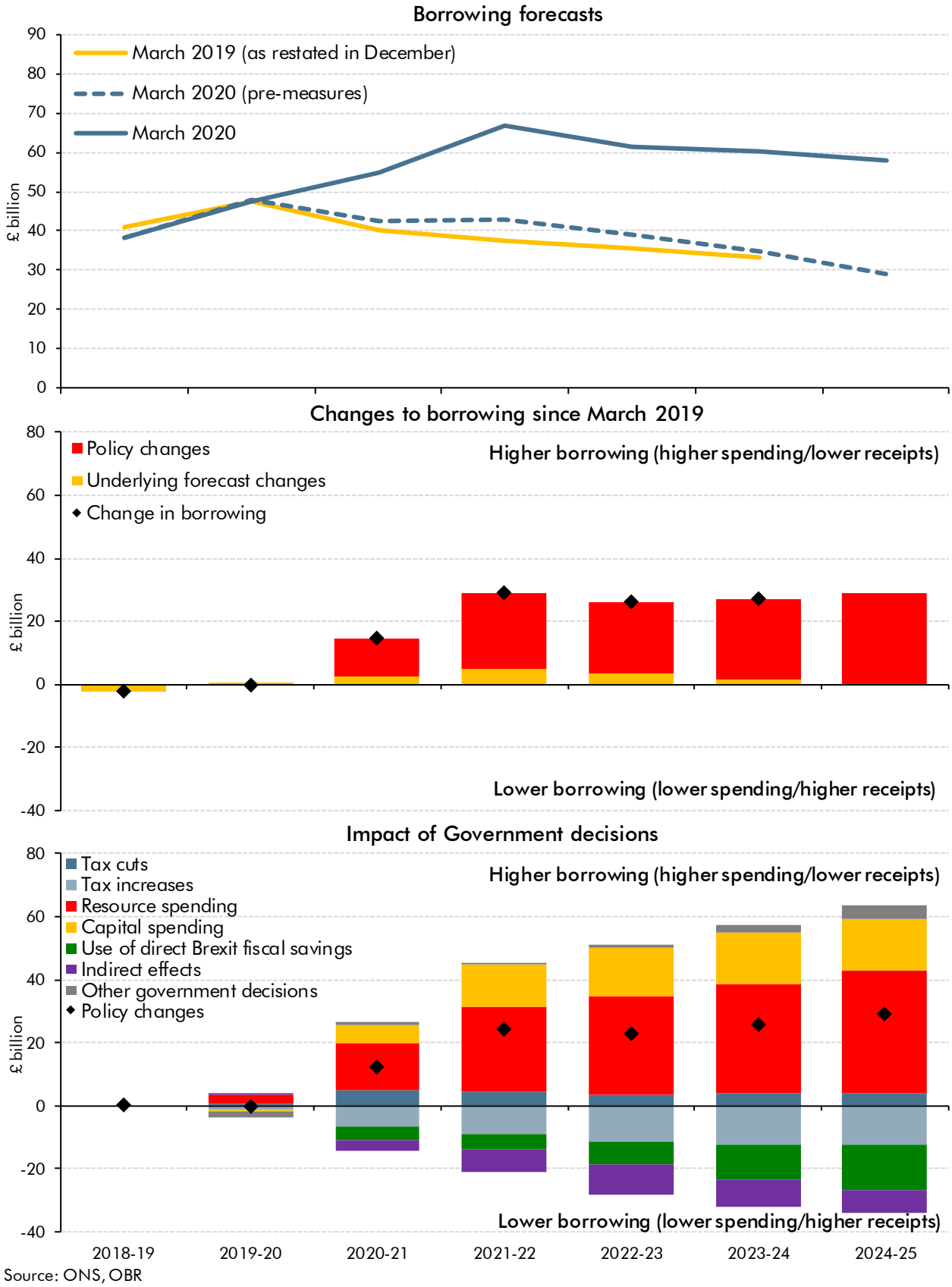
1.1 In addition to its impact on public health, the coronavirus is likely to have a significant adverse effect on the economy and public finances in coming quarters. But neither the size nor the duration of this effect are possible to predict with any confidence. The Chief Medical Officer has declared that an epidemic in the UK is now "*likely*", while the Bank of England Governor has said that the shock to the economy "*could prove large*".

1.2 With large numbers of people potentially sick – or restricting their movements to avoid becoming so – the coronavirus is likely to reduce both the demand for goods and services in the economy and the ability of businesses at home and abroad to supply them. That will temporarily reduce private sector incomes and spending (and hence tax revenues), while putting upward pressure on government spending to help address the outbreak. This implies additional upward pressure on the budget deficit and public debt. But the impact on the public finances over the medium and longer term is likely to be less significant, unless the outbreak inflicts lasting damage on the economy's supply capacity.

1.3 As regards this fiscal event, the Treasury as usual asked us to close our pre-measures forecasts for the economy and the public finances some way in advance of the Budget – on 18 and 25 February respectively – so that it had a stable base against which to finalise its policy decisions. (With the spread of coronavirus then expected to be relatively limited, the impact on the forecasts in this *Economic and fiscal outlook* (*EFO*) is largely confined to a modestly weaker outlook for growth in world trade and the UK's export markets.) The only subsequent changes to the forecast were to reflect the Budget measures and other policy announcements since our previous forecast in March 2019 – notably the new migration regime and further rises in the National Living Wage. Under the circumstances, the precise forecasts for the economy and public finances in this *EFO* can no longer be regarded as central – particularly in the near term – but scrutinising and analysing the impact of the Government's policy decisions even against this baseline remains informative.

1.4 Turning to those policy decisions, the Government has proposed the largest sustained fiscal loosening since the pre-election Budget of March 1992 (which was reversed within months after the UK left the European exchange rate mechanism in September that year). Relative to our pre-measures baseline forecast, the Government's policy decisions increase the budget deficit by 0.9 per cent of GDP on average over the next five years and add £125 billion (4.6 per cent of GDP) to public sector net debt by 2024-25.

Chart 1.1: Public sector borrowing: March 2020 versus restated March 2019



Source: ONS, OBR

1.5 The largest components of the fiscal loosening are significant increases in departmental spending plans – for both current and capital. As regards current spending, the Budget completes the reversal of the cuts to real departmental spending per person undertaken by the Coalition Government. The turnaround started in the Conservative Government's post-election Budget in July 2015, but really took hold with the multi-billion pound NHS settlement in June 2018. The capital spending turnaround is more dramatic still – the Coalition Government's early cuts (which had been a feature of the previous Labour Government's March 2010 Budget plans) will have been almost fully reversed this year. Spending is set to be around a third higher at the end of our forecast than in 2010-11.

1.6 The net tax rise announced in the Budget reduces borrowing by an average of £5.5 billion a year. This is more than explained by the decision to cancel the planned cut in the main rate of corporation tax from 19 to 17 per cent this April. The Budget also cuts National Insurance and freezes fuel and alcohol duties for a year (again), but restricts eligibility to use cheaper 'red diesel' to just a handful of uses. This leaves the receipts-to-GDP ratio on a steadily rising path, reaching its highest level since 1984-85 at the forecast horizon.

1.7 Despite a year having passed since our last full forecast, the near-term economic outlook at the time we closed this forecast appeared little changed. That has of course been overtaken by coronavirus. Against our stable but subdued pre-measures forecast baseline, the profile for GDP growth reflects the impact of the Government's policy decisions. In broad terms, they deliver a boost to demand in the near term that dissipates by the end of the forecast. This overlays a steadily building drag on potential output, largely via the effect of the new migration regime on population growth. GDP growth peaks at 1.8 per cent in 2021, thanks to the fiscal loosening, before easing back to around 1½ per cent a year.

1.8 The Government set this Budget against the materially looser set of fiscal rules outlined in the Conservative Party manifesto and confirmed in the Queen's Speech. Based on these *EFO* forecasts, the Government would meet its new target of a current budget balance in the third year of our forecast (currently 2022-23) by a margin of £11.7 billion. Public sector net investment (PSNI) rises to 3.0 per cent in 2022-23 and remains there, meeting the 'maximum investment' rule. This incorporates our assumption that 20 per cent of the additional capital plans will go unspent (reflecting past experience when governments try to ramp up capital spending quickly). This leaves public sector net debt broadly stable. These assessments reflect the forecasts underpinning them, so near-term risks are to the downside. The extent to which that is true further out, when the rules apply, is unclear.

1.9 Formally speaking, the fiscal rules approved by Parliament in the January 2017 *Charter for Budget Responsibility* remain in force for now – and the Government is not on course to meet them. Our forecast shows a structural budget deficit of 2.4 per cent of GDP in 2020-21, missing the 'fiscal mandate' by £9.2 billion. The formal 'fiscal objective' is to return the Budget to balance. The Government was on course to achieve a small budget surplus by 2023-24 in our October 2018 pre-measures forecast, but thanks to two expansionary budgets and improved accounting for student loans the deficit is now set to rise and then level off at around £60 billion a year. The Government says that it intends to review the

fiscal framework ahead of the next Budget, so the next *Charter* could incorporate different fiscal targets to those that have underpinned the decisions in the Budget.

1.10 The Government's fiscal plans are rooted in the assumption that its borrowing costs will remain relatively low, as market expectations indeed suggest. Rather than aim for budget balance and a clear decline in the debt-to-GDP ratio – as Philip Hammond did initially as Chancellor – the new administration is content to borrow significant sums on an ongoing basis and merely to stabilise the debt-to-GDP ratio. This looks sustainable over the medium term on current interest rate and growth forecasts. But, as we have noted in our *Fiscal risks reports*, financing conditions may not remain this favourable. The debt-to-GDP ratio is twice as high as in the pre-crisis period, the stock of index-linked gilts is much larger and the Bank of England's asset purchases have shortened the effective maturity of the public debt. Taking both fresh borrowing and the need to roll over existing debt into account, the Government's gross financing requirement averages around £150 billion a year over the next five years, around half as much again as a share of GDP as in the five years prior to the financial crisis even though the budget deficit is around a fifth smaller. So the public finances are more vulnerable to adverse inflation and interest rate surprises than they were.

The economic outlook

1.11 The UK left the European Union on 31 January. Under the Withdrawal Agreement, we are now in a transition period until the end of 2020. From that point on, our forecast assumes an orderly move to a new trading arrangement – although still one that has to be painted with a broad brush pending the outcome of the negotiations. On 27 February the UK formally set out its objectives for the negotiations, which are consistent with a free trade agreement. We have not assumed the specific form that this will take, but have instead drawn on an average of external estimates of the effect of a typical free trade agreement. In broad terms, this implies around a 4 per cent loss of potential GDP over 15 years, relative to what would have happened under existing trading arrangements.

1.12 We estimate that the economic effects of the referendum vote have so far reduced potential output by around 2 per cent, relative to what would have happened in its absence. Part of this reflects lower net inward migration, but mostly it reflects weaker productivity growth on the back of depressed business investment and the diversion of resources from production towards preparing for potential Brexit outcomes. Real business investment has barely grown since the referendum, whereas our March 2016 forecast assumed it would have risen more than 20 per cent by now. We expect this shortfall to be partly reversed as the specifics of the trading relationship are clarified, hence reducing uncertainty. But, working in the other direction, we expect the adverse effect of higher trade barriers to build through our five-year forecast period and beyond. Broadly speaking, we believe that around one third of the long-run hit to productivity from Brexit has already happened, that another third is likely to come over the forecast period and the rest comes through beyond our forecast horizon.

1.13 Global growth was weaker last year than expected, with world GDP rising 2.9 per cent in 2019 versus our forecast of 3.5 per cent. Global trade growth has slowed even more thanks largely to trade tensions between US and China. UK export markets have weakened too.

1.14 At the point that we closed our global forecast on 14 February, the coronavirus outbreak was mostly concentrated in China, with only limited spread to other countries. Based on the information then available, we lowered our forecast for the growth of world trade and UK export markets in 2020 by 0.5 and 0.2 percentage points respectively, reducing UK GDP growth by around 0.1 percentage points. In calibrating the size of the effect, we were guided by the impact of the 2003 SARS outbreak. Since we closed our forecast, it has become clear that the spread of coronavirus will be far wider than assumed in our baseline forecast, pointing to a deeper – and possibly more prolonged – slowdown.

1.15 Absent coronavirus, the near-term economic outlook for the UK would have been little changed since our previous forecast last March, although weaker growth around the turn of the year has lowered annual growth in 2020 significantly. Based on unchanged plans for tax and spending, we would have also lowered our GDP growth forecast slightly in 2021 and 2022. Those medium-term revisions reflect a weaker outlook for potential productivity growth (in the light of continued weak outturns, subdued business investment and the incorporation of an effect from higher trade barriers). The effect of that on potential output is tempered by an upward revision to labour market participation – again reflecting trends in recent data. We judge that the economy was operating only very slightly below potential at the end of 2019, so there is very little spare capacity to be used up.

1.16 Policy measures announced since last March have a material effect on the medium-term path of GDP growth. The new migration regime announced on 19 February has led us to revise down net inward migration – moving from using the ONS's 'principal' population variant to its 'zero net EU migration' variant (though we do not expect net EU migration necessarily to be zero). This reduces assumed net inward migration in 2024-25 from 190,000 to 129,000. This means slower population growth, particularly among those of working age, and a slightly lower participation rate, reduces employment by 0.4 per cent by 2024-25. As the forgone migration is concentrated among those with lower incomes, average productivity across the smaller workforce is 0.1 per cent higher. This leaves real GDP 0.3 per cent lower in 2024-25 but GDP per capita little changed.

1.17 Raising the National Living Wage (NLW), so that it reaches two-thirds of median earnings of the relevant population by October 2024, boosts average earnings at the expense of lower profits. It also reduces employment thanks to a small increase in the equilibrium unemployment rate, equivalent to around 50,000 more unemployed in 2024-25.

1.18 The large and sustained fiscal loosening announced in the Budget raises output in the near term, with the effect peaking at around 0.5 per cent in early 2022. The effects of fiscal policy changes on demand influence the path of real GDP in the short and medium term, but we generally assume that they fade eventually as the economy adjusts. The large planned increase in public investment should boost potential output too – eventually by around 2.5 per cent if the increases in general government investment as a share of GDP in the Budget were to be sustained indefinitely. But we assume that these favourable consequences for supply are likely to be felt mainly beyond our five-year forecast horizon.

1.19 One reason that fiscal loosening has only a temporary effect on output is because tighter monetary policy is necessary to keep inflation on track to meet the 2 per cent target. Our forecast for Bank Rate is usually derived from market expectations, which were consistent with Bank Rate falling to around 0.5 per cent and remaining there over the medium term. We felt that would be inconsistent with our economic and fiscal forecasts, which require a tighter monetary stance to eliminate the positive output gap generated by the Budget package. So, on this occasion, we adopted an alternative path for Bank Rate (and the exchange rate) that delivers such a tighter monetary stance. (However, market interest rate expectations have since fallen significantly in response to the spread of coronavirus.)

1.20 Overall, real GDP growth dips to 1.1 per cent this year as the deterioration in the global outlook and continuing drag from uncertainty over Brexit are only partly offset by the fiscal expansion. It then picks up to 1.8 per cent in 2021 as the effect of the fiscal expansion reaches its peak, before settling at an average of 1.4 per cent in the medium term. Risks to the near-term path in particular are, of course, now very clearly to the downside.

1.21 Large rises in public spending mean that general government expenditure contributes over half of GDP growth this year and next, despite accounting for only around a fifth of GDP. The fiscal easing crowds out some consumer spending, private investment and net trade. Exports fall 3.6 per cent over the forecast, in large part due to higher trade barriers.

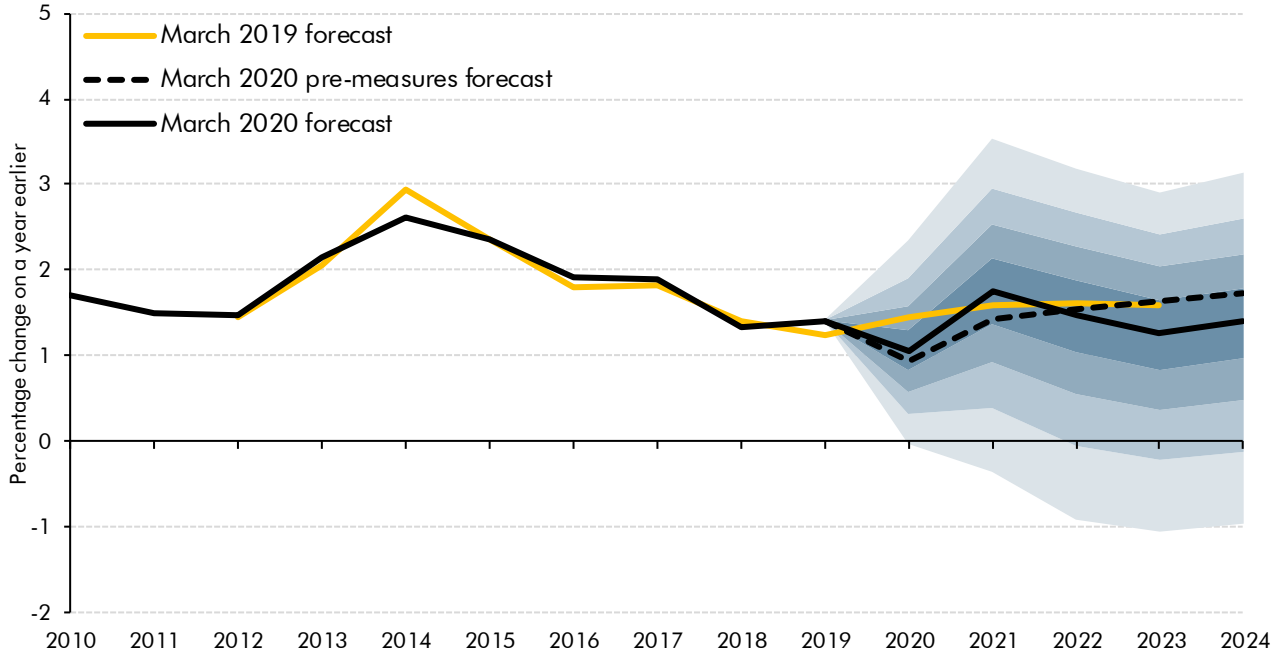
1.22 The unemployment rate is currently 3.8 per cent – just below our estimate of its underlying equilibrium rate – despite the slowing in GDP growth. We expect it to rise modestly through the forecast period to 4.1 per cent as the increases in the NLW price some workers out of employment. Whole economy employment increases by 520,000 over the forecast period, but we expect growth in government employment to account for virtually all the increase. Earnings growth is expected to increase to 3.6 per cent, boosted by the Budget package, but then eases back to a little above 3 per cent in the medium term.

1.23 We expect CPI inflation to come in at 1.8 per cent in the first quarter of 2020, but to drop to 1.2 per cent in the second quarter – thanks in part to the announced cut in the Ofgem energy price cap for April 2020. It is then expected to rise to reach the 2 per cent target by the end of 2021 – aided by the fiscal expansion pushing output above potential.

1.24 The future is, of course, uncertain. One way to illustrate the uncertainty around our GDP growth forecast is shown in Chart 1.2. This presents our central forecast together with a fan showing the probability of different outcomes based on past errors in official forecasts. The solid black line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands. It implies a roughly one-in-ten chance of the economy shrinking in calendar year 2020 and a similar probability of growth exceeding 2.5 per cent – closer to the average pre-crisis growth rate.

1.25 But these probabilities do *not* reflect our subjective assessment of the risks facing the UK economy today. Historically, the chance of the economy falling into recession at some point in a five-year period is roughly one-in-two. But a recession this year is quite possible if the spread of coronavirus causes widespread economic disruption.

Chart 1.2: Real GDP growth fan chart



Source: ONS, OBR

Table 1.1: Overview of the economy forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2018	2019	2020	2021	2022	2023	2024
Output at constant market prices							
Gross domestic product (GDP)	1.3	1.4	1.1	1.8	1.5	1.3	1.4
GDP per capita	0.7	0.8	0.5	1.3	1.1	0.9	1.1
GDP levels (2018=100)	100.0	101.4	102.5	104.3	105.8	107.1	108.6
Output gap	0.2	0.1	-0.1	0.4	0.4	0.2	0.0
Expenditure components of real GDP							
Household consumption	1.6	1.3	1.1	1.2	1.2	1.4	1.4
General government consumption	0.4	3.6	3.7	2.8	2.1	1.9	2.2
Business investment	-1.5	0.3	0.0	1.8	3.0	2.4	2.3
General government investment	1.3	2.1	1.9	10.9	4.6	1.8	1.2
Net trade[1]	-0.2	0.0	-0.1	-0.3	-0.2	-0.4	-0.3
Inflation							
CPI	2.5	1.8	1.4	1.8	2.1	2.1	2.0
Labour market							
Employment (millions)	32.4	32.8	33.0	33.1	33.2	33.3	33.4
Average earnings	3.3	2.8	3.3	3.6	3.4	3.1	3.1
LFS unemployment (rate, per cent)	4.1	3.8	3.8	3.8	3.9	4.0	4.1

The fiscal outlook

1.26 Public sector net borrowing fell from a high of £158.3 billion (10.2 per cent of GDP) in 2009-10 to £38.4 billion (1.8 per cent) by 2018-19. In our restated March 2019 forecast, we expected it to rise in 2019-20, but then shrink to £33.3 billion by 2023-24. But, thanks to the fiscal loosening in the Budget, we now expect it to hit a six-year high of £66.7 billion in 2021-22 and to remain at £57.9 billion (2.2 per cent of GDP) in 2024-25.

Table 1.2: Overview of the fiscal forecast

	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Revenue and spending							
Public sector current receipts	37.5	37.7	37.9	38.0	38.3	38.4	38.5
Total managed expenditure	39.3	39.8	40.3	40.8	40.8	40.8	40.7
Budget 2020 fiscal targets							
Current budget deficit	-0.3	-0.1	-0.2	-0.1	-0.5	-0.7	-0.8
Public sector net investment	2.0	2.2	2.6	2.9	3.0	3.0	3.0
Debt-interest-to-revenue ratio (per cent)	4.1	3.8	3.3	3.5	3.3	3.1	2.9
Legislated fiscal target and objective							
Public sector net borrowing	1.8	2.1	2.4	2.8	2.5	2.4	2.2
Cyclically adjusted net borrowing	1.9	2.2	2.4	3.0	2.7	2.5	2.2
Public sector net debt	80.6	79.5	77.4	75.0	75.4	75.6	75.2
	£ billion						
Revenue and spending							
Public sector current receipts	812.9	839.3	872.9	910.8	949.2	984.7	1022.3
Total managed expenditure	851.3	886.8	927.7	977.4	1010.7	1044.9	1080.2
Budget 2020 fiscal targets							
Current budget deficit	-5.8	-1.7	-4.9	-2.7	-11.7	-16.7	-21.2
Public sector net investment	44.3	49.1	59.7	69.3	73.2	77.0	79.1
Legislated fiscal target and objective							
Public sector net borrowing	38.4	47.4	54.8	66.7	61.5	60.2	57.9
Cyclically adjusted net borrowing	41.4	48.2	55.3	71.8	68.1	63.9	58.7
Public sector net debt	1774	1799	1818	1827	1900	1969	2031

Public sector net borrowing

1.27 Borrowing has been revised up since March 2019 by an average of 0.8 per cent of GDP. The revision is exceeded only by those in our November 2011 and November 2016 forecasts, both occasions when we revised the outlook for potential GDP growth significantly lower. (Indeed, taking December's statistical restatement and this forecast together, the overall revision since March 2019 is the largest we have ever made.) In contrast to previous large upward revisions to borrowing, the underlying outlook is only modestly worse. The average upward revision to the pre-measures deficit is just 0.1 per cent of GDP, while the bulk of the revision reflects the impact of the Government's policy decisions.

1.28 Between 2020-21 and 2023-24, borrowing on a pre-measures basis has been revised up by an average of £3.1 billion a year. This reflects several factors:

- Total **receipts** have been revised down by £3.0 billion a year on average, despite an upward revision of £4.9 billion in 2019-20 (much of which reflects one-off factors). The deterioration is more than explained by changes in our economy forecast, in particular the weaker outlook for earnings growth and household spending.

- **Debt interest spending** has been revised down by £7.4 billion a year on average. This reflects lower Bank Rate expectations (which lower spending almost immediately), lower gilt yields (the effect of which builds up as more new debt is issued) and lower RPI inflation (which reduces spending in all years, but by decreasing amounts).

- **Other current spending** has been revised up by £2.8 billion a year on average, mostly in the near term. Roughly two-thirds of this reflects higher spending on R&D tax credits, following large increases in use of the small firms' element in recent years. Welfare spending has also been revised up, in particular on incapacity benefits.

- **Public sector net investment** has been revised up by £4.6 billion thanks largely to higher local authorities' capital spending and higher capital transfers associated with new student loans. This more than explains the upward revisions to borrowing.

1.29 Government decisions increase borrowing by progressively larger amounts, reaching £29.1 billion (1.1 per cent of GDP) in 2024-25. This includes both the direct impact of Budget tax and spending measures and the indirect effect of those measures, plus the migration and NLW announcements, on the economy. The direct impact arises from:

- Large increases in **current departmental spending** (RDEL) that rise from £15.2 billion in 2020-21 to £38.9 in 2024-25 (reflecting higher plans and our assumptions about underspending relative to them).

- The removal of the 'DEL in waiting' that we included in our previous post-referendum forecasts, having assumed that **direct fiscal savings from Brexit** (i.e. contributions not paid plus customs duties retained) would be fully recycled into higher UK spending. As that has now happened, removing the 'DEL in waiting' assumption lowers current spending by £4.3 billion in 2020-21 rising to £14.6 billion in 2024-25, with the rising profile reflecting the declining cost of the divorce bill over those years.

- **Other spending measures** (both on and off the Treasury's scorecard) raise borrowing by £1.7 billion a year on average. This is more than explained by the Government's decision to raise the spending envelope of the Scottish Government by £4.9 billion a year on average between 2021-22 and 2024-25 (in line with higher DEL).

- **Receipts measures** (both on and off the scorecard) reduce borrowing by an average of £6.4 billion a year. This is fully explained by the decision to cancel the April 2020 cut in the main rate of corporation tax from 19 to 17 per cent, which raises £6.4 billion a

year on average. Raising the National Insurance 'primary threshold' to £9,500 in 2020-21 costs £2.3 billion a year on average, while restricting eligibility for 'red diesel' raises £1.8 billion a year from 2022-23 onwards.

- Significant increases in **departmental capital spending** (CDEL) that rise from £5.7 billion in 2020-21 to £16.7 billion in 2024-25. These amounts would have been higher still had we not assumed that 20 per cent of the increase in capital spending announced by the Treasury will go unspent – reflecting past difficulties governments have faced in ramping up capital spending quickly.

1.30 The indirect effects of the Government's decisions reduce borrowing across the forecast:

- Indirect effects of Budget **tax and spending measures** reduce borrowing by £7.2 billion a year on average. The significant overall easing in fiscal policy delivers a cyclical boost to the economy that lifts tax receipts via higher incomes and consumer spending in particular. Its temporary effect on inflation leads to permanently higher nominal GDP and tax bases. The boost to receipts therefore peaks at £11.5 billion in 2022-23, but remains at £8.9 billion in 2024-25. Higher departmental spending lifts public service pension contributions, reducing the net cost of these schemes (in the medium term). Conversely, the higher borrowing, higher interest rates and temporarily higher RPI inflation combine to raise debt interest spending.

- Raising the **National Living Wage** to reach two-thirds of median earnings by October 2024 reduces borrowing by £1.2 billion in 2024-25. This includes the boost to income tax and NICs receipts and the reduction in welfare spending from higher pay (outweighing the depressing impact of slightly lower employment). These effects are partly offset by the effect of lower profits on corporation tax receipts and modestly higher inflation on debt interest spending.

- The new **migration regime** raises borrowing by amounts rising to £1.0 billion in 2024-25. We have assumed that the new regime will leave the population in that year 0.4 smaller than it would otherwise have been. But this will be concentrated among those who would have been lower paid, so the effect on nominal GDP is smaller at 0.3 per cent. This reduces tax receipts in 2024-25 by £1.5 billion, but also reduces welfare spending by £0.5 billion.

Table 1.3: Changes to public sector net borrowing

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	41.0	47.6	40.2	37.6	35.4	33.3	
March 2020 forecast	38.4	47.4	54.8	66.7	61.5	60.2	57.9
Change	**-2.5**	**-0.2**	**14.6**	**29.1**	**26.0**	**26.9**	
Underlying revisions	**-2.5**	**0.4**	**2.3**	**5.1**	**3.6**	**1.5**	
of which:							
Receipts[1]	-3.3	-4.9	1.0	3.5	4.1	3.5	
Debt interest	0.5	-2.0	-6.7	-6.6	-7.7	-8.5	
Other spending[1]	0.3	7.3	7.9	8.2	7.1	6.5	
Total effect of Government decisions[2]		**-0.6**	**12.3**	**24.0**	**22.5**	**25.4**	**29.1**
of which:							
Current departmental spending[2]		2.9	15.2	27.0	31.2	34.9	38.9
Capital departmental spending[2]		-0.5	5.7	13.4	15.4	16.1	16.7
Use of direct Brexit fiscal savings		0.0	-4.3	-5.0	-7.1	-11.3	-14.6
Receipts measures[3]		-1.0	-2.0	-4.6	-8.0	-8.6	-8.5
Other spending measures[3]		-2.1	1.1	0.3	0.7	2.6	3.9
Indirect effects of Government decisions		0.0	-3.3	-7.1	-9.7	-8.4	-7.2
of which:							
Due to tax and spending measures		0.0	-3.4	-7.2	-9.7	-8.3	-7.0
Raising the National Living Wage		0.0	0.0	-0.3	-0.6	-0.9	-1.2
New migration regime		0.0	0.0	0.3	0.5	0.8	1.0
Memo: March 2020 pre-measures forecast	*38.4*	*48.1*	*42.5*	*42.7*	*39.0*	*34.9*	*28.8*

[1] Excludes the impact of customs duties switch, which raises receipts and current spending by the same amount.

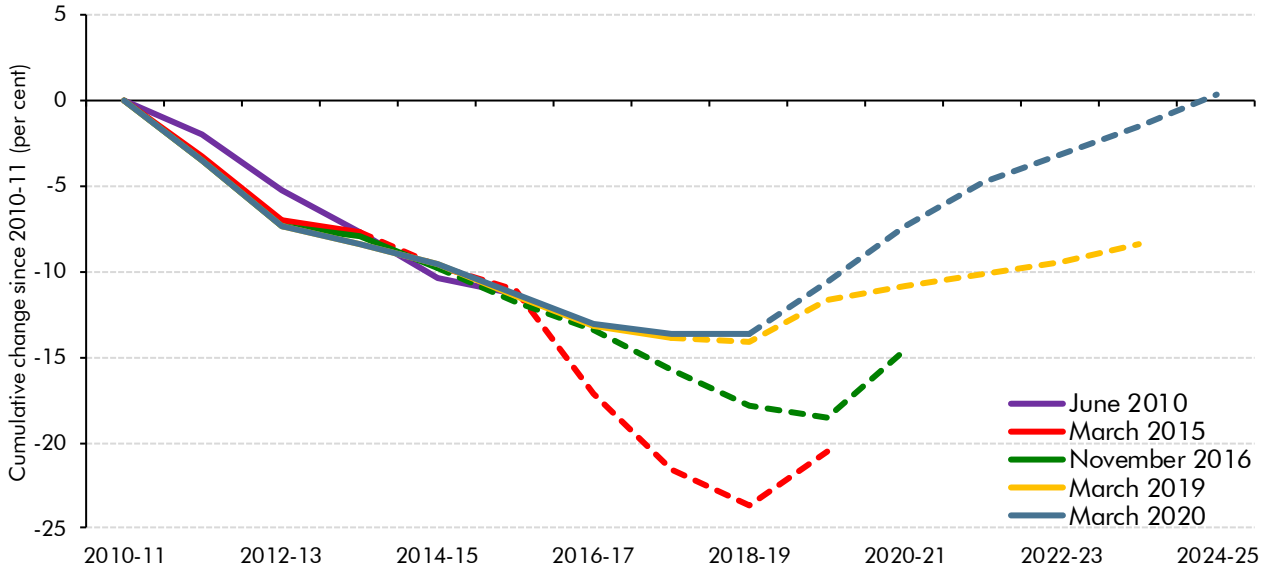
[2] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.

[3] Includes both scorecard and non-scorecard measures. See Annex A for more information.

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.

1.31 Chart 1.3 shows the striking turnaround in the path of resource spending by central government departments across the UK set out in this Budget. Viewed in terms of real spending per person, the eight years of cuts from 2010-11 are entirely reversed by 2024-25, with almost half reversed just this year and next. The increased resource spending announced in this Budget, in last year's Spending Round and in the NHS settlement of June 2018, continue the reversal of the spending tide that started in the Summer Budget of July 2015, when the newly elected Conservative Government moderated the sharp cuts in RDEL spending previously pencilled into the March 2015 pre-election Budget. But, viewed as a share of GDP, only around a third of the cuts will have been reversed by 2024-25.

Chart 1.3: Change in real RDEL spending per person since 2010-11



Note: 2017-18 and 2018-19 exclude the effects of business rates pilots. All other figures include both RDEL and Scottish Government current AME and are adjusted as far as possible for consistency with the latest forecast. See source table in the supplementary expenditure tables on our website.
Source: OBR

1.32 Overall the impact of the Government's policy decisions on borrowing is around half as large again as the previous largest policy loosening over the past decade (in Budget 2018). The only time fiscal policy has been changed by a larger margin in our forecasts was the 1.4 per cent of GDP average fiscal tightening in the Coalition Government's first Budget in June 2010, when it set out its plans to reduce the post-crisis budget deficit it had inherited.

1.33 Looking back further, this is the largest planned sustained giveaway at any fiscal event since Norman Lamont's ill-fated pre-election Budget in 1992. The loosening is similar in shape and modestly larger in scale to that in Gordon Brown's 2000 Budget, which – like this one – was dominated by public spending increases. These were predicated on the continuation of strong tax receipts, but were then undermined when the dotcom bubble burst.

Public sector net debt

1.34 Public sector net debt (PSND) is now essentially flat at around 75 per cent of GDP in the later years of the forecast (after falling in the initial years as the Bank of England's Term Funding Scheme (TFS) loans are repaid). This contrasts with our March 2019 forecast, when it fell in every year of the forecast – with or without the effect of TFS loans being repaid.

1.35 Higher nominal GDP reduces PSND relative to GDP in all years of the forecast, on average by 1.1 percentage points. Underlying forecast revisions also reduce cash debt in all years, though by decreasing amounts across the forecast. But government policy decisions add progressively more to debt, reaching £125 billion in 2024-25.

1.36 As regards underlying forecast revisions, cumulative borrowing raises cash debt modestly by 2023-24, while a weaker pound against the dollar raised the sterling value of the foreign currency reserves by a broadly offsetting amount. The early repayment of TFS loans reduces debt in the early years of the forecast, but that effect unwinds by 2021-22 once they have all been repaid.

1.37 As regards Government decisions:

- The direct effects of the Budget package on **public sector net borrowing** add progressively more to debt over the period, reaching £148 billion in 2024-25.
- **Delays and cancellations to asset sales** also add steadily to debt. Delaying the sale of UKAR and RBS assets increases debt at the start of the period, but this largely unwinds over the forecast. The cancellation of student loans sales raises our debt forecast by increasing amounts due to the proceeds foregone. This accounts for the majority of the £12 billion upward revision to debt from financial transactions in 2024-25.
- The **wider effects of policy measures on the economy** – including the temporary effects of the Budget package and the persistent ones of the new migration regime and higher path for the NLW – reduce debt by £36 billion in 2024-25.

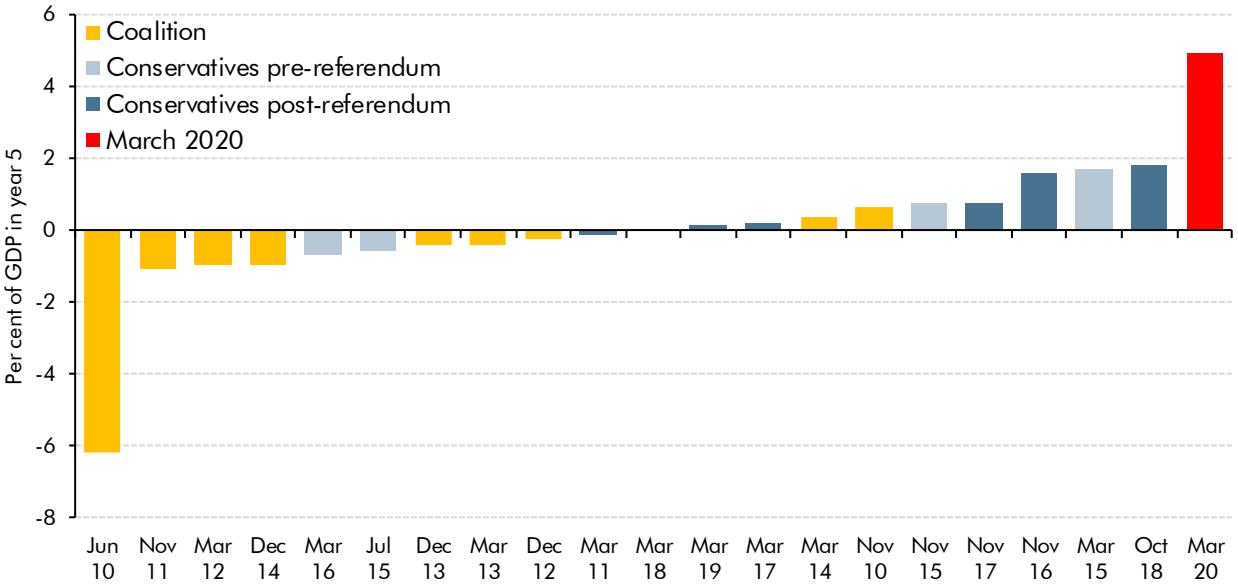
Table 1.4: Changes to public sector net debt since March 2019

	Per cent of GDP						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	82.2	81.3	78.2	74.3	73.6	72.7	
March 2020 forecast	80.6	79.5	77.4	75.0	75.4	75.6	75.2
Like-for-like change	**-1.5**	**-1.8**	**-0.8**	**0.7**	**1.9**	**2.9**	
of which:							
Change in nominal GDP[1]	-1.3	-1.0	-1.1	-1.2	-1.0	-0.9	
Change in cash level of net debt	-0.3	-0.8	0.4	1.9	2.9	3.8	
	£ billion						
Restated March 2019 forecast	1,779	1,817	1,810	1,781	1,827	1,870	
March 2020 forecast	1,774	1,799	1,818	1,827	1,900	1,969	2,031
Like-for-like change in cash debt	**-6**	**-18**	**8**	**46**	**73**	**99**	
of which:							
Underlying forecast revisions	**-6**	**-29**	**-20**	**-7**	**-5**	**-3**	
Public sector net borrowing (pre-measures)	-3	-2	0	5	9	10	
Financial transactions (pre-measures)	-4	-17	-7	0	0	1	
Valuation changes	1	-10	-13	-12	-14	-15	
Effect of Government decisions		**11**	**28**	**54**	**78**	**102**	**125**
Affecting public sector net borrowing		-1	15	46	78	112	148
Affecting financial transactions		13	11	12	16	17	12
Indirect effects		-1	3	-5	-16	-27	-36

[1] Non-seasonally adjusted GDP centred end-March.

1.38 The cumulative impact on debt at our forecast horizon of the additional borrowing announced in the Budget is the largest since June 2010, when the Coalition Government's first Budget was expected to reduce debt by 6 per cent of GDP (Chart 1.4). Subsequent fiscal events typically saw much smaller policy packages. Since the 2015 election, successive Conservative Government policy packages have added to debt at the forecast horizon.

Chart 1.4: Cumulative impact of policy on PSND over five years



Note: Does not include the final year of the forecast if it was not included in the previous forecast. Therefore the impact of March 2020 Government decisions is the cumulative impact on 2023-24.
Source: OBR

Performance against the Government's fiscal targets

1.39 The *Charter for Budget Responsibility* requires the OBR to judge whether the Government has a greater than 50 per cent chance of meeting its fiscal targets under current policy. The latest version was approved by Parliament in January 2017.

1.40 The legislated targets in the *Charter* related to the cyclically adjusted deficit and public sector net debt in 2020-21 (a 2 per cent of GDP limit and for it to be falling as a share of GDP respectively), plus a welfare cap that applies in 2022-23 and an objective to balance the budget by the mid-2020s. The Government has not published a new draft *Charter*, but has instead asked us to assess its performance against new fiscal targets that were set out in the Conservative Party manifesto and confirmed in the Queen's Speech. It intends to review the fiscal framework ahead of the next Budget this autumn, so the rules may change again.

1.41 Relative to the legislated targets, the rules adopted for this Budget are materially looser. They require the current budget to be in balance by the third year of the forecast (2022-23 in this one) and public sector net investment (PSNI) not to exceed 3 per cent of GDP. This puts a ceiling of 3 per cent of GDP on the deficit and affords 1 per cent of GDP more space than the legislated deficit rule (£22.3 billion in today's terms) and 3 per cent of GDP more than the legislated fiscal objective (£66.9 billion). A new debt-interest-to-revenue ratio rule requires net interest costs to be less than 6 per cent of non-interest receipts.

1.42 The Conservative manifesto stated that the pursuit of these targets "*means that debt will be lower at the end of the Parliament*". But observing these rules does not mean that debt will always fall relative to GDP. As well as borrowing, the path of debt depends on two other factors: the net cost of financial transactions (which are not covered by the rules) and the rate of nominal GDP growth (over which inflation-targeting governments have little control). Given our medium-term expectations for these variables, the maximum deficit consistent with a stable debt-to-GDP ratio is around 2.5 per cent of GDP. So the Chancellor would need to over-achieve his new rules on average to ensure that debt falls in normal times.

The implications of our central forecast

Performance against Budget 2020 fiscal targets

1.43 Our forecast implies that the Government's Budget 2020 targets are on course to be met:

- **Current balance rule**: the current budget is forecast to be in surplus in 2022-23 by 0.5 per cent of GDP (£11.7 billion). Based on historical forecast errors, this implies a 60 per cent chance of meeting the target. But given the coronavirus outbreak and the likely policy response to it, the odds are likely to be worse than that.

- **Maximum investment rule**: public sector net investment averages 2.9 per cent of GDP between 2020-21 and 2024-25, observing the limit. It is precisely 3.0 per cent of GDP between 2022-23 and 2024-25. Unusually, one risk to this target is that the Government is more successful than we have assumed in spending all that it plans to. We have assumed that 20 per cent of its additional capital plans will go unspent.

- **Debt-interest-to-revenue ratio rule**: net interest payments are forecast to fall in cash terms over the next five years, so with receipts rising steadily the debt-interest-to-revenue ratio falls from 3.8 per cent in 2019-20 to 2.9 per cent in 2024-25 – meeting the rule by a comfortable margin.

Performance against the legislated targets

1.44 As regards the legislated targets that formally remain in force:

- **Fiscal mandate**: the structural deficit is 2.4 per cent of GDP in 2020-21, so the mandate is missed by 0.4 per cent of GDP (£9.2 billion). In our March 2019 forecast it was met by 1.2 per cent of GDP (£26.6 billion), although statistical changes meant that margin was a smaller 0.3 per cent (£7.6 billion) in our restated forecast.

- **Supplementary target**: debt falls by 2.1 per cent of GDP in 2020-21, meeting the target, but by a smaller margin than the 3.2 per cent of GDP in March 2019. The margin is now little above the 1.9 per cent of GDP reduction in debt due to Term Funding Scheme loans being repaid to the Bank of England in that year.

- **Welfare cap**: the relevant welfare spending is forecast to be £0.5 billion higher than the cap in 2022-23 but £3.4 billion below the cap-plus-margin once the adjustments for changes in our inflation forecast and devolved welfare spending have been applied. On that basis, our formal assessment is that the terms of the cap are met.

1.45 These assessments are all subject to uncertainty. In every forecast we test the robustness of our judgements in three ways: by looking at past forecast errors; by conducting sensitivity analyses; and by exploring alternative scenarios. These are reported in Chapter 4. In this forecast, the uncertain economic and fiscal consequences of the coronavirus outbreak present a clear downside risk. The legislated targets are particularly vulnerable since they apply in 2020-21. The risks to performance against the new targets are more uncertain.

2 Economic outlook

Introduction

2.1 This chapter:

- summarises the main **economic developments** since our previous forecast in March 2019 (from paragraph 2.2), including our latest estimates of the amount of **spare capacity** in the economy;
- describes our assumptions and judgements in respect of **the UK's exit from the EU** (from paragraph 2.13);
- highlights the key **conditioning assumptions** for the forecast, including fiscal and monetary policy, asset prices and the world economy (from paragraph 2.16);
- sets out our **real GDP growth forecasts** (from paragraph 2.30), including our judgement regarding the **growth in the economy's productive potential** that underpins our forecasts for actual GDP growth;
- discusses the outlook for the **labour market** (from paragraph 2.51) and **inflation** (from paragraph 2.58); and
- outlines our forecast for **nominal GDP**, which is the key driver of the outlook for the public finance forecasts (from paragraph 2.66), and compares our central forecast with those of selected **external organisations** (from paragraph 2.79).

Developments since our previous forecast

2.2 The Foreword to this document describes the timetable that was followed in producing the forecasts presented here. As usual, we closed our pre-measures economy and fiscal forecasts well ahead of the Budget to provide a stable base against which the Chancellor could assess his policy measures. The pre-measures economy forecast was closed on 18 February and the fiscal forecast on 25 February. And they reflect information gathered from financial market prices over the 10 days to 11 February. After that, the only changes relate to Budget measures and other policy announcements, which in this forecast include the new migration regime and the higher National Living Wage (NLW). Since we closed our pre-measures forecast, news about the spread of coronavirus has prompted unusually large movements in asset prices, while other forecasters have been downgrading their assessments of the economic outlook to take account of the possible adverse consequences. The ultimate spread and economic impact of coronavirus are at this stage highly uncertain,

but they represent a clear downside risk to the forecasts presented below. The consequences are, though, most likely to be concentrated in the near term. We discuss the coronavirus-related risks to our economy and fiscal forecasts in Box 2.3 and in Chapter 3.

Global developments

2.3 Global growth has eased since our previous forecast. In the second half of 2019, GDP in the euro area grew by 0.4 per cent – 0.5 percentage points less than we expected last March, reflecting a continued slowdown in manufacturing and weaker external demand. US GDP grew by 1.0 per cent in the second half of 2019 – in line with our prediction this time last year. GDP growth in China and India also continued to slow during 2019. Global output rose by 3.6 per cent in 2018 and we now estimate it to have expanded by 2.9 per cent in 2019 – a downward revision of 0.6 percentage points from our previous forecast.

2.4 Increased trade barriers and a rise in uncertainty as a result of the trade tensions between the US and China have led world trade and UK export market growth to be significantly slower than world GDP growth. Uncertainty has caused declines in heavily traded capital goods – as firms postpone investment decisions – and industrial inputs that form a large part of global goods trade. World trade rose by 3.7 per cent in 2018 but we estimate that growth slowed to just 1.1 per cent in 2019, reflecting a broad-based slowing in trade growth in the US, China and other advanced economies. UK export market growth also slowed, from 3.0 per cent in 2018 to an estimated 1.5 per cent in 2019.

2.5 Inflation in the advanced economies has also been lower than we forecast last March. Inflation in the euro area was 1.0 per cent in the fourth quarter of 2019, 0.7 percentage points lower than expected. And in the US, inflation was 2.0 per cent in the fourth quarter of 2019, 0.2 percentage points lower than expected.

UK GDP

2.6 Since our previous forecast, the Office for National Statistics (ONS) has released its 2019 Blue Book. This is the ONS's annual opportunity to introduce methodological changes to the National Accounts, on top of the normal quarterly incorporation of new information into its estimates of economic activity. This year's revisions were relatively minor, with the profile of output growth since the EU referendum little changed. But there were significant revisions to its composition. We discussed these revisions in our 2019 *Forecast evaluation report (FER)*.[1]

2.7 Initial estimates suggest that output grew by 1.4 per cent in 2019, slightly above our March 2019 forecast. Also, quarterly growth was more volatile than we expected. Output rose by 0.6 per cent in the first quarter but then fell 0.1 per cent in the second. This was in large part down to a precautionary build-up of stocks in the run-up to the UK's planned departure from the EU on 29 March, together with car producers bringing forward summer shutdowns into April. The economy returned to growth in the third quarter with GDP expanding by 0.5 per cent, but temporary factors again contributed, including a bounce back in car

[1] OBR, *Forecast evaluation report*, December 2019.

production. Output then stagnated in the fourth quarter, dragged down by a fall in industrial production as the UK's main export markets slowed and car plants were again shut down as a precaution against Brexit-related disruption to supply chains.

Inflation and the labour market

2.8 CPI inflation was 1.9 per cent in the first quarter of 2019, in line with our previous forecast. Thereafter inflation was lower than expected and declined steadily in the second half of 2019, partly due to lower-than-expected rents and Ofgem reducing its energy price cap in the final quarter.

2.9 Labour market quantities have been stronger than we expected last March – in terms of both employment and hours worked. With GDP growth only slightly stronger than we expected, productivity growth in 2019 was consequently significantly weaker. Overestimating the contribution of productivity to output growth, while simultaneously underestimating the contribution of total hours worked, has been a persistent feature of our recent forecasts. Average earnings growth was weaker than expected in 2019, based on the National Accounts measure employed in our forecast (computed by dividing wages and salaries by the number of employees). Earnings growth on this measure has, though, been weaker than on the headline average weekly earnings (AWE) measure.

Our latest estimates of the output gap

2.10 The first step in constructing our forecast is to assess how the current level of activity compares with that consistent with stable inflation in the long term (potential output) – the output gap. Potential output cannot be observed directly, but various techniques can be used to infer it, including survey indicators, statistical filters and production functions. Every method has drawbacks and none avoids the need for judgement. We therefore consider a broad range of evidence anew at each forecast:

- **Surveys** from the Confederation of British Industry (CBI) and the British Chambers of Commerce (BCC) suggest that businesses experienced elevated recruitment difficulties and were operating near capacity in 2019. Both our 'principal components' and 'aggregate composite' estimates derived from these surveys moved into positive territory in 2017 and have remained so, reflecting in particular the heightened recruitment difficulties. But we place little weight on these measures in our overall assessment, as they tend to be quite volatile and have recently suggested implausibly high degrees of overheating.

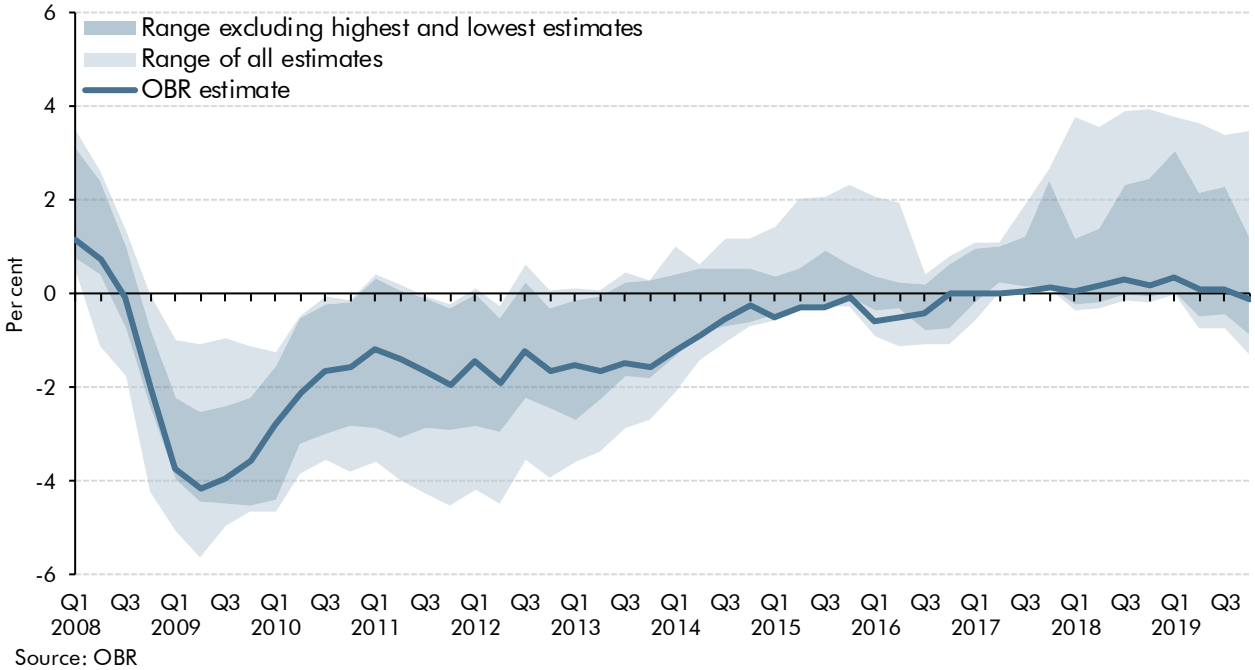
- The two **statistical filters** that utilise output data alone imply that the economy is currently operating below capacity. We also place limited weight on these measures, as the corresponding estimates of potential output in the recent past are prone to substantial revision as new observations become available, especially when economic conditions change sharply.

- Our **other filter-based models** augment the output data with ancillary information on the cyclical position. Of these, the 'inflation-augmented' and 'capacity utilisation-augmented' measures point to output lying below potential. We place slightly more weight on these measures at this juncture. The 'unemployment-augmented' measure points to a significant positive output gap.

- Our **production function** approach, which uses filters to back out the components of potential output, currently points to a negative output gap.[2]

2.11 Chart 2.1 shows the swathe of estimates implied by all our output gap models, as well as a truncated swathe that excludes the highest and lowest estimates. The range of output gap estimates is very wide, reflecting the high degree of uncertainty that surrounds each of the measures. We also sense-check our judgement by comparing the assumed profile for the output gap with the paths for output growth and the unemployment rate. Overall, our current judgement is that the output gap lies in the bottom half of the swathe, and that the economy was operating slightly below potential in the fourth quarter 2019 – by 0.1 per cent, very similar to the margin of spare capacity that we were expecting last March.

Chart 2.1: Range of output gap estimates

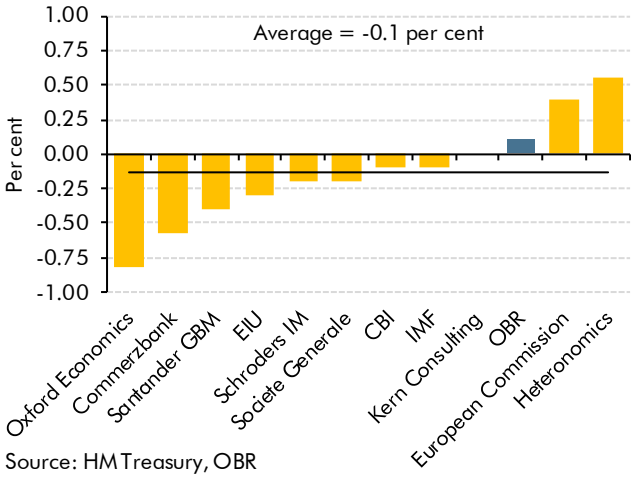


Source: OBR

2.12 Charts 2.2 and 2.3 compare our latest output gap estimates with those of other bodies reported in the Treasury's monthly comparison of independent forecasts. The variation across these estimates is quite low by historical standards. Our estimates lie a little above the average in both 2019 and 2020, but by amounts that are small relative to the uncertainty that lies around any estimate of the output gap.

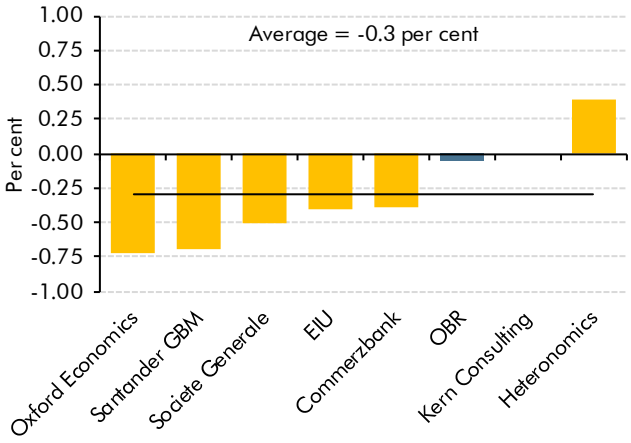
[2] Our production function approach employs a filter-based estimate of the equilibrium unemployment rate up to 2011, which then falls to our judgement-based central estimate by the second half of 2019.

Chart 2.2: Output gap estimates: 2019



Source: HM Treasury, OBR

Chart 2.3: Output gap estimates: 2020



Assumptions about the UK's exit from the EU

2.13 The OBR is required by legislation to produce its forecasts based on current government policy (but not necessarily assuming that particular policy objectives will be met). With the nature of the future relationship between the UK and the EU still to be settled, this is not straightforward. We asked the Government if it wished to provide any additional information on post-Brexit policies in relation to trade and migration that would be relevant to our forecasts. As set out in the Foreword, it directed us to its February 2020 paper on the future relationship with the EU and its policy statement on the future migration regime.[3,4] We have incorporated into our forecast an estimate of the effects of introducing the new migration regime from January 2021. As explained in Box 2.4, we have moved from using the ONS 'principal' population projection to the 'zero net EU migration' variant.

2.14 Following the UK's departure from the EU on 31 January, we assume that the current transition period will continue until the end of 2020 – in line with the EU (Withdrawal Agreement) Act. During the transition period, the trading relationship between the UK and the EU is assumed not to change. Thereafter, the UK is assumed to move in an orderly fashion to a new trading arrangement with the EU – although one that must still be painted with a broad brush pending the outcome of negotiations. With our forecast horizon now extending out to the first quarter of 2025, we therefore assume that the UK will be outside the EU single market and customs union for most of the forecast period. Accordingly, we need to take a stance about the likely longer-term impact on UK productivity of greater friction in the trading relationship with the EU. In so doing, we have drawn on the range of external estimates of the effect of a typical free-trade agreement (discussed in Box 2.1). In broad terms, these imply that potential productivity will eventually be around 4 per cent lower than it otherwise would have been, mainly due to extra costs resulting from higher trade barriers and greater impediments to the exploitation of comparative advantage.

[3] HM Government, *The future relationship with the EU: The UK's Approach to Negotiations*, February 2020.
[4] HM Government, *The UK's points-based immigration system: policy statement,* February 2020.

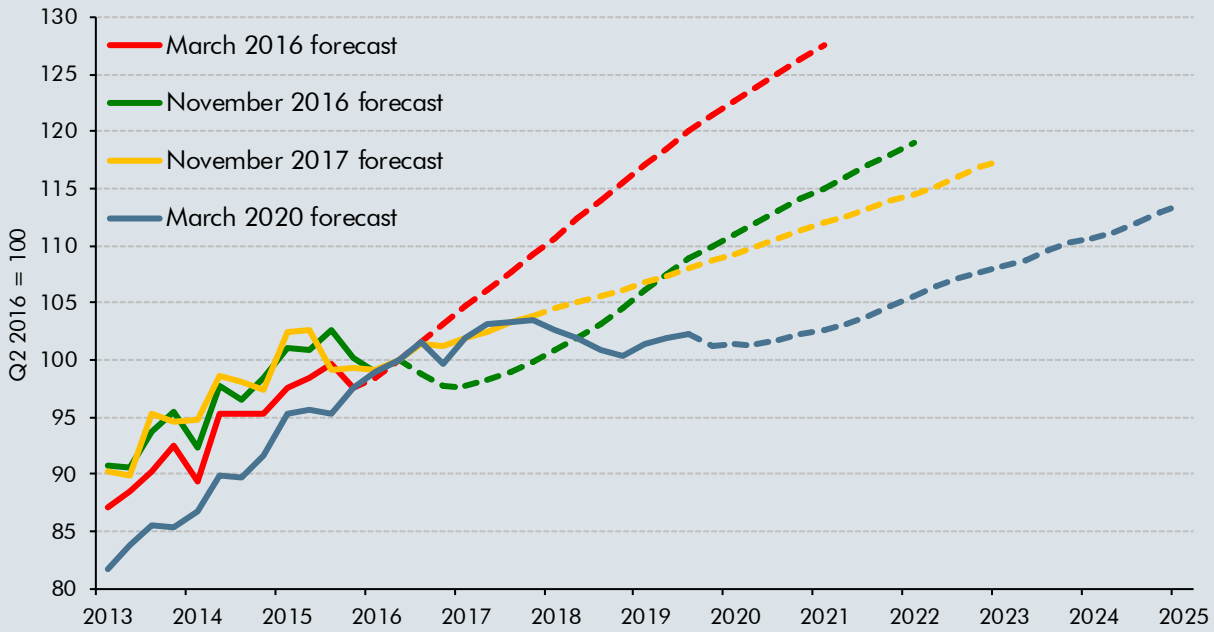
2.15 This assessment does not include any potential offsetting effects from new trade agreements with other jurisdictions or the benefits that might flow if the Government takes advantage of the increased autonomy in its domestic policies; we will consider the effects of these on our future forecasts as and when they are enacted. Our Brexit *Discussion paper* sets out in more detail the channels through which higher barriers to trade with the EU, and any potential offsets, could affect the UK economy and the period over which these might be relevant.[5]

Box 2.1: The effect on productivity of leaving the EU

In our November 2016 forecast – our first following the EU referendum – we assumed that the UK would leave at the end of March 2019. With the possibility of a transition period, and our forecast extending only to 2021, it was therefore likely that the UK would still be trading under EU rules for most of the forecast period. To form our productivity judgement, we therefore concentrated on the near-term effect of heightened uncertainty on business investment and capital deepening, rather than longer-term effects from higher trade barriers. We anticipated that this would reduce the level of productivity by 1.4 per cent by the first quarter of 2022 – 1.0 percentage points of which was expected to have occurred by now – relative to what would otherwise have happened.

In the event, business investment has been even weaker than we expected immediately after the referendum (Chart A). Recent productivity growth may have also been dampened by a diversion of resources away from productive activities to prepare for Brexit – especially the possibility of 'no deal'.[a] As a result of these two factors, we have increased our estimate of the impact of Brexit on productivity to date, from 1.0 to 1.4 per cent. At least some of these effects may start to unwind once the details of the future trading regime are known.

Chart A: Successive OBR business investment forecasts



Source: ONS, OBR

[5] OBR, *Discussion paper No. 3: Brexit and the OBR's forecasts*, 2018.

Once the transition period ends, the effect of higher trade barriers on trade intensity and productivity will increasingly come into play.[b] Drawing on available analysis,[c] we have assumed since our November 2016 *EFO* that both exports and imports would be around 15 per cent lower after 10 years than they otherwise would have been. More recent studies confirm that this assumption is broadly consistent with the average estimated effect of leaving the EU, to trade instead under the terms of a typical free trade agreement.[d]

Higher trade barriers impose an additional burden on exporters and importers, lowering (total factor) productivity directly. In addition, they inhibit the exploitation of comparative advantage, leading to lower trade intensity and a less efficient international distribution of production. While some of the adjustment will need to take place quickly, the consequential changes to the UK's industrial structure may be quite drawn out. As a result, the process of adjustment is likely to weigh on productivity growth for several years. Some studies suggest that dynamic effects – for instance through the impact on knowledge transfer – are also possible.[e]

With the outcome of the negotiations still unknown, we have not modelled the long-run impact on productivity and GDP of a specific trading relationship. But, consistent with the formal negotiating objectives of the UK and the EU, we have looked at estimates of the effect of leaving the EU to trade under the terms of a typical free trade agreement. These point to a central estimate of an effect on potential productivity – i.e. including both the effects on total factor productivity and capital deepening – in the region of 4 per cent in the long run (Table A), although the range of estimates is wide.

Table A: Long-run effect on productivity of trading with EU on FTA terms

Organisation	Model	Productivity assumption	Per cent Effect
Felbermayr et al (2018)	New quantitative trade model	Constant returns to scale	-1.8
IMF (2018)	Computable general equilibrium	Constant returns to scale	-2
Mayer et al (2018)	New quantitative trade model	Constant returns to scale	-2.4
UK in a Changing Europe (2019)	New quantitative trade model	Constant returns to scale	-2.5
OECD (2016)	NIGEM	Dynamic productivity	-2.7
IMF (2018)	Computable general equilibrium	Melitz-style increasing returns to scale	-3.3
Netherlands CPB (2016)	Computable general equilibrium	Krugman-style increasing returns to scale	-3.4
Bank of England (2019)	Gravity modelling	Dynamic productivity	-3.5
NIESR (2018)	Gravity modelling	Dynamic productivity	-3.8
Whitehall Study (2018)	Computable general equilibrium	Melitz-style increasing returns to scale	-4.9
UK in a Changing Europe (2019)	Gravity modelling	Dynamic productivity	-6.4
Netherlands CPB (2016)	Computable general equilibrium	Dynamic productivity	-5.9
World Bank (2017)	Gravity modelling	Dynamic productivity	-10
Average			**-4.0**

With the impact of Brexit on productivity already having reached 1.4 percentage points, according to our estimates, around one third of the long-run impact is, in effect, already in the data. While some of the drag on investment from uncertainty should unwind once uncertainty over the future trading relationship between the EU and UK is resolved, any reversal should be

more than offset by the effect of higher trade barriers on productivity. There is little evidence about the pace at which these effects will be manifest, but we assume that it will take 15 years for the impact to come through in full, but with some front-loading. Specifically, we assume a further third of the long-run productivity effect – in net terms – will take place over our current forecast period and the final third beyond the forecast horizon (and incorporated this effect into our long-term economic determinants, discussed in Annex B). There is, of course, considerable uncertainty about both the size and timing of the effect of Brexit on potential productivity, but it is completely dwarfed by the uncertainty surrounding the underlying path of future productivity growth (also discussed in Annex B).

[a] Bloom *et al*, *The impact of Brexit on UK firms*, August 2019.
[b] OBR, *Discussion paper No. 3: Brexit and the OBR's forecasts*, 2018.
[c] Here we took the average estimated effect from studies by NIESR (*The long-term economic impact of leaving the EU*, National Institute Economic Review no. 236, May 2016), the OECD (*The economic consequences of Brexit: A taxing decision*, OECD policy paper no. 16, April 2016) and LSE/CEP (*The consequences of Brexit for UK trade and living standards*, March 2016).
[d] For example, see: Bank of England, *EU withdrawal scenarios and monetary and financial stability*, November 2018; World Bank, *Deep Integration and UK-EU Trade Relations,* January 2017; NIESR. *The economic effects of the Government's proposed Brexit deal*, November 2018; The UK in a Changing Europe, *The economic impact of Boris Johnson's Brexit proposal*, 2019.
[e] For more details, see OBR, *Discussion paper No. 3: Brexit and the OBR's forecasts*, 2018.

Other key forecast assumptions and judgements

Fiscal policy and Budget measures

2.16 Our forecast is conditioned on current government policy and its announced plans for spending and taxes. Relative to our March 2019 forecast, the Government has announced a significant and sustained fiscal loosening. To assess the impact of this on GDP growth we apply a standard set of fiscal multipliers that vary according to the type of tax or spending.[6] Fiscal policy influences the path of real GDP relative to potential in the short to medium term, but we generally assume that it has no lasting effect, as the immediate effects of policy measures fade over time through several mechanisms – for example, the tighter monetary policy needed to keep inflation at target, a stronger exchange rate, and the upward pressure on real wages from a tighter labour market. We explained these assumptions in more detail in our latest *FER*.[7]

2.17 Box 2.2 summarises how our economy forecast has been affected by this fiscal loosening and other small policy changes. Two other policy announcements have had material effects on our medium-term economic forecast: the new migration regime that will be introduced in January 2021 and the further rises in the National Living Wage up to 2024. These are discussed in Boxes 2.4 and 2.5 respectively. Chapter 3 and Annex A describe the corresponding fiscal impacts. Further detail about each Budget measure is set out in the Treasury's documents.

[6] For example, changes in capital spending are assumed to have a multiplier of 1, such that a permanent 1 per cent of GDP increase in capital spending raises GDP by 1 per cent (in the first year).
[7] OBR, *Forecast evaluation report*, December 2019.

Box 2.2: Economic effects of policy measures

The Government has chosen to loosen **fiscal policy** materially, with the change dominated by higher departmental spending – both current and capital. To estimate the effect of fiscal policy decisions on GDP growth we use 'multipliers' drawn from the empirical literature.

The bulk of the rise in current spending in 2020-21 on health, education and policing was announced in the 2019 Spending Round. This Budget has increased spending in all future years and by increasing amounts. It has also raised capital spending plans significantly. We expect some of the planned increases to go unspent, as has been the case in the past, particularly when governments try to ramp up capital spending quickly. But even so, our post-measures forecasts for current and capital spending by departments exceed our pre-measures forecasts by 0.5 and 0.6 per cent of GDP respectively by 2024-25. The overall fiscal loosening boosts cumulative real GDP growth by early 2022 by around 0.5 percentage points, with growth slightly weaker than it otherwise would have been thereafter as the effect of the fiscal easing fades.

Over time frames that extend beyond our forecast horizon, higher government investment should boost the supply capacity of the economy. But the extent to which it does so will depend on the mix of projects chosen. Some spending may generate substantial future *social* returns but have little effect on potential GDP – for instance, building more hospitals. Other projects – notably transport infrastructure – are likely to raise potential GDP, but the benefits will probably take a significant amount of time to come through, especially where there are long build times (as with major railway infrastructure). Furthermore, increased competition for scarce construction resources may directly crowd out some private sector investment.

The extra spending on general government investment over the forecast period can be expected eventually to raise the public sector gross capital stock by around 5 per cent. Assuming an output elasticity of 0.1, based on a range of international studies,[a] this suggests an eventual impact on the level of potential productivity of perhaps 0.5 per cent, though that would depend on the precise mix of the extra investment. We have assumed that this would manifest itself largely beyond our forecast horizon. (As we explain in Annex B, if the increase in general government investment as a share of GDP were to be sustained indefinitely, the long-term impact on potential productivity might be of the order of 2.5 per cent.)

We have made several other adjustments to our economic forecast for measures announced in this Budget. The Government has announced several changes that are expected to affect the level of **business investment**, most importantly a reversal of the planned cut in corporation tax from 19 to 17 per cent, which was due to take effect this April. This more than offsets the expected rise in business investment generated by the more generous structures and buildings allowance and R&D tax credits. When combined, these measures are expected to reduce the level of business investment by 0.3 per cent by the end of the forecast, relative to what we assumed in March 2019.

We have adjusted our **inflation** forecast to account for the expected impact of freezing all alcohol duties, fuel duty and tuition fees this year, which reduce CPI inflation. Increasing the National Living Wage and reintroducing the tobacco duty escalator that lapsed at the end of the last Parliament more than offsets these. We expect that the combined effect of the policy measures

will add 0.1 per cent to the level of CPI by the end of the forecast period. We have also adjusted the path of inflation to reflect the positive output gap generated by the fiscal easing.

The policy change that has the most significant impact on our **house price** forecast is the fiscal easing, which boosts real household incomes and house price inflation in the near term. We expect the announced change in the migration regime and the higher Bank Rate profile we have assumed (see paragraph 2.21) to weigh on house price inflation in the medium term.

[a] *Pedro Bom and Jenny Ligthart, "What have we learned from three decades of research on the productivity of public capital?", journal of Economic Surveys (2014).*

Monetary policy and asset prices

2.18 At its January meeting, the Monetary Policy Committee (MPC) voted 7-2 to hold Bank Rate at 0.75 per cent. It also voted unanimously to maintain the stock of corporate and UK government bond purchases at its current level. This reflected its view that "*the existing stance of monetary policy is appropriate*", following "*early indications of an improved outlook*" based on recent developments in the global economy and falling uncertainty in the UK economy. The MPC has stated that it will closely monitor the extent to which this will be sustained and how it will flow through into domestic activity. The minutes also noted that the "*upcoming Budget may be expansionary*", though by convention the MPC only takes account of government policies that have already been announced in constructing its forecasts.

2.19 We normally derive a future path for Bank Rate from the sterling forward interest rate curve. In this forecast, we adopted that approach in our pre-measures forecast but diverged from it in our post-measures forecast. The path underpinning the pre-measures forecast was based on the average of market prices in the 10 days to 11 February and was consistent with market participants expecting a cut in Bank Rate of around 25 basis points (Chart 2.4). That was, on average, around 0.5 percentage points lower than the corresponding profile at the time of our March 2019 forecast.

2.20 Sterling has been quite volatile over the past 12 months, falling noticeably during the third quarter of 2019, a period of heightened Brexit-related and political uncertainty. It then strengthened towards the end of 2019 after the election, with the sterling effective exchange rate reaching its highest quarterly average since the referendum. We assume that the sterling effective exchange rate will be 2.4 per cent higher than assumed in our March 2019 forecast for the first quarter of 2020. This mainly reflects the strengthening of the pound against the euro more than offsetting the weakening against the dollar over the last year. This represents the starting point for the exchange rate assumption in our pre-measures forecast, which thereafter evolves in line with the spread between domestic and foreign interest rates (Chart 2.5). But, as with Bank Rate, we have diverged from our normal approach in constructing our post-measures forecast.

2.21 In order to produce a coherent economic and fiscal forecast it is important that the assumed paths for Bank Rate and asset prices are, at least broadly, compatible with the main features of our central economic scenario. In particular, the assumed path for Bank Rate needs to be

consistent with inflation meeting the 2 per cent target over the medium term. While our pre-measures forecast shows a small margin of spare capacity over much of the forecast (consistent with a small Bank Rate cut), the substantial fiscal easing in the Budget means that output is projected to be modestly above potential for much of the forecast period in our post-measures forecast (see Chart 2.6). Moreover, the fiscal multipliers that we use to quantify the impact of the fiscal package assume that part of the 'crowding out' of the fiscal impulse is a consequence of the tighter monetary policy stance necessary to keep inflation at target.[8] Taken together, these seem incompatible with the cut in Bank Rate priced into the market curve. Accordingly, we judged it appropriate to adopt a higher path for Bank Rate (and the exchange rate) for the post-measures forecast, consistent with the elimination of the output gap and inflation returning to target within the forecast period.

2.22 The most recent movements in market interest rates have clearly been influenced by expectations about the economic implications of coronavirus, but Bank Rate cuts were priced in even prior to these latest changes. There are several possible explanations:

- Market participants may hold a different view of the **appropriate path for Bank Rate** than either ourselves or the MPC.[9] That could be because they are more pessimistic about the outlook for demand, more optimistic about the outlook for supply, or believe the natural real rate of interest is lower.

- Market participants hold the same central (median) view as embodied in our forecast but believe the **risks are skewed to the downside**, so that the mean path that is implied in the market curve lies below the path that would be consistent with the median path. Alternatively, they may believe that the MPC would act more aggressively to the crystallisation of downside risks than it would to upside risks, perhaps because of concerns about the consequences of Bank Rate reaching its effective lower bound.

- Market participants may have underestimated the scale of the **Budget package**, despite what was signalled in the Conservative Party manifesto, or might have a different view on its implications for the economy and the path of monetary policy. For example, they might have expected the Government to raise capital spending more gradually than has been announced or may implicitly assume smaller fiscal multipliers than ourselves.

2.23 We are agnostic about the relative importance of these explanations and there is no way of knowing what market participants had priced in with regard to fiscal policy. But for the purpose of calibrating alternative assumptions, we looked at how the paths of Bank Rate and the exchange rate might change if market participants had taken full account of the 2019 Spending Round but not the remainder of the Budget package. We then used a small macroeconomic model[10] to calibrate a suitable joint monetary and exchange rate response sufficient to offset – in the long run – the impact of that 'unanticipated' part of the Budget

[8] See Box 2.2, *Forecast evaluation report*, December 2019.
[9] The MPC's latest central forecast, conditioned on the prevailing market interest rate curve, shows both excess demand and inflation above target at the forecast horizon; see *Monetary Policy Report*, January 2020.
[10] We have used an updated version of the model published in Working Paper No.4 A small model of the UK economy, OBR, July 2012. The model structure is similar though parameter estimates differ due to data updates and re-estimation.

package on output and thus also to meet the inflation target. This suggested a broadly flat path for Bank Rate coupled with an immediate sterling appreciation of around 3 per cent (largely reflecting a modest increase in the underlying equilibrium exchange rate) would suffice – though other combinations are also possible. This analysis forms the basis for the assumptions in our post-measures forecast, with the exchange rate subsequently following a path reflecting the difference between UK and overseas interest rates. On average, our exchange rate assumption is 4.8 per cent above our March 2019 assumption.

2.24 The pre- and post-measures forecasts for Bank Rate and the exchange rate predate the latest market movements triggered by an intensification of coronavirus fears. Several central banks have already cut interest rates in response, including in the US and Australia. The Governor of the Bank of England has said that the shock from coronavirus "*could prove large*" and that policy makers are working on a *"powerful"* response. So the forecasts for interest and exchange rates could well soon be overtaken by events.

Chart 2.4: Bank Rate

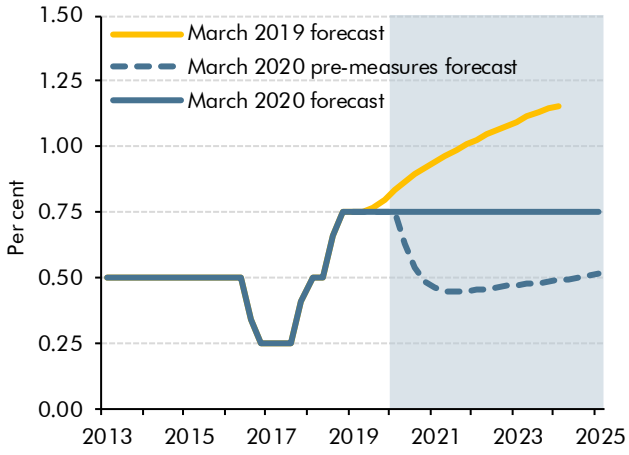
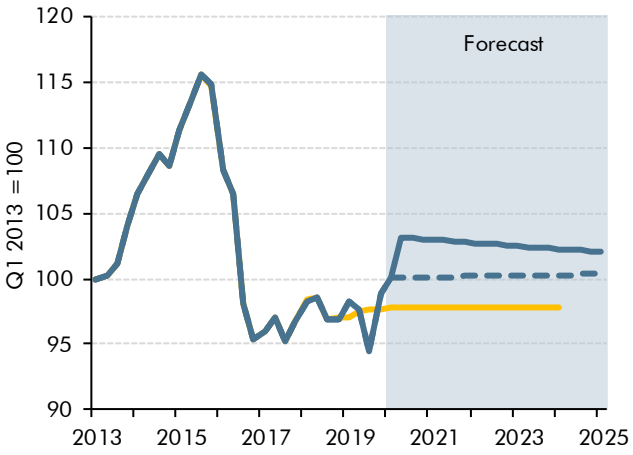


Chart 2.5: Sterling effective exchange rate



Source: Bank of England, Bloomberg, OBR

2.25 UK equity prices were 2.6 per cent higher in the fourth quarter of 2019 than assumed in our March 2019 forecast. The starting point for the forecast is based on the 10-day average to 11 February, from where we assume they rise in line with nominal GDP. We have not adjusted our equity price forecast for the Budget package, other than via its effects on nominal GDP. Since we closed the forecast, equity prices have fallen sharply, as discussed in Box 2.3; the corresponding fiscal implications are discussed in Chapter 3.

2.26 Sterling oil prices were somewhat volatile during 2019. Oil prices are assumed to fall in the first quarter of 2020 to £45 per barrel, largely due to weakened demand from China after the coronavirus outbreak. We assume oil prices then follow the futures price for the first two years of the forecast and subsequently move in line with major economies' CPI inflation. Sterling oil prices settle at around £41 per barrel over the forecast period, around 12 per cent below our March 2019 assumption. But since we made this assumption, oil prices have been further hit by the escalation of concerns over the effects of coronavirus (Box 2.3).

World economy

2.27 Our projection for global growth is informed by the forecasts in the IMF's October 2019 *World Economic Outlook* (WEO), its January update and the OECD's November 2019 *Economic Outlook*. In light of these, we revised our forecast down significantly in the near term. We now expect world GDP in 2020 to grow by 3.0 per cent – a downward revision of 0.6 percentage points from our March 2019 forecast (Table 2.1). These revisions are widespread across both the advanced and emerging economies. Some of this revision is due to the outbreak of coronavirus, although the latest estimates suggest that the near-term effect on growth is likely to be significantly greater than we have assumed (Box 2.3). We expect global GDP growth to recover to 3.6 per cent next year.

Table 2.1: Global GDP and trade growth

	Percentage change on a year earlier						
	Outturn	Forecast					
	2018	2019	2020	2021	2022	2023	2024
GDP							
Euro area	1.9	1.2	1.1	1.4	1.4	1.3	1.3
US	2.9	2.3	2.0	1.7	1.6	1.6	1.6
China	6.7	6.2	5.0	6.5	5.7	5.6	5.5
World	3.6	2.9	3.0	3.6	3.5	3.6	3.6
Trade							
UK export markets	3.0	1.5	1.6	3.4	3.3	3.4	3.5
World	3.7	1.1	1.9	3.9	3.6	3.7	3.8

2.28 We expect the slowdown in world trade growth in 2019 to reverse over the following couple of years as trade tensions ease (and given our assumption that the impact of coronavirus would be relatively mild and transient). Even so, we have revised down our forecast for 2020 by 2.0 percentage points and for it to remain well below the growth seen in 2018. We expect world trade growth to pick up further in 2021 and to continue growing robustly thereafter. The near-term downward revisions to world trade growth are much larger than for world GDP, largely reflecting the impact of increased global trade barriers and of coronavirus on globalised supply chains.

2.29 We expect growth in UK export markets to follow a similar profile to that of world trade. We now expect growth of 1.6 per cent in 2020, 1.9 percentage points lower than in our previous forecast, reflecting a continuation of last year's subdued expansion in trade between the advanced economies. Thereafter, growth is expected to pick up noticeably.

Box 2.3: The potential impact of coronavirus on the economy and public finances

Our global forecast was closed for new data on 14 February. At that point, the coronavirus (Covid-19) outbreak was mostly concentrated in China with only limited spread to other countries. For our central forecast, we assumed that the associated economic disruption would be relatively short-lived and concentrated in China, with some transmission through supply chains to other parts of Asia and Europe. This implied a temporary impact on global GDP and trade, weighing modestly on UK activity in the first part of this year – a mild 'V-shaped' shock.

In calibrating the size of the effect, we were guided by the impact of the 2003 SARS outbreak, which is estimated to have knocked around 1 percentage point off Chinese GDP growth that year.[a] The associated impact on world GDP and trade was, though, quite limited. Since then, the share of China in world GDP and world trade has more than doubled. For that reason, we expected the impact on world GDP and world trade to be somewhat greater.

Bearing this in mind, we lowered our forecast for Chinese GDP growth in 2020 by 1 percentage point (to 5 per cent), with smaller adjustments in other parts of Asia, the US and the euro area, that together reduced world GDP growth by 0.3 percentage points. On this basis we lowered our forecasts for the growth of world trade and UK export markets by 0.5 and 0.2 percentage points respectively. This was expected to knock 0.1 percentage points off UK GDP growth this year.

Since we closed our pre-measures forecast (which serves as a stable basis for the Chancellor's Budget policy decisions), it has become clear that the spread of coronavirus will be far wider than assumed in our central forecast, pointing to a deeper – and possibly more prolonged – slowdown. While the number of confirmed cases in the UK is still relatively small at the time of writing, the Chief Medical Officer, Professor Chris Whitty, has already declared that an epidemic is now "likely" here and the Government has announced plans as to how it would respond.[b]

The intensification of the outbreak overseas will affect the UK through a variety of channels: a more pronounced slowdown in export markets; potential shortages of inputs as supply chains are disrupted; disruption of travel plans and international transport; and the general impact of heightened uncertainty on spending by businesses and households. In addition, a widespread outbreak in the UK would directly impact both supply, as businesses have to operate with a substantially reduced workforce as individuals are placed under quarantine, and demand, as consumers stay at home in order to avoid contact with others.[c]

This is a fast-moving situation and forecasts necessarily become speculative. The OECD's Interim Economic Outlook – released after we closed our forecast – has a 'baseline' scenario that assumes the outbreak is contained and largely centred in China (though much more severe than in our central forecast). In that scenario, world GDP growth slows to 2.4 per cent this year and world trade falls by 0.9 per cent. In its more severe 'domino' scenario, with broad contagion around the globe, the corresponding figures are 1.5 per cent and 3.8 per cent. The implications of slower growth for the public finances, abstracting from any discretionary measures, leads the median advanced economy to experience an increase in the budget deficit of 0.1 per cent of GDP in 2020 in the baseline scenario but more than 0.5 per cent in the more severe one.[d]

At this stage, it is too early to identify any economic impact in ONS data for the UK, but asset prices have moved sharply since we closed the window for financial market data on 11 February

These movements alone would change our fiscal forecast. By the time London markets had closed on 6 March, equity prices had fallen 13 per cent; oil prices by about £7 a barrel; and the market implied path for Bank Rate over the coming years by around 25 basis points (Table B). Plugging these determinants into the main fiscal forecast models that use them would lower receipts in 2022-23 by £3.7 billion (dominated by the effect of lower equity prices on capital gains tax), but also lower spending by £1.5 billion (as the debt interest saving associated with the APF would be greater). So, other things being equal, borrowing would be £2.2 billion higher.

Table B: Indicative fiscal effects of changes in market determinants

	Change in determinant	£ billion in 2022-23	
		Receipts	Spending
Equity prices (per cent)[1]	-13	-3.2	
Oil prices (£/barrel)[2]	-7	-0.5	
Market-implied Bank Rate (basis points)	-25		-1.5
Total		**-3.7**	**-1.5**

[1] Combined impact on capital gains and inheritance tax.
[2] Combined impact of a fall in North-Sea revenue and a rise in fuel duties.

In the Budget, the Chancellor announced measures intended to mitigate the effects of the more severe potential scenarios. Unavoidably, these were finalised after we closed our economic and fiscal forecasts. It is impossible at this point to give a reliable estimate of their fiscal consequences, as the take-up and implementation will depend on how the outbreak unfolds.

[a] This is consistent with Hai, Zhao, Wang and Hou, *The Short-Term Impact of SARS on the Chinese Economy*, 2004; and Lee and McKibbin, *Estimating the global economic costs of SARS*, 2004.
[b] UK Government, *Coronavirus action plan*, 2020.
[c] For information on how coronavirus may impact the UK we have drawn on CBO, *A potential influenza pandemic: possible macroeconomic effects and policy issues*, 2005; Keogh-Brown, Wren-Lewis, Edmunds, Beutels and Smith, *The possible macroeconomic impact on the UK of an influenza pandemic*, 2009; and McKibbin and Fernando, *The global macroeconomic impacts of COVID-19: Seven Scenarios*, 2020.
[d] OECD, *Interim economic outlook*, March 2020.

Prospects for real GDP growth

The path of potential output

2.30 The path for potential output, together with the starting output gap, determine the scope for growth in GDP over the next five years that is consistent with the Bank of England meeting its inflation target over the medium term.

Potential hours worked

2.31 There are four elements to our forecast for the potential total number of hours worked: the number of adults in the country; the proportion of them participating in the labour market; the proportion of those that could find employment; and the average number of hours that they would be willing and able to work:

- **Population**. As a result of the tighter migration regime for EU migrants that is planned for January 2021, we now base our forecast on the ONS 'zero net EU migration' variant, which projects that net inward migration will fall to 129,000 in 2025. This

lowers projected population growth relative to our March 2019 forecast, which reduces potential output (see Box 2.4).

- **Participation**. We forecast participation rates using the cohort model that underpins our long-term projections.[11] We have revised our assumptions on labour market entry and exit rates to better capture the effect of education policy reforms a decade ago that have affected successive cohorts' labour market activity. This delivers a slightly higher profile for participation than last March, with the rising share of the elderly eventually outweighing increased participation by those on the cusp of retirement.

- **Employment rate**. Before policy changes, we expected the equilibrium unemployment rate to hold steady at 4.0 per cent. The increase in the National Living Wage is expected gradually to raise this to 4.1 per cent by 2024 (see Box 2.5).

- **Average hours**. Before policy changes, we expected equilibrium average hours to be broadly flat across the forecast period. The increase in the National Living Wage is expected to lower average hours slightly (also described in Box 2.5).

Box 2.4: The new immigration system

In February, the Government announced its intention to introduce a 'points-based' migration system from January 2021 that will align migration policy for EU and non-EU migrants. The new regime requires migrants to speak English, have a job offer from an approved sponsor, and meet skills and salary thresholds. Tier 2 General applicants will need to earn the higher of the 25th percentile of their occupation's wage distribution or £25,600 – slightly below the £30,000 specified in the Government's December 2018 White Paper. Potential migrants will also be able to trade a salary lower than the going rate against characteristics such as their qualifications.

Relative to the current regime, this is more restrictive for EU migrants but modestly less so for non-EU migrants. It shares many features with the current system for non-EU migrants, but with a lower salary threshold. Even so, successful implementation of the new regime by the January deadline looks challenging.

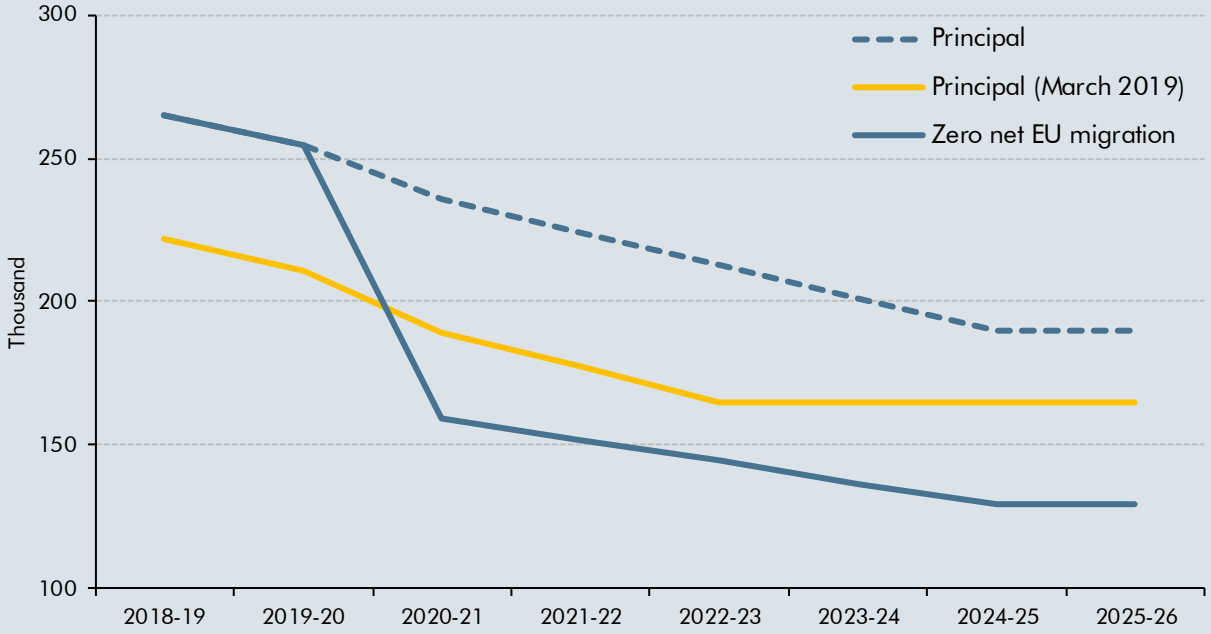
In its latest report, [a] the Migration Advisory Committee modelled the impacts on migration of a counterfactual scenario in which the UK was assumed to have adopted in 2004 the more restrictive regime outlined in the Government's earlier White Paper (which proposed a salary threshold of £30,000). This counterfactual was then compared with actual migration flows to get a sense of the impacts by 2016-18. It concluded that cumulative EEA migration would have been 70 per cent lower, with the overall population 3.2 per cent smaller, employment 4.0 per cent lower, GDP per worker 1.3 per cent higher and therefore overall output 2.8 per cent lower.

Our March 2019 forecast was based on the ONS's 'principal' population projection for net migration to decline to 165,000 a year in 2023. Last October, the ONS revised up the level of net migration in the 'principal' projection to settle at 190,000 in 2025, which we incorporated in our pre-measures forecast. To reflect the more restrictive regime, in our post-measures forecast

[11] Annex A of our July 2014 *Fiscal Sustainability Report* discusses our longer-term approach to labour market modelling in more detail.

we have switched to the 'zero net EU migration' variant, in which net migration flows fall to 129,000. The profile for this variant strikes us as a reasonable depiction of how net inward migration might evolve as a result of introducing the new migration regime, though that does not imply that our central expectation of net EU migration itself is exactly zero. Indeed, we would expect falls in net migration from the EU to be partly offset by increases in net migration from those outside the EU. Recent years suggest an offset of around half might be expected. Uncertainty around migration projections is always large,[b] with the change in migration regime only adding to this uncertainty.

Chart B: Net inward migration in ONS population projections



Source: ONS

These changes reduce the expected size of the population and, alongside a small fall in the participation rate, reduce total participation by 0.4 per cent at the forecast horizon. We assume no effect on equilibrium unemployment, so the full effect feeds through into lower employment.

The productivity impact is more difficult to judge. The salary threshold imposed on new migrants will, arithmetically, lead to a 'batting average' effect as some low wage – and therefore in most cases also low productivity – workers will no longer be able to enter the country, thereby raising average productivity relative to the current regime. Based on the available evidence, we assume this increases potential output per worker by 0.1 per cent – broadly offsetting the fall in the participation rate and around a quarter of the total employment effect.[c]

[a] Migration Advisory Committee 2020 *A Points-Bases System and Salary Thresholds for Immigration: report.*
[b] We have outlined the challenges in forecasting net migration in *Discussion paper No.3 Brexit and the OBR's forecasts*
[c] Home Office *Technical Paper to accompany 'The UK's future skills-based immigration system economic appraisal: Annex B'* 2018 and HM Government *EU Exit: Long-Term Analysis Technical Reference Paper*, 2018.

Potential productivity

2.32 The outlook for potential productivity is the most important, yet most uncertain, element of potential output. Several factors are relevant to our overall judgement:

- Productivity growth has been weak **globally** since around the time of the financial crisis, with the slowdown more pronounced in the UK than in most other countries. We continue to expect some recovery from the recent sustained period of low growth, though we have revised down our long-term assumption (see Annex B).

- The recent extreme weakness of UK productivity growth in part reflects the stagnation of **business investment** since the EU referendum (see Box 2.1). We expect a gradual pick-up in business investment growth after the end of the transition period, as some of the uncertainty regarding the future economic relationship between the EU and UK is resolved. But it will take time for businesses to adapt to the new regime, so that recovery in investment is initially likely to be muted. In addition, the necessary structural change in the economy following Brexit is likely to prompt firms to scrap some capital earlier than they otherwise would have done.

- Some of the recent weakness in productivity may have reflected a diversion of people away from productive activities to **prepare for Brexit** – especially the possibility of 'no deal' – so lowering total factor productivity (TFP). Together with the weakness in business investment, we estimate this already to have reduced potential productivity by around 1.4 percentage points. At the end of the transition period, businesses will be faced with the additional costs associated with the new trade barriers, further dampening TFP. Ultimately, we expect productivity to be around 4 per cent lower than it would otherwise have been, though it will take some years for these effects to work through in full (see Box 2.1).

- A **tighter labour market** may exert pressure on firms to extract more output from their existing workforce. In addition, shifts in the composition of the workforce induced by the new migration regime can be expected to generate a small upward impetus to productivity growth, worth around 0.1 percentage points relative to the current regime by the end of the forecast period, while the planned increase in the NLW is expected to add around 0.2 percentage points.

- The significant planned increase in **public investment** potentially boosts productivity by raising the public capital stock, but we have assumed that the effect is likely to be felt mainly beyond our forecast horizon (see Box 2.2 and Annex B).

2.33 Our projection for potential productivity is formed as a top-down judgement, but reflects the net effect of these varied and conflicting forces. We continue to assume that potential productivity growth will rise gradually over the forecast period, reaching 1.3 per cent in 2024. The profile is, however, lower than we assumed last March, owing to the recent weakness in outturn data, subdued business investment growth and the incorporation of the effect of higher trade barriers on productivity growth within the forecast horizon.

2.34 In respect of the particular impact of Brexit, an unwinding of the adverse effect of heightened uncertainty on business investment since the referendum should be more than offset by higher trade barriers weighing on TFP. Overall, we estimate that around a third of the final Brexit effect on productivity of around 4 percentage points is, in effect, already in the data; another third will be felt over our forecast period; and that the remaining third will work through gradually beyond our forecast horizon.

Potential output

2.35 Overall, relative to March 2019, the downward revisions to potential productivity growth, equilibrium average hours, and population growth, along with the upward revision to the equilibrium unemployment rate, outweigh the upward revision to the potential participation rate. As a result, potential output growth averages 1.4 per cent a year between 2019 and 2023, down from 1.6 per cent in March 2019.

Table 2.2: Contributions to potential output growth

	Percentage points, unless otherwise stated					
	Population[1]	Participation and unemployment[1]	Average hours	Productivity[2]	Potential output[3]	*memo: Equilibrium unemployment rate (per cent)*
2019	0.5	0.1	0.0	0.9	1.4	4.0
2020	0.6	0.1	-0.2	0.8	1.2	4.0
2021	0.5	0.0	-0.1	1.0	1.4	4.0
2022	0.5	-0.1	0.0	1.1	1.4	4.1
2023	0.5	-0.2	0.0	1.2	1.5	4.1
2024	0.5	-0.2	0.0	1.3	1.6	4.1
	2019-2023 average					
March 2019 forecast	0.5	-0.1	0.0	1.1	1.6	4.0
March 2020 forecast	0.5	0.0	-0.1	1.0	1.4	4.0
Difference	0.0	0.1	-0.1	-0.1	-0.2	0.0

[1] Corresponding to those aged 16 and over.
[2] Output per hour.
[3] Components may not sum to total due to rounding.

Oil and gas output

2.36 Our potential output forecast excludes the small, but volatile, oil and gas sector. So to produce our GDP forecast we need a forecast for oil and gas production. Our production forecasts are informed by the projections published by the Oil and Gas Authority (OGA). Based on the OGA's latest *Stewardship Survey*, we have revised production up compared to March 2019. That largely reflects higher-than-expected production in 2019, which we assume will persist over the forecast. Our oil and gas expenditure forecasts are also informed by OGA projections. We have revised overall expenditure down since last March, reflecting weaker spending both in 2018 and 2019.

The short-term outlook for GDP

2.37 Following the weak end to 2019, we expect a return to growth in the first quarter of 2020. Although few hard data are currently available – the first estimate of January GDP was not available until 11 March – surveys suggest a pick-up in activity in the first two months of the year. In January, the IHS Markit/CIPS Purchasing Managers Index (PMI) rose to its highest level since September 2018 (albeit still below the historical average) and there was a similar improvement in CBI's growth indicator, while Deloitte's CFO Survey and the Bank of England's Decision Maker Panel both pointed to improved business sentiment. The PMI edged up slightly in February, however there was some suggestion that the rebound in activity was losing momentum due to coronavirus-related disruptions.

2.38 Taking all this into account, we expect quarterly GDP growth to be 0.2 per cent in the first quarter of 2020, including some small and temporary downward effect from the disruption caused by coronavirus. We expect quarterly growth to strengthen through the rest of the year, as the initial effects of the fiscal loosening begin to build and our expectation – at the time we finalised the forecast – that the coronavirus effect unwinds. For 2020 as a whole, we forecast GDP growth of 1.1 per cent, 0.4 percentage points below our estimate last March. This reflects the deterioration in the global outlook and the slowdown in UK growth at the end of 2019, which was likely partly due to ongoing Brexit-related uncertainty.

Table 2.3: The quarterly GDP profile

	Percentage change on previous quarter											
	2019				2020				2021			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
March 2019 forecast[1]	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4
March 2020 forecast[2]	**0.6**	**-0.1**	**0.5**	**0.0**	**0.2**	**0.4**	**0.5**	**0.5**	**0.5**	**0.4**	**0.4**	**0.4**
Change[3]	0.4	-0.4	0.2	-0.3	-0.1	0.0	0.1	0.1	0.1	0.0	0.0	0.0

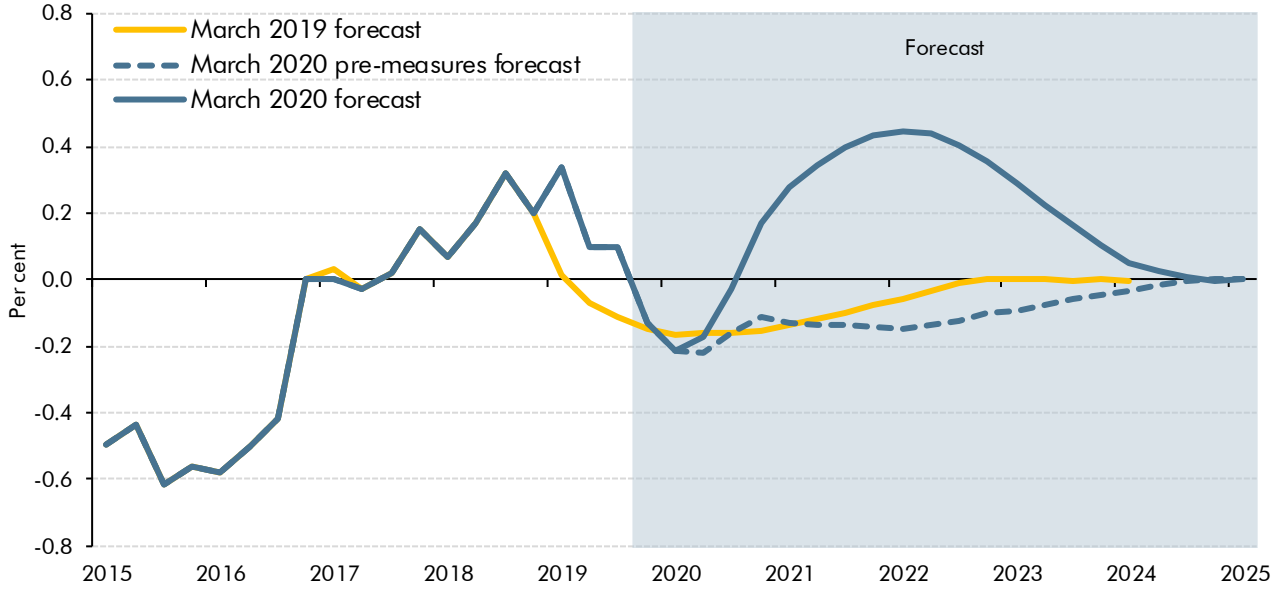
[1] Forecast from the first quarter of 2019.
[2] Forecast from the first quarter of 2020.
[3] Changes may not sum due to rounding.

The medium-term outlook for GDP

2.39 The peak impact of the fiscal easing on GDP occurs in 2021. Along with the lifting of uncertainty, as the UK moves smoothly (we assume) to a new trading relationship with the EU, this raises GDP growth to 1.8 per cent in 2021, pushing output above potential as shown in Chart 2.6. As the effect of the fiscal expansion dissipates and the tighter migration regime and labour market implications of a higher NLW continue to build, we expect GDP growth to ease to an average of a little under 1½ per cent for the rest of the forecast period, as the output gap gradually closes.

2.40 Before incorporating the fiscal stimulus, we had forecast output to fall further below potential in 2020, reflecting the subdued growth in the UK's export markets and the continuing impact of uncertainty regarding the consequences of Brexit. We then expected growth to pick up, closing the output gap by the end of the forecast period.

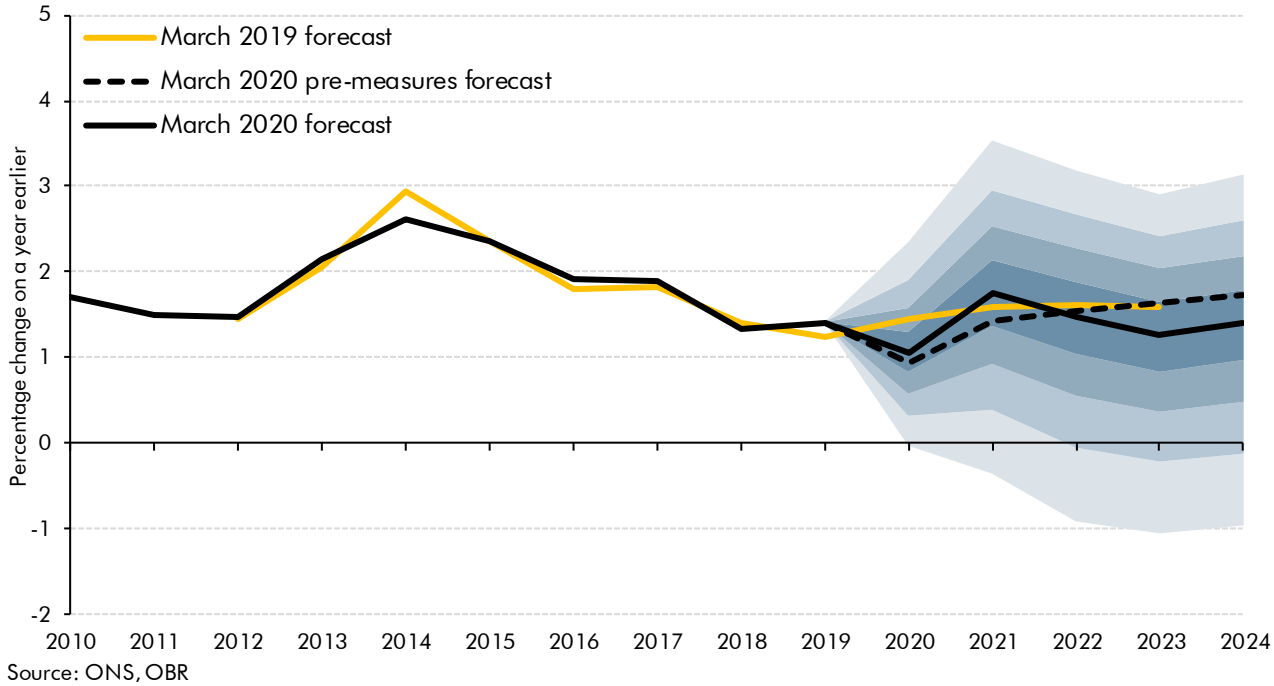
Chart 2.6: Output gap



Note: Output gap estimates on a quarterly basis, based on the latest National Accounts data and expressed as actual output less potential output as a percentage of potential output (non-oil basis).
Source: OBR

2.41 There is of course significant uncertainty around our central projection for GDP growth. Chart 2.7 shows the likelihood of different outcomes surrounding the central forecast based on the historical distribution of official forecast errors. The solid black line shows our median forecast, with successive pairs of lighter shaded areas around it representing 20 per cent probability bands. The chart implies a roughly 10 per cent probability that GDP will fall in 2020, and the same probability that growth will exceed 2.5 per cent. But it should be emphasized that past forecast errors may not be a guide to future economic shocks.

Chart 2.7: Real GDP growth fan chart



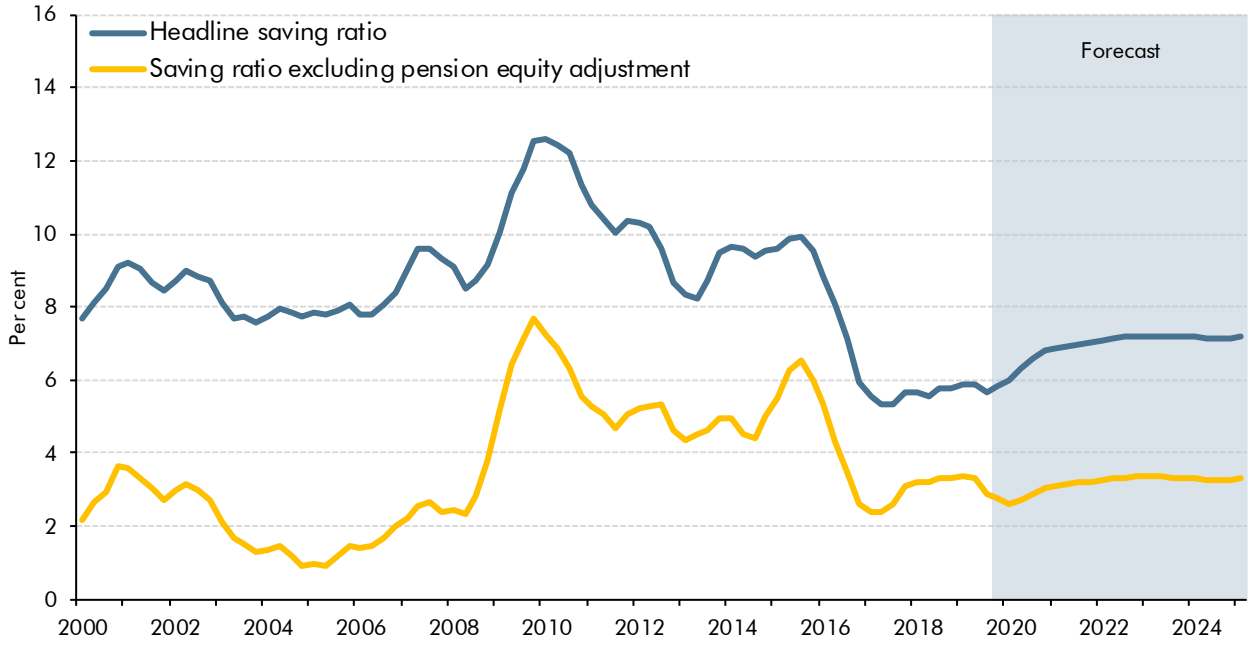
Source: ONS, OBR

Expenditure composition

Domestic demand

2.42 We expect private consumption to be relatively subdued in 2020, rising by 1.1 per cent, broadly in line with real household incomes. Real consumption growth is expected to be slightly below real income growth over the forecast. The fiscal expansion, which pushes output above potential, also induces tighter financial conditions that crowd out some private consumption. As a result, the household saving ratio rises from 6.6 per cent in 2020 to 7.2 per cent by the end of the forecast (Chart 2.8), closer to its pre-crisis average.

Chart 2.8: The household saving ratio



Source: OBR

2.43 Our forecast for government consumption is driven by the new spending plans set out in the Budget. Real government consumption rises by 3.7 per cent in 2020 – the largest annual increase since 2005 – and then at an average of 2.3 per cent a year for the rest of the forecast period, up from 1.6 per cent in our March 2019 forecast. In nominal terms, government consumption ends the forecast at 20.2 per cent of GDP. Back in December 2014, when the Coalition Government pencilled in continuing cuts in medium-term departmental spending totals, government consumption had been projected to fall to a post-war low of 14.7 per cent of GDP at the forecast horizon.

2.44 We expect the weakness in business investment in 2019 to continue into 2020 – it rose by just 0.3 per cent in 2019 and we expect it to be flat in 2020 – due to the lingering impact of Brexit uncertainty. We then expect a modest recovery in 2021 with investment growing by 1.8 per cent, as waning uncertainty regarding the new trading relationship with the EU leads to the implementation of some deferred investment. Relative to our March 2019 forecast, business investment growth is weaker due to the reversal of the planned cut in the corporation tax rate and some crowding out caused by the fiscal expansion.

2.45 Real residential investment contracted by 0.3 per cent in 2019 and we expect this weakness to intensify this year, with residential investment falling by around 4 per cent, reflecting the recent fall in housing starts and subdued turnover in the housing market. Growth is expected to pick up later in the forecast period – reaching around 1.5 per cent – as turnover in the housing market picks up and as real earnings growth rises. The relatively weak profile partly reflects the large increase in public investment, which increases competition for resources and raises costs in the construction sector, reducing activity.

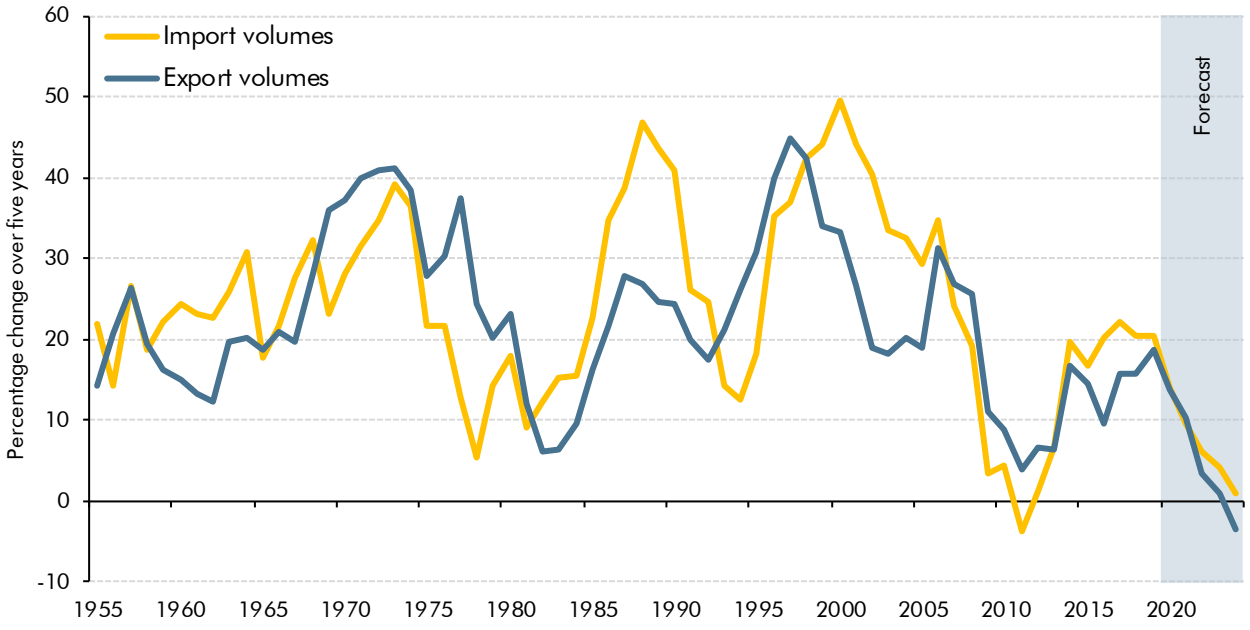
2.46 In contrast to the relatively subdued outlook for private investment, government investment is expected to increase significantly over the forecast period thanks to the Budget spending decisions. We now expect real government investment to increase by around 11 per cent in 2021, up from 2.2 per cent in March 2019. Although year-on-year changes in public investment can be volatile, this would be the largest increase since 2008, when existing capital spending plans were brought forward to provide a fiscal stimulus in response to the financial crisis. General government investment growth averages 4.8 per cent a year from 2020 and 2023, up from 1.8 per cent in March 2019.

Trade

2.47 Brexit-related stockpiling ahead of both the March and October deadlines meant that both import and export growth were stronger in 2019 than we forecast last March. Imports rose as UK firms built up inventories of goods manufactured in the EU, while exports rose as their EU counterparts did the same. We expect this strength to unwind in 2020, with exports falling by 0.6 per cent and imports by 0.2 per cent. Given the significantly weaker outlook for world trade compared to last March, along with the frictions introduced by the new trading relationship with the EU in 2021, we expect exports to fall modestly throughout the forecast. This weakness is exacerbated by the appreciation of the exchange rate, which we have assumed will accompany the fiscal easing. Between 2019 and 2024 we expect exports to contract by a total of 3.6 per cent.

2.48 Due to a slowdown in import growth towards the end of 2019, and weaker domestic demand, our forecast for import growth in 2020 is significantly lower than last March. Over the rest of the forecast, however, we expect imports to be marginally stronger than in March partly due to a stronger pound boosting import volumes. Given the relative strength of imports compared to exports, the outlook for net trade has deteriorated since March. We now forecast that net trade will subtract from GDP growth every year and by a cumulative 1.7 percentage points between the second quarter of 2020 and the first quarter of 2025 (we expect the first quarter of 2020 to be distorted by trade in non-monetary gold).

Chart 2.9: Trade growth



Source: Bank of England, OBR

2.49 The relative contributions of the components of demand to GDP growth are summarised in Table 2.4. Growth in government expenditure is forecast to contribute over half of combined GDP growth this year and next, despite accounting for only around a fifth of GDP. In the near term, valuables and inventories also have an impact. The former due to the large movements in non-monetary gold in 2019, while the latter is driven by the accumulation of stocks in the run-up to the two Brexit deadlines in 2019.

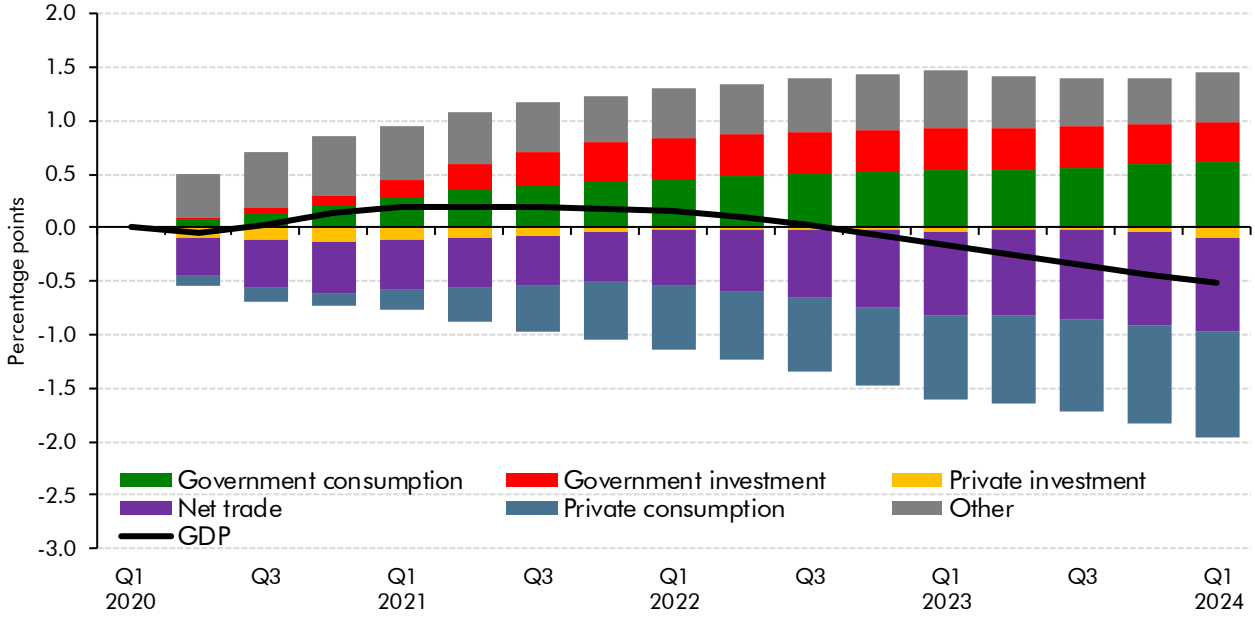
Table 2.4: Expenditure contributions to real GDP

	Percentage points, unless otherwise stated					
	Outturn	Forecast				
	2019	2020	2021	2022	2023	2024
GDP growth (per cent)	1.4	1.1	1.8	1.5	1.3	1.4
Main contributions:						
Private consumption	0.8	0.7	0.8	0.8	0.9	0.9
Business investment	0.0	0.0	0.2	0.3	0.2	0.2
Dwellings investment[1]	0.0	-0.2	0.1	0.1	0.1	0.1
Government[2]	0.7	0.8	0.8	0.6	0.4	0.5
Change in inventories	0.1	-0.1	0.1	0.0	0.0	0.0
Net trade	0.0	-0.1	-0.3	-0.2	-0.4	-0.3
Other[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.

2.50 Chart 2.10 shows the revision to our real GDP forecast relative to March 2019 broken down by expenditure component, with a stronger contribution from government and a weaker one from the private sector, mainly because we expect the fiscal easing to crowd out net trade, private consumption and private investment.

Chart 2.10: Expenditure contributions to the cumulative change in real GDP growth



Note: The comparison begins in Q2 2020 as contributions in Q1 2020 are distorted by trade in non-monetary gold.
Source: OBR

Labour market

Participation, employment and productivity

2.51 The participation rate increased slightly in the fourth quarter of 2019, to a little above our estimate of its underlying equilibrium rate. We expect participation to fall to its equilibrium rate in the near term, and stay in line with it as the rate declines over the forecast thanks to population ageing. As explained in paragraph 2.31, we have revised up our forecast for the equilibrium participation rate over the forecast period since March 2019.

2.52 The unemployment rate fell to 3.8 per cent in the fourth quarter of 2019, slightly below our estimate of its equilibrium rate of 4.0 per cent. We expect the unemployment rate to fall slightly in the near term thanks to the fiscal easing, and then edge up as growth falls back. The unemployment rate rises slightly over the forecast period as a whole due to the modest effect of the increase in the NLW (Box 2.5) on the underlying equilibrium rate.

2.53 Employment growth across the forecast is somewhat weaker than in our March 2019 forecast, with the downward revision in population growth, and upward revision in the equilibrium unemployment rate, offsetting the effect of the upward revision to the participation rate. Whole economy employment increases by around 520,000 over the forecast period, but the large increases in government spending mean that we expect an

increase in government employment to account for virtually all (490,000) of the rise.[12] This would reverse all the post-2010 fall in government employment. In our pre-measures forecast, the figures for whole economy and general government employment would have been 720,000 and 350,000 respectively, with lower migration the largest factor reducing total employment growth and higher public spending raising the share of it accounted for by government employment.

2.54 Having moved to a lower migration variant, net inward migration now accounts for around 45 per cent of population growth over the forecast period. In our pre-measures forecast, this would have been over 50 per cent. Absent net migration, employment would have fallen slightly in our post measures forecast as the age structure of the native population means that a fall in the participation rate would offset a rise in population.

2.55 Productivity growth has remained stubbornly weak. Some of this weakness looks temporary, for example, because some business investment has been postponed until more clarity about the future trading relationship between the UK and the EU emerges. When combined with the downward revision to our forecast for potential productivity growth, that means that we expect cumulative growth in actual productivity between the fourth quarter of 2019 and first quarter of 2024 of 4.8 per cent – down from 5.2 per cent in March 2019.

Earnings

2.56 We use an implied measure of average earnings 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 economy forecast is based – particularly the measure of wages and salaries that is an important determinant of tax receipts. The two series have diverged in the past few quarters, but given the more consistent messages coming from the AWE and HMRC's real-time information (RTI), we have chosen to put more weight on these in informing our forecast judgements.

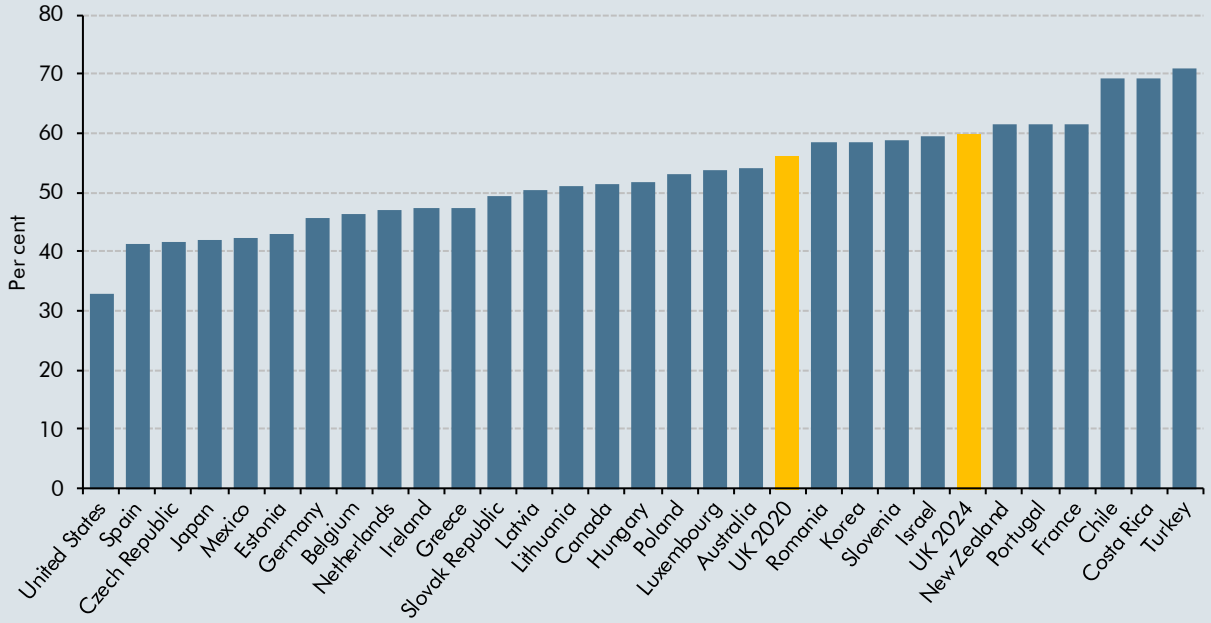
2.57 We estimate that the National Accounts measure of average earnings grew by 2.8 per cent in 2019. This outstripped the sum of productivity growth and whole-economy inflation, resulting in a higher labour share of income. In the near term, we expect earnings growth to pick up alongside a rise in productivity growth – peaking at 3.6 per cent in 2021. Following this, we expect earnings growth to drop back to around 3 per cent, as productivity growth slows and firms partially rebuild their margins which have been squeezed recently.

[12] We use a top down approach for general government employment growth, combining estimates of pay bill growth and the growth of pay bill per head to generate a forecast for employment growth. More information about this approach can be found in the November *2010 Economic and Fiscal Outlook*.

Box: 2.5: The National Living Wage

The Government has introduced a new target for the National Living Wage (NLW) to reach two-thirds of median earnings (of the relevant population) by 2024, providing economic conditions allow. The age threshold will also be reduced from 25 to 21, starting with a move to age 23 from 2021. This will raise the NLW to a level above that in most other countries (Chart C), so there are relatively few international precedents to draw on to estimate the potential effects. This increases uncertainty around the potential impact.

Chart C: Adult minimum wage relative to full-time median earnings in 2018



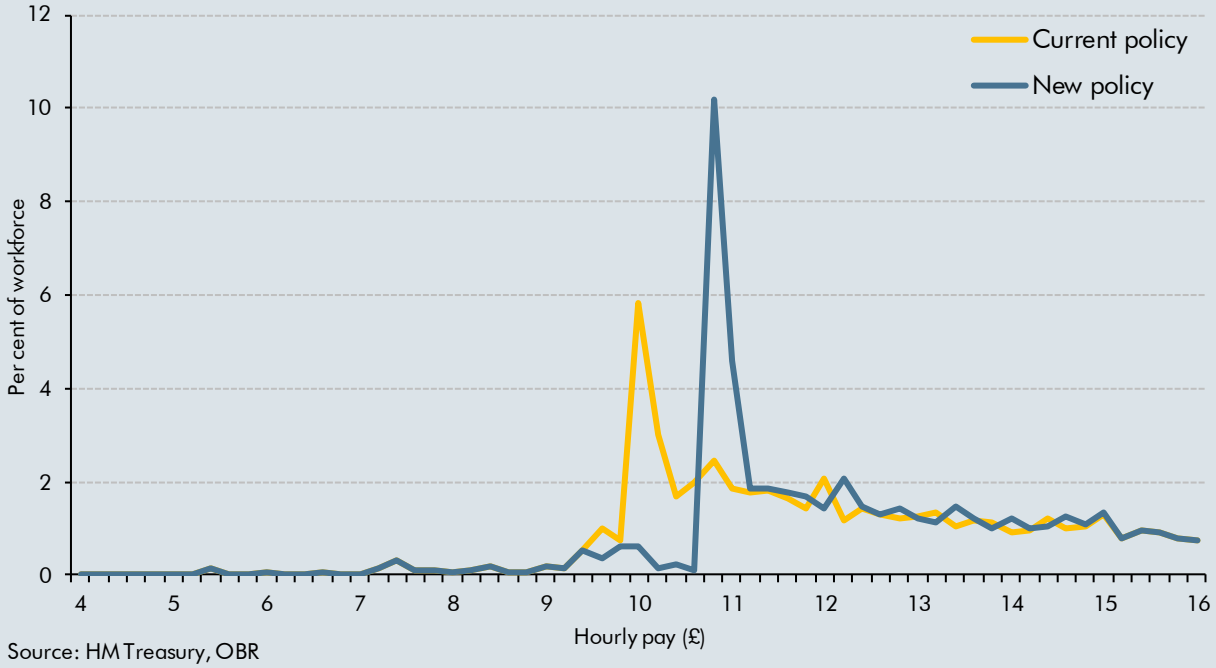
Source: HM Treasury calculations, OECD, ONS

The path that the NLW will take remains uncertain, as the rates themselves are set annually, informed by recommendations from by the Low Pay Commission. For the purposes of this forecast, we have assumed that the NLW will rise smoothly to reach the desired level in 2024.

We have estimated the economic effects of the increase using a similar framework to that we applied in July 2015 when the NLW was first announced, but reflecting the latest evidence:[a]

- We have retained our assumption that the impact of the NLW on earnings **spills over** to those with hourly earnings up to 40 per cent above the new NLW, as employers and employees seek to maintain wage differentials (Chart D).
- There is limited evidence that previous increases in the National Minimum Wage and NLW have had a significant impact on aggregate **employment**, so we have revised down our assumption of the responsiveness of total hours to increases in the NLW to an elasticity of 0.3 (from 0.4 previously). This remains somewhat higher than the literature might appear to suggest, reflecting the fact that the higher NLW will increasingly apply in sectors subject to conventional market pressures.

Chart D: Illustrative earnings distributions in 2024



Source: HM Treasury, OBR

Using these assumptions, we estimate that the rise in the NLW will reduce total hours worked by 0.3 per cent, and that the effect is split evenly between unemployment and average hours worked. That corresponds to a rise in unemployment of around 50,000 (and an increase in our estimate of the equilibrium unemployment rate from 4.0 to 4.1 per cent) by 2024. As the loss of hours worked is concentrated at the bottom of the earnings distribution, there is an offsetting positive compositional (or 'batting average') effect on productivity. Overall, real GDP is 0.1 per cent lower than it would have been by 2024.

Table C shows how the higher path for the NLW has affected our fiscal forecast:

- The largest effect is on **income tax and NIC receipts**, which are up by £1.5 billion a year by 2024-25. This effect is much larger than our estimate at the time of the initial NLW announcement in July 2015 because around three-quarters of those benefiting earn more than the personal allowance and the primary and secondary thresholds for NICs. As a result, most of the additional earnings will be taxed at a higher marginal rate. This includes the effect of fewer hours and lower employment.
- As regards other receipts, the squeeze on profit margins lowers **corporation tax** receipts, while higher consumer spending adds modestly to **VAT and excise duty** receipts.
- The overall effect on **welfare spending** is close to zero, but this reflects offsetting effects. Higher earnings will reduce eligibility for means-tested benefits. But higher unemployment will add to spending on universal credit, while higher earnings growth will raise spending on state pensions via triple lock uprating. Other uprating effects will be small.
- Modestly higher RPI inflation adds to **debt interest** spending.

This does not include the additional costs for local authorities of providing adult social care.

Table C: Fiscal effects of increasing the National Living Wage

	£ billion			
	Forecast			
	2021-22	2022-23	2023-24	2024-25
Total effect on net borrowing	**-0.3**	**-0.6**	**-0.9**	**-1.2**
of which:				
Welfare spending	-0.1	-0.1	-0.1	0.0
Earnings effects	-0.1	-0.3	-0.4	-0.5
Uprating effects	0.0	0.1	0.3	0.4
Unemployment effects	0.0	0.1	0.1	0.2
Income tax and NICs receipts	-0.4	-0.8	-1.1	-1.5
Corporation tax receipts	0.1	0.1	0.2	0.2
Other receipts	0.0	0.0	0.0	-0.1
Debt interest	0.2	0.2	0.2	0.2

[a] A. Dube, *Impacts of Minimum Wages: Review of the International Evidence,* 2019 and Low Pay Commission, *National Minimum Wage: Low Pay Commission Report*, 2019.
[b] For more detail see *More than a minimum: the review of the minimum wage*, Professor Sir George Bain, March 2014.

Prospects for inflation

2.58 In assessing the outlook for the economy and the public finances, we are interested in several different measures of inflation, principally the Consumer Prices Index (CPI) and the Retail Prices Index (RPI). But we also need to forecast the GDP deflator and its components, which are required to generate a projection for nominal GDP.

2.59 CPI and RPI inflation affect the public finances in several ways. The Government uses the CPI to index many allowances and thresholds, and to uprate benefits and public service pensions. The RPI is no longer a National Statistic, because it falls short of agreed international statistical standards,[13] but the Government still uses it to calculate interest payments on index-linked gilts, interest charged on student loans and to revalorise excise duties. The ONS publishes several other inflation measures – most notably CPIH, a variant of the CPI that includes housing costs. But as these do not currently affect the public finances, we do not forecast them.

CPI inflation

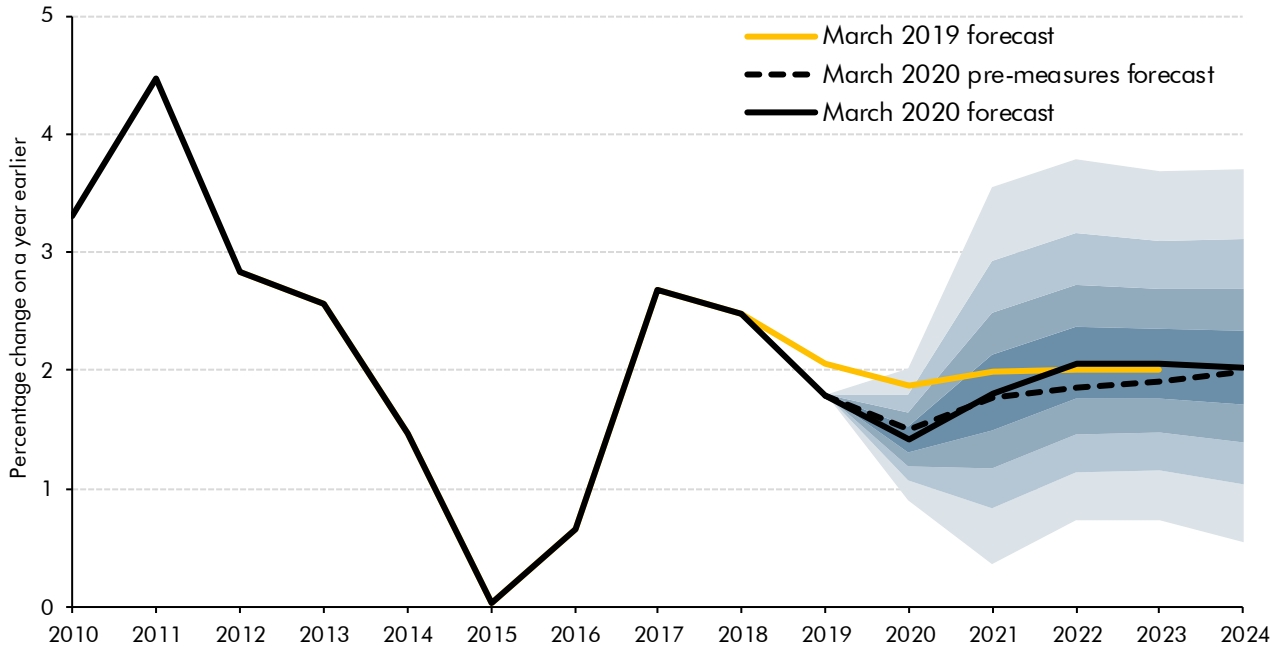
2.60 CPI inflation averaged 1.4 per cent in the fourth quarter of 2019, below the MPC's 2 per cent target and 0.6 percentage points lower than we forecast last March. We expect a tick up to 1.8 per cent in the first quarter of this year, partly due to the impact on the annual comparison of temporarily low energy and fuel prices a year ago. This is followed by a dip to 1.2 per cent in the second quarter, in part driven by the announced drop in the Ofgem energy price cap for April.

[13] ONS, *Shortcomings of the Retail Prices Index as a measure of inflation*, March 2018.

2.61 Several policy measures affect the inflation forecast (see Box 2.2). These include freezing alcohol duties, fuel duty and tuition fees, reintroducing the tobacco duty escalators and raising the National Living Wage. Fiscal easing also boosts economic activity and creates modest excess demand, placing some upward pressure on inflation and takes it slightly above target in 2022 and 2023. But we expect this effect to fade as a result of the higher paths for Bank Rate and sterling that we have assumed, so that inflation returns to the target by the end of the forecast period.

2.62 Chart 2.11 shows our latest central CPI inflation forecast within a fan chart produced using the same methodology that underpins the GDP fan chart (Chart 2.7). It illustrates the range of possible outcomes one would expect if past official forecast errors were a reasonable guide to future ones (which is not necessarily the case). It shows that the downward revisions to our forecast since March 2019 – mainly as a result of lower utility prices – are small compared to the historical differences between forecasts and outturns.

Chart 2.11: CPI inflation fan chart



Source: ONS, OBR

RPI inflation

2.63 RPI inflation averaged 2.2 per cent in the fourth quarter of 2019, 0.7 percentage points lower than our March forecast. We compile our RPI inflation forecast by adding a 'wedge' to our CPI inflation forecast for differences in measurement, coverage and weights. We have revised down the formula effect and weights component in the medium term in line with our revised assumptions for the wedge in the long run, outlined in Box 2.3 of our 2019 *FER*.[14]

[14] OBR, *Forecast evaluation report*, December 2019.

The GDP deflator

2.64 The GDP deflator is a broad measure of prices in the domestic economy. It covers all goods and services that comprise GDP, including those relating to private and government consumption, investment and the relative price of exports to imports – the 'terms of trade'. GDP deflator inflation was estimated to be 1.8 per cent in 2019. We expect it to rise to a peak of 2.2 per cent in 2022 as CPI inflation rises to a slightly above-target rate and as increases in the growth in government spending raises the growth in the price of government consumption and investment. As public spending growth eases, we expect growth in government consumption prices to fall slightly and bring GDP deflator inflation back to 2.1 per cent by the end of the forecast period.

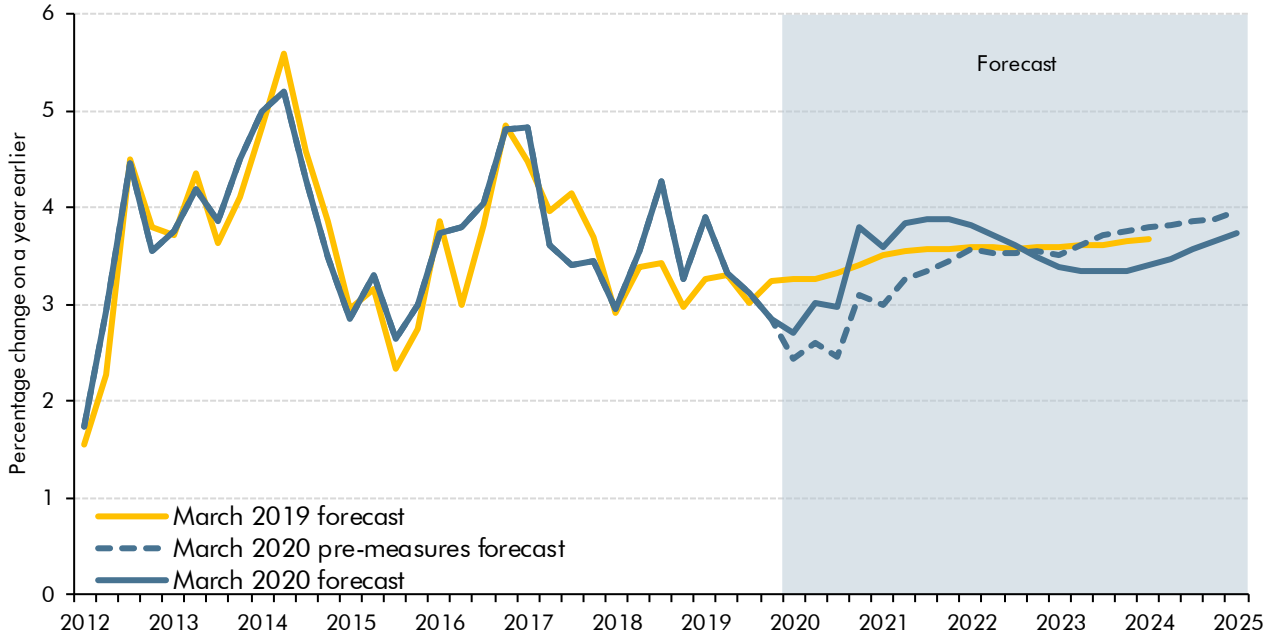
2.65 Overall, GDP deflator inflation is forecast to be higher than last March over the forecast period, mainly due to higher government consumption and investment inflation which result from the announced increase in government spending since last March.

Prospects for nominal GDP

2.66 Most public discussion of the economic outlook focuses on real GDP – the volume of goods and services produced in the economy. But the nominal or cash value – and its composition by income and expenditure – is more important for the public finances. Taxes are driven primarily by nominal, rather than real, GDP. So too is the share of GDP devoted to public spending, as much of that spending is set out in multi-year cash plans (public services, grants and administrative, and capital spending) or linked to measures of inflation (including benefits, tax credits and interest on index-linked gilts).

2.67 We expect nominal GDP growth to slow in 2020 to 3.1 per cent from 3.3 per cent in 2019. This reflects weaker real GDP growth, which is partially offset by higher whole-economy inflation. We then expect nominal GDP growth to strengthen, peaking at 3.8 per cent in 2021, as real GDP growth picks up as a result of the fiscal easing, before slowing slightly in the remaining years of the forecast as the effects of the easing fade (Chart 2.12).

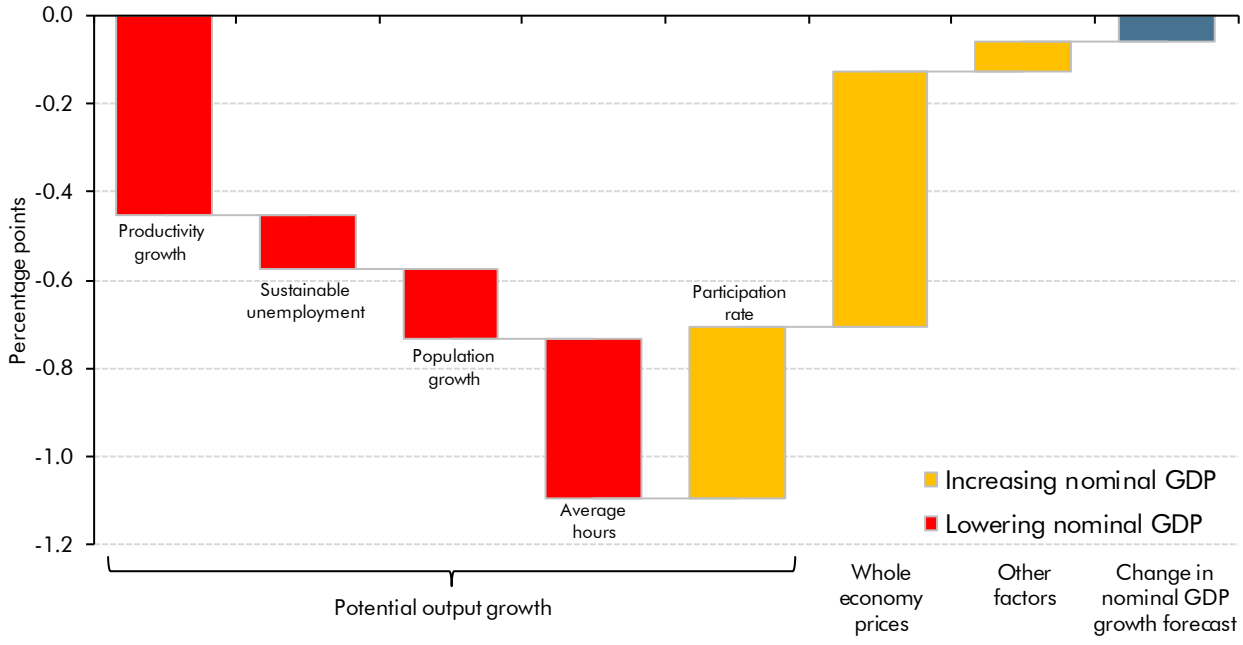
Chart 2.12: Nominal GDP growth



Source: ONS, OBR

2.68 Cumulative nominal GDP growth between 2019-20 and 2023-24 is 14.9 per cent, the same as last March. But that masks offsetting revisions to output and inflation, shown in Chart 2.13. The permanent reduction in supply potential is offset by the inflationary consequences of the fiscal expansion, which delivers a permanent increase in the whole economy price level. The composition of that growth is also more 'tax-rich' than we predicted last March. In particular, cumulative wages and salaries growth is 0.4 percentage points higher; labour income is more heavily taxed than other forms of income or spending.

Chart 2.13: Sources of revision to nominal GDP growth from 2019-20 to 2023-24

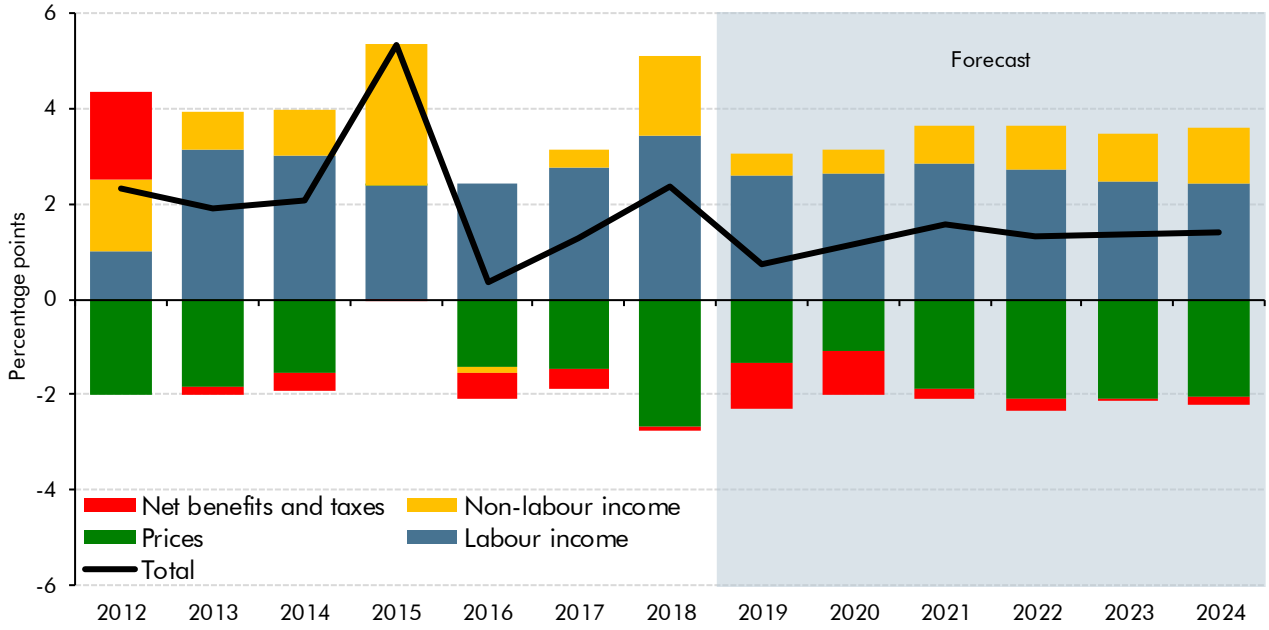


Source: OBR

Income composition of GDP growth

2.69 Nominal household disposable income growth has slowed since 2018, with both labour and non-labour income decelerating and an increased drag from net benefits and taxes. We expect household income growth to edge up in 2020 and pick up further thereafter as non-labour income growth strengthens and the drag from net benefits and taxes lessens. Real household income growth is expected to slow less sharply in 2019 and 2020, as lower inflation partly offsets weaker nominal household income growth (Chart 2.14).

Chart 2.14: Contributions to real household income growth



Source: ONS, OBR

2.70 Non-oil private non-financial corporation (PNFC) profits have been more buoyant than we expected. We now estimate that profits grew by 4.1 per cent in 2019, up from 3.1 per cent in 2018 and above our March forecast of 2.2 per cent. Profit growth then slows to below 3 per cent in 2020 and 2021, falling as a share of GDP as the labour share rises. Profit growth subsequently recovers as margins are rebuilt, somewhat reversing the earlier profits squeeze, though the increases in the National Living Wage weigh on profit growth.

Individual sectors of the economy

Property market

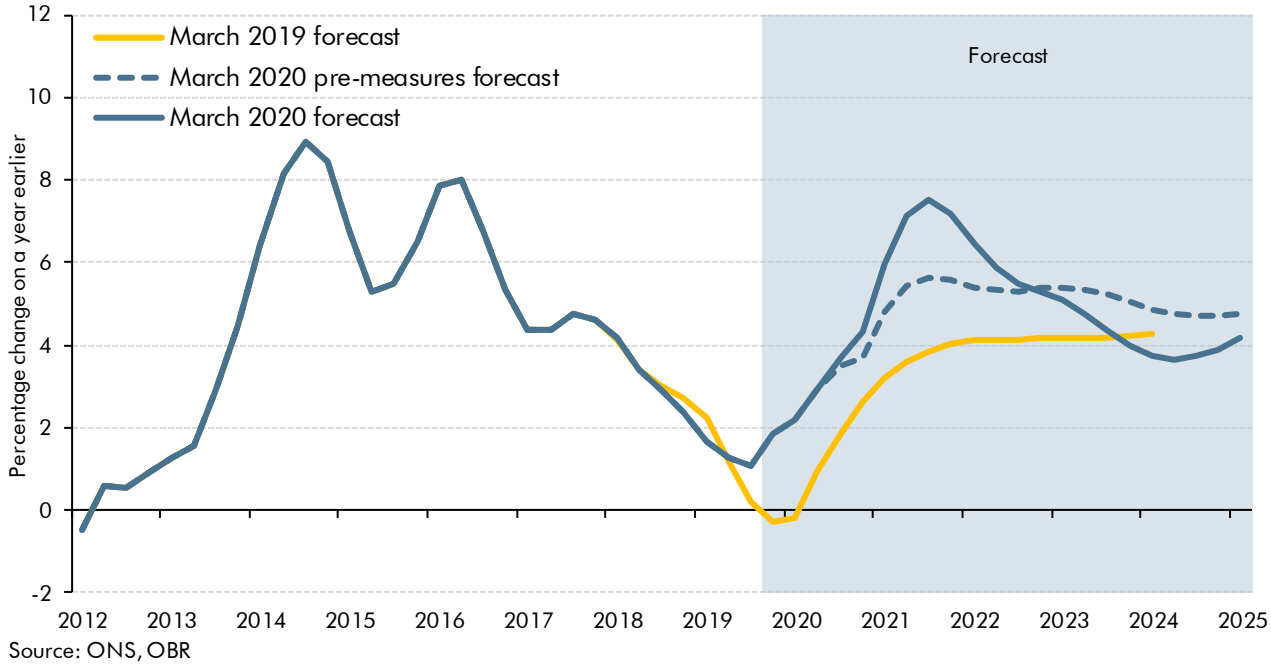
Residential housing

2.71 House price inflation has slowed significantly in recent quarters. Having peaked in 2016 at 7.0 per cent, it fell steadily to reach 1.1 per cent in the third quarter of 2019. It has picked up slightly more recently, reaching 1.8 per cent in the fourth quarter of 2019.

2.72 Indicators of housing market activity and price expectations have shown signs of improvement since our March 2019 forecast and are consistent with higher house price inflation. The Halifax and Nationwide price indices – which are timelier than the ONS measure used in our forecast – have signalled a continued recovery. We expect annual house price inflation to reach 4.3 per cent by the end of 2020.

2.73 Beyond the near term, we expect house price inflation to pick up further as a result of stronger real household income growth (thanks partly to fiscal easing) and continued pressure of demand on supply (despite lower migration). We expect it to peak at 7.5 per cent in the third quarter of 2021, then to ease back to 4.1 per cent by the forecast horizon. Overall, we expect house prices to rise by 23 per cent between the fourth quarter of 2019 and the first quarter of 2024, up from 17 per cent in our previous forecast due to stronger real household income growth and lower interest rates.

Chart 2.15: House price inflation forecast



Source: ONS, OBR

2.74 After increasing through 2018, residential property transactions fell in early 2019 – probably due to Brexit-related uncertainty and broadly in line with our March 2019 forecast. A slightly stronger rebound than we expected in the fourth quarter of 2019 meant that transactions ended the year 1.5 per cent higher than we anticipated. The latest near-term indicators of housing market activity point to this momentum being maintained and we expect transactions to rise by 4.5 per cent between the end of 2019 and the end of 2020. Thereafter, we expect transactions to continue rising gradually to a level that is similar to our March 2019 forecast by the end of 2024.

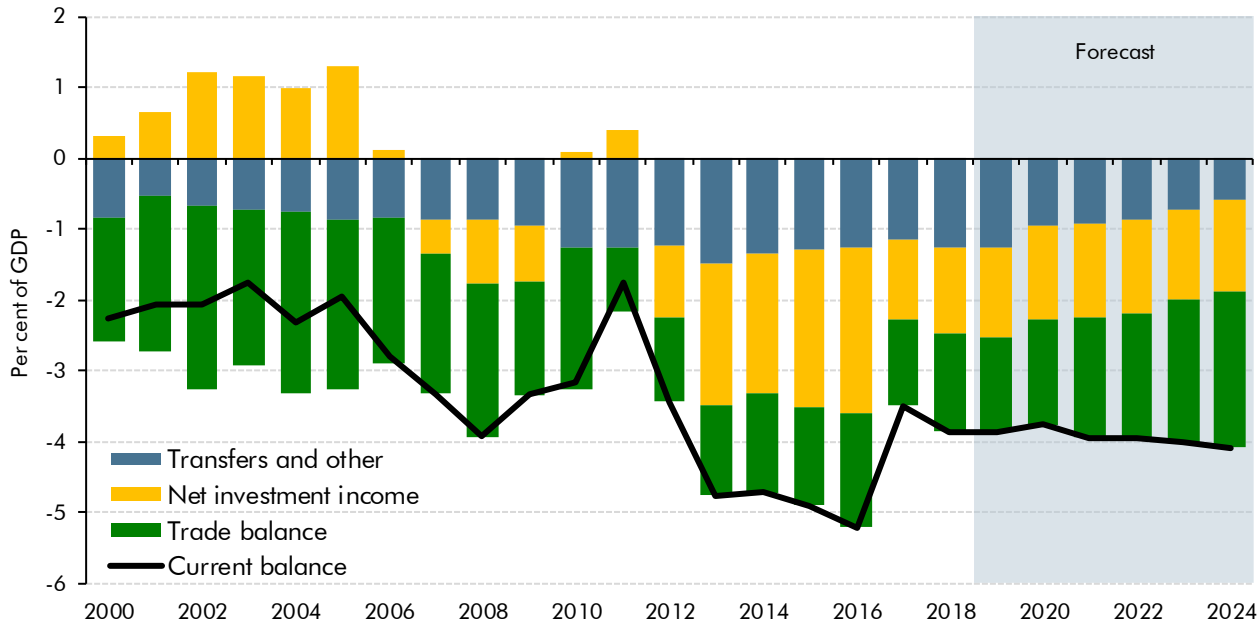
Commercial property

2.75 Commercial property price inflation is expected to be lower in 2019-20 compared to our March 2019 forecast. In line with the consensus outlook from the IPF,[15] commercial property prices are expected to fall until 2021-22 before recovering in the remaining years. Our commercial property transactions forecast is weaker in 2019-20 compared to our previous forecast. Transactions are expected to fall until 2020-21 before recovering. These near-term changes reflect the latest outturn data from HMRC. The forecast is little changed thereafter.

External sector

2.76 Over the past couple of years, the current account has on average been in deficit by around 4 per cent of GDP. The deficit narrowed in the third and fourth quarters of 2019 – driven by the trade deficit, although some of this related to trade in non-monetary gold. We expect the current account deficit to widen back to around 4 per cent of GDP by 2021, remaining around that level for the rest of the forecast. This widening is driven by the trade deficit which is partially offset by a narrowing of the transfers deficit, which reflects the declining path of EU financial settlement payments from 2021 onwards (Chart 2.16).

Chart 2.16: Current account balance



Source: ONS, OBR

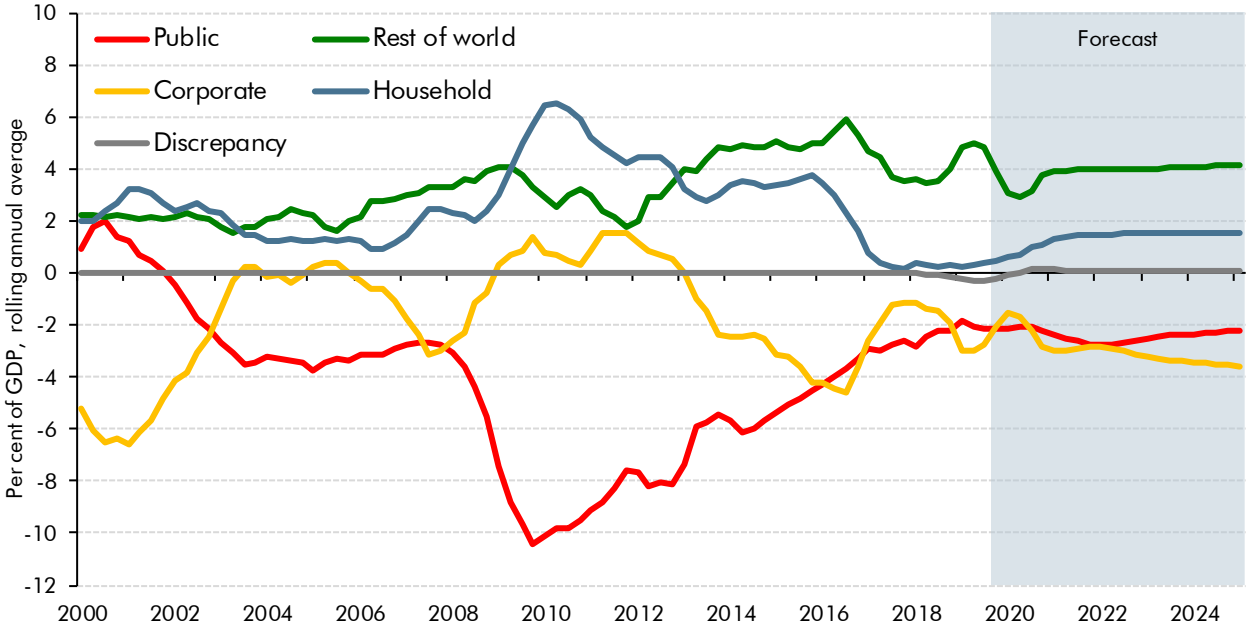
[15] Investment Property Forum, UK Consensus Forecasts Summer 2019.

Sectoral net lending

2.77 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.

2.78 In the first three quarters of 2019, households and the rest of the world were reported to be in surplus while the public and corporate sectors were in deficit. We expect the household sector surplus to widen as a share of GDP. This is offset by a wider corporate sector deficit (Chart 2.17).

Chart 2.17: Sectoral net lending



Source: ONS, OBR

Comparison with external forecasters

2.79 In this section, we compare our latest projections with those of selected outside forecasters. Our forecast incorporates the large fiscal package announced in the Budget. We do not know how much, if any, of the fiscal easing announced in the Budget may have been anticipated in those outside forecasts on the basis of the contents of the Conservative manifesto. We do know that the Bank of England's January 2020 *Monetary Policy Report* reflected the spending announcements made in Spending Round 2019 but – in line with its usual practice – did not make any allowance for what the Budget itself might include. None of the forecasts compared here take on board the recent developments in financial markets triggered by rising concerns about coronavirus.

2.80 In its January 2020 *Monetary Policy Report*, the **Bank of England's** modal forecast is for GDP to grow by 0.8 per cent in 2020 and 1.4 per cent in 2021. These are downwardly revised from its November *Report* and reflect expectations of a weaker near-term pick-up in potential output growth. For 2022, the Bank has a slightly more optimistic forecast for growth at 1.7 per cent, 0.2 percentage points higher than our own forecast. This pick-up in growth reflects expectations of a recovery in global activity and stronger domestic demand that together produce a small degree of cyclical overheating.

2.81 Table 2.5 compares our forecast for actual and potential output with the Bank's over the Bank's three-year forecast horizon. We expect potential output growth to be stronger than the Bank assumes due to differences in productivity forecasts. However, for actual output, our forecasts are similar. This is mainly because the Bank assumes that there is currently a higher margin of spare capacity (Table 2.6).

2.82 The Bank's modal CPI inflation forecast is largely the same as ours for most of their forecast period, only being slightly higher for 2021, as seen in Table 2.6. This is driven by stronger domestic price pressures as excess demand arises.

Table 2.5: Potential and actual output comparisons against the Bank of England

	Per cent	
	Average of four-quarter growth rates from Q1 2020-Q1 2023	
	OBR	Bank of England
Potential output	1.4	1.1
Main contributions:		
Productivity	1.0	0.5
Labour supply	0.4	0.5
Actual output	1.4	1.4

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

Table 2.6: Comparison with external forecasters

	Per cent				
	2020	2021	2022	2023	2024
OBR (March 2020)					
GDP growth	1.1	1.8	1.5	1.3	1.4
CPI inflation	1.4	1.8	2.1	2.1	2.0
Output gap	-0.1	0.4	0.4	0.2	0.0
Bank of England (January 2020)[1]					
GDP growth (mode)	0.8	1.4	1.7		
CPI inflation (mode)[2]	1.4	2.0	2.1		
Excess demand/excess supply[3]	-0.5	0.3	0.5		
NIESR (February 2020)[4]					
GDP growth	1.3	1.6	1.6	1.8	1.7
CPI inflation	1.8	2.1	2.0	2.0	2.0
OECD (March 2020)[5]					
GDP growth	0.8	0.8			
CPI inflation	2.0	1.8			
Output gap	-1.1	-1.2			
IMF (January 2020)[6]					
GDP growth	1.4	1.5	1.5	1.5	1.5
CPI inflation	1.9	2.0	2.0	2.0	2.0
Output gap	-0.1	0.0	0.0	0.0	0.0

[1] Forecast based on market interest rates.

[2] Fourth quarter year-on-year growth rate.

[3] Per cent of potential GDP.

[4] Output gap not published.

[5] The OECD updated GDP growth projections for 2020 and 2021 in their March 2020 *Interim Economic Outlook*. All other projections are from the November 2019 *Economic Outlook*.

[6] The IMF updated GDP growth projections for 2020 and 2021 in their January 2020 *WEO* update. All other projections are from the October 2019 *WEO*.

Table 2.7: Detailed summary of forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2018	2019	2020	2021	2022	2023	2024
UK economy							
Gross domestic product (GDP)	1.3	1.4	1.1	1.8	1.5	1.3	1.4
GDP per capita	0.7	0.8	0.5	1.3	1.1	0.9	1.1
GDP level (2018=100)	100.0	101.4	102.5	104.3	105.8	107.1	108.6
Nominal GDP	3.5	3.3	3.1	3.8	3.7	3.4	3.5
Output gap (per cent of potential output)	0.2	0.1	-0.1	0.4	0.4	0.2	0.0
Expenditure components of GDP							
Domestic demand	1.3	1.6	1.1	2.0	1.7	1.6	1.7
Household consumption[1]	1.6	1.3	1.1	1.2	1.2	1.4	1.4
General government consumption	0.4	3.6	3.7	2.8	2.1	1.9	2.2
Fixed investment	-0.2	0.4	-0.8	3.4	2.9	2.0	1.8
Business	-1.5	0.3	0.0	1.8	3.0	2.4	2.3
General government[2]	1.3	2.1	1.9	10.9	4.6	1.8	1.2
Private dwellings[2]	6.5	-0.3	-4.2	1.5	1.6	1.3	1.2
Change in inventories[3]	0.2	0.1	-0.1	0.1	0.0	0.0	0.0
Exports of goods and services	1.2	3.7	-0.6	-0.5	-0.6	-1.1	-1.0
Imports of goods and services	2.0	3.6	-0.2	0.4	0.2	0.2	0.2
Balance of payments current account							
Per cent of GDP	-3.9	-3.9	-3.8	-3.9	-4.0	-4.0	-4.1
Inflation							
CPI	2.5	1.8	1.4	1.8	2.1	2.1	2.0
RPI	3.3	2.6	2.2	2.7	3.1	3.0	2.9
GDP deflator at market prices	2.2	1.8	2.0	2.0	2.2	2.1	2.1
Labour market							
Employment (million)	32.4	32.8	33.0	33.1	33.2	33.3	33.4
Productivity per hour	0.5	0.0	0.9	1.2	1.2	1.1	1.2
Wages and salaries	4.8	3.5	3.6	3.8	3.6	3.3	3.2
Average earnings[4]	3.3	2.8	3.3	3.6	3.4	3.1	3.1
LFS unemployment (% rate)	4.1	3.8	3.8	3.8	3.9	4.0	4.1
Household sector							
Real household disposable income	2.4	0.8	1.1	1.6	1.3	1.4	1.4
Saving ratio (level, per cent)	5.8	5.7	6.6	7.0	7.2	7.2	7.2
House prices	3.2	1.5	3.3	7.0	5.8	4.6	3.8
World economy							
World GDP at purchasing power parity	3.6	2.9	3.0	3.6	3.5	3.6	3.6
Euro area GDP	1.9	1.2	1.1	1.4	1.4	1.3	1.3
World trade in goods and services	3.7	1.1	1.9	3.9	3.6	3.7	3.8
UK export markets[5]	3.0	1.5	1.6	3.4	3.3	3.4	3.5

[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 to the forecast

	Percentage point difference, unless otherwise stated					
	Outturn	Forecast				
	2018	2019	2020	2021	2022	2023
UK economy						
Gross domestic product (GDP)	-0.1	0.2	-0.4	0.2	-0.1	-0.3
GDP per capita	0.0	0.2	-0.4	0.3	0.0	-0.2
GDP level (2018=100)[1]	0.0	0.2	-0.2	-0.1	-0.2	-0.5
Nominal GDP	0.3	0.1	-0.2	0.3	0.1	-0.3
Output gap (per cent of potential output)	0.0	0.2	0.1	0.5	0.4	0.2
Expenditure components of GDP						
Domestic demand	-0.2	-0.1	-0.4	0.3	0.0	-0.1
Household consumption[2]	-0.1	0.2	-0.4	-0.4	-0.4	-0.2
General government consumption	0.2	1.4	2.0	1.2	0.5	0.2
Fixed investment	-0.2	-0.2	-2.5	1.5	1.0	-0.1
Business	-0.6	1.3	-2.4	-0.5	0.6	0.0
General government[3]	0.7	-3.8	0.0	8.7	3.6	-0.2
Private dwellings[3]	0.9	-1.3	-4.6	1.2	0.1	-0.3
Change in inventories[4]	-0.1	-0.4	-0.1	0.1	0.0	0.0
Exports of goods and services	1.1	2.3	-2.3	-0.7	-0.3	-0.6
Imports of goods and services	1.2	0.6	-2.3	-0.2	0.2	0.1
Balance of payments current account						
Per cent of GDP	0.4	1.2	1.3	1.0	0.8	0.7
Inflation						
CPI	0.0	-0.3	-0.5	-0.2	0.1	0.1
RPI	0.0	-0.4	-0.6	-0.3	0.0	-0.1
GDP deflator at market prices	0.4	-0.1	0.2	0.1	0.2	0.1
Labour market						
Employment (million)	0.0	0.2	0.2	0.2	0.2	0.1
Productivity per hour	-0.1	-0.8	0.0	0.1	-0.1	-0.2
Wages and salaries	0.4	0.1	0.3	0.3	0.2	-0.2
Average earnings[5]	0.4	-0.3	0.4	0.5	0.2	-0.1
LFS unemployment (% rate)	0.0	-0.3	-0.3	-0.2	-0.1	0.0
Household sector						
Real household disposable income	0.8	0.0	0.0	-0.1	-0.4	-0.4
Saving ratio (level, per cent)	1.5	1.5	2.4	2.8	2.9	2.8
House prices	-0.1	0.6	2.0	3.3	1.6	0.4
World economy						
World GDP at purchasing power parity	0.0	-0.6	-0.6	0.0	-0.1	0.0
Euro area GDP	0.1	-0.4	-0.6	-0.2	-0.1	-0.1
World trade in goods and services	-0.4	-2.7	-2.0	0.1	-0.2	0.0
UK export markets[6]	-0.9	-1.9	-1.9	-0.1	-0.2	0.1

[1] Per cent change since March 2019.

[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: Determinants of the fiscal forecast

	Percentage change on previous year, unless otherwise specified							*Growth over forecast*
	Outturn	Forecast						
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
GDP and its components								
Real GDP	1.6	1.1	1.3	1.7	1.4	1.3	1.5	8.5
Nominal GDP[1]	3.9	2.8	3.4	3.9	3.5	3.4	3.6	22.5
Nominal GDP (£ billion)[1,2]	2167	2229	2304	2394	2478	2562	2654	487
Nominal GDP (centred end-March £bn)[1,3]	2199	2263	2348	2437	2519	2606	2700	501
Wages and salaries[4]	4.2	3.5	3.8	3.6	3.7	3.2	3.3	23.1
Non-oil PNFC profits[4,5]	3.1	4.1	2.6	2.9	3.4	3.4	4.0	22.2
Consumer spending[4,5]	4.2	2.6	2.2	3.1	3.3	3.5	3.5	19.6
Prices and earnings								
GDP deflator	2.1	1.9	2.0	2.1	2.1	2.1	2.1	13.0
RPI	3.1	2.6	2.1	2.9	3.0	2.9	2.8	17.6
CPI	2.3	1.8	1.4	1.9	2.1	2.0	2.0	11.7
Average earnings[6]	3.0	2.9	3.6	3.3	3.5	3.0	3.2	21.1
'Triple-lock' guarantee (September)	2.6	4.0	3.2	3.7	3.4	3.2	3.0	22.3
Key fiscal determinants								
Employment (million)	32.5	32.9	33.0	33.1	33.2	33.3	33.4	0.9
Output gap (per cent of potential output)	0.3	0.0	0.1	0.4	0.4	0.1	0.0	-0.2
Financial and property sectors								
Equity prices (FTSE All-Share index)	4003	4065	4245	4408	4565	4718	4888	885
HMRC financial sector profits[1,5,8]	1.9	1.5	1.7	1.9	1.8	1.7	1.8	10.8
Residential property prices[9]	2.6	1.6	4.2	7.1	5.4	4.2	3.9	29.4
Residential property transactions (000s)[10]	1192	1191	1259	1278	1317	1344	1373	181
Commercial property prices[10]	3.9	-1.9	-1.4	0.0	0.7	2.1	2.1	1.5
Commercial property transactions[10]	-0.8	-5.1	-1.7	1.7	1.4	1.3	1.5	-1.1
Oil and gas								
Oil prices ($ per barrel)[5]	71.3	64.0	56.1	54.8	55.1	56.2	57.3	-14.0
Oil prices (£ per barrel)[5]	53.4	50.1	42.1	40.6	40.6	41.3	41.9	-11.5
Gas prices (p/therm)[5]	60.7	34.7	26.5	35.5	36.2	36.9	37.6	-23.1
Oil production (million tonnes)[5]	50.9	51.6	51.0	48.3	45.9	43.6	41.5	-9.3
Gas production (billion therms)[5]	13.6	13.0	13.0	12.4	11.8	11.2	10.7	-2.9
Interest rates and exchange rates								
Market short-term interest rates (%)[11]	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.1
Market gilt rates (%)[12]	1.4	0.8	0.9	0.9	0.9	1.0	1.1	-0.3
Euro/Sterling exchange rate (€/£)	1.13	1.13	1.15	1.21	1.20	1.18	1.17	0.04

[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 timing effects.
[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 2.10: Changes in the determinants of the fiscal forecast

	Percentage point difference, unless otherwise specified						Growth over forecast
	Forecast						
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
GDP and its components							
Real GDP	0.1	-0.1	-0.2	0.1	-0.2	-0.3	-0.8
Nominal GDP[1]	0.8	-0.4	0.0	0.3	-0.1	-0.3	-0.5
Nominal GDP (£ billion)[1,2]	37	29	30	39	38	33	-3.7
Nominal GDP (centred end-March £bn)[1,3]	34	27	34	40	36	32	-2.2
Wages and salaries[4]	0.1	0.3	0.3	0.1	0.3	-0.4	0.8
Non-oil PNFC profits[4,5]	0.2	1.9	-0.3	-0.4	-0.2	-0.2	0.9
Consumer spending[4,5]	0.3	-0.7	-1.2	-0.6	-0.4	-0.2	-3.4
Prices and earnings							
GDP deflator	0.4	-0.1	0.1	0.2	0.2	0.1	0.5
RPI	-0.1	-0.4	-0.7	-0.1	0.0	-0.1	-1.6
CPI	0.0	-0.3	-0.5	-0.1	0.1	0.0	-0.8
Average earnings[6]	0.1	-0.1	0.5	0.2	0.3	-0.3	0.8
'Triple-lock' guarantee (September)	0.0	0.5	0.3	0.6	0.3	0.0	1.9
Key fiscal determinants							
Employment (million)	0.0	0.3	0.2	0.2	0.2	0.1	0.1
Output gap (per cent of potential output)	0.1	0.1	0.2	0.5	0.4	0.1	0.1
Financial and property sectors							
Equity prices (FTSE All-Share index)	2	135	181	200	206	201	199
HMRC financial sector profits[1,5,8]	-1.3	-1.6	0.0	0.1	0.0	-0.1	-1.7
Residential property prices[9]	-0.3	1.4	2.1	3.2	1.3	0.0	9.1
Residential property transactions (000s)[10]	-1	12	12	-13	-11	-18	-16.6
Commercial property prices[10]	0.3	-0.3	-0.5	-1.9	-1.3	0.1	-3.9
Commercial property transactions[10]	0.7	-6.3	-3.2	0.1	-0.2	-0.4	-10.3
Oil and gas							
Oil prices ($ per barrel)[5]	0.0	1.9	-5.5	-7.2	-8.2	-8.3	-8.3
Oil prices (£ per barrel)[5]	0.0	2.4	-4.4	-5.7	-6.0	-5.8	-5.8
Gas prices (p/therm)[5]	0.0	-15.8	-26.6	-18.6	-19.0	-19.4	-19.4
Oil production (million tonnes)[5]	3.6	3.2	2.6	2.3	2.2	2.1	-1.5
Gas production (billion therms)[5]	-0.1	-0.7	-0.3	-0.2	-0.2	-0.2	-0.1
Interest rates and exchange rates							
Market short-term interest rates (%)[11]	0.0	-0.2	-0.3	-0.4	-0.4	-0.5	-0.5
Market gilt rates (%)[12]	0.0	-0.5	-0.5	-0.6	-0.7	-0.7	-0.7
Euro/Sterling exchange rate (€/£)	0.00	0.00	0.03	0.10	0.10	0.10	0.10

[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 timing effects.
[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:

- specifies the assumptions that we have made in respect of the UK's **exit from the EU** (from paragraph 3.5);
- explains the effects of **new policies announced since March 2019** on the fiscal forecast (from paragraph 3.8);
- reviews **classification issues** affecting our forecast (in paragraph 3.11);
- describes the outlook for **public sector receipts**, including a tax-by-tax analysis explaining how the forecasts have changed since March 2019 (from paragraph 3.18);
- portrays the outlook for **public sector expenditure**, focusing on spending covered by departmental expenditure limits and the components of annually managed expenditure, including those subject to the 'welfare cap' (from paragraph 3.23);
- presents the outlook for the key **fiscal deficit aggregates**, including headline and structural measures of the budget deficit (from paragraph 3.88);
- shows the outlook for key **balance sheet aggregates**, such as public sector net debt, and for government lending to the private sector and other financial transactions, including asset sales (from paragraph 3.108); and
- summarises **risks and uncertainties**, including those embodied in the reporting of contingent liabilities (paragraph 3.137).

3.2 Further breakdowns of receipts and expenditure and other details of our forecast are provided in extensive supplementary tables on our website. The forecasts in this chapter start from the estimates of 2018-19 outturn data published by the Office for National Statistics (ONS) on 21 February. We then present an in-year estimate for 2019-20 that makes use of ONS outturn data for April 2019 to January 2020 and limited administrative tax data for some of February. Finally, we present forecasts for 2019-20 to 2024-25.

3.3 The Foreword to this document describes the timetable that was followed in producing the forecasts presented here. As is usual, we closed our pre-measures economy and fiscal forecasts well ahead of the Budget to provide a stable base against which the Chancellor could assess his policy measures. The pre-measures economy forecast was closed on 18

February and the fiscal forecast on 25 February. And they reflect information gathered from financial market prices over the 10 days to 11 February. After that, the only changes relate to Budget measures and other policy announcements – in this forecast these include the new migration regime and the higher National Living Wage. Since we closed our pre-measures forecast, news about the spread of coronavirus has prompted unusually large movements in asset prices, while other forecasters have been reassessing the economic outlook to take on board the possible adverse economic consequences. The ultimate spread and economic impact of coronavirus are at this stage highly uncertain, but they represent a clear downside risk to the forecasts presented below. The consequences are, though, most likely to be concentrated in the near term. We discuss the coronavirus-related risks to our economy forecast in Box 2.3 and associated fiscal risks in this chapter.

3.4 As in previous *Economic and fiscal outlooks (EFOs)*, this fiscal forecast:

- Represents our **central view** of the path of the public finances, based on the current policies and policy assumptions of the Government, and the information and conditioning assumptions that we thought appropriate when compiling our pre-measures forecast in mid-February. On that basis, we believed that, in the absence of future policy or classification changes, the outturns were as likely to be above the forecast as below it. But the near-term risks to economic activity have since clearly pivoted to the downside.

- 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 previous forecast in March 2019.

- Focuses on official 'headline' fiscal aggregates that **exclude public sector banks**.

Assumptions regarding the UK's exit from the EU

3.5 The OBR is required by legislation to produce its forecasts based on current government policy (but not necessarily assuming that particular policy objectives will be met). With negotiations over the UK's future relationship with the EU still taking place, this is not straightforward. We asked the Government to provide any additional information on its policies regarding Britain's departure from the EU that would be relevant to our forecasts.

3.6 The Government directed us to the Prime Minister's speech on 3 February[1] and to a paper published on 27 February[2] setting out the Government's proposed approach to negotiations about the future relationship with the EU. The Government also issued a public consultation on amendments to the tariffs currently applied through the EU's Common External Tariff,[3] which closed on 5 March. On 19 February the Government published an immigration policy statement, setting out the Government's intended immigration regime after the end of

[1] Prime Minister's Office and The Rt Hon Boris Johnson MP, *PM speech in Greenwich: 3 February 2020*, February 2020.
[2] Prime Minister's Office, *Our approach to the Future Relationship with the EU*, February 2020.
[3] Department for International Trade, *The UK Global Tariff*, February 2020.

the transition period.[4] We have reflected the new migration regime in this forecast, whereas other areas remain subject to the continuing negotiations between the UK and the EU, or to future UK Government policy decisions.

3.7 In addition to the potential future trade and migration regimes, there are several areas where the Government's post-transition policy objective is clear, but we have needed to make auxiliary assumptions to construct our fiscal forecast. For example:

- We assume there are no changes to the structure or effectiveness of **tax systems for which there are common EU rules**, such as VAT, unless otherwise stated.

- The Treasury is still considering responses to its recently concluded consultation on the UK's new '**Most Favoured Nation' tariff schedule**. Our customs duty forecast therefore assumes that the regime that is presently in operation will continue; any subsequent changes will be reflected in a future forecast and costed relative to that baseline.

- There is no further information regarding **fee status and eligibility for student finance for EU students** beyond the 2020-21 academic year. We therefore assume that the forecast for EU-domiciled student entrants will be stable from the academic year 2020-21.

- The Government has promised to pursue an approach to **vehicle emissions regulation** "*at least as ambitious*"[5] as the current arrangements and a system of **carbon pricing** of "*at least the same effectiveness and scope*" as the EU emissions trading system. In the absence of firm policies in these areas, we assume the EU schemes continue, consistent with the stated position that UK replacement schemes will be at least equivalent in effect.

Policy announcements

3.8 The Government has announced a large Budget giveaway, with public spending being placed on a much higher path than the previous plans embodied in our March 2019 forecast. It has financed this in part with the direct fiscal savings associated with Brexit – the contributions no longer required (net of the divorce settlement) and the customs duties no longer remitted to the EU – and by cancelling the corporation tax cut that was due in April 2020. But, for the most part, higher spending is financed through higher borrowing.

3.9 The large and sustained fiscal easing provides a temporary boost to real economic activity and leaves the cash size of the economy permanently larger via its effects on whole-economy inflation. This boosts all the major tax bases, raising receipts. The effect of the Budget package on borrowing and interest rates raises debt interest spending. And since more than one pound in ten of higher departmental current spending goes on pension contributions, the medium-term net cost of public service pensions is reduced materially.

[4] Home Office, *The UK's points-based immigration system: policy statement*, February 2020.
[5] Office for Low Emission Vehicles, *The Road to Zero*, September 2018.

3.10 The new migration regime raises borrowing by reducing population and receipts growth, but the effect is tempered by the foregone population growth being concentrated amongst the lower paid, reducing means-tested welfare spending and limiting the effect on income tax. A higher path for the National Living Wage reduces borrowing slightly.

Table 3.1: Summary of the effect of Government decisions on the budget balance

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total effect of Government decisions	**0.6**	**-12.3**	**-24.0**	**-22.5**	**-25.4**	**-29.1**
Direct effect of policies on the scorecard	**0.6**	**-17.9**	**-36.4**	**-38.5**	**-41.2**	**-41.9**
of which:						
RDEL spending[1]	-2.5	-14.9	-27.2	-31.9	-35.6	-38.6
CDEL spending[1]	0.0	-7.0	-16.7	-19.2	-20.0	-20.7
Use of direct Brexit fiscal savings	0.0	4.3	5.0	7.1	11.3	14.6
Receipts	1.0	1.4	3.8	7.1	7.6	7.5
Other AME spending	2.1	-1.6	-1.3	-1.7	-4.4	-4.7
Direct effect of non-scorecard policies	**0.0**	**2.3**	**5.3**	**6.3**	**7.4**	**5.6**
of which:						
RDEL spending[1]	-0.4	-0.3	0.2	0.6	0.6	-0.3
CDEL spending[1]	0.5	1.3	3.3	3.8	3.9	4.1
Receipts	0.0	0.6	0.9	0.9	1.0	1.0
AME spending	0.0	0.6	1.0	1.0	1.9	0.8
Indirect effect of Government decisions	**0.0**	**3.3**	**7.1**	**9.7**	**8.4**	**7.2**
Total effect of Government decisions	**0.6**	**-12.3**	**-24.0**	**-22.5**	**-25.4**	**-29.1**
of which:						
Gross tax increases	1.4	6.8	9.0	11.7	12.5	12.5
Gross tax cuts	-0.4	-4.8	-4.3	-3.7	-3.9	-3.9
Total RDEL spending changes[1]	-2.9	-15.2	-27.0	-31.2	-34.9	-38.9
Total CDEL spending changes[1]	0.5	-5.7	-13.4	-15.4	-16.1	-16.7
Total AME spending changes	2.1	3.3	4.7	6.5	8.7	10.7
Indirect effects	0.0	3.3	7.1	9.7	8.4	7.2
of which:						
Due to tax and spending measures	0.0	3.4	7.2	9.7	8.3	7.0
Raising the National Living Wage	0.0	0.0	0.3	0.6	0.9	1.2
New migration regime	0.0	0.0	-0.3	-0.5	-0.8	-1.0

[1] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.
Note: The full breakdown of this table can be found in Annex A. This table uses the Treasury scorecard convention that a positive figure means an improvement in PSNB, PSNCR and PSND.

Classification and other statistical changes

3.11 In December 2019 we restated our March 2019 forecast to reflect the significant changes introduced by the ONS in September 2019.[6] These included changes to the treatment of student loans, funded public sector pensions, depreciation and corporation tax credits. Since then, the ONS has announced the classification of Pool Re (a terrorism reinsurer) to the central government sector, but has not yet provided estimates of the effect this will have on the public finances. As such we are unable to include Pool Re in this forecast.

[6] OBR, *Restated March 2019 forecast,* December 2019

3.12 The Government has announced several measures in this Budget that the ONS will in due course need to classify. Pending these decisions, and reflecting the advice of Treasury classification experts, we have assumed that:

- the new **plastic packaging tax** is a tax on production;
- a **green gas levy** on suppliers to the gas grid is a tax on production and the corresponding payment to producers of biomethane is a subsidy;
- a UK scheme to replace the EU **fines on car manufacturers for excess CO_2 emissions** in their new car sales will accrue at the point the emissions are reported;
- **Brexit financial settlement** payments to the EU will accrue when the UK receives twice-yearly communication from the EU as to the amounts due; and
- changes to the payment date for some **import VAT** liabilities will affect cashflows but not the accrued recording of VAT receipts.

3.13 In addition, we have changed the way in which we show the effect of customs duties being retained by the Exchequer from the end of 2020, when the Brexit transition period ends. In our previous post-referendum forecasts, the move from them being recorded as an EU tax to being a UK tax was subsumed within our fiscally neutral assumption that direct savings from leaving the EU would finance other public spending. With DEL envelopes for the next Spending Review being set at this Budget, we now record the customs duty receipts as they will appear in reality and have increased spending accordingly (see Box 3.5). This better reflects the real-world position on both receipts and spending without altering our fiscally neutral assumption that direct fiscal savings related to Brexit will be spent. This assumption has in effect been confirmed by the higher DEL spending announced in the Budget

3.14 The ONS is considering several issues that could materially affect future forecasts. Some relate to things that have been included in this forecast:

- the classification of two previously announced policies that we have provisionally recorded as taxes: the **apprenticeship levy** and the **digital services tax**; and
- the sale of **railway arches** and **spectrum licences**, which we include as financial transactions affecting debt immediately with smaller flow effects on the deficit.

3.15 Others relate to things that we have not anticipated in this forecast:

- the classification or recording of the **Nuclear Liabilities Fund**, which could have implications for both the balance sheet and the deficit; and
- the implications for the public finances of a change to the recording of **leases** in commercial accounts (under the 'IFRS 16' accounting standard).

3.16 The change to leases could be significant. Currently *finance* leases are recorded on the balance sheet of the lessee, whereas for *operating* leases the asset remains on the lessor's. Under IFRS 16, nearly all leases will be reported on the balance sheet within lessees' financial statements, leading to increases in their reported debt and non-current assets.

3.17 The ONS has concluded that for property leases IFRS 16 is a good proxy for the ESA10 accounting standard used for the public finances, but that a modified IFRS 16 dataset will be needed for other leases.[7] It is now working to establish appropriate data and aims to introduce changes this autumn. The ONS has not released estimates of the scale of the impacts, so we are unable to anticipate them in this forecast. But the changes are likely to increase substantially the number of finance leases on the Government's books, raising measured debt, capital spending and depreciation, but reducing rental payments on operating leases that are part of current spending. Given the enormous number of leases the public sector engages in – the Treasury estimates there to be around 55,000 in central government alone – the impacts could be large. Prompted by this change in treatment, it is possible that departments might reconsider whether the contracts should be leases at all. The effect of this on the public finances is also uncertain.

Public sector receipts

3.18 Table 3.2 summarises our receipts forecast. Receipts rise relative to GDP in every year, reflecting several revenue-raising policies, as well as underlying growth in our forecasts. Income tax and NICs rise by 0.2 per cent of GDP in 2020-21, because unchanged personal allowance and higher rate thresholds mean that more people are dragged into higher tax bands. Removing eligibility to use cheaper 'red diesel' from most current users boosts fuel duty by 0.1 per cent of GDP in 2022-23. Capital taxes rise strongly over the forecast, benefitting from underlying growth in equity and house prices, as well as our assumption that effective tax rates will rise. They are boosted from 2021-22 onwards by the restriction of entrepreneur's relief announced in the Budget.

[7] ONS, *Looking ahead – developments in public sector finance statistics: 2019*, May 2019

Table 3.2: Major receipts as a share of GDP

	Per cent of GDP						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Income tax	8.9	8.8	9.0	9.1	9.2	9.2	9.3
NICs	6.3	6.5	6.5	6.6	6.6	6.6	6.7
Value added tax	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Onshore corporation tax	2.5	2.4	2.5	2.5	2.5	2.5	2.5
Fuel duties	1.3	1.2	1.2	1.2	1.2	1.2	1.2
Business rates	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Council tax	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Alcohol and tobacco duties	1.0	0.9	0.9	0.9	0.9	0.9	0.8
Capital taxes[1]	1.4	1.4	1.5	1.5	1.6	1.7	1.8
UK oil and gas receipts	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Other taxes	3.3	3.4	3.4	3.3	3.3	3.3	3.3
National Accounts taxes	**33.9**	**33.9**	**34.1**	**34.2**	**34.4**	**34.5**	**34.6**
Interest and dividend receipts	1.1	1.2	1.2	1.2	1.2	1.3	1.3
Other receipts	2.5	2.5	2.6	2.7	2.6	2.6	2.6
Current receipts	**37.5**	**37.7**	**37.9**	**38.0**	**38.3**	**38.4**	**38.5**

[1] Includes capital gains tax, inheritance tax, property transaction taxes and stamp taxes on shares.

Sources of change in the receipts-to-GDP ratio

3.19 Movements in the receipts-to-GDP ratio can arise from two sources:

- changes in the **composition of GDP** can lead to specific tax bases growing more or less quickly than GDP as a whole; and
- the **effective tax rate paid on each tax base** can change due to policy or other factors.

3.20 Similar splits apply for non-tax receipts – for example, when considering movements in the receipts-to-GDP ratio due to interest and dividends, the split between changes in the government's asset holdings and in the effective interest rates earned on them.

Change in the receipts-to-GDP ratio over the forecast period

3.21 The receipts-to-GDP ratio rises by 0.9 per cent of GDP between 2019-20 and 2024-25 to reach 38.5 per cent of GDP, the highest since the mid-1980s. National Accounts taxes rise to 34.6 per cent of GDP by the end of the forecast, the highest since 1969-70. These rises are more than explained by higher effective tax rates (due to policy measures and fiscal drag), which are partly offset by the composition of GDP becoming less tax rich. Chart 3.1 shows the contributions to the predicted rise in the receipts-to-GDP ratio.

3.22 The largest positive contributions to the change are:

- A 0.7 per cent of GDP rise in **income tax and NICs** receipts. Total income remains relatively flat as a share of GDP over the forecast, so the increase is entirely explained by the effective tax rate rising. This includes a 0.2 per cent of GDP rise in 2020-21 due to policy measures, in particular the Budget 2018 measure to hold the personal

allowance and higher rate threshold flat in that year (having raised them substantially in 2019-20). The remainder reflects fiscal drag, as a modest pick-up in the growth of productivity and real earnings pulls more income into higher tax brackets.

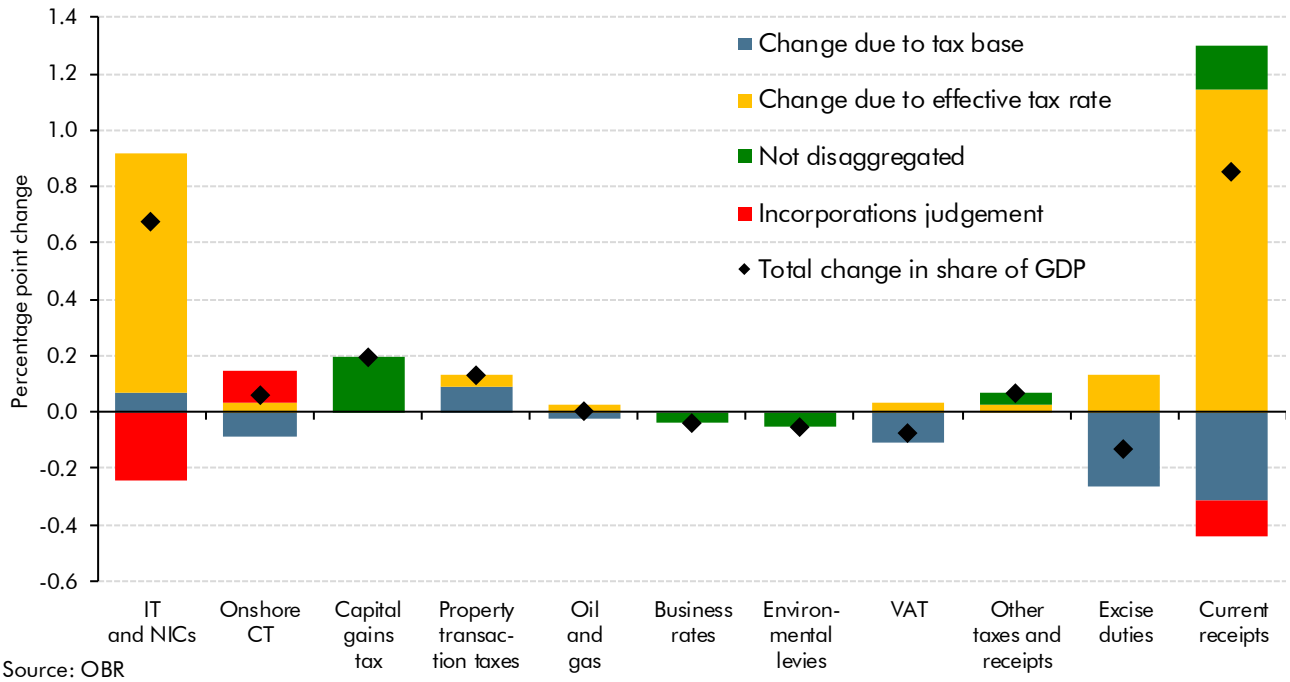
- A 0.1 per cent of GDP rise in **onshore corporation tax**. Most of this rise reflects our assumption that incorporations will continue to rise (though the negative effect of this on income tax and NICs receipts is greater[8]). Abstracting from incorporations, receipts rise by less than 0.1 per cent of GDP across the forecast. The positive impact from falling use of reliefs and deductions (in part explained by the annual investment allowance being cut from £1 million to £200,000 in January 2021) is offset by our assumption of subdued growth in financial company profits over the forecast.

3.23 The remaining upward contributions largely reflect taxes on capital, including **property transaction taxes** and **capital gains tax** (CGT). We assume that both equity and property prices rise over the forecast, boosting the tax base. Effective tax rates also rise thanks to fiscal drag in the property transaction tax system (as most thresholds remain flat over time) as well as our assumption that CGT receipts are geared to equity price gains (partly reflecting the tax system, which taxes the gain rather than the overall value of the disposal). (These forecasts are particularly sensitive to coronavirus risks to asset prices.)

3.24 The main offsetting fall reflects **excise duties**, which fall by 0.1 per cent of GDP between 2019-20 and 2024-25. This is explained by declining tax bases, due to trends in alcohol and tobacco consumption and rising fuel efficiency. These are only partly offset by rises in duty rates based on the Government's stated policy assumptions (which continue to assume increases in fuel duty from next year), but which has in practice been frozen every year since 2011-12) that raise the effective tax rate. The decision to restrict eligibility for 'red diesel' tempers the overall decline, adding 0.1 per cent of GDP to receipts in 2024-25.

[8] See Box 4.1 of our November 2016 *EFO* for more information.

Chart 3.1: Sources of change in the tax-to-GDP ratio (2019-20 to 2024-25)



Source: OBR

Detailed current receipts forecasts

3.25 Our detailed receipts forecasts and changes since March 2019 are presented in Tables 3.3 and 3.4. Further breakdowns are available on our website. Our forecasts for Scottish and Welsh devolved taxes are discussed in our *Devolved tax and spending forecasts* publication.

Table 3.3: Current receipts

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Income tax[1]	192.6	195.2	207.5	217.4	227.3	236.6	246.6
of which: Pay as you earn	163.5	165.3	175.5	184.3	193.3	201.0	209.7
Self assessment	31.5	32.3	34.3	35.9	37.2	38.9	40.5
Other income tax	-2.4	-2.4	-2.2	-2.8	-3.2	-3.4	-3.6
National insurance contributions	137.3	145.4	150.2	157.0	164.0	170.3	177.1
Value added tax	133.1	136.6	140.6	145.9	151.0	155.8	160.7
Corporation tax[2]	56.3	55.1	58.1	60.0	62.6	64.9	67.2
of which: Onshore	54.4	54.0	57.2	58.9	61.4	63.6	66.0
Offshore	1.9	1.1	0.9	1.1	1.1	1.2	1.2
Petroleum revenue tax	-0.7	-0.4	-0.3	-0.3	-0.2	-0.2	-0.2
Fuel duties	28.0	27.7	27.5	28.1	30.5	31.2	31.7
Business rates	30.6	31.2	31.5	33.4	34.3	34.9	36.2
Council tax	34.8	36.2	37.9	39.1	40.3	41.6	42.9
VAT refunds	18.3	19.2	20.2	21.0	21.8	22.5	23.7
Capital gains tax	9.2	10.0	11.4	12.7	14.3	15.7	17.0
Inheritance tax	5.4	5.1	5.5	5.9	6.3	6.7	7.1
Property transaction taxes[3]	12.9	12.8	13.8	14.7	16.2	17.4	18.7
Stamp taxes on shares	3.6	3.4	3.6	3.7	3.9	4.0	4.1
Tobacco duties	9.2	8.7	9.0	8.8	8.8	8.7	8.7
Alcohol duties	12.1	12.1	11.9	12.4	12.8	13.3	13.9
Air passenger duty	3.6	3.8	4.0	4.2	4.4	4.6	4.8
Insurance premium tax	6.3	6.5	6.6	6.7	6.9	7.0	7.1
Climate change levy	1.9	2.1	2.2	2.1	2.3	2.4	2.6
Bank levy	2.5	2.4	1.9	1.1	1.1	1.1	1.0
Bank surcharge	1.8	1.5	1.6	1.6	1.6	1.7	1.7
Apprenticeship levy	2.6	2.8	3.0	3.1	3.2	3.3	3.5
Soft drinks industry levy	0.3	0.3	0.3	0.3	0.3	0.3	0.4
Digital services tax	0.0	0.1	0.3	0.4	0.4	0.5	0.5
Other HMRC taxes[4]	7.4	7.4	7.4	7.6	7.7	7.7	7.8
Vehicle excise duties	6.5	6.7	7.1	7.0	7.2	7.4	7.6
Licence fee receipts	3.2	3.3	3.6	3.8	3.8	3.9	3.9
Environmental levies	7.5	10.2	9.6	9.9	9.8	10.4	10.8
EU ETS auction receipts	0.3	1.5	1.2	1.2	1.3	1.3	1.3
Other taxes	8.8	8.8	9.0	9.3	9.7	9.8	9.9
National Accounts taxes	**735.3**	**755.8**	**786.2**	**818.2**	**853.6**	**885.0**	**918.6**
Less own resources contribution to EU	-3.4	-3.4	-2.4	-	-	-	-
Interest and dividends	24.0	27.6	27.6	28.9	30.6	32.4	33.9
Gross operating surplus	52.9	54.3	57.0	58.7	61.3	63.5	66.2
Other receipts	4.0	5.0	4.5	4.9	3.7	3.8	3.6
Current receipts	**812.9**	**839.3**	**872.9**	**910.8**	**949.2**	**984.7**	**1,022.3**
Memo: UK oil and gas revenues [5]	*1.1*	*0.7*	*0.7*	*0.9*	*0.9*	*1.0*	*1.0*

[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 SDLT, ATED and devolved property transaction taxes.

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

[5] Consists of offshore corporation tax and petroleum revenue tax.

Table 3.4: Changes to current receipts since March 2019

	£ billion					
	Outturn	Forecast				
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Income tax[1]	0.1	-0.5	-0.6	1.5	2.6	2.2
of which: Pay as you earn	0.3	1.4	1.5	3.2	5.0	4.8
Self assessment	0.0	-1.8	-1.3	-0.6	-1.0	-1.4
Other income tax	-0.2	-0.1	-0.8	-1.1	-1.3	-1.3
National insurance contributions	-0.4	2.0	0.5	1.5	2.8	3.0
Value added tax	1.4	0.0	-0.9	-0.4	0.1	0.3
Corporation tax[2]	2.7	1.1	3.8	3.8	3.8	3.7
of which: Onshore	2.7	1.5	4.7	4.9	5.0	4.9
Offshore	0.1	-0.4	-0.9	-1.1	-1.2	-1.3
Petroleum revenue tax	0.0	0.1	0.2	0.2	0.1	0.1
Fuel duties	-0.2	-0.7	-1.7	-2.0	-0.6	-0.9
Business rates	-0.5	-0.1	-0.2	-0.1	-0.1	0.1
Council tax	0.6	-0.1	0.5	0.5	0.5	0.5
VAT refunds	0.0	0.7	1.2	1.5	1.8	1.9
Capital gains tax	-0.1	0.9	1.6	2.8	3.6	4.1
Inheritance tax	0.1	-0.2	0.1	0.3	0.4	0.5
Property transaction taxes[3]	0.1	0.2	0.4	0.2	0.7	0.6
Stamp taxes on shares	-0.1	-0.3	-0.2	-0.2	-0.2	-0.2
Tobacco duties	0.0	-0.4	0.0	-0.2	-0.2	-0.2
Alcohol duties	0.0	-0.5	-1.1	-1.1	-1.2	-1.2
Air passenger duty	0.1	0.0	0.1	0.2	0.2	0.2
Insurance premium tax	0.1	0.3	0.4	0.5	0.7	0.8
Climate change levy	0.0	-0.1	0.0	0.1	0.2	0.0
Bank levy	0.0	0.1	0.1	0.0	0.0	0.0
Bank surcharge	0.0	-0.4	-0.4	-0.4	-0.5	-0.5
Apprenticeship levy	-0.2	0.0	0.0	0.0	0.0	0.0
Soft drinks industry levy	0.0	0.0	0.0	0.0	0.0	0.0
Digital services tax	0.0	0.1	0.0	0.0	0.0	0.0
Other HMRC taxes[4]	-0.2	-0.2	-0.4	-0.4	-0.4	-0.4
Vehicle excise duties	0.1	0.2	0.2	-0.1	-0.2	-0.3
Licence fee receipts	0.0	-0.1	0.2	0.3	0.3	0.2
Environmental levies	-0.3	2.0	0.9	0.7	0.2	0.5
EU ETS auction receipts	-0.3	0.2	-0.2	0.0	-0.1	-0.1
Other taxes	0.7	0.2	0.2	0.5	0.7	0.5
National Accounts taxes	**3.6**	**4.6**	**4.7**	**9.8**	**15.3**	**15.3**
Less own resources contribution to EU	-0.1	0.0	1.0	3.5	3.5	3.5
Interest and dividends	-0.5	0.5	-0.3	-0.9	-0.9	-0.8
Gross operating surplus	0.5	0.2	0.5	0.1	0.4	0.1
Other receipts	-0.1	0.9	0.2	0.8	0.3	0.2
Current receipts	**3.4**	**6.1**	**6.2**	**13.3**	**18.6**	**18.4**
Memo: UK oil and gas revenues [5]	*0.1*	*-0.3*	*-0.8*	*-0.9*	*-1.1*	*-1.2*

[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 SDLT, ATED and devolved property transaction taxes.

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

[5] Consists of offshore corporation tax and petroleum revenue tax.

Changes in the receipts forecast since March 2019

3.26 Table 3.5 sets out the sources of changes to our receipts forecast relative to the restated March 2019 forecast we published in December. It also abstracts from the change in how we treat customs duties. On a like-for-like basis we have revised up receipts by £10.4 billion a year on average. This is more than explained by the impact of Government decisions, partly offset by a modest deterioration in our pre-measures forecast.

3.27 Government decisions have boosted receipts, both directly and indirectly, by £11.9 billion a year on average. Some of the largest impacts include:

- Cancelling the cut in the rate of **corporation tax** from 19 to 17 per cent due to take effect in April 2020 raises £6.4 billion a year on average from 2020-21 onwards.
- The removal of the **'red diesel'** relief (a reduced fuel duty rate for non-road vehicles) increases receipts by £1.6 billion a year on average from 2022-23 onwards.
- Raising the **NICs primary threshold and lower profits limit** to £9,500 in 2020-21 costs £2.3 billion a year on average across the forecast.
- **Higher public spending boosts receipts** through two key channels. First, via the cyclical boost to the economy – which dissipates after a few years, but raises several tax bases temporarily. Second, via the temporary effect on inflation that has a persistent effect on the level of nominal GDP and thus the cash value of tax bases.
- Further rises in the **National Living Wage** boost the wages of affected workers, slightly offset by reduced hours worked. This boosts income tax and NICs receipts, but weighs on corporation tax receipts (through the associated profit squeeze).
- The new **migration regime** is expected to lower net inward migration and population growth, but with the effect concentrated among those on lower incomes. This reduces income tax and NICs receipts, as discussed in Box 3.6.

3.28 Underlying changes to our pre-measures forecast have lowered receipts by £3.0 billion a year on average from 2020-21 onwards. That follows an upward revision of £4.9 billion in 2019-20, which largely reflects one-off factors (such as a higher-than-expected special dividend from RBS). The subsequent downward revisions largely stem from the effect of weaker productivity growth on the major tax bases: lower average earnings growth weighs on income tax and NICs; lower consumer spending growth weighs on VAT receipts; and lower profit growth weighs on corporation tax. Lower interest rates materially reduce our pre-measures forecast for interest received on the government's financial assets.

Table 3.5: Sources of change to the receipts forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	833.2	866.7	897.4	930.6	966.3	
Customs duties forecast treatment change	-	*0.8*	*3.2*	*3.2*	*3.3*	
Restated March 2019 with customs duties change	833.2	867.5	900.6	933.8	969.5	
March 2020 forecast	839.3	872.9	910.8	949.2	984.7	1,022.3
Like-for-like change	**6.1**	**5.4**	**10.1**	**15.4**	**15.1**	
	Underlying forecast changes					
Total	**4.9**	**-1.0**	**-3.5**	**-4.1**	**-3.5**	
of which:						
Income and expenditure	**0.8**	**-1.6**	**-3.4**	**-3.3**	**-3.4**	
Average earnings	-0.7	-0.7	-1.7	-1.8	-2.9	
Employee numbers	1.3	0.6	0.3	0.8	1.4	
Non-financial company profits	0.1	-0.1	-0.4	-0.4	-0.3	
Consumer expenditure	-0.5	-1.6	-1.8	-2.0	-1.8	
Self-assessment income streams	0.2	0.6	0.5	0.4	0.3	
Other	0.5	-0.3	-0.4	-0.3	-0.1	
UK oil and gas	**-0.1**	**-0.8**	**-0.8**	**-1.1**	**-1.0**	
Oil and gas prices	-0.3	-1.1	-1.1	-1.4	-1.3	
Production and expenditure	0.2	0.2	0.3	0.3	0.3	
Property markets	**0.0**	**0.3**	**0.5**	**0.8**	**1.0**	
Market-derived assumptions	**-0.1**	**-0.6**	**-1.3**	**-1.8**	**-2.0**	
Oil prices	0.2	0.0	-0.2	-0.3	-0.3	
Equity prices	0.1	0.8	1.1	1.2	1.3	
Interest rates	-0.4	-1.4	-2.2	-2.7	-3.0	
Exchange rates	0.0	-0.1	0.0	0.0	0.0	
Prices	**-0.2**	**-0.2**	**-0.2**	**-0.1**	**0.0**	
Other economic determinants	**-0.1**	**0.6**	**0.8**	**1.1**	**1.1**	
Other assumptions	**4.5**	**1.3**	**0.9**	**0.3**	**0.7**	
PAYE IT and NICs outturn and modelling	2.3	1.4	2.3	3.3	4.6	
SA IT and CGT outturn and modelling	-0.9	-0.7	-0.1	-0.4	-0.6	
Onshore CT outturn and modelling	0.5	0.3	-0.5	-0.4	-0.5	
VAT outturn and modelling	0.0	-0.3	-0.4	-0.3	-0.2	
Excise duty outturn and modelling	-1.4	-1.8	-2.0	-2.2	-2.4	
Capacity markets	1.7	1.1	0.9	0.5	0.7	
Fees and fines judgements	0.8	0.3	0.9	0.4	0.1	
RBS dividends	0.9	0.3	0.0	0.0	0.1	
Other factors	0.5	0.8	-0.3	-0.6	-1.2	
	Effect of Government decisions					
Total	**1.3**	**6.4**	**13.6**	**19.5**	**18.6**	**17.4**
of which:						
Scorecard measures	1.0	1.4	3.8	7.1	7.6	7.5
Non-scorecard measures	0.0	0.6	0.9	0.9	1.0	1.0
Indirect effects of Government decisions	0.3	4.5	9.0	11.5	10.0	8.8
of which:						
Tax and spending measures	0.3	4.5	8.9	11.5	10.1	8.9
Raising the National Living Wage	0.0	0.0	0.3	0.7	1.0	1.4
New migration regime	0.0	0.0	-0.3	-0.7	-1.1	-1.5
Memo: March 2020 pre-measures forecast	*838.0*	*866.5*	*897.1*	*929.7*	*966.0*	*1,004.9*

Tax-by-tax analysis

Income tax and NICs (excluding self-assessment)

3.29 Receipts of income tax and NICs paid via the PAYE system, plus other non-SA receipts, are expected to exceed our March 2019 forecast by £3.3 billion in 2019-20. Around £3 billion of this upward revision is from higher PAYE receipts on employee salaries, thanks largely to stronger-than expected employment and earnings growth, plus higher-than-expected receipts from pension flexibility withdrawals (which continue to surprise on the upside).

3.30 With bonuses in both the financial and non-financial sectors concentrated in the final months of the financial year, receipts for 2019-20 as a whole remain uncertain. Based on the contrasting strength in receipts from these sectors in the year to date, and other indicators, we have assumed that financial sector bonuses will be flat on a year earlier, while those in the business services sector are expected to rise significantly.

3.31 The substantial rises in the personal allowance to £12,500 and the higher rate threshold to £50,000 in 2019-20 have subdued growth in PAYE income tax but boosted NICs receipts. This will reverse in 2020-21 as these thresholds are frozen in cash terms. The Budget raises the primary NICs threshold to £9,500 from April 2020, further reducing growth in NICs receipts in 2020-21. But helped by faster earnings growth in 2020, we expect growth in non-SA income tax and NICs to pick up from 3.4 per cent in 2019-20 to 4.9 per cent in 2020-21, despite the £2.1 billion cost of raising the NICs threshold.

3.32 We have revised up receipts relative to our March 2019 forecast across all years:

- Our **pre-measures** forecast is higher in all years and by amounts rising from 2020-21 onwards, with in-year strength and various modelling changes – for example better capturing growth in income tax on occupational pensions schemes – the main factors.

- The direct effect of **Budget measures** takes nearly £3 billion a year off receipts from 2020-21 onwards. This primarily reflects the more generous NICs threshold and NICs employment allowance, plus giveaways in respect of the disguised remuneration loan charge and the pensions annual allowance taper.

- The temporary **boost to economic activity from the Budget package** is the largest source of upward revision. In terms of real GDP, this boost is cyclical, so fades by the end of the period. But in terms of nominal GDP, and therefore wages and salaries, it persists as prices remain higher than they would otherwise have been. As a result, the effect on income tax receipts peaks in 2022-23 at £6.4 billion, but only falls back to £4.9 billion in 2024-25 despite the cyclical boost to the GDP having faded by then.

- Smaller effects come from the **new migration regime**, which lowers receipts by amounts rising to £1.5 billion in 2024-25, and the **higher National Living Wage**, which raises them by £1.4 billion by the same point.

Table 3.6: Key changes to non-SA income tax and NICs forecasts since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	305.0	322.2	334.8	347.6	361.4	
March 2020 forecast	308.4	323.4	338.5	354.2	367.9	383.2
Change	**3.3**	**1.2**	**3.7**	**6.5**	**6.5**	
	Underlying forecast changes					
Total	**3.3**	**1.5**	**1.3**	**2.8**	**3.9**	
of which:						
Economic determinants	**0.6**	**0.2**	**-0.4**	**0.2**	**-0.1**	
Average earnings	-0.7	-0.7	-1.7	-1.8	-2.9	
Employee numbers	1.3	0.6	0.3	0.8	1.4	
Inflation	0.0	0.4	1.0	1.3	1.6	
Other economic determinants	0.0	-0.2	-0.1	-0.1	-0.2	
Other						
Recostings	0.4	-0.2	0.0	0.0	-0.2	
Other income tax and NICs streams	0.4	-0.1	-0.5	-0.7	-0.6	
Outturn receipts and modelling	1.9	1.6	2.2	3.4	4.8	
	Effect of Government decisions					
Total	**0.0**	**-0.3**	**2.4**	**3.7**	**2.6**	**2.1**
of which:						
Scorecard and non-scorecard measures	0.0	-2.9	-2.6	-2.7	-2.7	-2.8
Indirect effects	0.0	2.6	5.0	6.4	5.3	4.9

Self-assessment (SA) income tax

3.33 Self-assessment (SA) income tax receipts in 2019-20 were £1.8 billion below our March 2019 forecast. This reflects lower 2018-19 liabilities (in part because 2017-18 liabilities were revised down in last summer's HMRC Trust Statement) and a weak initial 2019-20 payment on account (POA) in January 2020. Preliminary analysis of SA income streams showed the strongest growth was in dividend income, consistent with the effect from reducing the dividend allowance from £5,000 to £2,000.

3.34 Many taxpayers pay SA income tax through the POA mechanism. For 2019-20 liabilities, the first POA was due in January 2020, the second is due in July 2020 and the balancing payment will be made in January 2021. So cash received on liabilities for a particular year are spread across two. The weak initial POA in January 2020 means a higher level of subsequent payments in 2020-21 for a given amount of liabilities. This timing effect will boost SA receipts in 2020-21. Receipts in 2020-21 should also be buoyed by the 3.5 per cent growth in self-employment that we expect in 2019-20, given its recent strength.

3.35 Compared with March 2019, much of the weakness in SA receipts in 2019-20 pushes through the forecast. The effect from higher self-employment income relative to our March 2019 forecast is more than offset by the effect of the lower interest rates for tax on savings income (much of which is now paid through SA). The boost to the economy from the Budget package raises self-employment and, we assume, short-term interest rates relative to our pre-measures forecast. Overall, this raises SA receipts by £0.7 billion a year by 2024-25.

3.36 Budget measures raise SA receipts by around £1 billion a year by the end of the forecast. By not cutting the corporation tax rate in April 2020, the incentive to incorporate has been reduced relative to what was assumed in our pre-measures forecast (boosting SA income tax at the expense of corporation tax). And the restriction on entrepreneur's relief will mean that for those individuals who can substitute between income and capital gains, there will be a greater incentive to take earnings as income rather than capital gains.

Table 3.7: Key changes to the SA income tax forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	34.0	35.6	36.5	38.3	40.3	
March 2020 forecast	32.3	34.3	35.9	37.2	38.9	40.5
Change	**-1.8**	**-1.3**	**-0.6**	**-1.0**	**-1.4**	
	Underlying forecast changes					
Total	**-1.8**	**-1.5**	**-1.6**	**-2.5**	**-3.0**	
of which:						
Self employment income	0.3	0.6	0.6	0.6	0.6	
Dividend income	0.0	0.2	0.0	0.0	0.0	
Savings income	-0.1	-0.3	-0.7	-1.0	-1.1	
Other economic determinants	-0.1	-0.2	-0.1	-0.2	-0.3	
Other modelling and receipts changes	-1.9	-1.8	-1.4	-1.9	-2.2	
	Effect of Government decisions					
Total	**0.0**	**0.2**	**1.0**	**1.5**	**1.7**	**1.6**
of which:						
Scorecard and non-scorecard measures	0.0	0.1	0.6	0.9	1.0	0.9
Indirect effects	0.0	0.1	0.4	0.6	0.6	0.7

VAT

3.37 We have revised up our pre-measures forecast for VAT receipts in 2019-20 by £0.1 billion, but revised it down from 2020-21 onwards. In 2019-20, the negative effect of weaker-than-expected household spending has been offset by other factors, notably a £0.6 billion payment by HS2 (which was fiscally neutral because HS2 was compensated by central government, and has now been added to the list of entities that receive VAT refunds). From 2020-21 onwards, Table 3.8 shows the key drivers of our underlying forecast changes are:

- Weaker **household spending** growth in our pre-measures forecast, which in turn reflects weaker growth in productivity and real household incomes.

- A more VAT-rich **composition of overall household spending** provides a partial offset, as we have assumed flat rather than declining share of durables is total spending, which means a higher share of spending paying the 20 per cent standard rate.

3.38 New VAT rules allowing postponed accounting for most import VAT from January 2021 materially affect the profile of cash receipts in 2020-21 and 2021-22, but as they do not affect when the underlying VAT liability was incurred we have assumed that they will not affect accrued VAT receipts.

3.39 Downward revisions to our pre-measures forecast are partly offset by the effect of Budget policy announcements – particularly over the next couple of years:

- The **direct effect of Budget measures** raise VAT receipts modestly thanks to several relatively small measures that have largely offsetting effects.

- The **indirect effects of Government decisions** have more material effects, adding £0.7 billion a year on average, increasing until 2022-23 and then diminishing thereafter. Higher public spending adds to VAT receipts in all years, since departments pay VAT on the goods and services they procure. NLW rises add very modestly to VAT receipts via their effects on household incomes. But the tighter migration regime reduces VAT receipts by modest but rising amounts.

Table 3.8: Key changes to the VAT forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	136.6	141.5	146.3	150.9	155.6	
March 2020 forecast	136.6	140.6	145.9	151.0	155.8	160.7
Change	**0.0**	**-0.9**	**-0.4**	**0.1**	**0.3**	
	Underlying forecast changes					
Total	**0.1**	**-1.3**	**-1.4**	**-1.1**	**-0.7**	
of which:						
Household spending	-0.7	-1.8	-2.3	-2.7	-2.9	
Standard rated share	0.2	0.7	1.1	1.6	2.0	
Other economic determinants	0.6	0.1	0.1	0.3	0.5	
Outturn receipts and modelling	0.0	-0.3	-0.4	-0.3	-0.2	
	Effect of Government decisions					
Total	**-0.1**	**0.4**	**1.0**	**1.2**	**0.9**	**0.4**
of which:						
Scorecard and non-scoreard measures	-0.1	0.0	0.0	0.1	0.2	0.1
Indirect effects	0.0	0.4	1.0	1.1	0.7	0.3
Memo: VAT gap (per cent)	*7.4*	*7.4*	*7.3*	*7.3*	*7.3*	*7.3*

3.40 The 'implied VAT gap' shown in Table 3.8 is the difference between a theoretical total and actual VAT receipts. It is adjusted for timing factors where they can be estimated. Changes in this estimate may reflect real-world changes in non-compliance or measurement errors in estimating the theoretical total. We have revised down the implied VAT gap in every year relative to our March forecast, reflecting the latest data and several modelling changes.

Onshore corporation tax

3.41 In its September 2019 *Public sector finances* release, the ONS revised accrued corporation tax receipts down significantly, in large part due to correcting the recording of company tax credits, which had previously been double-counted. In December 2019 we restated our March 2019 onshore corporation tax forecast to be consistent with these changes.

3.42 Relative to that restated forecast we have revised receipts up by around £5 billion a year from 2020-21 onwards, which is more than explained by the effect of Budget measures. This largest yield comes from the decision not to cut the main rate from 19 to 17 per cent this April, which raises corporation tax receipts by amounts rising to £6.1 billion a year in 2024-25. Increasing the generosity of the structures and buildings allowance (by raising the main rate from 2 to 3 per cent) has a small offsetting cost. The indirect effects of policy decisions raise the tax base overall, leaving receipts higher by £0.1 billion a year.

3.43 On a pre-measures basis, we revised receipts higher in 2019-20 and 2020-21, but revised them down by an average of £0.9 billion a year thereafter. This reflects several partly offsetting factors:

- Our pre-measures forecast for cumulative **profits growth** is down from 2020 onwards, relative to last March. This reflects weaker productivity growth and our judgement that the profit share of national income will be squeezed in the near term. This reduces receipts by £0.4 billion a year by 2023-24. Other revisions to our economy forecast have small and offsetting effects on receipts.

- In following up the company tax credits error that was corrected in the data, we identified a related **error in the estimated impact of the pre-measures cut in the main rate from 19 to 17 per cent** in April 2020, which has been corrected. The costing had incorrectly been based on a measure of receipts 'net' of reduced liability tax credits. This meant that the estimated cost of the rate cut was too low. Correcting this (as well as other more minor revisions to the model) reduced our pre-measures forecast by £0.6 billion in 2023-24. This partly explains why the Budget decision to cancel this cut raises around £1 billion a year more than the Conservative manifesto suggested.

- **Other modelling and data changes** raise receipts in the near term, but have little effect thereafter. Cash receipts so far in 2019-20 have been stronger than expected, more than explained by strength in the life assurance sector. These firms are taxed partly on the gains on their investment holdings and so the spike in bond prices in the second half of 2019 has led to a sharp rise in receipts. Our forecast implies little change in bond prices next year, so we assume this boost to 2019-20 receipts is a one-off.

Table 3.9: Key changes to the onshore corporation tax forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	56.7	56.8	58.4	61.0	63.5	
Corporation tax correction	**-4.2**	**-4.3**	**-4.4**	**-4.6**	**-4.8**	
Restated March 2019 forecast	52.5	52.5	54.0	56.4	58.7	
March 2020 forecast	54.0	57.2	58.9	61.4	63.6	66.0
Change	**1.5**	**4.7**	**4.9**	**5.0**	**4.9**	
	Underlying forecast changes					
Total	**0.6**	**0.1**	**-0.9**	**-0.9**	**-0.9**	
of which:						
Company profits	0.1	-0.2	-0.4	-0.5	-0.4	
Other economic determinants	0.0	0.0	0.0	0.0	0.0	
CT rate cut recosting	0.2	-0.3	-0.6	-0.6	-0.6	
Other modelling and outturn data	0.3	0.6	0.1	0.2	0.1	
	Effect of Government decisions					
Total	**0.9**	**4.6**	**5.8**	**6.0**	**5.8**	**5.8**
of which:						
Scorecard and non-scorecard measures	0.9	4.6	5.6	5.7	5.7	5.8
Indirect effects	0.0	0.1	0.2	0.3	0.1	0.0

3.44 We have revised down **bank surcharge** receipts by £0.4 billion a year relative to last March, a fall of around 20 per cent. This reflects particularly weak receipts during 2019, in part reflecting the weak profit performance of several banks last year. We assume that financial company profit growth will be subdued over the forecast period. In part this reflects the implications of the UK's exit from the EU, although we make no specific assumptions about the loss of passporting rights or future regulatory divergence between the UK and EU.

Oil and gas revenues

3.45 Between 2020-21 and 2023-24, we have halved our forecast for oil and gas revenues – a downward revision of £0.9 billion a year on average. This is more than explained by much lower oil and gas prices, with our forecast conditioned on prices that are respectively 12 and 34 per cent lower in levels terms by 2023-24 than in our March 2019 forecast. Partly offsetting that, we have revised up oil production across the forecast, following stronger-than-expected production in 2018 and 2019. (Oil prices fell materially between us closing our pre-measures forecast and completing this *EFO*, reflecting concerns about how coronavirus will affect global demand. For example, dollar oil prices on 6 March were 17.8 per cent lower than the 10-day average to 11 February used in this forecast. Mechanically, that would lower our receipts forecast by £0.6 billion a year.)

Property transaction taxes

3.46 We have revised up our forecast for property transactions taxes since March 2019 by £0.4 billion a year on average. This is primarily due to higher stamp duty land tax (SDLT) in England and Northern Ireland, but we have also revised up receipts from land and buildings transaction tax (LBTT) in Scotland and land transaction tax (LTT) in Wales. Our LBTT and LTT forecasts are detailed in our *Devolved tax and spending forecasts* publication.

3.47 The upward revisions to our SDLT forecast reflects:

- **Pre-measures forecast revisions**. We have revised up our pre-measures house price inflation forecast, which boosts receipts. This is partly offset by lower commercial property transactions and the small effects of other modelling changes.

- **Budget measures**. The introduction of a 2 per cent surcharge for non-UK residents when they buy a property in the UK is expected to raise £0.1 billion a year on average. Forestalling creates an uneven effect on receipts in 2020-21 and 2021-22.

- The **indirect effect of the Budget package on house prices** boosts receipts, with the effect peaking in 2021-22 and 2022-23 at £0.3 billion. This largely reflects the stronger household income growth associated with the fiscal easing.

Table 3.10: Key changes to the property transactions tax forecasts since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	12.6	13.4	14.5	15.5	16.8	
March 2020 forecast	12.8	13.8	14.7	16.2	17.4	18.7
Change	**0.2**	**0.4**	**0.2**	**0.7**	**0.6**	
	Underlying forecast changes					
Total	**0.2**	**0.1**	**0.2**	**0.3**	**0.3**	
of which:						
Residential property determinants	0.3	0.5	0.8	1.0	1.1	
Commercial property determinants	-0.3	-0.4	-0.5	-0.5	-0.6	
Outturn receipts and modelling	0.1	0.0	-0.1	-0.2	-0.3	
	Effect of Government decisions					
Total	**0.0**	**0.3**	**0.1**	**0.4**	**0.4**	**0.2**
of which:						
Scorecard and non-scorecard measures	0.0	0.2	-0.3	0.1	0.2	0.2
Indirect effects	0.0	0.1	0.3	0.3	0.2	0.1

Taxes on capital

3.48 We have revised up **capital gains tax** receipts by £2.6 billion a year on average relative to March 2019. This reflects both a stronger pre-measures forecast and Budget measures:

- **Pre-measures forecast revisions**. Outturn receipts for 2018-19 were £0.9 billion higher than we expected, with liabilities paying the lower entrepreneurs' relief rate explaining almost half of that surprise (which means that the relief itself cost more than expected). We have also revised up receipts growth from 2020-21 onwards, thanks to higher equity prices and property prices, partly offset slightly by lower property transactions. (Had we conditioned our forecast on equity prices as they stood on 6 March, rather than the 10-day average to 11 February that underpins our pre-measures forecast, but holding all other aspects of our pre-measures forecast constant, CGT receipts would have been £3.2 billion lower in 2024-25.)

- **Budget measures**. Entrepreneur's relief has been restricted to gains of up to £1 million in a lifetime, down from £10 million. The yield from this is highly uncertain, but is estimated to £1.6 billion in 2024-25.

- The **indirect effects of the Budget package** further raise receipts. This reflects higher house prices due to the cyclical boost to household incomes, plus the more mechanical effect of our equity price forecast being linked to nominal GDP, which is higher.

Table 3.11: Key changes to the capital gains tax forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	9.1	9.7	9.9	10.6	11.6	
March 2020 forecast	10.0	11.4	12.7	14.3	15.7	17.0
Change	**0.9**	**1.6**	**2.8**	**3.6**	**4.1**	
	Underlying forecast changes					
Total	**0.9**	**1.5**	**1.9**	**2.1**	**2.4**	
of which:						
Equity prices	0.0	0.6	0.9	1.0	1.1	
House prices and transactions	0.0	0.1	0.1	0.2	0.2	
Outturn receipts and other modelling	0.9	0.7	0.9	1.0	1.1	
	Effect of Government decisions					
Total	**0.0**	**0.2**	**0.9**	**1.5**	**1.7**	**1.7**
of which:						
Scorecard and non-scorecard measures	0.0	0.2	0.8	1.2	1.4	1.5
Indirect effects	0.0	0.0	0.1	0.3	0.3	0.2

3.49 We have revised up **inheritance tax** receipts by £0.2 billion a year on average. This largely reflects higher mortality assumptions, plus higher equity and house prices. This is partly offset by the effect of new outturn data.

3.50 We have revised down **stamp duty on shares** by £0.2 billion a year on average, due to weaker-than-expected receipts in 2019-20 partly offset by higher equity prices.

Excise duties

3.51 **Fuel duties** have been revised down by £1.2 billion a year on average. This reflects:

- A lower **pre-measures forecast**, thanks to a £0.7 billion downward revision to **2019-20 receipts** that persists over the forecast, a small reduction due to lower RPI inflation, and a £0.8 billion reduction as a result of faster improvements in fuel efficiency than we assumed last March (part of which reflects new emission fines discussed in Box 3.1).

- **Budget measures** include the now familiar one-year freeze in the main rate of fuel duty, which reduces receipts by £0.5 to £0.6 billion a year from 2020-21 onwards. But this is more than offset by restricting eligibility to use 'red diesel', which raises £1.8 billion a year from 2022-23 onwards by requiring more fuel users to pay the higher main rate.

3.52 We have revised down **alcohol duties** by £1.0 billion a year on average. This mostly reflects lower-than-expected receipts so far this year, which we assume will persist over the forecast. Lower RPI inflation and consumer expenditure also lower receipts, while the latest alcohol duty freeze announced in this Budget costs £0.3 billion a year on average.

3.53 We have revised **tobacco duties** down by £0.2 billion a year on average relative to our March forecast. We have revised down receipts in 2019-20 by £0.4 billion due to lower-than-expected clearances. We think part of the shortfall in 2019-20 is due to uncertainty about the timing of duty uprating generated by the cancelled Autumn Budget, so we have assumed only half the shortfall will persist over the forecast.

3.54 The early General Election meant that the existing RPI duty uprating did not go ahead and the 2 per cent duty escalator expired (as it was only in place until the end of the Parliament). The RPI duty uprating is now set to take place on Budget day and the 2 per cent escalator has been reinstated for this Parliament.

Business rates

3.55 Business rates are calculated by multiplying the rateable value of non-domestic property by the 'multiplier', which is uprated with CPI inflation, minus any reliefs. The main change since our March 2019 forecast is the Budget announcement that the retail discount for properties with a rateable value under £51,000 will be increased from 33 to 50 per cent for 2020-21. Raising the generosity of the retail discount costs £250 million in 2020-21, bringing the full cost of the discount to around £750 million. With no announced policy thereafter, we assume there is no retail discount from 2021-22 onwards.

3.56 On a pre-measures basis, business rates are little changed from March 2019. Lower CPI inflation pushes down the multiplier reducing receipts by around £0.3 billion a year by 2023-24. This is offset by provisional information from local authorities on expected yield in 2020-21, adding around £0.5 billion a year to receipts from 2020-21 onwards.

Other taxes

3.57 **Vehicle excise duty (VED)** receipts are expected to be higher over the first half of the forecast, mostly due to stronger-than-expected receipts in 2019-20 that we assume will persist. From 2021-22 onwards we have revised receipts down due to modelling changes in our new car sales forecast and faster improvements in new car efficiency thanks to new CO_2 emissions targets and associated fines that are described in Box 3.1.

3.58 We have revised up **VAT refunds** by £1.4 billion a year on average. This is mostly driven by higher government procurement and investment reflecting the large rise in public spending announced in the Budget. Adding HS2 to the entities that can claim VAT refunds has added £0.3 billion a year on average to the forecast.

3.59 We have revised up **insurance premium tax** (IPT) by £0.5 billion on average since March 2019. Receipts so far this year have been unexpectedly strong and so we have revised up our growth assumption over the forecast as well as assuming a higher starting point.

3.60 The UK-issued allowances under the **EU emissions trading scheme (EU ETS)** restarted on 4 March 2020, following the ratification of the Withdrawal Agreement.[9] The total allowances included in the auction calendar amount to the combined volumes to be auctioned by the UK for the calendar years 2019 and 2020. Changes in receipts mostly reflect the new published auction schedule. We have assumed that this spike in cash receipts is spread out over 2019 and 2020, approximating the ONS accruals treatment in the public finances.

3.61 During the transition period the UK continues to have access to EU ETS, but the status of the UK's membership thereafter remains uncertain. The Treasury told us that *"the UK will implement a system of carbon pricing of at least the same effectiveness and scope as the EU Emissions Trading System (EU ETS). A consultation by the UK Government and the devolved administrations sets out the preferred option to establish a UK ETS and link it to the EU ETS or, if this cannot be achieved, implement a standalone UK ETS or a Carbon Emissions Tax."*

3.62 In the absence of further policy detail this forecast has been prepared as though the UK remained a member of the EU ETS, that allowances beyond 2021 will broadly match the pre-Brexit planned auction schedule, and that receipts will reflect current futures prices for carbon allowances. We will revisit this in the autumn in the light of any firmer policy.

3.63 **BBC licence fee** receipts have been revised up by £0.2 billion a year on average. This is more than accounted for by the BBC's decision to means-test free TV licences for those over the age of 75 by limiting them to people in receipt of pension credit. We discussed this in Box 5.1 of our 2019 *Fiscal risks report*. The induced rise in spending on pension credit is included in our welfare spending forecast. We assume the BBC spends the higher receipts.

3.64 Our forecast for **council tax** is up by £0.4 billion a year on average over the forecast period, reflecting the Government's decision to increase the amount by which local authorities can increase council tax rates without a referendum. Our forecast for local authority income and spending is set out in the spending section below.

3.65 **Customs duties** comprise the majority of 'traditional own resources' or TOR-based contributions to the EU until the end of the transition period in December 2020. Until now our post-referendum forecasts have continued to treat them as though they are collected on behalf of the EU – equivalent in fiscal terms to assuming they are spent once they become UK receipts and consistent with our approach to the EU contributions in our spending forecast. We have switched to presenting them on a gross basis in this forecast. As the Government is consulting on its new post-Brexit tariff schedule, we have not incorporated any proposed changes in this forecast, and have assumed that the present schedule persists beyond January 2021. Once sufficient detail about the new schedule is available, we will incorporate it into our forecast and show what it costs or yields relative to the present system. We have revised down customs duties receipts by £0.2 billion a year on average.

[9] ICE, Emissions Auction 2020 Calendar.

3.66 **Environmental levies** include levy-funded spending policies such as the renewables obligation (RO), contracts for difference (CfD) and the capacity markets scheme. We also include receipts from the 'CRC energy efficiency scheme' until its abolition after the 2018-19 compliance year (with final receipts scored in 2019-20). The Budget announcement of a green gas levy boosts environmental levies by £95 million in 2024-25.

3.67 The capacity markets scheme (which focuses on the security of electricity supply) has resumed following the lifting of the suspension of the scheme in October 2019. It had been suspended following a European Court of Justice ruling that removed its state aid approval. Given the uncertainty over the timing of the resumption, our March 2019 forecast had set post-suspension capacity markets tax and spend to zero. The £1.7 billion from the capacity markets scheme in 2019-20 mainly reflects deferred payments from the suspension period. Thereafter, the tax and spend from the scheme reflects auctions held to date and an assumption that future auctions will clear at an average of historical clearing prices. Given its treatment in the public finances, this scheme is neutral for borrowing.

Other receipts

3.68 We have revised up **fines and penalties** from the Serious Fraud Office (SFO), Financial Conduct Authority (FCA) and the Prudential Regulation Authority (PRA) in 2019-20 by £0.8 billion, thanks to the €1.0 billion SFO fine paid by Airbus SE. We have assumed that fines of this size will not be repeated in future years, so our forecast reverts to levels more consistent with those recorded in recent years prior to 2019-20. In future years, we have incorporated an estimate of new car emissions fines (discussed in Box 3.1).

Box 3.1: New car emission fines

In April 2019, the European Parliament and Council adopted new regulations to set mandatory emissions targets for new cars. These targets are being phased in from 2020 and apply in full from 2021. They set an EU-wide fleet emissions target of 95 grams of CO_2 per kilometre for new cars. In broad terms, each manufacturer faces a fine of €95 per new car registered for each gram deviation above this target (on a fleet-wide average basis). Each manufacturer will face a separate weight-adjusted target and 'super credits' will be issued between 2020 and 2022 for zero and very low emission cars.

We asked the Government whether it will continue to levy these fines from 1 January 2021, after the Brexit transition period ends, as this would represent a new source of income for the Exchequer. It told us that "*all of the provisions of the CO_2 regulatory regime as it stands, including those relating to the targets and fines for non-compliance*" transferred into UK law on 31 January 2020 under the terms of the EU Withdrawal Act. It also told us that the Government has committed to "*pursue a future approach that is at least as ambitious as the current arrangements for vehicle emissions regulation*" via its 'Road to Zero' strategy.[a] We therefore need to forecast the effect of these fines on the public finances.

The latest Society of Motor Manufacturers and Traders (SMMT) data the average emissions of new cars in the UK in 2019 was 127.9 grams of CO_2 per kilometre, around 35 per cent above

the current EU-wide 2021 target.[b] On that basis, hitting that target in 2021 would require falls of around 14 per cent a year in 2020 and 2021 – versus an average over the past ten years of just 2 per cent a year (according to the SMMT). Some policy details have yet to be finalised, for example with respect to 'pooling' (whereby manufacturers can group together to meet emissions targets jointly) and any exemptions for smaller manufacturers (which form part of the current EU regime). We have drawn on a range of external estimates of the new regime's effect at the EU level to generate our own UK forecast for the fines. We also adjust our forecasts for fuel duty and vehicle excise duties (VED) to be consistent with the path for new car efficiencies that results.

Several external studies have estimated the firm-level impact of these fines at an EU level, with totals varying widely from €2 billion to €34 billion (with some studies looking at 2020 and others at 2021).[c,d,e] Given the scale of the fines, we have assumed that the average emission rating of new cars in the UK will hit the target only two years late, in 2023, despite the marked change required relative to the trend of the past ten years. This implies an average fall in measured emissions of around 7 per cent a year. This generates a central estimate that these fines will raise £0.9 billion in 2021-22 and diminishing amounts thereafter as car manufacturers meet their targets. In the absence of further policy detail, we assume that the fines will accrue at the point the emissions are reported. As Table A shows, this yield is more than offset by the indirect cost of faster improvements in fuel efficiency reducing fuel duty and VED receipts.

Given the approach we have needed to take to estimate the fines revenue, there is clearly significant uncertainty around these figures. If manufacturers were able to hit the target in 2021, it would reduce overall receipts by around £1.5 billion in 2021-22, relative to our current forecast (reflecting both lower fines revenue and lower fuel duty and VED receipts).

Table A: Impact of new car emission fines

	£ billion				
	Forecast				
	2020-21	2021-22	2022-23	2023-24	2024-25
New car emissions fines	0.3	0.9	0.4	0.1	0.0
Effect on fuel duty	-0.1	-0.2	-0.3	-0.4	-0.5
Effect on vehicle excise duties	-0.1	-0.2	-0.3	-0.2	-0.2
Total effect on receipts	**0.1**	**0.5**	**-0.2**	**-0.6**	**-0.7**

[a] *The Road to Zero: Next steps towards cleaner road transport and delivering our Industrial Strategy*, HM Government, July 2018.
[b] *SMMT New Car Registrations*, SMMT, January 2020.
[c] *Automakers sprint for electrification as large fines loom for emissions*, Moody's Investor Service, April 2019.
[d] *CO2 emissions are increasing. Car makers must act*, PA Consulting, January 2020.
e *2021 CO2 targets would generate €34 billion euros in penalty payments within Europe*, JATO Dynamics, April 2019.

3.69 **Interest and dividend receipts** include income from the government's financial assets, among them student loans and bank deposits held by the Debt Management Office and local authorities. It also includes dividends from the Government's shareholding in RBS. Our March 2019 restated forecast incorporated the change in the scoring of accrued interest on student loans and the inclusion of income from funded public sector pension schemes.

3.70 Relative to that March forecast, interest and dividend receipts are up £0.5 billion in 2019-20, but down by around £0.9 billion a year from 2021-22 onwards. This reflects:

- Higher-than-expected **special dividends from RBS** in 2019-20, with the Government receiving £1.8 billion of dividends – around twice what we assumed last March. The forecast for future years has been updated for the new profile of RBS share sales. RBS dividends drop back over the forecast period reflecting the sales and that we do not assume additional special dividend payouts in the future.

- Lower **interest rates** (despite our use of a higher path than assumed by financial markets) take around £1.1 billion a year off receipts by 2023-24.

3.71 Accrued interest on student loans is down by an average of £0.1 billion a year. Lower inflation and interest rates reduce accrued interest, but the cancellation of student loans asset sales means interest on those loans will no longer be foregone.

3.72 We have revised our public sector **gross operating surplus (GOS)** forecast up by an average of £0.3 billion a year from 2019-20 onwards. This is driven by increases to our forecast for borrowing-financed spending by local authorities, some of which is delivered through their housing revenue accounts (HRAs). This increases GOS by £1.1 billion a year by 2023-24, but is neutral for borrowing, as it also reduces expenditure by the same amount as an accounting adjustment. Partially offsetting this is a downward revision to Transport for London (TfL) operating revenues, which we have drawn from the latest TfL business plan, and reduce GOS by £0.8 billion by the end of the forecast period.

Public sector expenditure

Definitions and approach

3.73 This section explains our forecast for public sector expenditure, 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. In our forecast, we combine these National Accounts aggregates with the two administrative aggregates used by the Treasury to manage public spending:

- **Departmental expenditure limits (DELs)**[10] currently account for just under half of spending – mostly covering spending on public services, grants and administration ('resource' spending), and investment ('capital' spending). These are items that can be planned over extended periods. Our fiscal forecast therefore shows PSCE in resource DEL and PSGI in capital DEL. We typically assume (in line with past 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.

[10] Our presentation of expenditure only shows those components of RDEL, CDEL and AME that are included in the fiscal aggregates of PSCE and PSGI. For budgeting purposes, the Treasury also includes other components in DEL and AME such as non-cash items and financial transactions, which are discussed later in this chapter.

- **Annually managed expenditure (AME)** accounts for just over half of spending – items less amenable to multi-year planning, such as social security and debt interest. Again, our fiscal forecast shows PSCE in current AME and PSGI in capital AME.

Summary of the expenditure forecast

3.74 Table 3.12 summarises our latest forecast for public spending. TME is expected to rise by 1.4 per cent of GDP between 2018-19 and 2024-25, as higher resource and capital departmental spending (which rise by 1.8 and 1.2 per cent of GDP respectively) is only part offset by lower AME spending (which falls by 1.6 per cent of GDP). The largest fall is the 0.6 per cent of GDP drop in the net cost of public service pensions, while debt interest, welfare spending and local authority capital spending also fall as a share of GDP.

Table 3.12: TME split between DEL and AME

	Per cent of GDP						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
TME	**39.3**	**39.8**	**40.3**	**40.8**	**40.8**	**40.8**	**40.7**
of which:							
TME in DEL	**16.0**	**16.9**	**17.8**	**18.5**	**18.7**	**18.9**	**19.0**
of which:							
PSCE in RDEL	13.6	14.2	14.7	15.1	15.2	15.3	15.4
PSGI in CDEL	2.3	2.7	3.1	3.4	3.5	3.6	3.6
TME in AME	**23.3**	**22.9**	**22.4**	**22.3**	**22.1**	**21.9**	**21.7**
of which:							
Welfare spending	10.3	10.1	10.0	9.9	10.0	10.0	10.1
Debt interest, net of APF	1.7	1.7	1.5	1.6	1.5	1.5	1.4
Locally financed current expenditure	2.4	2.4	2.4	2.3	2.3	2.3	2.3
Net public service pension payments	0.6	0.3	0.2	0.1	0.1	0.0	0.0
Other PSCE in AME	6.3	6.6	6.6	6.6	6.5	6.4	6.3
PSGI in AME	1.9	1.8	1.8	1.7	1.7	1.7	1.7

3.75 Tables 3.13 and 3.14 detail our latest spending forecast and the changes since last March. For the first time, public spending exceeds £1 trillion a year – from 2022-23 onwards.

Table 3.13: Total managed expenditure

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector current expenditure (PSCE)							
PSCE in RDEL	295.6	316.3	339.8	361.3	375.9	391.8	408.6
PSCE in AME	462.7	471.4	476.0	492.8	505.6	518.1	532.2
of which:							
Welfare spending	222.8	224.6	231.2	237.8	246.8	256.9	266.8
of which:							
Inside welfare cap	119.5	119.0	122.6	124.3	127.0	130.2	133.5
Outside welfare cap	103.3	105.6	108.6	113.5	119.8	126.7	133.4
Locally financed current expenditure	52.7	53.9	55.0	55.1	56.9	58.6	60.1
Central government debt interest, net of APF[1]	37.5	38.2	34.5	37.8	37.9	37.3	36.8
Scottish Government's current expenditure	27.9	32.0	33.5	35.6	37.4	38.9	40.7
Expenditure transfers to EU institutions[2]	12.2	11.0	9.0	11.1	8.4	4.7	2.2
Assumed spending in lieu of EU transfers[2]	-	-	-	-	-	-	-
Net public service pension payments	12.9	6.9	4.2	2.9	2.0	1.2	0.3
Company and other tax credits	6.2	6.8	7.4	7.9	8.4	8.8	9.2
BBC current expenditure	3.0	3.8	4.0	4.0	4.1	4.1	4.2
National lottery current grants	1.2	1.3	1.3	1.1	1.0	1.0	0.9
General government imputed pensions	0.9	1.3	1.3	1.3	1.3	1.3	1.3
Public corporations' debt interest	0.4	0.4	0.4	0.4	0.5	0.5	0.5
Funded public sector pension schemes	18.7	19.5	20.5	21.4	22.4	23.5	24.6
General government depreciation	41.1	42.2	44.1	45.7	47.4	49.3	51.3
Current VAT refunds	16.1	16.9	17.7	18.4	19.1	19.7	20.9
Environmental levies	7.8	10.7	10.6	11.0	10.9	11.5	12.0
Other PSCE items in departmental AME[3]	2.2	1.6	1.2	1.4	1.5	1.5	1.6
Other National Accounts adjustments	-1.0	0.3	0.1	-0.2	-0.5	-0.8	-1.2
Total public sector current expenditure	**758.3**	**787.7**	**815.8**	**854.1**	**881.5**	**909.9**	**940.8**
Public sector gross investment (PSGI)							
PSGI in CDEL	50.8	59.9	71.2	82.2	86.6	91.5	94.8
PSGI in AME	42.2	39.1	40.7	41.1	42.6	43.5	44.6
of which:							
Locally financed capital expenditure	13.1	13.1	10.9	10.3	10.8	10.3	10.4
Public corporations' capital expenditure	9.9	11.0	11.4	11.4	11.5	11.7	11.9
Student loans	10.1	9.8	10.6	11.2	11.9	12.4	12.8
Funded public sector pension schemes	1.6	0.8	0.9	0.9	0.9	0.9	0.9
Scottish Government's capital expenditure	3.4	4.0	4.6	5.4	5.6	5.8	6.0
Tax litigation	0.0	0.0	1.8	1.2	1.1	1.1	1.1
Other PSGI items in departmental AME[3]	6.8	0.8	0.8	0.8	0.8	0.7	0.6
Other National Accounts adjustments	-2.7	-0.4	-0.3	0.0	0.0	0.6	0.7
Total public sector gross investment	**93.0**	**99.1**	**111.9**	**123.3**	**129.2**	**135.0**	**139.4**
Less public sector depreciation	-48.8	-49.9	-52.2	-54.0	-56.0	-58.1	-60.3
Public sector net investment	44.3	49.1	59.7	69.3	73.2	77.0	79.1
Total managed expenditure	**851.3**	**886.8**	**927.7**	**977.4**	**1,010.7**	**1,044.9**	**1,080.2**

[1] Includes reductions in debt interest payments due to the APF.

[2] From 2019-20 onwards, the expenditure transfers to EU institutions reflect the estimated cost of the financial settlement that the UK will pay the EU after Brexit.

[3] Includes Network Rail current and capital expenditure in 2018-19 only.

Table 3.14: Changes to total managed expenditure since March 2019

	£ billion					
	Outturn	Forecast				
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector current expenditure (PSCE)						
PSCE in RDEL	1.5	4.1	15.2	27.0	31.2	34.9
PSCE in AME	1.3	2.7	-1.2	-1.2	-6.3	-12.8
of which:						
Welfare spending	-0.2	-2.7	-1.0	-2.2	-2.7	-3.6
of which:						
Inside welfare cap	0.2	-2.4	-0.6	-1.7	-2.5	-3.5
Outside welfare cap	-0.4	-0.3	-0.4	-0.5	-0.2	-0.1
Locally financed current expenditure	0.9	-0.4	1.9	-0.1	0.0	0.0
Central government debt interest, net of APF[1]	0.5	-2.0	-4.4	-2.5	-3.7	-5.0
Scottish Government's current expenditure	0.3	4.0	3.8	4.9	5.7	5.9
Expenditure transfers to EU institutions[2]	-0.1	-1.7	-1.5	0.7	0.7	0.6
Assumed spending in lieu of EU transfers[2]	-	-	-3.0	-3.0	-5.6	-9.3
Net public service pension payments	0.3	0.2	-2.2	-4.3	-5.9	-7.0
Company and other tax credits	1.1	1.6	2.2	2.7	3.0	3.2
BBC current expenditure	-0.9	0.0	0.2	0.3	0.3	0.2
National lottery current grants	0.0	-0.1	0.1	-0.1	-0.2	-0.2
General government imputed pensions	-0.4	0.0	0.0	0.0	0.0	0.0
Public corporations' debt interest	-0.1	0.0	0.0	0.0	0.0	0.0
Funded public sector pension schemes	-0.1	0.0	0.0	0.0	0.0	0.0
General government depreciation	0.1	-0.1	0.1	-0.2	-0.3	-0.4
Current VAT refunds	0.1	0.7	0.8	1.1	1.2	1.3
Environmental levies	-0.3	2.0	0.9	0.6	0.2	0.5
Other PSCE items in departmental AME[3]	0.4	0.4	0.1	0.1	0.1	0.1
Other National Accounts adjustments	-0.3	0.8	0.8	0.8	0.8	0.9
Total public sector current expenditure	**2.8**	**6.8**	**14.0**	**25.8**	**25.0**	**22.1**
Public sector gross investment (PSGI)						
PSGI in CDEL	-0.4	-0.4	5.7	13.4	15.4	16.1
PSGI in AME	-1.6	-0.5	1.1	3.1	4.2	7.1
of which:						
Locally financed capital expenditure	-1.0	0.8	0.8	0.5	1.3	1.4
Public corporations' capital expenditure	0.3	1.4	1.7	1.8	1.9	1.9
Student loans	0.0	-1.4	-1.0	-0.7	-0.3	2.0
Funded public sector pension schemes	0.0	-0.1	0.0	0.0	0.0	0.0
Scottish Government's capital expenditure	0.0	-0.2	0.1	0.5	0.6	0.7
Tax litigation	0.0	-1.3	-0.6	0.8	0.7	0.7
Other PSGI items in departmental AME[3]	0.8	0.2	-0.1	-0.1	-0.1	-0.1
Other National Accounts adjustments	-1.7	0.1	0.1	0.3	0.2	0.5
Total public sector gross investment	**-2.0**	**-0.9**	**6.8**	**16.6**	**19.7**	**23.2**
Less public sector depreciation	-0.1	-0.1	-0.6	-0.5	-0.6	-0.6
Public sector net investment	-2.1	-1.0	6.2	16.1	19.1	22.6
Total managed expenditure	**0.8**	**6.0**	**20.8**	**42.4**	**44.7**	**45.3**

[1] Includes reductions in debt interest payments due to the APF.

[2] From 2019-20 onwards, the expenditure transfers to EU institutions reflect the estimated cost of the financial settlement that the UK will pay the EU after Brexit.

[3] Includes Network Rail current and capital expenditure in 2018-19 only.

3.76 Table 3.15 summarises the sources of changes to our forecast since March 2019. It compares our latest forecast to a restated March 2019 baseline that has also been adjusted for the change in how we present customs duties and the assumed post-Brexit spending associated with it in our pre-measures forecast. On that basis, it shows that we have revised spending up by progressively larger amounts, reaching £42.1 billion in 2023-24.

3.77 Government policy decisions explain the vast majority of the upward revision:

- **Departmental spending** envelopes have been set for this year's Spending Review at levels far higher than those assumed in our March 2019 forecast. Even after assumed underspending relative to those higher totals, this raises RDEL and CDEL spending in 2024-25 by £38.9 billion and £16.7 billion respectively. The knock-on effects of these rises to Scottish Government AME spending are £3.9 billion and £1.8 billion.

- These large increases in DEL spending mean that we can now remove our post-referendum forecast assumption that **direct Brexit fiscal savings** would be spent on other domestic priorities, since that has now come to pass. In effect, this finances part of the higher DEL spending, by amounts rising to £14.6 billion in 2024-25 (Box 3.5).

- **Other spending measures** include raising the R&D tax credit main rate from 12 to 13 per cent, which raises current spending, and cancelling planned student loan sales, which removes the capital spending associated with selling them at a discount.

- Higher RDEL spending boosts **public service pension scheme income** via higher contributions. As more than 10 per cent of RDEL goes on pension contributions, this reduces the net cost of the schemes by amounts rising to £4.3 billion in 2024-25.

- **Other indirect effects of the Budget package** include the higher debt interest spending associated with higher borrowing, higher RPI inflation and higher interest rates.

- **Raising the National Living Wage** has a largely neutral effect on welfare.

- The **new migration regime** reduces welfare spending because the associated decline in migrants from the EU is concentrated among those in the income bracket that is most likely to be eligible for means-tested in-work support.

3.78 Our pre-measures forecast revisions are small by comparison. Lower interest rates and lower inflation have reduced spending materially, particularly on debt interest. The combined effect of these changes reduces spending by £8.8 billion in 2023-24. Partly offsetting that, we have revised up growth in spending on incapacity benefits, which largely explains the upward revision to welfare spending. We have also revised up the expected cost of R&D tax credits in our pre-measures forecast, reflecting higher outturns, and borrowing-financed capital spending by local authorities, reflecting recent trends.

Table 3.15: Sources of change to the spending forecast since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	880.8	906.9	935.0	966.0	999.6	
Customs duties forecast treatment change	0.0	0.8	3.2	3.2	3.3	
Restated March 2019 with customs duties change	880.8	907.7	938.2	969.3	1,002.8	
March 2020 forecast	886.8	927.7	977.4	1,010.7	1,044.9	1,080.2
Like-for-like change	**6.0**	**20.0**	**39.2**	**41.4**	**42.1**	
	Underlying forecast changes					
Total forecast changes	**5.3**	**1.2**	**1.6**	**-0.6**	**-2.0**	
of which:						
Economic determinants	**-2.1**	**-4.1**	**-3.6**	**-3.6**	**-3.7**	
Inflation changes	-1.9	-4.1	-3.4	-3.4	-3.3	
Other	-0.2	0.0	-0.2	-0.2	-0.3	
Market assumptions: interest rates	**-0.2**	**-2.2**	**-3.2**	**-4.3**	**-5.2**	
Other assumptions and changes	**7.6**	**7.5**	**8.3**	**7.4**	**6.9**	
DEL forecast changes	1.3	0.0	-	-	-	
Other changes to the welfare forecast	0.2	2.8	3.0	2.9	2.5	
Scottish government expenditure	1.0	-0.4	-0.8	-0.8	-1.0	
Net expenditure transfers to EU institutions	-1.7	-0.9	-0.4	-0.8	-0.5	
Net public service pension payments	0.2	-0.4	-1.0	-2.0	-2.7	
Locally financed capital expenditure and public corporations' capital expenditure	2.3	2.3	2.5	3.3	3.4	
Other changes to central government debt interest, net of APF	0.2	-1.1	-1.7	-1.8	-1.9	
Company and other tax credits	1.6	2.2	2.5	2.6	2.8	
Student loans	0.7	1.3	1.9	2.4	2.5	
Environmental levies	2.0	0.9	0.6	0.2	0.5	
Other	-0.3	0.7	1.7	1.3	1.1	
	Effect of Government decisions					
Total effect of Government decisions	**0.7**	**18.7**	**37.6**	**42.0**	**44.0**	**46.5**
of which:						
Higher departmental spending	2.5	20.9	40.5	46.7	51.1	55.5
Use of direct Brexit fiscal savings	0.0	-4.3	-5.0	-7.1	-11.3	-14.6
Other spending measures	-2.1	1.1	0.3	0.7	2.6	3.9
DEL effect on public service pensions	0.0	-1.7	-3.0	-3.5	-4.0	-4.3
Raising the National Living Wage	0.0	0.0	-0.1	-0.1	-0.1	0.0
New migration regime	0.0	0.0	0.0	-0.1	-0.3	-0.5
Other budget package indirect effects	0.3	2.8	5.0	5.5	6.0	6.4

Spending within departmental expenditure limits

DEL spending and changes since March 2019

3.79 In this section, we use 'RDEL spending' and 'CDEL spending' to refer to PSCE in RDEL and PSGI in CDEL. Our forecasts reflect:

- **Departments' latest 'forecast outturns' for 2019-20** that were sent to the Treasury in February, the local government finance settlement and this year's Supplementary Estimates, plus our assumptions regarding any further underspending relative to them.
- **Departments' plans for 2020-21** as announced in the 2019 Spending Round plus the further additions announced in this Budget, including our assumptions regarding likely underspending against these latest plans.
- **The Government's Budget announcements on the total DEL envelopes for 2021-22 to 2023-24** that will be allocated at the Spending Review later this year. These are significantly higher than the provisional totals on which our March 2019 forecast was based. Although some DELs have already been allocated to departments, most will not be finalised until the Spending Review. DELs already allocated include the NHS RDEL settlement to 2023-24 and the schools RDEL settlement to 2022-23.
- The Government's latest **provisional total DELs for 2024-25**.

3.80 Table 3.16 shows our forecasts for RDEL and CDEL spending and overall changes relative to our March forecast; these changes are broken down in Table 3.17. We present plans, underspends and actual spending in every year. For years covered by actual plans or the envelope for this year's Spending Review, our forecasts for actual spending are generated by subtracting underspends from the totals that have been set. For 2024-25, the Treasury has stated how much it intends to spend in total and we show the implied plans and underspends that we think would be consistent with that level of actual spending.

3.81 Table 3.16 shows that:

- Actual **resource spending** has been revised up in 2019-20, as a result of the additional funding announced in the Spending Round together with our expectation that departments will underspend those new plans by less than we assumed last year. In 2020-21 actual spending is up £15.2 billion, thanks largely to increases announced in the 2019 Spending Round plus some further additions in the Budget. The Budget has set limits for the Spending Review years that are even higher, increasing spending by amounts rising to £34.9 billion in 2023-24 after allowance for underspends.
- Actual **capital spending** is little changed in 2019-20 but £5.7 billion higher in 2020-21, reflecting the increase announced in the Spending Round and this Budget (partially offset by a slightly higher underspend than we assumed last year). The Budget has set totals for the Spending Review years that are much higher than the provisional ones set out last year. This has led us to increase CDEL spending between 2021-22 and 2023-24 by £15.0 billion a year on average, despite assuming much greater underspends.

Table 3.16: RDEL and CDEL spending and changes since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PSCE in RDEL						
March 2019 forecast		Implied, post-Spending Review				
Limits[1]	314.7	327.1	336.8	347.1	359.3	
Assumed underspend	-2.5	-2.5	-2.5	-2.5	-2.5	
Actual spending	**312.2**	**324.6**	**334.3**	**344.6**	**356.8**	
March 2020 forecast						
Limits[1]	317.6	343.0	365.2	380.0	396.0	413.0
Assumed underspend	-1.3	-3.2	-3.9	-4.1	-4.3	-4.4
Actual spending	**316.3**	**339.8**	**361.3**	**375.9**	**391.8**	**408.6**
Changes						
Limits[1]	2.9	16.0	28.4	32.8	36.7	
Assumed underspend	1.2	-0.7	-1.4	-1.6	-1.8	
Actual spending	**4.1**	**15.2**	**27.0**	**31.2**	**34.9**	
PSGI in CDEL						
March 2019 forecast			Implied, post-Spending Review			
Limits[1]	63.0	68.0	72.8	75.2	79.4	
Assumed underspend	-2.7	-2.5	-4.0	-4.0	-4.0	
Actual spending	**60.3**	**65.5**	**68.8**	**71.2**	**75.4**	
March 2020 forecast						
Limits[1]	62.5	75.1	89.5	94.5	99.5	102.9
Assumed underspend	-2.6	-3.9	-7.3	-7.8	-8.0	-8.1
Actual spending	**59.9**	**71.2**	**82.2**	**86.6**	**91.5**	**94.8**
Changes in actual spending						
Limits[1]	-0.5	7.1	16.8	19.3	20.1	
Assumed underspend	0.1	-1.4	-3.3	-3.8	-4.0	
Actual spending	**-0.4**	**5.7**	**13.4**	**15.4**	**16.1**	
	Per cent of GDP					
PSCE in RDEL (actual spending)						
March 2019 forecast	14.2	14.3	14.2	14.1	14.1	
March 2020 forecast	14.2	14.7	15.1	15.2	15.3	15.4
Change	**0.0**	**0.5**	**0.9**	**1.0**	**1.2**	
PSGI in CDEL (actual spending)						
March 2019 forecast	2.7	2.9	2.9	2.9	3.0	
March 2020 forecast	2.7	3.1	3.4	3.5	3.6	3.6
Change	**-0.1**	**0.2**	**0.5**	**0.6**	**0.6**	

[1] In the years covered by the Spending Review, limits reflect the Departmental spending allocations agreed with HM Treasury at the latest Spending Review, adjusted for policy changes and classification changes since. In years beyond the Spending Review this reflects the implied limits consistent with what HM Treasury intends to spend and our view on underspends.

3.82 Table 3.17 details the sources of revisions to our forecast since March 2019, breaking them down between our underlying forecast judgements (which relate primarily to 2019-20) and the effects of the Government's decisions (which are large in most years).

3.83 In 2019-20 we have reduced the amount by which we expect RDEL plans to be underspent by £1.2 billion (thereby increasing actual spending). This reflects the final spending plans set at Supplementary Estimates, which reallocated some underspending, the latest in-year

evidence available to the Treasury, and past experience of how departments' own spending forecasts tend to evolve in the final months of the year. We have also nudged down our estimate of CDEL underspending in 2019-20 by £0.1 billion on a pre-measures basis.

3.84 From 2020-21 onwards, the Government has announced significant increases in RDEL and CDEL limits rising to £40.8 billion and £20.8 billion in 2024-25 respectively. The consequences for actual spending are tempered by our assumption that underspending relative to these materially higher limits will also be greater. Since detailed plans have not yet been set out, we have simply assumed that a fraction of the planned higher spending will be left unspent. For RDEL, we have assumed that 5 per cent of the additional funding is not spent, taking overall underspends between 2021-22 and 2024-25 from 0.7 to 1.0 per cent between the pre- and post-measures forecasts. For CDEL, we have assumed a much larger 20 per cent of the additional funding in each year is not spent, taking overall underspends from 4.7 to 7.5 per cent on average. This reflects past experience of attempts to ramp up capital spending sharply, as discussed in Box 3.2.

Table 3.17: Sources of changes to DELs since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
PSCE in RDEL						
March 2019 forecast	312.2	324.6	334.3	344.6	356.8	
March 2020 forecast[1]	316.3	339.8	361.3	375.9	391.8	408.6
Change	**4.1**	**15.2**	**27.0**	**31.2**	**34.9**	
of which:						
Forecast changes	**1.2**					
Assumed underspend	1.2					
Effect of UK Government decisions[1]	**2.9**	**15.2**	**27.0**	**31.2**	**34.9**	**38.9**
Scorecard measures	2.5	14.9	27.2	31.9	35.6	38.6
Non-scorecard measures	0.4	1.0	1.2	0.9	1.2	2.2
Assumed underspend	0.0	-0.7	-1.4	-1.6	-1.8	-1.9
PSGI in CDEL						
March 2019 forecast	60.3	65.5	68.8	71.2	75.4	
March 2020 forecast[1]	59.9	71.2	82.2	86.6	91.5	94.8
Change	**-0.4**	**5.7**	**13.4**	**15.4**	**16.1**	
of which:						
Forecast changes	**0.1**	**0.0**				
Assumed underspend	0.1	0.0				
Effect of UK Government decisions[1]	**-0.5**	**5.7**	**13.4**	**15.4**	**16.1**	**16.7**
Scorecard measures	0.0	7.0	16.7	19.2	20.0	20.7
Non-scorecard measures	-0.5	0.1	0.1	0.1	0.1	0.1
Assumed underspend	0.0	-1.4	-3.3	-3.8	-4.0	-4.1

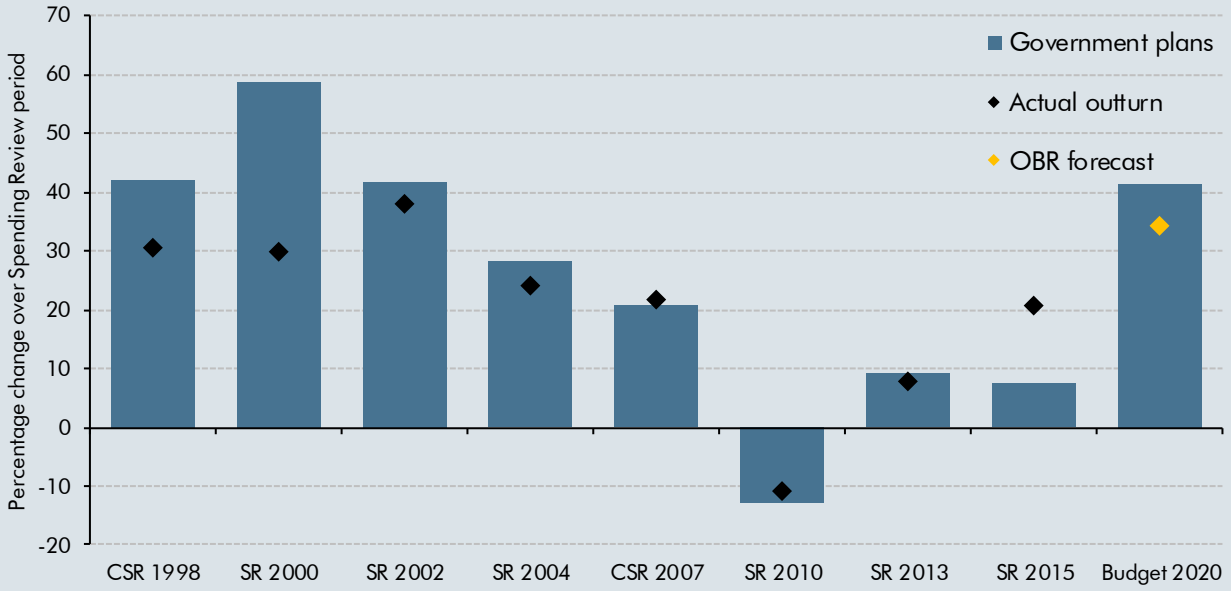
[1] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.

Box 3.2: Capital spending plans: how much will actually be spent?

When presented with DEL limits for capital spending in a Budget or other fiscal statement, we need to decide what that they imply for the *actual* level of spending and the budget deficit. History shows that departmental capital budgets are almost always underspent, so in our forecasts we always assume some degree of underspending in each year.

More importantly for the judgement that we have to make in this particular forecast, history also shows that ramping capital spending up quickly is particularly difficult, implying larger underspends than when spending limits evolve relatively smoothly. This was true in the pre-crisis decade under the Labour Government, when capital spending growth fell short of plans in most Spending Reviews (Chart A). Actual capital spending did exceed the plans set out in the 2007 Comprehensive Spending Review and 2015 Spending Review, but in both cases this was due to subsequent deliberate policy decisions to loosen fiscal policy. The cuts to capital spending set out in the 2010 Spending Review were also partly reversed by subsequent policy decisions.

Chart A: Capital spending plans versus outturn at successive Spending Reviews



Note: Capital spending is defined as public sector gross investment. Outturn is taken from the March/April forecast of the following financial year to minimise the impact of classification changes.
Source: OBR

Given the frequent changes made to the composition of Capital DELs and the lack of sufficient long-run historical outturn series, we have calibrated our underspend assumptions by looking at differences between forecast and outturn for public sector gross investment in the period from 1998 to 2007, when the Labour Government was seeking to raise public investment as a share of GDP. We have employed the same methodology used by the Institute for Fiscal Studies in its recent study of public spending control,[a] taking 'outturn' from Budgets a year after the year in question, so that they are less affected by subsequent classification changes.

As Table B shows, outturn spending fell short of plans at the one-, two- and three-year horizons in every forecast during this period. The average percentage error against plans was around 10 per cent at each of these horizons. This period followed sustained falls in public investment as a

share of GDP, so the planned increases required a significant change of direction. That contrasts with the increases announced in this Budget, which come on top of an already rising trend. On this basis, we have assumed that underspending against the new totals will be somewhat lower than implied by the pre-crisis Labour years. Specifically, we have assumed that 20 per cent of the addition to plans relative to the pre-measures forecast will be underspent, which implies that around 8 per cent of total CDEL plans will go unspent each year.

Table B: Outturn versus plans for capital spending:1998-99 to 2006-07

	In-year	1 year ahead	2 years ahead	3 years ahead
Number of forecasts	22	22	20	12
of which:				
Spending fell short of forecast	19	22	20	12
Spending exceeded forecast	3	0	0	0
Average percentage error	**-7**	**-10**	**-11**	**-8**

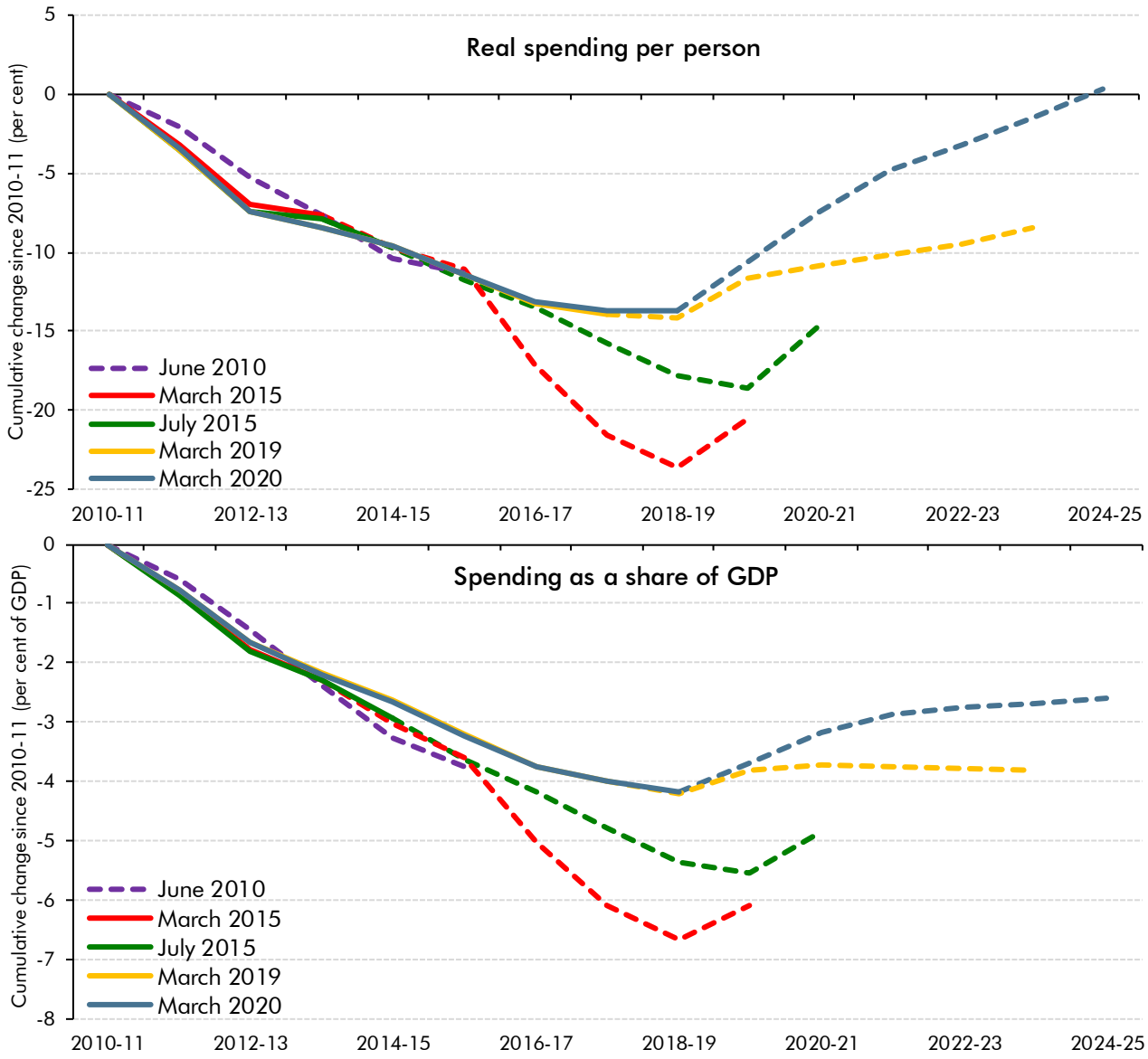
[a] *The planning and control of UK public expenditure, 1993–2015*, Crawford, Johnson and Zaranko, July 2018.

The fall and rise of DEL spending since 2010-11

3.85 DEL spending relates to England, Wales and Northern Ireland, with the Treasury now managing equivalent Scottish spending via AME. Despite this, it covers largely the same activities and is set in largely the same way – with large increases announced in the Budget reflecting the large increases in RDEL and CDEL. In this section we look at both combined.

3.86 Chart 3.2 shows the striking turnaround in the path of resource spending by central government departments across the UK set out in this Budget. Viewed in terms of real spending per person, the eight years of cuts from 2010-11 are entirely reversed by 2024-25, with almost half reversed just this year and next. The increased resource spending announced in this Budget, in last year's Spending Round and in the NHS settlement of June 2018, continue the change in the spending tide that started in the Summer Budget of July 2015, when the newly elected Conservative Government moderated the sharp cuts in RDEL spending previously pencilled into the March 2015 pre-election Budget. But, viewed as a share of GDP, only around a third of the cuts will have been reversed by 2024-25.

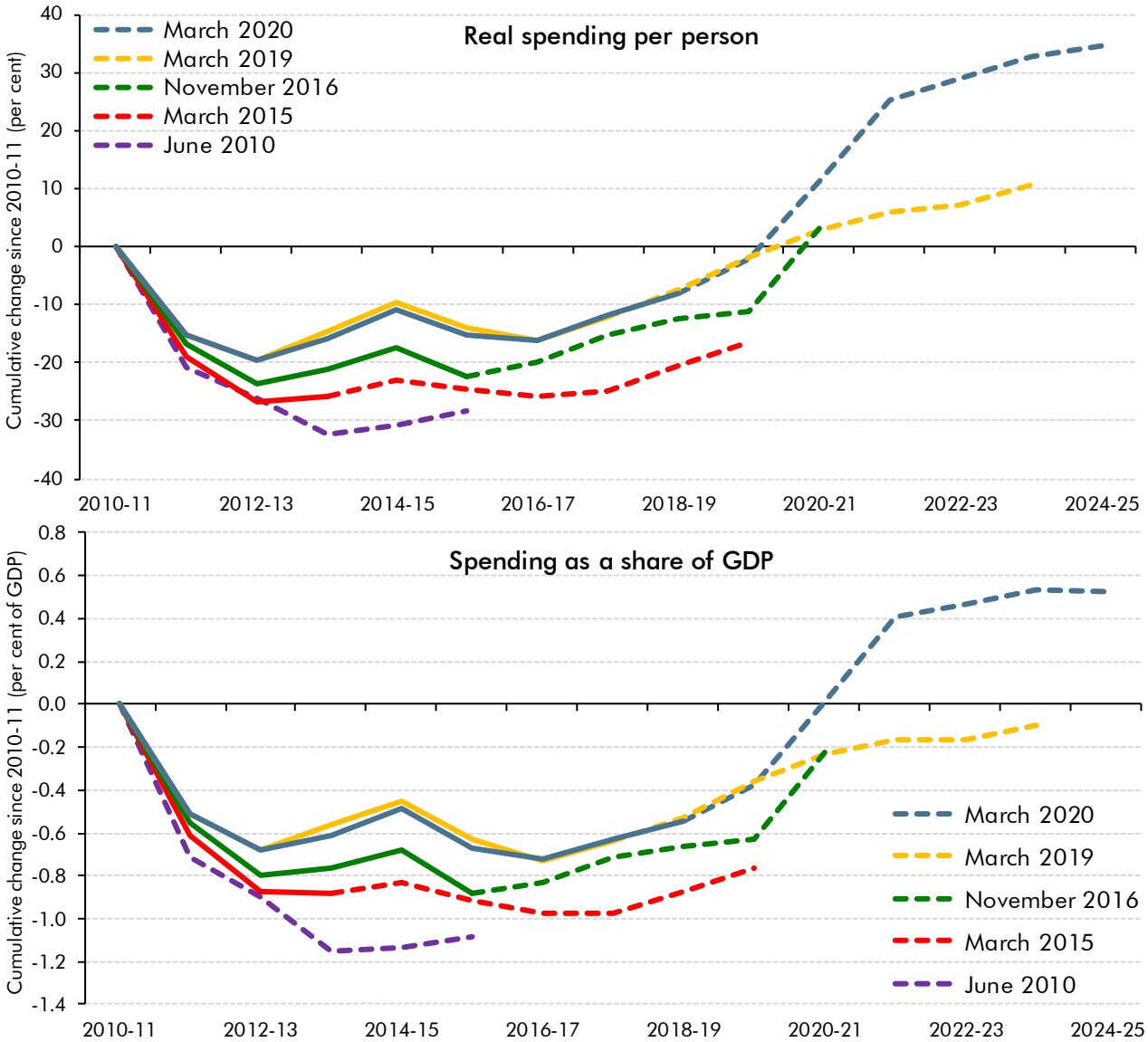
Chart 3.2: Change in RDEL spending since 2010-11



Note: 2017-18 and 2018-19 exclude the effects of business rates pilots. All other figures include both RDEL and Scottish Government current AME and are adjusted as far as possible for consistency with the latest forecast. See source table in the supplementary expenditure tables on our website.
Source: OBR

3.87 Chart 3.3 shows the same spending paths for departmental capital spending. The profile differs from that of resource spending, in that the sharp cuts implemented in the first two years of the Coalition Government (that had been a feature of the previous Labour Government's March 2010 Budget plans) were already being slowly reversed over the subsequent six years. By 2020-21 they will have been more than reversed, thanks largely to increases announced in the 2016 Autumn Statement. The additional increases announced in this Budget would, given our underspend assumptions, leave real CDEL spending per person in 2024-25 around 35 per cent higher than it was in 2010-11 and more than 50 per cent higher than the low it reached in 2012-13. As a share of GDP, CDEL spending remained below its 2010-11 level in our last forecast, but now rises above it in 2021-22.

Chart 3.3: Change in CDEL spending since 2010-11



Note: 2017-18 and 2018-19 exclude the effects of business rates pilots. All other figures include both CDEL and Scottish Government capital AME and are adjusted as far as possible for consistency with the latest forecast. See source table in the supplementary expenditure tables on our website.
Source: OBR

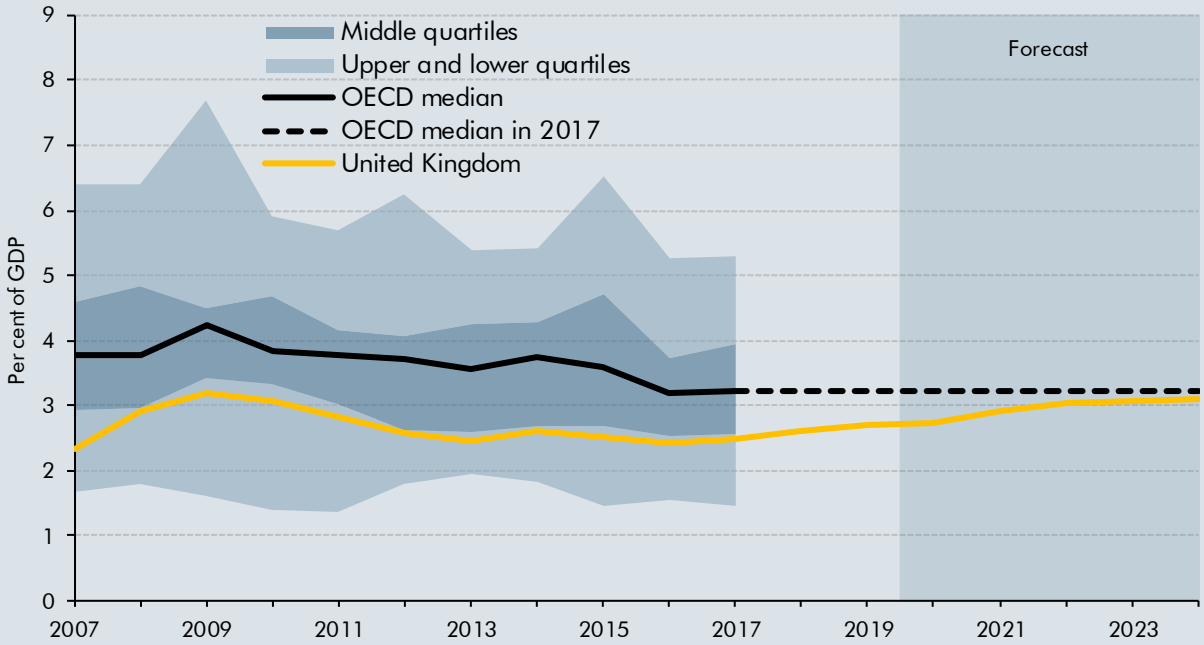
Box 3.3: International comparisons of government investment

Measured on an internationally comparable basis,[a] the capital spending increases announced in this Budget will take government investment from 2.5 per cent of GDP in 2017 to 3.1 per cent of GDP in 2024. But how does that compare with other advanced economies?

Chart B shows the UK's relative position among 30 OECD countries over the decade to 2017.[b] Across the whole period, the UK was consistently positioned within the bottom quarter in terms of government investment as a share of GDP – more specifically, it was ranked between 23rd and 27th out of 30 countries in every year. UK government investment was a little higher as a share of GDP in 2017 than in 2007, having first risen during the crisis then fallen back. The large increase over the next five years will take it to around the present OECD median. But it will still

fall well short of levels in countries whose governments invested most over the past decade – in South Korea, Estonia and Latvia investment averaged around 5 per cent of GDP a year.

Chart B: UK government investment on an internationally comparable basis relative to other OECD countries



Source: OBR

[a] Using OECD data at the level of general government (i.e. central and local government in the UK, plus state governments in countries that have them) and the National Accounts metric of gross capital formation plus acquisitions less disposals of valuables.
[b] Our analysis comprises 30 out of 36 OECD member countries; data on the OECD statistics website is unavailable in the required format for Canada, Chile, Iceland, Mexico, New Zealand, and Turkey.

Annually managed expenditure

Welfare spending

3.88 Total welfare spending in our forecast refers to AME spending on social security and tax credits. Just over half is subject to the Government's 'welfare cap', which excludes the state pension and those payments most sensitive to the economic cycle. We provide an update on performance against the cap in Chapter 4.

3.89 As detailed in our 2018 *Welfare trends report (WTR)*, much of our working-age welfare spending forecast is constructed by estimating a counterfactual in which the 'legacy' benefits system continues as though universal credit (UC) did not exist, and then adding to it an estimate of the marginal cost associated with rolling UC out. This has allowed us to base the forecast on as much administrative data as possible, but it does not directly reflect the real-world change in spending on legacy benefits as spending on UC rises. For the year in progress, we forecast on an 'actual cost' basis, since the counterfactual and marginal effects cannot be observed in the monthly flow of administrative data. This approach generates several problems that add uncertainty to our forecasts, but is unavoidable at present. As soon as is practical, we will switch to forecasting UC on an actual cost basis in all years.

3.90 Table 3.18 shows our latest welfare spending forecasts split into broad recipient groups.[11] It includes the disability benefits spending in Scotland that has been devolved and will in future be subsumed within the Scottish Government's overall AME budget. It shows that welfare spending is forecast to increase by 19 per cent in cash terms between 2019-20 and 2024-25, but to remain flat as a share of GDP. Spending within the welfare cap is expected to fall relative to GDP, while spending outside the cap – which is dominated by state pensions – is projected to rise as a share of GDP from 2020-21 onwards as the ageing population raises state pensions spending during a period in which there are no offsetting downward pressures from increases in the State Pension age.

Table 3.18: Total welfare spending

	£ billion						
		Forecast					
	Outturn	Welfare cap period					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Pensioner spending[1]	109.7	111.7	114.7	119.0	124.5	130.6	136.9
UC and legacy equivalents[2]	63.5	64.0	66.5	67.2	68.7	70.6	71.9
Disability benefits[3]	24.4	25.9	26.9	28.2	29.5	31.0	32.2
Child benefit	11.6	11.5	11.6	11.8	12.0	12.1	12.2
Other spending[4]	13.7	14.3	14.7	15.3	16.0	16.7	17.5
Effect of government decisions	0.0	0.0	-0.2	-0.5	-0.7	-1.3	-1.0
Budget 2020 welfare devolution	0.0	-2.7	-2.8	-2.9	-3.0	-3.2	-3.3
Indirect effect of government decisions	0.0	0.0	-0.2	-0.4	-0.1	0.3	0.5
Total welfare spending[5]	**222.8**	**224.6**	**231.2**	**237.8**	**246.8**	**256.9**	**266.8**
of which:							
Inside welfare cap	119.5	119.0	122.6	124.3	127.0	130.2	133.5
Outside welfare cap	103.3	105.6	108.6	113.5	119.8	126.7	133.4
	Per cent of GDP						
Total welfare spending[5]	**10.3**	**10.1**	**10.0**	**9.9**	**10.0**	**10.0**	**10.1**
of which:							
Inside welfare cap	5.5	5.3	5.3	5.2	5.1	5.1	5.0
Outside welfare cap	4.8	4.7	4.7	4.7	4.8	4.9	5.0

[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), incapacity benefits, contributory ESA, income support and income-based and contributory jobseeker's allowance.
[3] Disability benefits includes disability living allowance, personal independence payment, and attendance allowance. It also includes the equivalent spending that is devolved to Scotland.
[4] Other spending includes all Northern Ireland social security expenditure.
[5] Total welfare outturn inside and outside of the welfare cap in 2018-19 is sourced from OSCAR, consistent with PESA 2019. For 2018-19 only, the components reflect departments' own outturns, which may not be on a consistent basis to OSCAR. For this year the components may not sum to the total for this reason.

3.91 Table 3.19 sets out the sources of changes to welfare spending since our March 2019 forecast, again abstracting from the effect of devolving Scottish disability benefits spending. We have revised total spending up significantly from 2020-21 onwards, mainly in respect of working-age benefits, but also pension credit. This is offset somewhat by progressively larger downward revisions to spending on disability benefits and on state pensions.

[11] Forecasts for individual benefits are available in a supplementary table on our website.

3.92 On a pre-measures basis, our lower inflation forecast has led to progressively larger downward revisions thanks to lower CPI uprating and therefore lower average awards. We have also made some relatively large, but partly offsetting, modelling changes:

- **Universal credit and its legacy predecessors.** Spending has been revised up by progressively larger amounts, reaching £4.9 billion in 2023-24. This is almost entirely due to a change in our assumption regarding growth in incapacity benefits and housing benefit among people who are unable to work due to sickness or disability. We now assume that the caseload rises in line with the working-age population, reflecting the turnaround over the past year of the long-standing decline in the prevalence of benefit receipt from its mid-2000s peak. Spending on personal tax credits has also been revised up, partly due to lower than expected earnings growth for tax credit recipients in the latest outturn data and increased out-of-work caseloads.

- **Pension credit.** Spending has been revised up significantly, reflecting the BBC's announcement in June 2019 that it would means-test TV licences for over-75s by providing free licences only to those receiving pension credit. We assume that this will increase take-up, adding £0.6 billion a year on average from 2020-21 onwards.[12]

- **State pensions.** Spending has been revised down by progressively larger amounts due to the higher mortality rates reflected in the latest ONS population projections. This lowers the caseload by 75,000 in 2023-24 relative to our March 2019 forecast, reducing spending by £0.6 billion in that year. (Higher mortality rates have also lowered our forecasts for other pensioner benefits, such as winter fuel payments.)

- **Disability benefits.** We have revised spending down by £0.6 billion a year on average, largely reflecting much lower than expected costs from recent legal rulings.

- **Other welfare spending** has also been revised down, including statutory maternity pay (due to fewer births and lower outturn), carer's allowance (due to fewer in receipt of disability benefits) and tax-free childcare (due to lower-than-expected take-up).

3.93 In terms of Budget measures, the managed migration phase of UC has been pushed back again and we have assumed it will take two years longer than DWP currently assumes (rather than the six-month delay we have assumed in recent forecasts, as discussed below). Overall, this lowers spending by £0.6 billion a year on average between 2022-23 and 2024-25 as less is spent on transitional protection for those who lose out when moving to UC from the legacy system at DWP's behest. Other Budget measures have smaller effects. These include slowing the final phase of transferring claimants from disability living allowance to personal independence payment and restricting access to various benefits for EU migrants until they have been granted indefinite leave to remain by the Home Office (typically after five years' residence).

[12] This was discussed in Box 5.1 of our 2019 *Fiscal risks report*.

3.94 Other policy-related effects on welfare spending include:

- The effect of the **Budget package** on the economy has largely offsetting effects, with higher earnings growth raising state pensions spending via the triple lock but reducing means-tested benefits spending via its effects on claimants' incomes. Temporarily higher CPI inflation raises working-age spending via higher uprating.

- The **new migration regime** lowers spending by progressively larger amounts, reaching £0.5 billion in 2024-25. This represents a 0.4 per cent reduction in the cost of working-age and child benefits, in line with the 0.4 per cent drop in the working-age population that we have assumed will result from the new regime (see Box 3.6).

- Raising the **National Living Wage** has a largely neutral effect on welfare, with working age benefits pushing spending down through higher incomes, but with the offsetting effect of higher earnings increasing state pensions spending via the triple lock.

3.95 The devolution of disability benefits to Scotland has shifted £2.9 billion a year on average from welfare spending to Scottish Government AME. We have abstracted from that here.

Table 3.19: Sources of change to welfare spending since March 2019

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total welfare spending							
March 2019 forecast	223.0	227.3	232.2	240.0	249.5	260.5	
less Budget 2020 welfare devolution	0.0	-2.7	-2.8	-2.9	-3.0	-3.2	
Restated March 2019 forecast	223.0	224.6	229.4	237.1	246.5	257.3	
March 2020 forecast	222.8	224.6	231.2	237.8	246.8	256.9	266.8
Change	**-0.2**	**0.0**	**1.8**	**0.7**	**0.4**	**-0.4**	
of which:							
Forecast changes	**-0.2**	**0.0**	**2.2**	**1.5**	**1.2**	**0.6**	
CPI inflation	0.0	0.0	-0.6	-1.3	-1.6	-1.8	
UC and legacy equivalents modelling[1]	0.3	0.8	3.4	3.8	4.4	4.9	
Pension credit modelling	0.0	0.2	0.5	0.7	0.6	0.5	
State pension modelling	0.0	0.0	-0.2	-0.4	-0.7	-1.1	
Disability benefits modelling[2]	0.0	-0.5	-0.5	-0.5	-0.6	-0.8	
Other factors	-0.4	-0.4	-0.5	-0.7	-0.9	-1.2	
Effects of Government decisions	**0.0**	**0.0**	**-0.4**	**-0.8**	**-0.8**	**-0.9**	**-0.5**
Budget measures[3]	0.0	0.0	-0.2	-0.5	-0.7	-1.3	-1.0
Indirect effects	0.0	0.0	-0.2	-0.4	-0.1	0.3	0.5
of which:							
Due to tax and spending measures	0.0	0.0	-0.2	-0.2	0.1	0.7	0.9
Raising the National Living Wage	0.0	0.0	0.0	-0.1	-0.1	-0.1	0.0
New migration regime	0.0	0.0	0.0	0.0	-0.1	-0.3	-0.5

[1] UC and legacy equivalents includes personal tax credits, housing benefit (excluding pensioner part), incapacity benefits, contributory ESA, income support and income-based and contributory jobseeker's allowance.

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

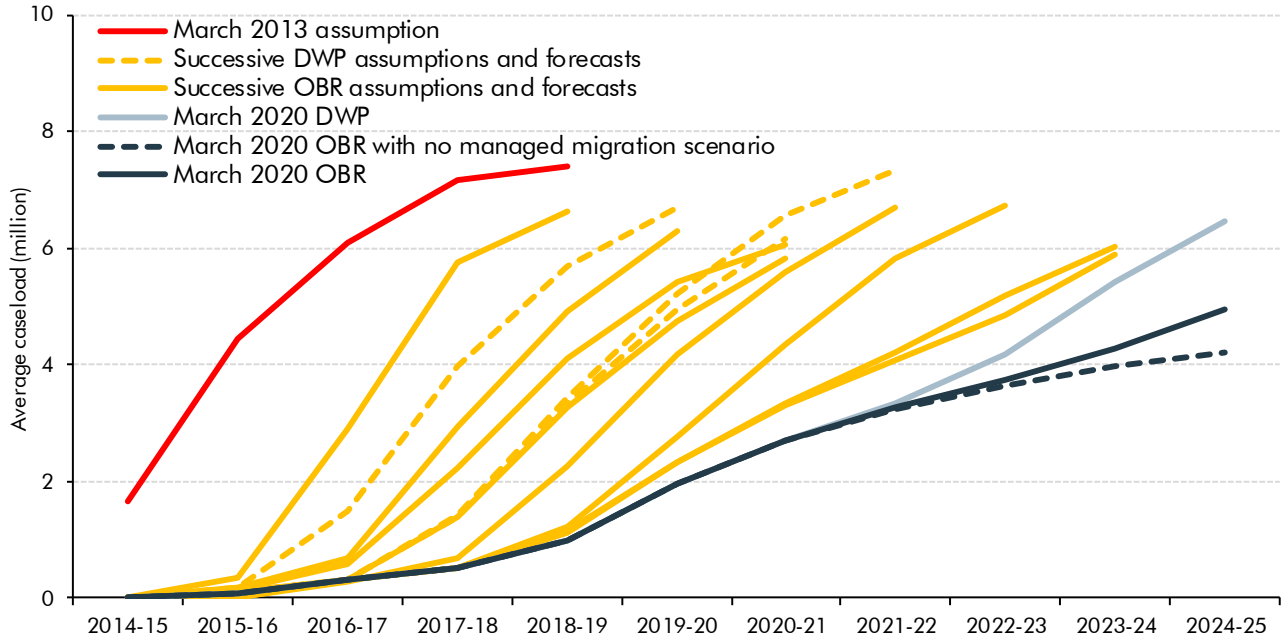
[3] This excludes the impact of the Budget 2020 welfare devolution measure.

The rollout of universal credit

3.96 Ever since our December 2014 *EFO*, we have assumed that the rollout of UC will take longer than DWP's own plans assume. In that time, we have always assumed a six-month delay, although its precise terms have changed as the rollout itself has evolved. As of March 2019, with UC rolled out to all jobcentres for new claims, we assumed that the managed migration phase would start on time but take six months longer to complete than DWP assumed. But in February 2020, DWP Ministers announced that a slower pace of natural migrations to UC meant that 900,000 more cases would need to be migrated by DWP and so the rollout would take nine months longer than previously assumed – ending in September 2024 rather than December 2023. In terms of our own assumptions, that means shifting from a June 2024 end-point to September 2026 (beyond our forecast horizon). As Chart 3.4 shows, whereas DWP's plans imply 6.5 million UC cases in 2024-25, our rollout assumptions imply 4.9 million. That is still higher than the 4.2 million that would move to UC naturally through changes of circumstance or new claims by 2024-25 in the absence of further managed migrations once the current pilot phase is completed.

3.97 Our decision to diverge more materially from DWP's plans reflects both the accumulated experience of the past seven years – illustrated in Chart 3.4 – and the greater emphasis apparent in recent statements from DWP Ministers on taking things slowly to protect claimants.[13] It has always been difficult to forecast the UC rollout given the 'test and learn' approach being taken, which is naturally more prone to delay than acceleration. Our six-month assumption has repeatedly been overtaken by events, so we have chosen two years as a period around which we hope the risks will be more evenly balanced.

Chart 3.4: Successive revisions to the universal credit rollout assumption



Source: DWP, OBR

[13] For example, on 4 February when debating the latest rollout delay in Parliament, the Parliamentary Under-Secretary of State for Work and Pensions assured the House that "*as we move into the managed migration phase protecting the vulnerable will be our utmost concern.*" On 27 January, when answering questions about the slow start to the managed migration pilot in Harrogate, he said that "*My clear instruction to officials was to take this slow and steady, and to go at the pace the claimant requires.*"

3.98 As well as the well-documented risks to the pace at which UC is rolled out – and especially the managed migration phase – the continued rollout to eligible families is making it increasingly difficult to interpret the flow of administrative spending data. Given the scale of spending on UC and its equivalents in the legacy system, this is a material source of risk to our welfare spending and wider fiscal forecasts. Box 3.4 discusses the nature of these risks.

Box 3.4: Interpreting surprises in spending on UC and its legacy equivalents

When preparing our fiscal forecasts, we are inevitably faced with surprises in the latest data relative to what would have been consistent with our most recent published forecast. How we interpret these surprises helps shape the revisions to our medium-term forecasts. That places a premium on being able to scrutinise the flow of administrative data against the assumptions underpinning our forecasts so that we can identify the source of upside or downside surprises.

For the £64.0 billion of spending on UC, and its legacy equivalents in 2019-20, that is extremely difficult. Analysis is hampered by the less than ideal, but unavoidable, way in which the forecast is constructed, and by uncertainties around the UC rollout. As detailed in our 2018 *Welfare trends report*, to understand the likely future trends in the UC claimant base it is essential to analyse and interpret past and present trends in the same base receiving legacy benefits, which requires us to be able to group claimants in a comparable way across both systems.

By way of illustration, if we were faced with a 1 per cent upside surprise in spending in the year in progress – i.e. around £0.6 billion, close to the upward revision we have made in this forecast – we would broadly have four alternative ways to interpret it, namely as:

- **A one-off event that will reverse next year.** For example, if a build-up of arrears was identified and paid out, we would know that this would not be repeated in future. This would imply a 1 per cent fall in spending next year and not affect spending in 2024-25.
- **A one-off event that will persist.** For example, if CPI uprating was 1 percentage point higher than assumed in the previous forecast. This would raise spending in every year by the same proportion, so in 2024-25 we would revise it up by £0.7 billion.
- **News about the cost of UC relative to the legacy system.** UC is expected to cost more than the legacy system, with the net additional cost reflecting large and offsetting gross costs and savings associated with different types of UC cases. If the upside spending surprise were interpreted as a higher marginal cost of UC – perhaps because take-up of UC was higher than assumed – then it might be expected to build up at the same pace as the UC rollout progresses. Our latest forecast assumes that around a third of the eventual UC caseload will already have moved to UC in 2019-20 and that three quarters will have moved by 2024-25, so a 1 per cent surprise this year would imply a 2.5 per cent upward revision in 2024-25 – £1.8 billion.
- **News about the rate of spending growth.** For example, it might appear that previous assumptions about trends in the prevalence of benefit receipt among the working-age population were too low. If this translated into spending growth being 1 percentage point higher each year, it would be revised up by 6.2 per cent in 2024-25 (£4.4 billion).

In some cases, it is relatively simple to interpret news. DWP knows how much it has spent addressing past underpayments, although there is much more uncertainty over how much future arrears payments will cost. And we know how actual uprating differs from the assumptions in our previous forecast. But in many cases it is much harder to attribute changes in spending to these individual interpretations. DWP analysts try to assess what the actual UC caseload would have looked like under the legacy system and to understand whether surprises in actual UC spending relate to surprises in the pace of rollout, in the take-up of UC relative to the legacy benefits, or in the amounts awarded relative to the amounts predicted by forecast models. This often proves particularly difficult for UC cases that bear most resemblance to HMRC-administered tax credits cases in the legacy system. Unfortunately, it is still difficult to track whether, and how, claimants leaving the tax credits system have moved into the UC system. And we cannot know who would have made a new claim to tax credits but now claims UC instead.

These inevitable difficulties are compounded by problems we have in interrogating the UC forecast. For example, management information is not routinely mapped onto forecast assumptions to test their veracity, while DWP's modelling of the flows associated with our judgements about the stock of different cases – essential to understanding the UC rollout – involves a particularly cumbersome process. These and other factors mean that it is often almost impossible to judge with confidence whether news this year should affect assumptions about the level or growth of the legacy counterfactual forecast or the UC marginal cost.

We have revised UC and legacy equivalent spending in 2023-24 up by £4.9 billion in this forecast – essentially a 'spending growth' interpretation of news about the incapacity benefits caseload. The examples above show how different interpretations of equally-sized surprises could result in very different revisions to future medium-term forecasts.

Locally financed current expenditure

3.99 We forecast spending by local authorities by forecasting their sources of income – including grants from central government and local sources – and the extent to which they will then overspend or underspend that income by varying their reserves or borrowing. Our forecast therefore encompasses spending financed by grants, which are mostly in DELs, and locally financed expenditure, which is in AME. Tables 3.20 and 3.21 focus on locally financed expenditure. Further detail is available in supplementary tables on our website.

3.100 Table 3.20 summarises the main changes to our locally financed current expenditure forecast since March 2019. When looking at these changes, it is important to distinguish between those related to council tax and business rates – which also affect our receipts forecast and are therefore broadly neutral for borrowing – and those related to the net use of reserves or changes in the amounts set aside to repay debt. These reflect authorities spending more or less than their income and therefore affect our borrowing forecast.

3.101 We have not changed our overall judgement about the amount that local authorities will use their reserves in 2019-20. But within this total we expect Transport for London (TfL) to make a one-off drawdown of £0.7 billion, offset by an addition to reserves across other English

authorities. We then assume that non-TfL English authorities taper net additions to reserves to zero by 2022-23.

3.102 Other changes to our forecast include a revised forecast of the effects of the 2020-21 business rates revaluation, which adds £0.5 billion to spending in 2020-21 declining to less than £0.1 billion by the end of the forecast due to the assumed path of successful appeals. Offsetting that, general fund income growth has been revised down based on the latest local authority budgets, lowering spending by around £0.4 billion a year.

3.103 Budget measures raise locally financed spending overall. These include:

- **Business rates retention pilots** in devolution deal areas and Greater London Authority boosts locally financed current expenditure by around £1.7 billion in 2020-21 at the expense of forgone expenditure financed by grants from central government.
- The increase in the **amount by which English authorities with social care responsibilities can increase the adult social care precept rates** without calling a local referendum from 2 per cent to 4 per cent in 2020-21. This adds £0.5 billion a year to spending from 2020-21 onwards (and boosts receipts in equal measure).
- A number of small measures on business rates and the current expenditure consequences of changes to the Public Works Loan Board (PWLB) interest rate changes, which combined reduce expenditure by around £0.1 billion a year.

3.104 There are several sources of uncertainty around our local authority spending forecast that we discussed in our March 2018 *EFO* (in paragraph 4.129) and that remain relevant. They include continuing budget pressures, the sectoral shifts that result from converting schools into academies and replacing housing benefit with universal credit, and policy risks associated with future changes to business rates retention by local authorities.

Table 3.20: Key changes to locally financed current expenditure since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	54.2	53.1	55.1	56.9	58.6	
March 2020 forecast	53.9	55.0	55.1	56.9	58.6	60.1
Change	**-0.4**	**1.9**	**-0.1**	**0.0**	**0.0**	
of which, changes in sources of local finance:						
Forecast changes	**-0.4**	**-0.2**	**-0.6**	**-0.5**	**-0.5**	
Council tax	-0.1	-0.1	-0.1	-0.1	-0.1	
Retained business rates	0.0	0.5	0.0	-0.1	0.0	
Net use of current reserves	0.0	-0.2	-0.1	0.0	0.0	
Net general fund income	-0.4	-0.3	-0.3	-0.3	-0.4	
Other	0.1	-0.1	-0.1	0.0	0.1	
Effect of Government decisions	**0.0**	**2.1**	**0.5**	**0.5**	**0.4**	**0.4**

Locally financed and public corporations' capital expenditure

3.105 Our latest forecasts for locally financed capital expenditure and public corporations' capital expenditure are shown in Table 3.21. These are net of asset sales, forecasts for which are available in supplementary tables on our website. 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.[14] So we switch these items from locally financed to public corporations' capital expenditure in our forecast to ensure consistency.

3.106 We present changes to locally financed and public corporations' capital expenditure together, so that switches such as those mentioned above net out and do not obscure the changes that affect TME. Spending has been revised up across the forecast period relative to our March 2019 forecast, by £2.3 billion in 2019-20, rising to £3.4 billion in 2023-24.

3.107 The main change to our pre-measures forecast is an upward revision to the level of capital spending financed by prudential borrowing that we expect (non-TfL) English authorities to undertake. This is based on analysis of local authorities' take-up of Public Works Loan Board (PWLB) loans, which has risen considerably, and on consultation with sector experts regarding forthcoming pressures on local authorities' capital spending budgets on refurbishing housing stock and the extent of further commercial investments.

3.108 This is an area of considerable uncertainty, as data on authorities' behaviour is lagged and we need to predict behaviour across many decision-makers, whose circumstances vary considerably. Our assessment points towards higher borrowing than previously thought, so we have increased our forecast by £2.3 billion by 2023-24.

3.109 Other sources of change to our forecast since March 2019 include:

- Upward revisions to **spending financed by the major repairs reserve** by around £0.5 billion each year, reflecting higher planned spending to refurbish housing stock.
- Upward revisions to our forecast for spending financed by **capital receipts from sales**, including 'right to buy' that rise to £0.6 billion in 2023-24, as a result of higher outturn data on the use of capital receipts and higher house prices.
- A forecast for **asset sales** lower by £0.5 billion in 2019-20, based on the outturn data for the first three quarters of the year. This increases net capital expenditure.
- **Capital spending by TfL** has been shifted from 2019-20 into later years, reflecting the latest delays in the opening of Crossrail.

3.110 The Government has announced various changes to interest rates charged on PWLB lending to local authorities. In October it raised the standard rate by 1 percentage point to 1.8

[14] 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.

percentage points above gilt rates. In this Budget it has eased the effect of that change with lower rates for HRA borrowing and a new tranche of even lower rates for infrastructure projects. The net effect of these is to reduce local authority capital spending modestly. Additionally, the capital spending consequences of the business rates retention pilots increase spending by £0.3 billion in 2020-21.

Table 3.21: Key changes to locally financed capital expenditure and public corporations' capital expenditure since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March 2019 forecast	21.9	19.8	19.3	19.1	18.6	
March 2020 forecast	24.1	22.3	21.6	22.3	21.9	22.4
Change	**2.2**	**2.5**	**2.3**	**3.2**	**3.3**	
of which:						
Forecast changes	**2.3**	**2.3**	**2.5**	**3.3**	**3.4**	
Prudential borrowing (non-TfL)	1.0	1.4	1.9	2.1	2.3	
Major repairs reserve	0.5	0.5	0.5	0.6	0.6	
Capital receipts from sales	0.3	0.4	0.4	0.5	0.6	
Less asset sales	0.5	-0.2	-0.3	-0.3	-0.3	
TfL capital spending	-0.2	0.0	0.1	0.1	0.0	
Other	0.2	0.1	-0.1	0.3	0.3	
Effect of Government decisions	**-0.1**	**0.2**	**-0.1**	**-0.1**	**-0.1**	**-0.1**

Public sector debt interest

3.111 Debt interest payments are forecast by applying appropriate interest rates to the stocks of conventional and index-linked gilts outstanding at different maturities and to other debt, such as NS&I products and Treasury bills.[15] The assumptions we use to forecast the levels of debt instruments are described later in this chapter.

3.112 We typically use financial market expectations to derive relevant interest rates (for example, coupons on newly issued conventional gilts), while our inflation forecast is used for index-linked gilts and other index-linked debt. Flows associated with the Bank of England's Asset Purchase Facility (APF) and its own balance sheet similarly apply appropriate interest rates to the APF's loan liability and to the stocks of gilt, corporate bond and loan assets.

3.113 Given the large fiscal easing announced in this Budget, we have adopted a different approach to forecasting interest rates in this *EFO*. Our pre-measures forecast is conditioned on market interest rates from mid-February, but we have assumed somewhat higher interest rates in our post-measures forecast (as explained in Chapter 2). The effect is to add 0.26 percentage points on average to our post-measures Bank Rate forecast and 0.14 percentage points to our weighted-average gilt yield forecast. RPI inflation is also modestly higher on average over the forecast period as a result of the Budget measures.

[15] Our forecasting approach was explained in Box 4.4 of our March 2015 *EFO* and is discussed in the 'in depth' section of our website. A supplementary fiscal table on our website presents the different stocks, flows and effective interest rates that make up this forecast.

3.114 Debt interest spending is expected to fall in 2020-21 due to differences in RPI inflation. Interest payments then rise sharply in 2021-22 and by smaller margins across the rest of the forecast as the cost of financing new borrowing roughly equals the saving associated with rolling over previously issued debt at lower interest rates than those that prevailed when it was issued. Interest accrued in respect of public sector funded pensions also rises steadily, in line with the liabilities of these schemes. The APF continues to subtract from debt interest spending over the forecast, but by decreasing amounts each year as the gap between the average interest rate earned on its assets and Bank Rate paid on its liabilities narrows.

3.115 Table 3.22 shows the changes to our forecast since March 2019. On a pre-measures basis, these lower spending by progressively larger amounts reaching £8.8 billion in 2023-24:

- Lower **RPI inflation** reduces spending in all years but by decreasing amounts from 2020-21 onwards.
- Materially lower interest rate expectations – for both **Bank Rate and gilt yields** – reduce spending by progressively larger amounts. Lower Bank Rate reduces spending almost immediately, but the effect of lower gilt yields builds as more debt is issued.
- Financing the **increase in cash borrowing in the pre-measures forecast** increases spending slightly.

3.116 Budget measures have several effects on debt interest spending. Taken together these raise spending by £3.7 billion a year on average:

- The large fiscal easing announced in the Budget, combined with delays to some asset sales and the cancellation of others, adds progressively larger amounts to **cash borrowing**. Cumulatively this reaches £125 billion in 2024-25. Higher financing needs add £1.0 billion a year to debt interest spending by 2024-25.
- Our assumption of a higher path for **Bank Rate and gilt yields** than markets are currently expecting adds £2.2 billion a year on average, increasing the cost of central government debt and reducing the debt interest saving associated with the APF.
- Changes to **RPI inflation** associated with the Budget package and individual measures have uneven effects across the period, but add £0.4 billion a year on average.
- **Other policies**, such as changes to the terms on which local authorities can borrow from the Public Works Loan Board, have had small effects.

Table 3.22: Key changes to debt interest since March

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector debt interest						
March 2019 forecast	60.5	60.1	62.5	64.8	66.7	
March 2020 forecast	58.5	55.7	60.1	61.2	61.7	62.3
Change	**-2.0**	**-4.4**	**-2.5**	**-3.7**	**-5.0**	
of which:						
Forecast changes	-2.3	-7.0	-6.9	-8.0	-8.8	
Effect of Government decisions	0.3	2.6	4.4	4.3	3.8	3.5
Central government debt interest						
March 2019 forecast	51.1	48.7	49.3	49.2	49.7	
March 2020 forecast	49.0	44.7	47.6	46.5	45.9	45.2
Change	**-2.1**	**-4.0**	**-1.7**	**-2.7**	**-3.9**	
of which:						
Forecast changes	**-2.0**	**-5.3**	**-4.5**	**-5.5**	**-6.2**	
Interest rates	-0.3	-2.2	-3.2	-4.3	-5.2	
Inflation	-1.9	-3.4	-1.7	-1.6	-1.4	
Financing	0.0	0.0	0.0	0.1	0.1	
Other factors (including outturn)	0.2	0.4	0.4	0.3	0.2	
Effect of Government decisions	**0.0**	**1.3**	**2.8**	**2.8**	**2.3**	**2.2**
Interest rates	0.0	0.5	0.9	1.1	1.3	1.5
Inflation	-0.2	0.2	1.3	0.9	0.2	-0.3
Financing	0.2	0.6	0.6	0.7	0.9	1.0
Asset Purchase Facility						
March 2019 forecast	-10.9	-9.7	-9.0	-7.7	-7.5	
March 2020 forecast	-10.8	-10.2	-9.8	-8.6	-8.6	-8.5
Change	**0.1**	**-0.4**	**-0.8**	**-0.9**	**-1.1**	
of which:						
Forecast changes	0.1	-1.4	-2.1	-2.2	-2.3	
Effect of Government decisions	0.0	1.0	1.3	1.2	1.1	1.0
Local authority and public corporation debt interest						
March 2019 forecast	20.2	21.2	22.2	23.3	24.4	
March 2020 forecast	20.3	21.2	22.2	23.3	24.4	25.6
Change	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	
of which:						
Forecast changes	-0.3	-0.3	-0.3	-0.3	-0.3	
Effect of Government decisions	0.3	0.3	0.3	0.3	0.3	0.3

Scottish Government AME

3.117 Scottish Government expenditure is treated as AME, ostensibly because an increasing proportion of expenditure is self-financed from taxation and thus falls outside Treasury control. But the majority is funded from a (residual) block grant that is tightly linked to central government DELs via the Barnett formula. The Scottish Government announced its latest spending plans in February 2020, which we have used as the starting point to update our forecast. And we have incorporated the effects of a restatement of the block grant when compared with March 2019, which is discussed in Annex A, and the devolution of disability benefits, which shifts £3.0 billion a year on average from DWP welfare spending to Scottish Government current AME.

3.118 The largest effect on Scottish Government expenditure that adds to total spending rather than shifting it between lines is the Barnett consequential changes in the block grant as a result of the large increases in RDEL and CDEL plans announced in the Budget. We have treated these essentially DEL-like components of Scottish spending in the same way as the DEL increases, assuming a 5 per cent underspend relative to current spending and a 20 per cent underspend relative to capital spending. The net effect of the higher block grants and the underspend assumptions increases in Scottish Government current and capital expenditure by £3.7 billion and £1.4 billion respectively in 2024-25. This simple approach of treating the block grant changes like DEL changes will need to be revisited in our autumn forecast, in the light of the Spending Review and Scottish Government plans.

Funded public sector pensions

3.119 The ONS brought funded public sector pension schemes into the public finances data in September 2019. We explained the implications of this, and our methodology for forecasting them, alongside the December restatement of our March 2019 forecast. As we set out, these schemes fall into three categories:

- **Funded schemes with largely public sector members**, notably the Local Government Pension Scheme, which covers 14,800 employers and has 5.8 million members.

- **The Pension Protection Fund (PPF),** which takes over the assets and liabilities of defined benefit schemes, largely from insolvent private sector firms. Such schemes are closed to new contributions after they have been taken into the PPF, while benefits paid out are also reduced.

- **The National Employment Savings Trust (NEST),** which facilitates auto-enrolment as part of the workplace pension reforms in the Pensions Act 2008.

3.120 Our receipts and spending forecasts focus on accrued changes to these entities. The largest elements are related to the schemes with public sector members, where actuarial concepts of scheme income and expenditure are recorded as interest receipts and spending. These flows are derived from balance sheet estimates and are relatively stable from year to year, but potential variability arises from schemes entering the PPF. Liquid assets held by all the funds net off public sector net debt, while their government bond holdings consolidate out (as they are treated as central government liabilities to another part of the public sector).

3.121 There has been little change to our forecasts for these schemes since our restated March 2019 forecast. We have drawn on more detailed information to forecast net asset transfers into the PPF, reducing spending in 2019-20 by £0.1 billion.

3.122 A potential upside risk to this forecast relates to the possible transfer of the Kodak Pension Plan 2 into the PPF. In its 2018-19 annual report, the PPF reported a provision of around £3 billion, much of which relates to the Kodak scheme, which is currently under assessment. The result of this assessment, and the timing of any subsequent transfer of assets and liabilities to the PPF is uncertain, so has not been reflected in our central forecast.

Student loans

3.123 Student loans generate a mix of receipts, spending and financial transactions, all of which are discussed in this section. Changes to the statistical treatment of student loans have materially affected the public finances. Our restated March 2019 forecast discussed the impact of the new ONS 'partitioned loan approach' on PSNB and its components. Our net investment forecast was revised up by £11.5 billion on average compared to the previous treatment due to capital transfers from outlays and sales being recorded as spending.

3.124 Table 3.24 summarises the main changes relative to our restated March 2019 forecast:

- **Modelling changes** add progressively larger amounts to capital spending at outlays, reaching £1.3 billion in 2023-24. This largely reflects a higher proportion of new outlays being treated as spending, in part to reflect better the reduced likelihood of repayment by students taking out their second or subsequent Plan 2 loans.

- Upward revisions to **student entrants that are eligible for loans** adds £0.6 billion on average to capital spending. As Table 3.23 shows, this is split between revisions to entrants at higher education institutions (which represents higher entrant numbers overall) and to entrants at alternative providers that are now registered with the Office for Students (which is in essence a classification change[16]). Our forecast reflects a judgement that providers will increase acceptance rates in years where applications are likely to be affected by decline in the 18-year-old population. The extent to which they do so is uncertain, with upside surprises in the latest data suggesting a stronger response than we had previously assumed. Higher education institutions themselves expect student numbers to rise much faster than we do.[17] If student entrants were to rise 22 per cent over the next five years, in line with their collective predictions, rather than the 5 per cent we assume, capital spending in 2024-25 would be £1.8 billion higher (0.1 per cent of GDP) and public sector net debt would be £10.0 billion higher (0.4 per cent of GDP).

- Downward revisions to **RPI inflation and Bank Rate** have reduced modified interest receipts by £0.2 billion a year on average.

- We have reduced long-term productivity growth, resulting in long-term **average earnings growth** being 0.5 per cent a year lower than we assumed a year ago. This implies that a lower proportion of the loan outlay will ultimately be repaid, and therefore more written off, raising the forecast for capital spending at outlay by an average of £0.4 billion a year, but with no effect on total outlays in the forecast period.

[16] Being registered as 'Approved (fee cap)' means providers can charge maximum tuition fees of £9,250 per year whereas previously the maximum had been £6,125. Previously, outlays to students at designated alternative providers were modelled in aggregate rather than via student numbers and average loans. Unfortunately, given the large volume of modelling work undertaken by DfE's student loans team over the past year, it has not been possible to restate our previous forecast to be on a consistent basis and show only like-for-like changes.
[17] See, for example, the discussion in *The official forecast of student numbers that is so often wrong, it's nicknamed 'the hedgehog'*, Nick Hillman, HEPI blog, December 2019.

Table 3.23: English-domiciled student entrants eligible for student loans

	Thousand						
	Outturn	Forecast[1]					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
English-domiciled							
March 2019 forecast	330	334	328	328	332	336	
March 2020 forecast	344	360	362	364	366	371	381
Change	**14**	**26**	**35**	**36**	**35**	**35**	
of which:							
Higher education institutions	14	12	20	22	20	20	
Approved (fee cap)	0	14	14	15	15	15	15

[1] Academic years.

Table 3.24: Key changes in student loans forecasts since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Capital spending (PSNI) (a)						
Restated March 2019 forecast	11.2	11.6	11.9	12.2	10.4	
March 2020 forecast	9.9	10.7	11.3	12.0	12.5	12.9
Change	**-1.3**	**-0.9**	**-0.6**	**-0.2**	**2.1**	
of which:						
Modelling changes	0.0	0.5	1.0	1.3	1.3	
Student numbers	0.4	0.5	0.5	0.7	0.7	
Economic determinants changes	0.0	0.0	0.0	0.0	0.0	
Long term economic assumptions	0.3	0.4	0.4	0.4	0.5	
Government decisions	-2.1	-2.3	-2.5	-2.6	-0.4	-0.4
Modified interest (receipt) (b)						
Restated March 2019 forecast	2.7	2.9	3.4	3.9	4.5	
March 2020 forecast	2.8	2.9	3.2	3.8	4.4	4.8
Change	**0.1**	**0.0**	**-0.2**	**-0.2**	**0.0**	
PSNB (c=a-b)						
Restated March 2019 forecast	8.5	8.7	8.5	8.3	5.9	
March 2020 forecast	7.1	7.7	8.1	8.2	8.1	8.1
Change	**-1.4**	**-1.0**	**-0.4**	**-0.1**	**2.1**	
Financial transactions (d)						
Restated March 2019 forecast	5.9	6.5	7.1	7.8	13.8	
March 2020 forecast	8.8	8.8	9.1	9.7	10.5	11.0
Change	**2.9**	**2.3**	**2.0**	**1.9**	**-3.3**	
Public sector net cash requirement (c+d)						
Restated March 2019 forecast	14.4	15.2	15.6	16.1	19.7	
March 2020 forecast	15.9	16.6	17.2	18.0	18.6	19.1
Change	**1.5**	**1.4**	**1.6**	**1.8**	**-1.1**	
Memo: Total cash outlays (a+d)	*18.7*	*19.5*	*20.4*	*21.7*	*23.0*	*23.9*

3.125 Several policies affect our student loans forecasts. Most have modest and partly offsetting effects: freezing tuition fees next year, not providing part-time maintenance loans and providing greater support for nursing and related courses. The largest effect comes from the cancellation of Plan 1 student loan sales. In our pre-measures forecast, the sales planned for 2019-20 to 2022-23 were expected to add on average £2.1 billion a year to capital spending over that period and to reduce modified interest by £0.3 billion a year by 2024-25. Cancelling the sales reverses those effects, as discussed in the asset sales section below.

3.126 In May 2019, the Government confirmed student finance eligibility for EU nationals in the 2020-21 academic year.[18] In the absence of a specified policy beyond this, we have assumed that EU-domiciled student entrants will be stable at 28,000 a year. EU-domiciled students thus account for 7 per cent of loan-eligible student entrants in our forecast. If eligibility were to be tightened or removed in future, this would lower outlays and spending.

Net expenditure transfers to EU institutions

3.127 In our forecasts since November 2016, we have taken a fiscally neutral approach to our post-Brexit spending forecast, assuming that when the UK leaves the EU any reductions in net expenditure transfers to Brussels would be fully recycled into extra spending.

3.128 In effect, this meant that we were compiling the forecast for net expenditure transfers to the EU as though the UK were not leaving the EU, and were incorporating an assumption that those funds (in effect 'DEL in waiting') would eventually be spent after the UK's withdrawal (rather than reducing borrowing). This assumption has been borne out by the higher departmental spending set out in this Budget, so we have now removed the 'DEL in waiting' component of our AME forecast (see Box 3.5). This section therefore focuses on changes to our estimate of the cost of the financial settlement.

3.129 In our March 2019 forecast, we estimated that the financial settlement would cost £37.8 billion, assuming that the UK would leave the EU on 29 March 2019. The subsequent delay to 31 January 2020 has reduced the size of the financial settlement, but this has made no difference to overall payments to the EU, as it merely extended the period during which contributions were made as an EU member state. On the basis of a 31 January 2020 exit, our March 2019 estimate of the financial settlement would have been £30.4 billion.

3.130 We have raised the cost of the financial settlement to £32.9 billion, £2.5 billion higher than in March 2019. Only some of these flows are recorded in AME. These include:

- Net **contributions as though the UK remained a member** until December 2020.
- **Payments of the *reste à liquider*** (RAL), which represents outstanding commitments at the end of the 2014-20 EU budget period and which we expect to continue until 2028.
- Non-financial net liabilities, including **pension payments and some other EU schemes**, for which some payments are expected to continue until 2064.

[18] Department for Education, *EU student funding continued for 2020/21*, 28 May 2019.

3.131 Table 3.25 breaks down the financial settlement flows recorded within and outside AME. Total payments recorded within AME amount to £47.8 billion (of which £10.9 billion lie beyond our present forecast horizon). These are partially offset by £15.0 billion of net receipts not recorded in AME (£2.8 billion beyond the forecast horizon). The latter include:

- **public and private sector receipts during the transition period and from the RAL**, which reduce the cost of the settlement for the UK as a whole but not for the Government;
- the remittance of **customs duties** collected on behalf of the EU until December 2020, net of the cost of collection; and
- **repayments of equity in the European Investment Bank and European Central Bank**, which are financial transactions and therefore affect debt but not expenditure.

Table 3.25: Financial settlement components by time period

	£ billion							
	Forecast							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-64	Total
March 2020 forecast	**0.6**	**8.0**	**6.8**	**5.2**	**2.9**	**1.2**	**8.2**	**32.9**
of which:								
In AME	2.0	9.2	10.6	8.3	4.7	2.2	10.9	47.8
Not in AME	-1.3	-1.2	-3.9	-3.0	-1.8	-1.0	-2.8	-15.0

3.132 On a like-for-like basis, we have revised up the AME component of the financial settlement relative to March 2019 by £0.9 billion. This reflects:

- A stronger **sterling-euro exchange rate** that reduces the cost by £2.5 billion, since the UK's financial settlement liabilities are denominated in euros.
- An adjustment to the profile of settlement payments to reflect the fact that **payments will accrue twice a year after December 2020**, when notification of the liability is given to the UK. This affects when payments will hit spending rather than the overall cost of the settlement. This lowers spending in 2020-21 and increases it in subsequent years.
- **Slower than forecast implementation of the EU's 2014-20 multiannual financial framework**, which pushes more expenditure into the *reste à liquider* (RAL). This increases the financial settlement by £1.2 billion, but has lowered our contributions while a member state.
- The **monthly pattern of contributions in 2020**, which has included higher-than-expected contributions in January but a lower-than-expected draw-forward for the whole of the first quarter. This shifts payments into 2020-21, but reduces the overall size of the payments within the financial settlement by £0.3 billion.
- Updated European Commission estimates of the cost of **pension liabilities**, which have added £2.6 billion (mostly beyond the forecast horizon).

3.133 We have revised the non-AME component up by £1.6 billion. This is due to a stronger sterling-euro exchange rate and an updated monthly pattern of receipts, which reduced customs duties remittances and private sector receipts falling into the financial settlement.

Table 3.26: Sources of change in the financial settlement since March 2019

	£ billion							
	Forecast							
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	2025-64	Total
Like-for-like changes in AME since March 2019	**-1.8**	**-1.2**	**0.3**	**0.6**	**0.6**	**0.2**	**2.3**	**0.9**
of which:								
Sterling-euro exchange rate	0.0	-0.2	-0.8	-0.6	-0.3	-0.1	-0.5	-2.5
Payments accrue twice a year	0.0	-2.5	0.5	0.9	0.6	0.2	0.3	0.0
More spending in the reste à liquider	0.0	0.0	0.4	0.2	0.3	0.1	0.2	1.2
Monthly pattern of 2020 contributions	-1.8	1.5	0.0	0.0	0.0	0.0	0.0	-0.3
Higher pensions liabilities	0.0	0.0	0.1	0.1	0.0	0.0	2.4	2.6
Like-for-like changes not in AME since March 2019	**0.8**	**1.3**	**0.0**	**-0.1**	**-0.1**	**0.0**	**-0.3**	**1.6**
of which:								
Sterling-euro exchange rate	0.0	0.1	0.3	0.2	0.1	0.1	0.2	1.0
Monthly pattern of receipts	0.8	1.2	-0.3	-0.3	-0.2	-0.1	-0.4	0.6

Box 3.5: Spending the direct fiscal savings from Brexit

In our November 2016 *EFO*, we set out broad-brush assumptions regarding the UK's prospective exit from the EU. These included two fiscally neutral holding assumptions, related to the UK's direct fiscal interactions with the EU – namely the transfers to EU institutions that feature in AME spending and the customs duties collected on behalf of the EU. Specifically, we assumed that net expenditure transfers to EU institutions – after factoring in the cost of the financial settlement – would be fully recycled into substitute UK spending. These transfers were labelled as 'Assumed spending in lieu of EU transfers' in AME, but have in effect been 'DEL in waiting'. Customs duties were treated in the same way, but on a net rather than a gross basis.

We do not typically anticipate Government policy in this way, but it quickly made commitments in respect of farming support, industrial strategy and science programmes that meant that if we had not done so, our central forecast would have been inconsistent with the intended path of public spending. Now that the UK has left the EU and the Government has set out the path of departmental spending over the next five years, we can remove the assumption that the direct fiscal savings from Brexit will be spent – there is no more 'DEL in waiting' as it is now in DEL.

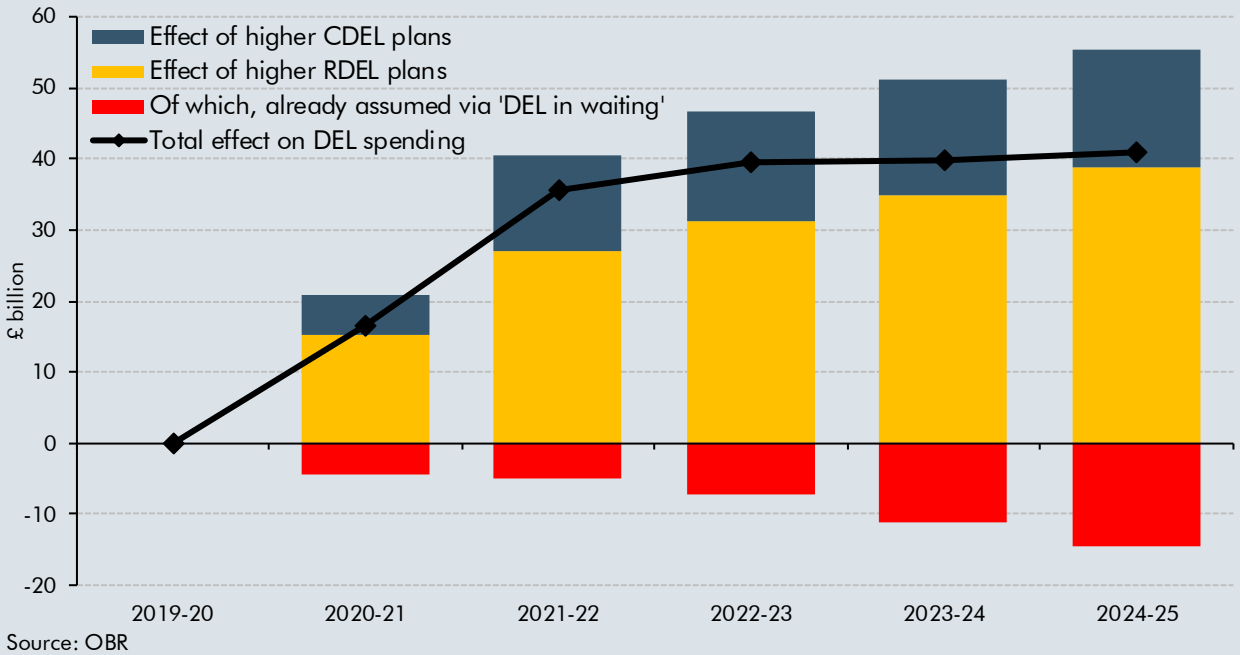
As the Government has chosen to increase DEL spending by more than the implied AME savings and retained customs duty receipts, it is moot – from the point of view of the overall public finances – whether the Government will actually fully replace all the previous EU spending programmes. We have therefore not attempted to map the individual spending lines.

Table C shows how we moved from our pre-measures forecast containing 'DEL in waiting' within AME to a post-measures forecast with that assumption removed. 'DEL in waiting' was the sum of customs duties retained from January 2021 and the difference between our 'no-referendum counterfactual' view of EU transfers and the financial settlement. This increased from £4.3 billion in 2020-21 to £14.6 billion in 2024-25. After our underspend assumptions, the Government's new DEL spending plans raise RDEL and CDEL spending in 2024-25 by £38.9 billion and £16.7 billion respectively. This means £40.9 of the £55.5 billion increase in DEL spending in 2024-25 feeds through to higher total managed expenditure and therefore to borrowing (Chart C).

Table C: DEL spending and use of the direct fiscal savings from Brexit

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Pre-measures DEL spending						
Total including 'DEL in waiting'	**376.2**	**394.4**	**408.0**	**423.0**	**443.5**	**462.4**
of which:						
RDEL spending	**316.3**	**324.6**	**334.3**	**344.7**	**356.8**	**369.7**
CDEL spending	**59.9**	**65.5**	**68.8**	**71.2**	**75.4**	**78.1**
'DEL in waiting'	**0.0**	**4.3**	**5.0**	**7.1**	**11.3**	**14.6**
In lieu of EU transfers	0.0	3.5	1.7	3.8	7.9	11.3
Retained customs duties	0.0	0.8	3.3	3.3	3.3	3.3
Post-measures DEL spending						
Total	**376.2**	**411.0**	**443.5**	**462.5**	**483.3**	**503.4**
of which:						
RDEL spending	**316.3**	**339.8**	**361.3**	**375.9**	**391.8**	**408.6**
CDEL spending	**59.9**	**71.2**	**82.2**	**86.6**	**91.5**	**94.8**
'DEL in waiting'	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
In lieu of EU transfers	0.0	0.0	0.0	0.0	0.0	0.0
Retained customs duties	0.0	0.0	0.0	0.0	0.0	0.0
Difference						
Total	**0.0**	**16.6**	**35.5**	**39.5**	**39.8**	**40.9**
of which:						
RDEL spending	**0.0**	**15.2**	**27.0**	**31.2**	**34.9**	**38.9**
CDEL spending	**0.0**	**5.7**	**13.4**	**15.4**	**16.1**	**16.7**
'DEL in waiting'	**0.0**	**-4.3**	**-5.0**	**-7.1**	**-11.3**	**-14.6**
In lieu of EU transfers	0.0	-3.5	-1.7	-3.8	-7.9	-11.3
Retained customs duties	0.0	-0.8	-3.3	-3.3	-3.3	-3.3

Chart C: DEL-in-waiting versus new DEL spending plans



Source: OBR

Public service pensions

3.134 Our net public service pensions forecast covers gross expenditure on pensions in payment, less employer and employee contributions received. (The corresponding spending by departments on employer contributions is included in RDEL.) The forecast includes central government pay-as-you-go schemes and locally administered police and firefighters' schemes.[19] A breakdown of spending and income for the major schemes we cover can be found in the supplementary tables on our website.

3.135 Table 3.27 breaks down the changes to our forecast since March 2019. Reduced scheme expenditure and higher scheme income have combined to lower net spending by increasing amounts, reaching £7.0 billion in 2023-24. The main changes relate to:

- **Significantly higher RDEL spending**, reflecting last year's Spending Round settlement and the further increases announced in the Budget, raises scheme income by increasing amounts. Full detail of how the higher RDEL will be allocated across departments, and therefore the precise amounts by which individual schemes' incomes will rise, will not be known until this year's Spending Review settlements. In the meantime we estimate that the higher RDEL will add £4.3 billion a year to total scheme income by 2024-25. This reduces net public service pension spending. The effect of the overall fiscal easing on CPI inflation has further modest implications for scheme expenditure.

[19] 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.

- **Slower pre-measures growth in expenditure**, reflecting lower forecast CPI inflation and the declining average age of teachers' pension scheme members. Updated retirement assumptions in the NHS pension scheme offset some of this decrease early in the forecast and augment it in later years. These pre-measures changes reduce expenditure by increasing amounts, reaching £1.4 billion in 2023-24.

- **Higher pre-measures contributions**, which thanks to stronger paybill growth have boosted pension scheme income. The largest effect comes from the teachers' pension scheme. Higher contribution rates applied in several schemes from 2019-20 means that faster paybill growth boosts income proportionately more than previously.

3.136 Several other policy measures have smaller effects. Raising the annual allowance taper will reduce use of 'scheme pays' by public service pension scheme members. But scheme pays costs for the NHS scheme in respect of 2019-20 will be higher thanks to the Secretary of State for Health and Social Care's announcement that clinicians' annual allowance charges in that year will be paid by his department not the scheme members. Setting up an unfunded pension scheme for Bradford & Bingley and Northern Rock Asset Management scheme members adds a little to total scheme expenditure from 2023-24 onwards.

Table 3.27: Key changes to public service pensions since March 2019

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Net public service pensions						
March 2019 forecast	6.7	6.4	7.3	7.9	8.2	
March 2020 forecast	6.9	4.2	2.9	2.0	1.2	0.3
Change	**0.2**	**-2.2**	**-4.3**	**-5.9**	**-7.0**	
of which:						
Forecast changes	0.2	-0.5	-1.3	-2.1	-2.8	
Effects of Government decisions	0.0	-1.7	-3.0	-3.8	-4.2	-4.6
Expenditure						
March 2019 forecast	44.4	46.4	48.6	50.4	52.4	
March 2020 forecast	44.7	46.2	47.9	49.1	50.8	52.4
Change	**0.2**	**-0.2**	**-0.7**	**-1.3**	**-1.6**	
of which:						
Forecast changes	**0.2**	**-0.2**	**-0.7**	**-1.1**	**-1.4**	
Teachers' pension scheme	-0.2	-0.3	-0.3	-0.4	-0.5	
NHS pension scheme	0.4	0.3	0.3	-0.2	-0.6	
Pre-measures CPI inflation	0.0	-0.1	-0.4	-0.2	-0.2	
Other	0.1	-0.1	-0.3	-0.3	-0.2	
Effect of Government decisions	**0.0**	**0.0**	**0.0**	**-0.3**	**-0.2**	**-0.2**
Income						
March 2019 forecast	-37.7	-40.0	-41.3	-42.6	-44.2	
March 2020 forecast	-37.8	-42.0	-44.9	-47.2	-49.6	-52.1
Change	**0.0**	**-2.0**	**-3.6**	**-4.6**	**-5.4**	
of which:						
Forecast changes	**0.0**	**-0.3**	**-0.6**	**-1.1**	**-1.4**	
Teachers' pension scheme	0.0	-0.1	-0.3	-0.5	-0.8	
Other	0.0	-0.2	-0.3	-0.6	-0.6	
Effect of Government decisions	**0.0**	**-1.7**	**-3.0**	**-3.5**	**-4.0**	**-4.3**

Depreciation

3.137 We have revised up public sector depreciation by £0.6 billion a year from 2020-21 onwards. Our pre-measures forecast reflects fuller data on public sector capital stocks and the associated trends in depreciation rates than were available when producing our restated March 2019 forecast. We have also incorporated the latest splits of capital spending across central government, local authorities and public corporations, which show less spending by central government but more by local authorities and public corporations. Together, these changes have increased depreciation in the early years of the forecast, and decreased it later. The large increase in capital spending in the Budget adds progressively larger amounts to depreciation, reaching £1.0 billion in 2024-25. The precise composition of this spending is not yet known, so we have largely drawn on recent data to estimate this effect.

Table 3.28: Key changes to public sector depreciation since restated March 2019

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	48.7	49.8	51.6	53.5	55.5	57.5	
March 2020 forecast	48.8	49.9	52.2	54.0	56.0	58.1	60.3
Change	**0.1**	**0.1**	**0.6**	**0.5**	**0.6**	**0.6**	
of which:							
Forecast changes	0.1	0.1	0.6	0.3	0.0	-0.2	
Effect of Government decisions	0.0	0.0	0.1	0.2	0.5	0.8	1.0

Other AME

3.138 The main changes to other AME spending items include:

- Spending on **company tax credits** is up by an average of £2.6 billion a year from 2019-20 onwards, almost entirely due to higher spending on R&D tax credits. Just £0.2 billion of this reflects the Budget increase the R&D expenditure credit rate from 12 to 13 per cent. Most reflects evidence of large increases in use of the small firms' element. It appears that this is at least partly due to abuse of the generous payable credits. We would have revised spending up by more were it not for the reintroduction from April 2020 of a cap on scheme use related to each firm's PAYE liability.

- Uneven revisions to spending associated with **tax litigation** payouts, based on updated information from HMRC. Relative to March 2019 this shifts spending into later years, while the overall cost over five years is slightly higher due to new cases.

- Some elements of our spending forecast are largely neutral for borrowing, because they are directly offset in receipts. These include **environmental levies** (which are up in the near term) and **VAT refunds** to central and local government (which are up thanks to the Budget spending announcements). These are detailed in the relevant receipts sections.

- Spending by the **Land Registry and Companies House** has been switched from AME to DEL from 2020-21 onwards, raising DEL spending and lowering other AME spending by £0.4 billion a year.

Deficit aggregates

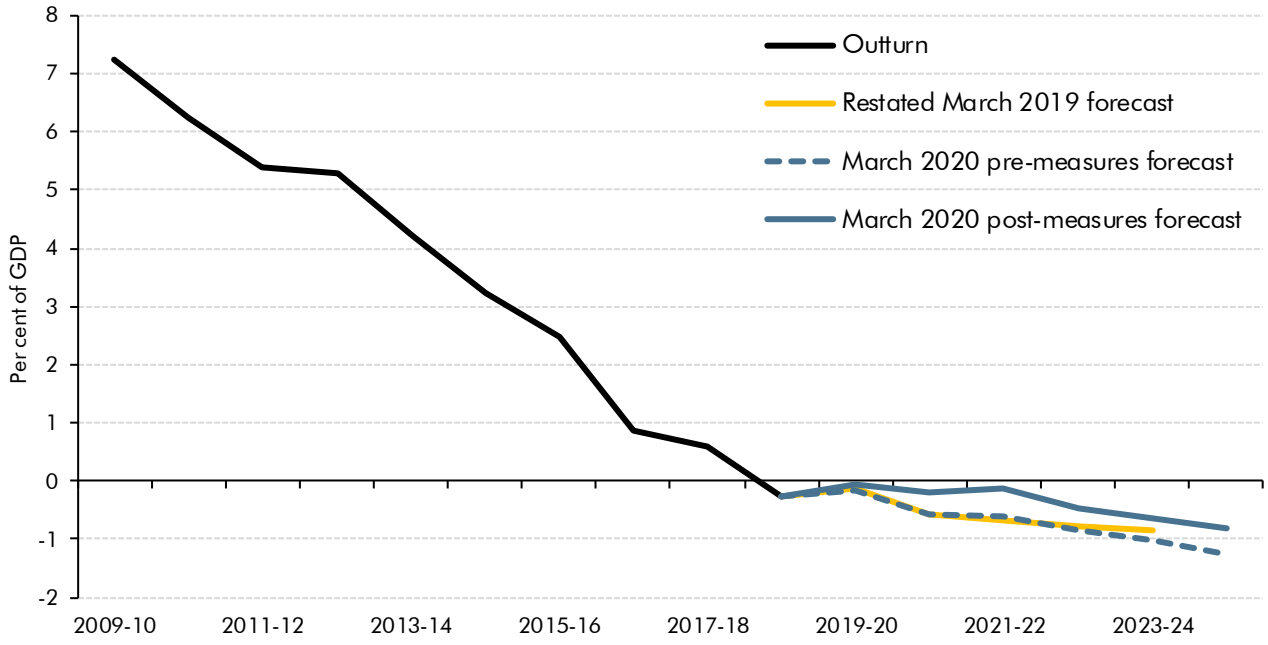
3.139 Our central forecast for the key measures of the Government's budget deficit incorporate the forecasts for receipts and expenditure set out in the previous sections of this chapter. In this section we explain the changes in the following aggregate measures of the deficit:

- **Public sector net borrowing (PSNB)**: the difference between total public sector receipts and expenditure on an accrued basis each year – the widest measure of borrowing.
- **Cyclically adjusted net borrowing**: PSNB adjusted to reflect the estimated impact of the economic cycle. It is a measure of underlying or 'structural' net borrowing, in other words the borrowing we would expect to see if the output gap were zero.
- The **current budget deficit**: the difference between receipts and public sector current expenditure each year. In other words, public sector net borrowing excluding borrowing to finance investment that boosts the public sector capital stock.
- The **cyclically adjusted current budget deficit**: the current budget that we would expect to see if the output gap was zero.
- **Public sector net investment (PSNI)**: the difference between gross capital spending and depreciation each year. In broad terms, the net increase in the capital stock each year.

Current budget balance

3.140 The latest ONS data record a current budget surplus of 0.3 per cent of GDP in 2018-19 – the first surplus since 2001-02, following nine years of deficit reduction from the peak of 7.2 per cent of GDP reached during the financial crisis and recession. Our restated March 2019 forecast predicted that the surplus would narrow in 2019-20, before widening again to average 0.7 per cent of GDP between 2020-21 and 2023-24. Absent the effect of policy measures, we would have made only small changes to this forecast. The combined effect of measures announced in the Budget, the new migration regime and the higher path for the National Living Wage reduce the surplus by 0.4 per cent of GDP on average.

Chart 3.5: Current budget deficit



Source: ONS, OBR

Underlying forecast revisions

3.141 On average between 2020-21 and 2023-24, underlying revisions increase the surplus by £1.5 billion a year on average (less than 0.1 per cent of GDP), reflecting several factors:

- Total **receipts** have been revised down by £3.0 billion a year on average, despite an upward revision of £4.9 billion in 2019-20 (much of which reflects one-off factors). The deterioration is more than explained by changes in our economy forecast, in particular the weaker outlook for earnings growth and hence household spending.

- **Debt interest spending** has been revised down by £7.4 billion a year on average. This reflects lower Bank Rate expectations (which lower spending almost immediately), lower gilt yields (the effect of which builds up as more new debt is issued) and lower RPI inflation (which reduces spending in all years, but by decreasing amounts).

- **Other current spending** has been revised up by £2.8 billion a year on average, mostly in the near term. Almost all of this reflects higher spending on R&D tax credits, following large increases in use of the small firms' element in recent years. Welfare spending has also been revised up, in particular on incapacity benefits.

Government decisions

3.142 Government decisions reduce the current surplus by £10.2 billion on average between 2020-21 and 2024-25 (0.4 per cent of GDP). This includes both the direct impact of Budget tax and spending measures and the indirect effect of those measures, plus the migration and NLW announcements, on the economy. The direct impact arises from:

- Large increases in **current departmental spending limits** (RDEL) that rise from £15.2 billion in 2020-21 to £38.9 in 2024-25 (reflecting higher plans and our assumptions about underspending relative to them). This is partly offset by some of that in effect confirming the 'DEL in waiting' included in our previous post-referendum forecasts, which assumed that **direct fiscal savings from Brexit** (i.e. contributions not paid plus customs duties retained) would be fully recycled into higher UK government spending. As that has now happened, removing the 'DEL in waiting' assumption lowers current spending by £4.3 billion in 2020-21 rising to £14.6 billion in 2024-25, with the rising profile reflecting the declining cost of the divorce bill over those years.

- **Other spending measures** (both on and off the Treasury's scorecard) raise borrowing by £2.2 billion a year on average. This is more than explained by the Government's decision to raise the current spending envelope of the Scottish Government by £3.4 billion a year on average between 2021-22 and 2024-25 (in line with higher RDEL).

- **Receipts measures** (both on and off the scorecard) reduce borrowing by an average of £6.4 billion a year. This is mostly explained by the decision to cancel the April 2020 cut in the main rate of corporation tax from 19 to 17 per cent, which raises £6.4 billion a year on average. Raising the National Insurance 'primary threshold' to £9,500 in 2020-21 costs £2.3 billion a year on average, while restricting eligibility for 'red diesel' raises £1.8 billion a year from 2022-23 onwards.

3.143 The indirect effects of the Government's decisions reduce borrowing across the forecast:

- Indirect effects of Budget **tax and spending measures** reduce borrowing by £6.6 billion a year on average. The significant overall easing in fiscal policy delivers a cyclical boost to the economy that lifts tax receipts via higher earnings and consumption in particular. Its temporary effect on inflation leads to permanently higher nominal GDP and tax bases. The boost to receipts therefore peaks at £11.5 billion in 2022-23 but remains at £8.9 billion in 2024-25. Higher departmental spending lifts public service pension contributions, reducing the medium-term net cost of these schemes. Conversely, the higher borrowing, higher interest rates and temporarily higher RPI inflation combine to raise debt interest spending.

- Raising the **National Living Wage** to reach two-thirds of median earnings by October 2024 reduces current borrowing overall. As Box 2.5 describes, the effects of this on current borrowing – which reach £1.2 billion in 2024-25 – include the boost to income tax and NICs receipts and the reduction in welfare spending associated with higher pay. These are partly offset by the effect of lower profits on corporation tax receipts and modestly higher inflation on debt interest spending.

- The **new migration regime** raises current borrowing by amounts rising to £1.0 billion in 2024-25. As Box 3.6 sets out, we have assumed that the new regime will leave the population in that year 0.4 smaller than it would otherwise have been, but because lower migration will be concentrated among those who would have been lower paid, the effect on nominal GDP is smaller at 0.3 per cent. The main effects of this are to reduce tax receipts by £1.5 billion and welfare spending by £0.5 billion.

Table 3.29: Changes to the current budget deficit since March 2019

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	-5.4	-2.5	-13.3	-15.7	-18.6	-21.1	
March 2020 forecast	-5.8	-1.7	-4.9	-2.7	-11.7	-16.7	-21.2
Change	**-0.4**	**0.8**	**8.4**	**13.0**	**6.9**	**4.4**	
Underlying revisions	**-0.4**	**-1.2**	**0.1**	**0.8**	**-2.1**	**-4.7**	
of which:							
Receipts[1]	-3.3	-4.9	1.0	3.5	4.1	3.5	
Debt interest	0.5	-2.0	-6.7	-6.6	-7.7	-8.5	
Other spending[1]	2.4	5.7	5.8	3.8	1.4	0.3	
Total effect of Government decisions[2]		**2.0**	**8.3**	**12.3**	**9.0**	**9.0**	**12.5**
of which:							
Current departmental spending[2]		2.9	15.2	27.0	31.2	34.9	38.9
Use of direct Brexit fiscal savings		0.0	-4.3	-5.0	-7.1	-11.3	-14.6
Receipts measures[3]		-1.0	-2.0	-4.6	-8.0	-8.6	-8.5
Other spending measures[3]		0.1	2.7	1.7	2.1	1.6	2.9
Indirect effects of Government decisions		0.0	-3.3	-6.9	-9.2	-7.6	-6.2
of which:							
Due to tax and spending measures		0.0	-3.3	-6.9	-9.2	-7.5	-6.0
Raising the National Living Wage		0.0	0.0	-0.3	-0.6	-0.9	-1.2
New migration regime		0.0	0.0	0.3	0.5	0.8	1.0
Memo: March 2020 pre-measures forecast	*-5.8*	*-3.7*	*-13.2*	*-14.9*	*-20.8*	*-25.8*	*-33.7*

[1] Excludes the impact of customs duties switch, which raises receipts and current spending by the same amount.

[2] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.

[3] Includes both scorecard and non-scorecard measures. See Annex A for more information.

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.

Cyclically adjusted current budget deficit

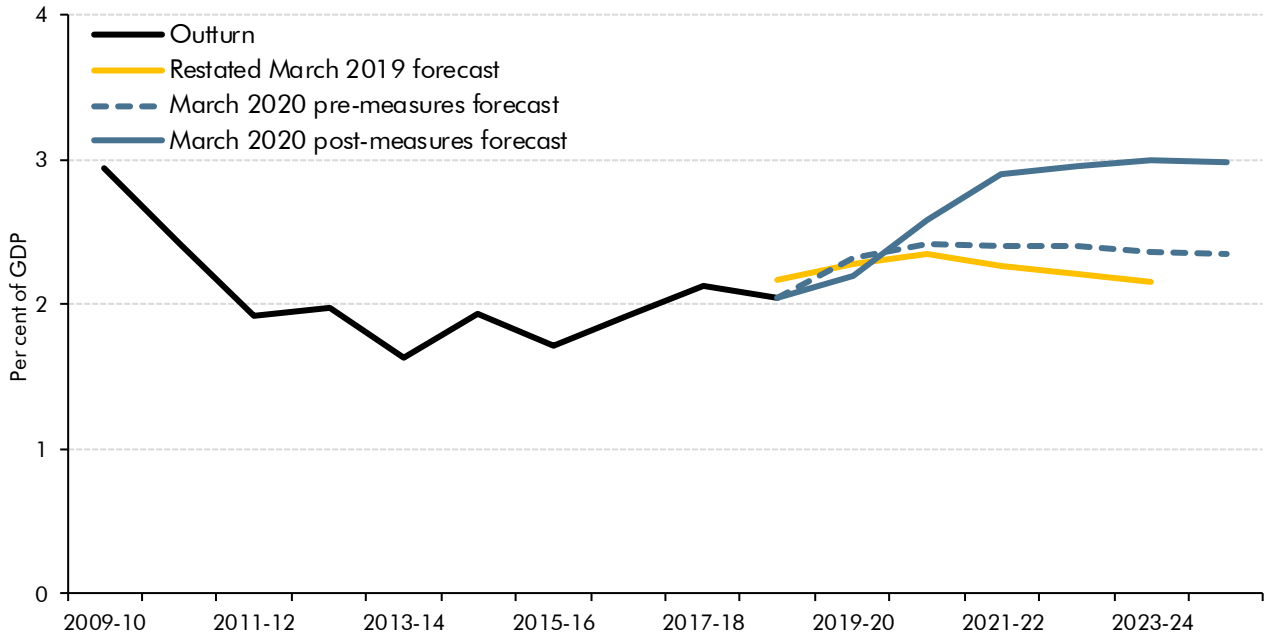
3.144 On a pre-measures basis, our forecast for the cyclically adjusted current budget is very similar to that for the headline balance. But our post-measures forecasts differ. The direct costs of Budget measures and the indirect effects of the new migration regime and NLW are structural, so have the same effect on cyclically adjusted borrowing as they do on headline borrowing. The indirect effects of the Budget package on the economy are entirely cyclical when viewed in terms of real GDP, so have little effect on cyclically adjusted borrowing. But because temporarily higher inflation leads to permanently higher nominal GDP, the Budget package does have a modest positive effect on the cyclically adjusted surplus. Taken together, these effects leave cyclically adjusted current borrowing close to balance between 2019-20 and 2022-23, before the surplus rises to 0.8 per cent of GDP in 2024-25.

Public sector net investment

3.145 Public sector net investment (PSNI) almost halved as a share of GDP between 2009-10 and 2013-14, before rising slightly to average 1.9 per cent of GDP between 2014-15 and 2018-19. In our restated March 2019 forecast, we expected PSNI to average around 2.2 per cent of GDP. On a pre-measures basis, we have revised that up to around 2.4 per cent

of GDP. The Budget has placed capital spending on a significantly higher path, with PSNI rising to 2.9 per cent of GDP by 2021-22 and staying at 3.0 per cent thereafter.

Chart 3.6: Public sector net investment



Source: ONS, OBR

Underlying forecast revisions

3.146 Underlying revisions increase PSNI by progressively more across the forecast period – rising from £1.6 billion in 2019-20 to £6.2 billion in 2023-24 (Table 3.30):

- Roughly two thirds of this change reflects higher **capital spending by local authorities and public corporations**. In particular we have revised up borrowing-financed spending by English local authorities, which has risen rapidly in recent years.

- Much of the rest is explained by **student loans**. Under the new accounting treatment, loan outlays that are not expected to be repaid are treated as capital transfers that add to PSNI. Several factors have led us to revise up our forecast for these capital transfers, the largest of which relates to the proportion of each new loan treated as spending.

Government decisions

3.147 Government decisions raise PSNI by £4.0 billion in 2020-21, then by £14.5 billion a year on average between 2021-22 and 2024-25. Table 3.30 shows that:

- **Significant increases in departmental capital spending limits** (CDEL) raise spending by amounts rising from £5.7 billion in 2020-21 to £16.7 billion in 2024-25. These amounts would have been higher still had we not assumed that 20 per cent of the increase in capital spending announced by the Treasury will go unspent – reflecting evidence of past difficulties in ramping up capital spending quickly (Box 3.2).

- **Other spending measures** reduce PSNI between 2019-20 and 2022-23, then raise it modestly in 2023-24 and 2024-25. The initial declines reflect the Government's decision not to sell any more tranches of student loans. As these sales raise less than the value of the loans recorded in the public finances, a capital transfer from government to private sector equal to that discount is recorded at the point of sale. Cancelling the sales removes around £2 billion a year of spending from 2019-20 to 2022-23. Scottish Government capital spending has been raised due to higher CDEL.

- These measures affect gross capital spending. To the extent that they add to the public capital stock, they have **indirect effects on depreciation costs**. These broadly follow the path of the cumulative rise in CDEL spending, raising depreciation and reducing PSNI by progressively larger amounts that reach £1.0 billion in 2024-25.

Table 3.30: Changes to public sector net investment since March 2019

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	46.4	50.2	53.6	53.3	54.1	54.4	
March 2020 forecast	44.3	49.1	59.7	69.3	73.2	77.0	79.1
Change	**-2.1**	**-1.0**	**6.2**	**16.1**	**19.1**	**22.6**	
Underlying revisions to spending	**-2.1**	**1.6**	**2.1**	**4.3**	**5.7**	**6.2**	
of which:							
LA and PC capital expenditure	-0.7	2.3	2.3	2.5	3.3	3.4	
Student loans	0.0	0.7	1.3	1.9	2.4	2.5	
Other spending	-1.5	-1.4	-1.5	-0.1	0.0	0.3	
Total effect of Government decisions[1]		**-2.6**	**4.0**	**11.7**	**13.4**	**16.3**	**16.6**
of which:							
Departmental spending[1]		-0.5	5.7	13.4	15.4	16.1	16.7
Other spending measures[2]		-2.2	-1.6	-1.5	-1.5	1.0	1.0
Indirect effects of Government decisions		0.0	-0.1	-0.2	-0.5	-0.8	-1.0
Memo: March 2020 pre-measures forecast	*44.3*	*51.8*	*55.7*	*57.6*	*59.8*	*60.6*	*62.5*

[1] The change in 2024-25 is relative to a basline that assumes DEL would otherwise have remained constant as a share of GDP.

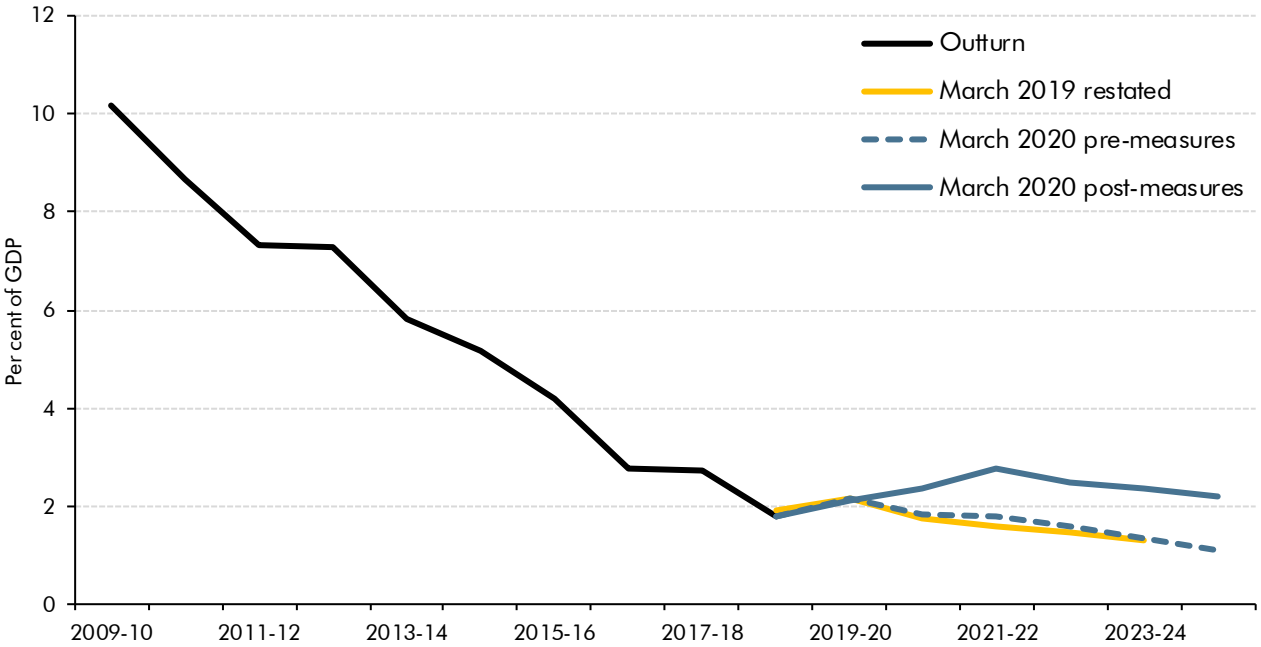
[2] Includes both scorecard and non-scorecard measures. See Annex A for more information.

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.

Public sector net borrowing

3.148 Public sector net borrowing fell from a high of £158.3 billion (10.2 per cent of GDP) in 2009-10 to 1.8 per cent by 2018-19. In our restated March 2019 forecast, we expected the deficit to shrink from £47.6 billion in 2019-20 to £33.3 billion in 2023-24. But, thanks to the fiscal loosening in the Budget, we now expect it to hit a six-year high of £66.7 billion in 2021-22 and to remain at £57.9 billion (2.2 per cent of GDP) in 2024-25.

Chart 3.7: Public sector net borrowing



Source: ONS, OBR

Underlying forecast revisions

3.149 Borrowing in 2018-19 came in £2.5 billion lower than we anticipated in March 2019 (on a like-for-like basis). Nonetheless, on a pre-measures basis we have revised it up by £0.4 billion in 2019-20. This largely reflects upward revisions to borrowing-financed capital spending by local authorities and faster growth in the cost of R&D tax credits. We would not expect either to be reflected in the latest ONS outturns, which are currently still largely based on forecasts (ONS ones for local authorities and our March 2019 ones for tax credits).

3.150 Between 2020-21 and 2023-24, borrowing on a pre-measures basis has been revised up by an average of £3.1 billion a year (as Table 3.31 shows). This is more than explained by upward revisions to public sector net investment – both local authorities' capital spending and higher capital transfers associated with new student loans. That is partly offset by an underlying improvement in the current budget thanks to much lower debt interest spending.

Government decisions

3.151 Government decisions raise borrowing in every year from 2020-21 onwards, nearly doubling the deficit in 2024-25. By 2024-25, £55.5 billion has been added to departmental spending, of which £14.6 billion has in effect been financed by using the direct fiscal savings from Brexit. The Government has also announced a net tax increase of £8.5 billion in that year, dominated by the effect of not going ahead with this April's cut in corporation tax. The indirect effects of the Budget measures offset roughly a quarter of their direct cost, more than explained by higher nominal GDP raising tax receipts and by the fact that a little over 10 per cent of the higher RDEL and Scottish Government current spending comes back to the Exchequer via higher pension contributions. The indirect fiscal cost of the new migration regime and the gain from the higher NLW are modest by comparison.

Table 3.31: Changes to public sector net borrowing

	£ billion						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	41.0	47.6	40.2	37.6	35.4	33.3	
March 2020 forecast	38.4	47.4	54.8	66.7	61.5	60.2	57.9
Change	**-2.5**	**-0.2**	**14.6**	**29.1**	**26.0**	**26.9**	
Underlying revisions	**-2.5**	**0.4**	**2.3**	**5.1**	**3.6**	**1.5**	
of which:							
Receipts[1]	-3.3	-4.9	1.0	3.5	4.1	3.5	
Debt interest	0.5	-2.0	-6.7	-6.6	-7.7	-8.5	
Other spending[1]	0.3	7.3	7.9	8.2	7.1	6.5	
Total effect of Government decisions[2]		**-0.6**	**12.3**	**24.0**	**22.5**	**25.4**	**29.1**
of which:							
Current departmental spending[2]		2.9	15.2	27.0	31.2	34.9	38.9
Capital departmental spending[2]		-0.5	5.7	13.4	15.4	16.1	16.7
Use of direct Brexit fiscal savings		0.0	-4.3	-5.0	-7.1	-11.3	-14.6
Receipts measures[3]		-1.0	-2.0	-4.6	-8.0	-8.6	-8.5
Other spending measures[3]		-2.1	1.1	0.3	0.7	2.6	3.9
Indirect effects of Government decisions		0.0	-3.3	-7.1	-9.7	-8.4	-7.2
of which:							
Due to tax and spending measures		0.0	-3.4	-7.2	-9.7	-8.3	-7.0
Raising the National Living Wage		0.0	0.0	-0.3	-0.6	-0.9	-1.2
New migration regime		0.0	0.0	0.3	0.5	0.8	1.0
Memo: March 2020 pre-measures forecast	*38.4*	*48.1*	*42.5*	*42.7*	*39.0*	*34.9*	*28.8*

[1] Excludes the impact of customs duties switch, which raises receipts and current spending by the same amount.

[2] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.

[3] Includes both scorecard and non-scorecard measures. See Annex A for more information.

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.

Cyclically adjusted net borrowing

3.152 On a pre-measures basis, our forecast for cyclically adjusted net borrowing is a little higher than our restated March 2019 forecast thanks to higher capital spending. As with the cyclically adjusted current budget, the direct effect of Budget tax and spending measures plus the migration and NLW policy changes raised cyclically adjusted net borrowing, while the indirect effects of the Budget measures are partly cyclical. As a result, Government decisions raise cyclically adjusted borrowing more than headline borrowing in the near term, but by similar amounts at the end of the forecast. On this measure, the deficit rises to 3.0 per cent of GDP in 2021-22 before falling back to 2.2 per cent by 2024-25.

Box 3.6: The effect of the new migration regime on our fiscal forecast

In Box 2.4 we described the new 'points-based' immigration system that the Government intends to introduce from January 2021, aligning the rules for EU and non-EU migrants.[a] Relative to the current regime, this is more restrictive for EU migrants but modestly less so for non-EU migrants. Successful implementation of the new regime by January looks challenging.

In our economy forecast, we assume that this reduces the size of the population and total employment in 2024-25 by 0.4 per cent as it reduces net inward migration. This reduction is concentrated among people on lower-than-average earnings reflecting the £25,600 salary cap, so the effect on nominal GDP in 2024-25 is smaller at 0.3 per cent.

In this box we describe how these changes have affected our fiscal forecast. This is a narrower question than the full fiscal impact of migrants that some bodies have sought to answer, since our forecasts take departmental spending plans set by the Government – we do not forecast the cost of providing, say, health services or education to the population. This means that lower net inward migration raises departmental spending *per person*, rather than reducing the total.

As Table D shows, the largest effects on our forecast are the savings from lower welfare spending that is offset by the cost of lower income tax and NICs receipts. With departmental spending fixed, the additional costs from lower tax receipts on consumer spending and on company profits means the overall effect on our forecast is to add to borrowing. For all but welfare spending and income taxes, we have calculated these effects by assuming that the reduction in nominal tax bases is broadly in line with the reduction in nominal GDP. For those two items we have modelled the effects at a more granular level:

- For **welfare benefits**, we have drawn on DWP and HMRC administrative data that matches nationality at point of application for a National Insurance number, tax, earnings and benefit records. It suggests that fewer than 10 per cent of existing EEA benefit claimants would have a salary above the £25,600 threshold. Savings from lower migration under this salary threshold build up to £0.5 billion a year by 2024-25, equivalent to 0.4 per cent of working-age and child welfare spending in that year. (This means that the Budget announcement tightening migrants' access to benefits saves little as most of the benefit spending on this group ceases as a result of the migration regime.)
- For **income tax and NICs**, we estimate the effect of lower migration on wages and salaries based on the reduction in the size of the workforce and average earnings under the salary cap – this is a reduction of 0.3 per cent in 2024-25. We then calculate an effective tax rate on those lost earnings drawing on evidence from HMRC's Survey of Personal Incomes. This yields a loss of income tax and NICs receipts that rises to £0.6 billion in 2024-25, equivalent to 0.1 per cent of the total in that year.

These estimates are necessarily a simplification of what can be expected in reality and are subject to significant uncertainty. In particular, they focus only on those who would not qualify to come to the UK because they are below the income threshold. They do not take account of the potential deterrent effect of the new system on those above the income threshold (who would still incur extra costs and hassle to move to the UK), where losses would be larger. Nor do they take account of initially low-income migrants' earnings rising during their time in the UK.

Table D: The effect of the new migration regime on our borrowing forecast

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total effect on net borrowing	**0.0**	**0.0**	**0.3**	**0.5**	**0.8**	**1.0**
of which:						
Welfare spending	0.0	0.0	0.0	-0.1	-0.3	-0.5
Income tax and NICs receipts	0.0	0.0	0.1	0.3	0.4	0.6
VAT and excise duty receipts	0.0	0.0	0.1	0.3	0.4	0.5
Corporation tax receipts	0.0	0.0	0.0	0.1	0.1	0.1
Other receipts	0.0	0.0	0.0	0.1	0.1	0.2

Alongside the Migration Advisory Committee's (MAC) latest report, Oxford Economics updated its analysis of EU migrants' fiscal contribution. This sought to answer the broader question than the one we answer in this box, including the cost of providing public services.[b] It estimated the net fiscal contribution of those who would be ineligible under a salary threshold of £30,000 – as the MAC had been asked to consider – to be *minus* £2,200 a year. The report also showed that the net fiscal contribution moved from negative to positive at a salary of around £20,000 (depending on age), so the net fiscal contribution of those below a £25,600 cap would be more negative than £2,200 a year. The difference between Oxford Economics' finding that cutting out such migration would boost the public finances and the negative effect the new migration regime change has had on our forecast reflects the fixed departmental spending totals. If departmental spending were 0.4 per cent lower in 2024-25, spending would be £2.0 billion lower, turning the negative impact on our forecast into a positive one.

[a] In most cases the existing rules for EU migrants also apply to those from the wider European Economic Area (EEA) and Switzerland. Irish citizens will continue to have freedom of movement within the Common Travel Area.

[b] Oxford Economics, *The Fiscal Impact of Immigration on the UK*, June 2018 and *The Fiscal Contribution of EU Migrants: Update and Scenario Analysis*, January 2020.

Our latest forecast revisions in context

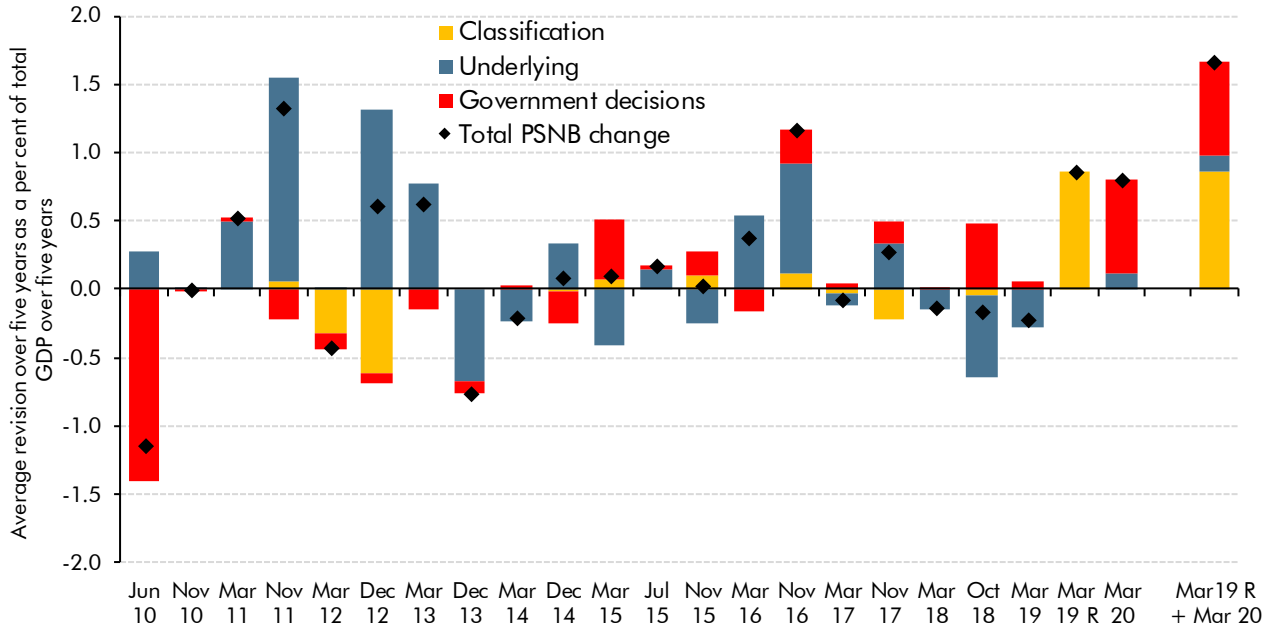
3.153 The forecasts for public sector net borrowing in this *EFO* are the twenty-first that we have published since the OBR was created in 2010 (together with one statistical restatement). As Chart 3.8 illustrates, the average upward revision to the deficit in this forecast of 0.8 per cent of GDP is the third largest over that period, exceeded only in November 2011 and November 2016.[20] These were both occasions on which we revised the outlook for potential GDP growth significantly lower, thanks largely to the EU referendum vote in the latter case.

3.154 Combining the classification changes that we presented in December when restating our March 2019 forecast – but that in normal circumstances would have been reflected alongside an updated pre-measures forecast and the effect of new policy decisions – the upward revision since our original March 2019 forecast is the largest we have made.

[20] Excluding the December 2019 restatement of the March 2019 forecast.

3.155 In contrast to previous large upward revisions – and despite the fact that almost a year has elapsed since our last full forecast – the underlying outlook for borrowing is little changed in this *EFO*. The average upward revision to the pre-measures deficit of just 0.1 per cent of GDP is the third smallest of the 13 upward revisions we have made over the past decade and the fourth smallest revision in either direction out of 21. By contrast, the Government's policy decisions have raised the deficit by 0.7 per cent of GDP on average, almost half as much again as the previous largest policy loosening in Budget 2018. The only time fiscal policy has been changed by a larger margin was the 1.4 per cent of GDP average fiscal tightening in the Coalition Government's first Budget in June 2010, when it set out its plans to reduce the post-crisis budget deficit that it had inherited.

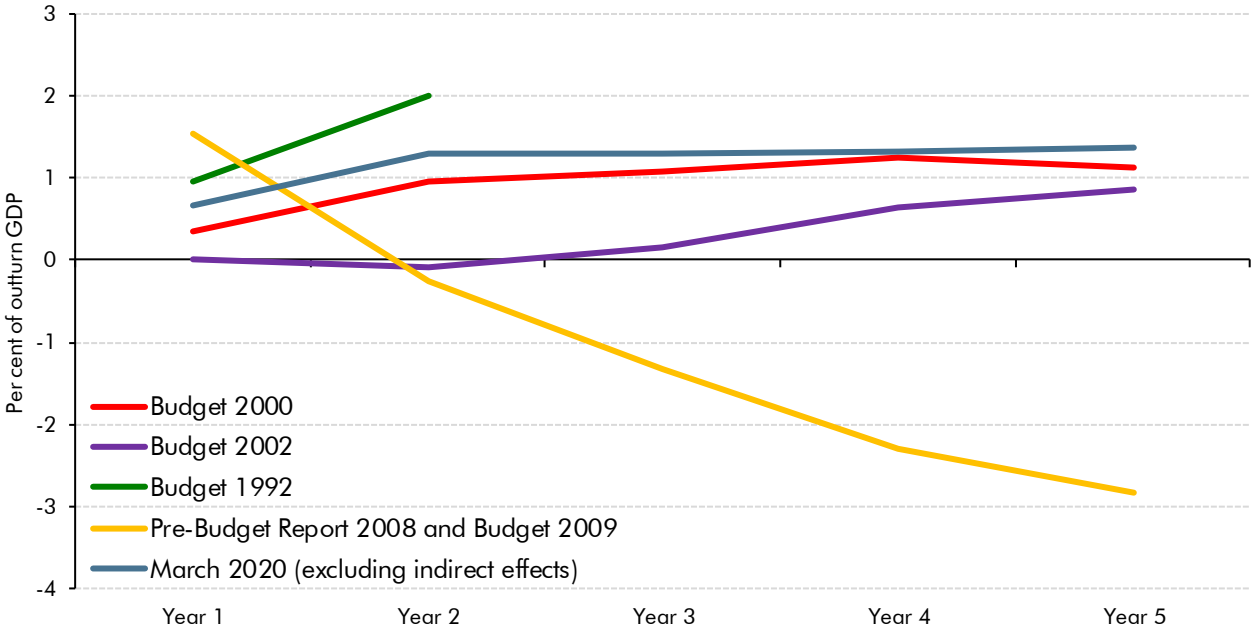
Chart 3.8: Average revisions to borrowing since June 2010



Source: OBR

3.156 Looking further back in time (Chart 3.9), this looks like the largest planned sustained giveaway at any fiscal event since Norman Lamont's ill-fated pre-election Budget in 1992 (which was more than reversed within a matter of months after sterling crashed out of the European exchange rate mechanism). It is modestly greater than the giveaway in Gordon Brown's 2000 Budget, which – like this Budget – was dominated by public spending increases. Mr Brown judged that he had room for largesse then because of the robust performance of tax receipts, but this was soon dented by the bursting of the dotcom bubble.

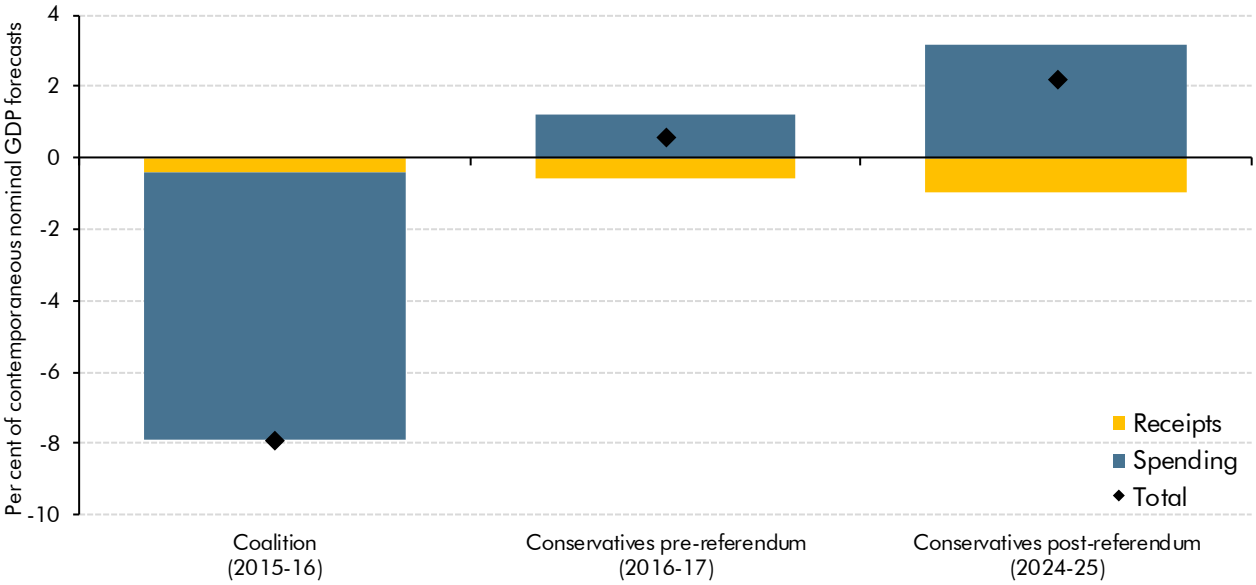
Chart 3.9: Major fiscal giveaways and takeaways



Source: HM Treasury, OBR

3.157 The scale of the fiscal loosening in this Budget is all the more unusual for taking place at the first fiscal event following a general election, which governments in the past have tended to see as their best opportunity to take unpopular decisions on tax and spending. It is the latest in a series of giveaway fiscal events since the Conservatives won the 2015 election – and more particularly since the referendum vote to leave the EU in June 2016. As Chart 3.10 illustrates, fiscal events to date under the Conservatives have reversed almost a third of the fiscal tightening announced by the preceding Coalition Government, judging by their (roughly) estimated impact on borrowing at the current forecast horizon of 2024-25.

Chart 3.10: Cumulative impact of policy decisions on borrowing in 2024-25



Note: March 2015 and July 2015 fiscal events have been combined in the Conservatives pre-referendum calculation because the Liberal Democrats put forward an alternative Budget ahead of the 2015 election.
Source: OBR

3.158 As we discuss in more detail in Chapter 4, the giveaways in this Budget move the Government further away from the 'fiscal objective' of a balanced budget that has been legislated for in its *Charter for Budget Responsibility* since January 2017, but which was already being downplayed ahead of the election. Having been on course to achieve a (tiny) budget surplus in 2023-24 in our October 2018 pre-measures forecast, our latest forecast points to a deficit of £60.2 billion (2.4 per cent of GDP in that year) – thanks in part to statistical classification changes but mostly to the giveaways in this and the 2018 Budget.

Balance sheet aggregates

Generating our balance sheet forecasts

3.159 We forecast several measures of the public sector balance sheet. For two decades, the headline measure has been public sector net debt (PSND). We forecast this in two stages:

- First, by forecasting the **financial transactions** that reconcile public sector net borrowing (PSNB) – the deficit on an accrued basis – with the public sector net cash requirement (PSNCR) – the deficit on a cash basis. These include loans and repayments between the public and private sectors, sales or purchases of financial assets, Bank of England schemes, and various timing effects.

- Second, we forecast the **valuation effects** and (when necessary) impact of **classification changes** that reconcile the PSNCR with the year-on-year change in PSND.

3.160 Table 3.32 sets out our latest forecast for these lines. Table 3.33 shows changes relative to our restated March 2019 forecast, which reflected several ONS statistical changes.

3.161 We use similar approaches to forecast other balance sheet aggregates, starting from the relevant deficit measure and adding other elements as required.

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

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Year-on-year change in PSND (a+b+c+d)	**25.4**	**19.4**	**8.9**	**72.5**	**69.2**	**62.2**
Public sector net borrowing (a)	**47.4**	**54.8**	**66.7**	**61.5**	**60.2**	**57.9**
Financial transactions (b)	**-15.1**	**-29.5**	**-60.3**	**10.8**	**6.3**	**12.8**
of which:						
DEL net lending	**5.5**	**6.0**	**4.3**	**4.5**	**2.0**	**2.0**
Help to Buy outlays	3.6	3.8	2.2	2.5		
Other housing schemes	0.4	0.3				
Devolved administrations	0.3	0.5				
Other DEL	1.3	1.7				
DEL beyond current Spending Review			2.7	2.7	2.6	2.6
Allowance for shortfall	-0.1	-0.3	-0.6	-0.6	-0.6	-0.6
Other government net lending	**6.1**	**6.8**	**7.3**	**7.0**	**5.5**	**4.9**
Student loan outlays[1]	9.3	9.6	10.0	10.5	11.0	11.6
Student loan repayments[2]	-3.3	-3.7	-4.2	-4.6	-5.0	-5.4
Loan to Ireland	-1.6	-1.6				
Scottish Government	0.7	0.8	0.8	0.9	0.9	0.9
UK Export Finance	0.6	1.9	1.4	1.2	0.5	0.2
Other AME	1.3	1.3	1.1	1.4	0.8	0.4
Help to Buy repayments	-0.9	-1.5	-2.0	-2.4	-2.7	-2.8
Sales or purchases of financial assets	**-5.4**	**-10.5**	**-3.5**	**-4.1**	**-3.6**	**-3.3**
Student loans	0.0	0.0	0.0	0.0	0.0	0.0
RBS shares	0.0	-3.8	-3.6	-4.2	-3.3	-3.3
UKAR asset sales and rundown	-4.7	-5.5	0.0	0.0	-0.3	0.0
Other sales	-0.7	-1.2	0.0	0.0	0.0	0.0
Bank of England schemes	**-14.3**	**-43.7**	**-63.4**	**0.0**	**0.0**	**0.0**
Cash flow timing effects	**-7.0**	**11.9**	**-4.9**	**3.4**	**2.4**	**9.2**
Student loan interest[2]	2.8	2.9	3.2	3.8	4.5	4.9
Corporation tax	-6.8	-0.8	2.4	1.9	1.6	1.6
Other receipts	5.7	7.0	5.2	4.0	4.6	4.3
Funded public pension schemes	-1.7	-1.9	-1.9	-2.0	-2.1	-2.1
Index-linked gilt uplift[3]	-10.4	0.5	-13.9	-7.0	-9.4	-2.9
Other gilt accruals	4.4	4.6	4.4	5.0	5.4	5.6
Other expenditure	-1.0	-0.5	-4.4	-2.3	-2.2	-2.2
Public sector net cash requirement (a+b)	*32.3*	*25.3*	*6.3*	*72.2*	*66.5*	*70.8*
Valuation effects (c)	**-6.9**	**-5.9**	**2.6**	**0.2**	**2.7**	**-8.6**
of which:						
Gilt premia	-13.1	-8.5	-8.0	-7.5	-7.1	-8.6
Asset Purchase Facility gilt premia	3.2	1.5	-3.2	0.8	0.5	-2.9
Index-linked gilts uplift[3]	10.4	-0.5	13.9	7.0	9.4	2.9
International reserves	-7.4	1.6	-0.1	-0.1	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: Changes to the public sector net debt profile since March 2019

	£ billion				
	Forecast				
	2019-20	2020-21	2021-22	2022-23	2023-24
Year-on-year change in PSND (a+b+c+d)	**-12.5**	**26.6**	**37.8**	**26.9**	**25.9**
Public sector net borrowing (a)	**-0.2**	**14.6**	**29.1**	**26.0**	**26.9**
Financial transactions (b)	**-0.1**	**11.9**	**8.0**	**2.5**	**1.5**
of which:					
DEL net lending	**-0.5**	**-0.4**	**-1.6**	**-1.9**	**-0.3**
Help to Buy outlays	-0.4	-0.4	-1.0	-1.2	
Other housing schemes	-0.1	-0.3			
Devolved administrations	-0.2	0.0			
Other DEL	0.0	0.3			
DEL beyond current Spending Review	-	-	-0.6	-0.7	-0.3
Allowance for shortfall	0.2	0.0	0.0	0.0	0.0
Other government net lending	**-1.3**	**-1.2**	**-1.9**	**-1.3**	**-2.0**
Student loan outlays[1]	-0.6	-0.9	-1.2	-1.2	-1.2
Student loan repayments[2]	-1.0	-1.4	-1.7	-2.0	-2.1
Loan to Ireland	0.0	0.0			
Scottish Government	0.2	0.1	0.4	0.4	0.8
UK Export Finance	0.0	0.9	0.6	1.1	0.4
Other AME	-0.1	0.2	0.1	0.5	0.2
Help to Buy repayments	0.2	0.0	-0.1	0.0	0.1
Sales or purchases of financial assets	**13.0**	**-3.3**	**5.2**	**5.7**	**2.4**
Student loans	4.6	4.7	5.0	5.2	0.0
RBS shares	3.6	-1.4	0.1	0.5	2.6
UKAR asset sales and rundown	4.9	-5.5	0.0	0.0	-0.3
Other sales	-0.1	-1.2	0.0	0.0	0.0
Bank of England schemes	**-14.3**	**7.5**	**6.9**	**0.0**	**0.0**
Cash flow timing effects	**3.1**	**9.3**	**-0.6**	**0.1**	**1.3**
Student loan interest[2]	0.0	-0.1	-0.1	-0.1	0.1
Corporation tax	-2.2	1.9	0.6	0.2	0.0
Other receipts	1.2	1.3	0.5	-0.4	-0.1
Funded public pension schemes	0.1	0.1	0.1	0.1	0.1
Index-linked gilt uplift[3]	2.2	3.1	0.4	0.4	0.9
Other gilt accruals	0.3	0.5	0.5	0.6	0.7
Other expenditure	1.6	2.5	-2.5	-0.7	-0.4
Public sector net cash requirement (a+b)	*-0.3*	*26.4*	*37.1*	*28.5*	*28.4*
Valuation effects (c)	**-12.1**	**0.2**	**0.7**	**-1.7**	**-2.4**
of which:					
Gilt premia	-5.0	0.9	-0.8	-1.2	-1.6
Asset Purchase Facility gilt premia	2.9	1.0	2.2	0.2	0.2
Index-linked gilts uplift[3]	-2.2	-3.1	-0.4	-0.4	-0.9
International reserves	-7.9	1.4	-0.2	-0.2	-0.2
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.

Public sector net cash requirement

3.162 Table 3.32 shows that the PSNCR is positive in every year of the forecast, with financing for the deficit being the main driver. Financial transactions reduce the PSNCR up to 2021-22, dominated by repayment of the Bank of England's Term Funding Scheme (TFS) loans. In the final three years of the forecast, financial transactions add to the PSNCR as government lending outweighs proceeds from asset sales.

3.163 Table 3.33 shows changes since our restated March 2019 forecast. PSNCR is higher in all years from 2020-21, thanks to higher borrowing (largely as a result of Budget measures) and TFS loans being repaid earlier than we had previously assumed (which brings cash receipts forward into 2019-20). The cancellation and delay of asset sales increases PSNCR in all years except 2020-21, which benefits from sales that have slipped from 2019-20.

Loans and repayments

3.164 As regards loans and repayments between the public and private sectors:

- The Government's forecasts for **lending within the DEL envelope** have been revised down in the years to 2022-23, largely reflecting lower expected lending through the Help to Buy: Equity Loan scheme. Help to Buy lending has been reduced both by a policy announced at this Budget that restricts eligibility and a change to the forecasting methodology that brings it more into line with our central forecast.

- We have revised down **financial transactions relating to student loan outlays** – i.e. the portion of outlays that is not treated as spending. Despite revising up outlays in total this is outweighed by a greater proportion being recorded as spending rather than lending. Policy changes have modestly reduced outlays.

- In the Budget, the Government has announced plans to increase **lending through UK Export Finance**. UKEF's total lending capacity has been increased by £3 billion, adding to the £2 billion increase announced at Budget 2018.

Sales and purchases of financial assets

3.165 At Budget 2019 the Government planned to sell £42 billion of financial assets between 2019-20 and 2023-24. Chart 3.11 shows that this has been revised down by £11 billion in this forecast, thanks to various delays and cancellations. The largest effect is in 2019-20, where proceeds have been revised down from £16.4 billion to £5.4 billion. Overall:

- Sales of **Plan 1 student loans** have been cancelled. The Treasury's review of the sales concluded that "*Following the Office for National Statistics' change in the accounting treatment of student loans, loan sales now have a significant negative impact on public sector net borrowing*" and that "*The government has therefore taken the decision that it will no longer proceed with further sales of student loans.*"[21] The real-world impact of

[21] HM Treasury, *Review of the student loan programme: Budget 2020*, March 2020.

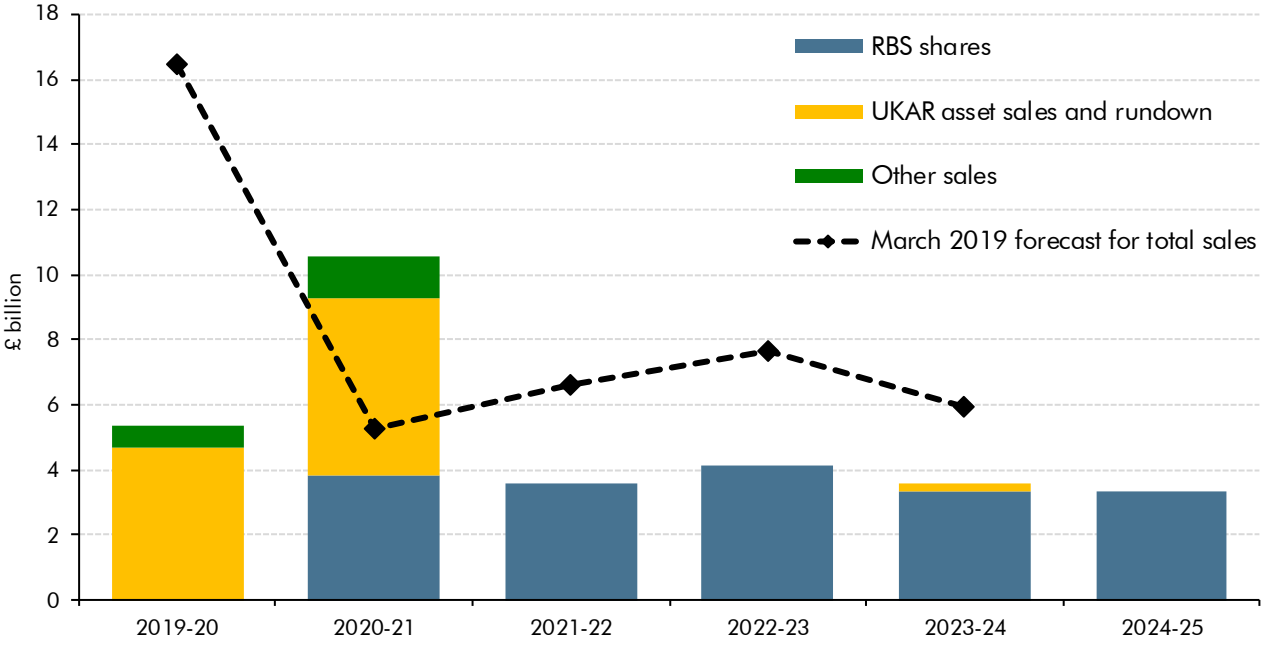
student loan sales is unaffected by the way the ONS accounts for them, so this change of heart might suggest to the cynical that the previous policy – of selling loans for less than they are valued on the government's books, justified with reference to the 'value for money' criteria in the Treasury's Green Book – was undertaken at least in part to exploit the 'fiscal illusions' created by the previous accounting treatment and thereby create the impression that by selling loans the government was strengthening the public finances. (We discussed this perverse incentive in Box 4.4 of our October 2018 *EFO*.) The cancellation of the Plan 1 sales foregoes cash proceeds of £11.3 billion. This raises PSND, but also removes the associated capital transfers recorded in spending by £8.5 billion, which would otherwise have raised public sector net financial liabilities (better reflecting their effect on fiscal sustainability more broadly).

- The final large sale of **UKAR assets** has been delayed and is now expected to be completed in early 2020-21 rather than late 2019-20.

- The Government has not sold any **RBS shares** so far in 2019-20 and we judge that it is unlikely that any sale will occur in the remainder of the year. The Government still plans to sell all its RBS shares, but now over a longer period up to 2024-25. Our forecast for overall proceeds has been reduced in line with the lower RBS share price.

- Sales of further tranches of **spectrum licenses** have been delayed. We have revised up expected gross proceeds from £0.5 billion in 2019-20 to £1.3 billion in 2020-21, which reflects Ofcom dropping some coverage obligations and the Government agreeing to pay half the construction costs, in return for the four main mobile operators delivering a 'Shared Rural Network'.

Chart 3.11: Proceeds from financial asset sales



Source: HM Treasury, OBR

Bank of England schemes

3.166 As of 19 February, £13.8 billion of TFS loans had been repaid in 2019-20 rather than at maturity as we had previously assumed. We have assumed this will rise to £14.3 billion by the end of the year and that these repayments relate to loans due in 2020-21. We have also assumed that some loans due in 2021-22 will be repaid early in 2020-21.

Timing effects

3.167 As regards cashflow timing effects and abstracting from the RPI uplift on index-linked gilts (which offsets in valuation effects):

- The **cancellation of the corporation tax cut** discussed earlier in this chapter increases cash receipts by £2.1 billion relative to accruals.

- Cash **VAT receipts** are forecast to be increased by £3.6 billion relative to accrued receipts this year from a delay in the payment date for VAT on imports from outside the EU. This has a large effect in 2019-20, when there will in effect be only 11 months of import VAT payments, with much smaller continuing effects in subsequent years.

Public sector net debt

3.168 Higher nominal GDP reduces PSND relative to GDP in all years of the forecast, on average by 1.1 percentage points. Underlying forecast revisions also reduce cash debt in all years, though by decreasing amounts across the forecast. Government policy decisions add progressively more to debt, reaching £125 billion in 2024-25. Consequently, net debt is now essentially flat as a share of GDP in the later years of the forecast (once the Bank of England's TFS loans have been repaid), having been declining in our March 2019 forecast.

3.169 As regards underlying forecast revisions, cumulative borrowing raises cash debt modestly by 2023-24, while a weaker pound raises the sterling value of the foreign currency reserves by a broadly offsetting amount. The early repayment of TFS loans reduces debt in the early years of the forecast, but that effect unwinds by 2021-22 once they have all been repaid.

3.170 As regards Government decisions:

- The direct effects of the Budget package on **public sector net borrowing** adds progressively more to debt over the period, reaching £148 billion in 2024-25.

- **Delays and cancellations to asset sales** also add steadily to debt. Delaying the sale of UKAR and RBS assets increases debt at the start of the period, but this largely unwinds over the forecast. The cancellation of student loans sales raises our debt forecast by increasing amounts due to the proceeds foregone. This accounts for the majority of the £11 billion upward revision to debt from this source in 2024-25.

- The **wider effects of policy measures on the economy** – including the temporary effects of the Budget package and the persistent ones of the new migration regime and

higher path for the National Living Wage – partly offset these direct effects. Overall they reduce debt by £36 billion in 2024-25.

Table 3.34: Changes to public sector net debt since March 2019

	Per cent of GDP						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Restated March 2019 forecast	82.2	81.3	78.2	74.3	73.6	72.7	
March 2020 forecast	80.6	79.5	77.4	75.0	75.4	75.6	75.2
Like-for-like change	**-1.5**	**-1.8**	**-0.8**	**0.7**	**1.9**	**2.9**	
of which:							
Change in nominal GDP[1]	-1.3	-1.0	-1.1	-1.2	-1.0	-0.9	
Change in cash level of net debt	-0.3	-0.8	0.4	1.9	2.9	3.8	
	£ billion						
Restated March 2019 forecast	1,779	1,817	1,810	1,781	1,827	1,870	
March 2020 forecast	1,774	1,799	1,818	1,827	1,900	1,969	2,031
Like-for-like change in cash debt	**-6**	**-18**	**8**	**46**	**73**	**99**	
of which:							
Underlying forecast revisions	**-6**	**-29**	**-20**	**-7**	**-5**	**-3**	
Public sector net borrowing (pre-measures)	-3	-2	0	5	9	10	
Financial transactions (pre-measures)	-4	-17	-7	0	0	1	
Valuation changes	1	-10	-13	-12	-14	-15	
Effect of Government decisions		**11**	**28**	**54**	**78**	**102**	**125**
Affecting public sector net borrowing		-1	15	46	78	112	148
Affecting financial transactions		13	11	12	16	17	12
Indirect effects		-1	3	-5	-16	-27	-36

[1] Non-seasonally adjusted GDP centred end-March.

Central government net cash requirement

3.171 The central government net cash requirement (CGNCR) is a key determinant of the Government's net financing requirement. Table 3.35 reconciles CGNCR with PSNCR (by removing transactions associated with local authorities and public corporations) and Table 3.36 sets out the changes in this reconciliation since March. Relative to the restated March forecast, public corporations' net cash requirement has changed largely due to the profile of Bank of England TFS loan repayments, while CGNCR ex is £20.6 billion higher on average across the forecast largely reflecting the Government's policy changes.

3.172 The inclusion of Bradford & Bingley (B&B), Northern Rock Asset Management (NRAM) and Network Rail in the central government sector means that the CGNCR is not simply a measure of the cash required by the Exchequer to fund its operations. Excluding these bodies to forecast the Government's net financing requirement involves adjustments for:[22]

[22] The Government is confirming the financing remit for 2019-20 and setting the remit for 2020-21 alongside this Budget. The OBR provides the Government with the forecast of the CGNCR for this purpose, but plays no further role in the derivation of the net financing requirement.

- The difference between the **net cash received by B&B and NRAM and that transferred to central government**. This adjustment ceases from 2020-21 onwards as our forecast assumes that the rundown of bodies will have been completed next year.

- The Treasury financing **Network Rail's new and maturing debt** for a fee. Refinancing needs are estimated at £2.6 billion over the forecast.

Table 3.35: Reconciliation of PSNCR and CGNCR

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector net cash requirement (NCR)	**32.3**	**25.3**	**6.3**	**72.2**	**66.5**	**70.8**
of which:						
Local authorities and public corporations NCR	-6.2	-34.7	-62.0	6.6	7.2	3.1
Central government (CG) NCR own account	38.5	60.0	68.3	65.6	59.3	67.7
CGNCR own account	38.5	60.0	68.3	65.6	59.3	67.7
Net lending within the public sector	5.7	4.9	4.8	4.8	4.7	4.6
CG net cash requirement	**44.2**	**64.8**	**73.1**	**70.4**	**64.0**	**72.2**
B&B and NRAM adjustment	-0.5	0.0	0.0	0.0	0.0	0.0
Network Rail adjustment	-0.6	0.4	-0.1	-0.5	0.0	0.3
CGNCR ex. B&B, NRAM and Network Rail	**43.1**	**65.3**	**73.0**	**69.9**	**64.0**	**72.6**

Table 3.36: Changes in the reconciliation of PSNCR and CGNCR

	£ billion				
	Forecast				
	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector net cash requirement (NCR)	**-0.3**	**26.4**	**37.1**	**28.5**	**28.4**
of which:					
Local authorities and public corporations NCR	-14.0	13.0	9.9	3.7	4.4
Central government (CG) NCR own account	13.7	13.4	27.2	24.8	23.9
CGNCR own account	13.7	13.4	27.2	24.8	23.9
Net lending within the public sector	1.5	0.4	0.1	-0.2	-0.6
CG net cash requirement	**15.1**	**13.8**	**27.3**	**24.6**	**23.4**
B&B and NRAM adjustment	0.0	0.0	0.0	0.0	0.0
Network Rail adjustment	0.0	0.0	0.2	0.0	-0.8
CGNCR ex. B&B, NRAM and Network Rail	**15.1**	**13.8**	**27.5**	**24.6**	**22.6**

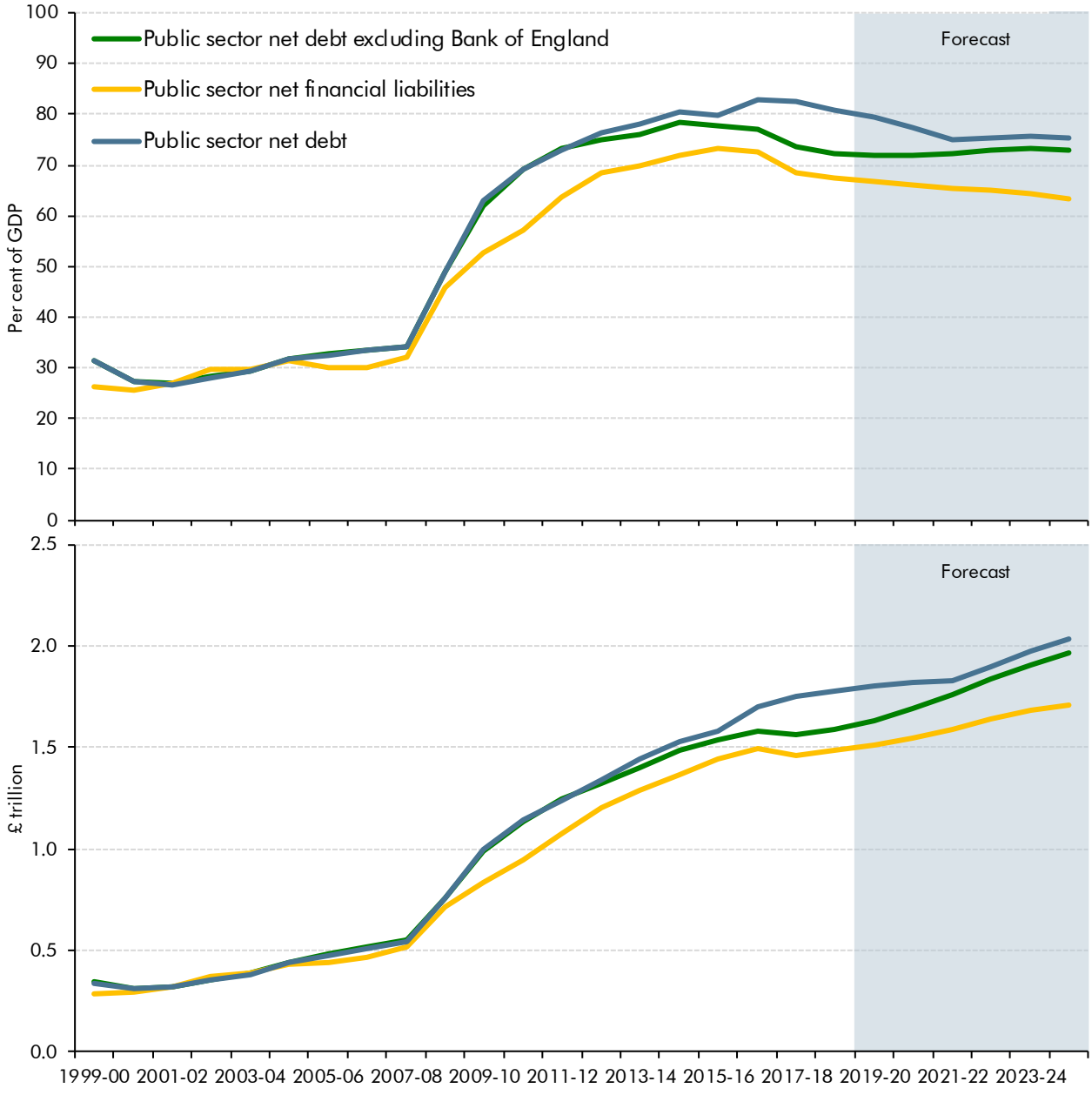
Alternative balance sheet aggregates

3.173 Our *Fiscal risks reports* have discussed various ways in which PSND is not a reliable metric for assessing the underlying health of the public finances. It includes only a limited range of liabilities and an even smaller range of 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 – particularly when selling illiquid assets.

3.174 Alternative metrics often do a better job than PSND of reflecting the underlying picture, although none is perfect. PSND excluding the Bank of England removes the distortions caused by the TFS, while public sector net financial liabilities (PSNFL) provides a more

realistic picture of the effect of asset sales. Chart 3.12 shows that the paths of both measures are much smoother than PSND, especially when the TFS loans are being repaid.

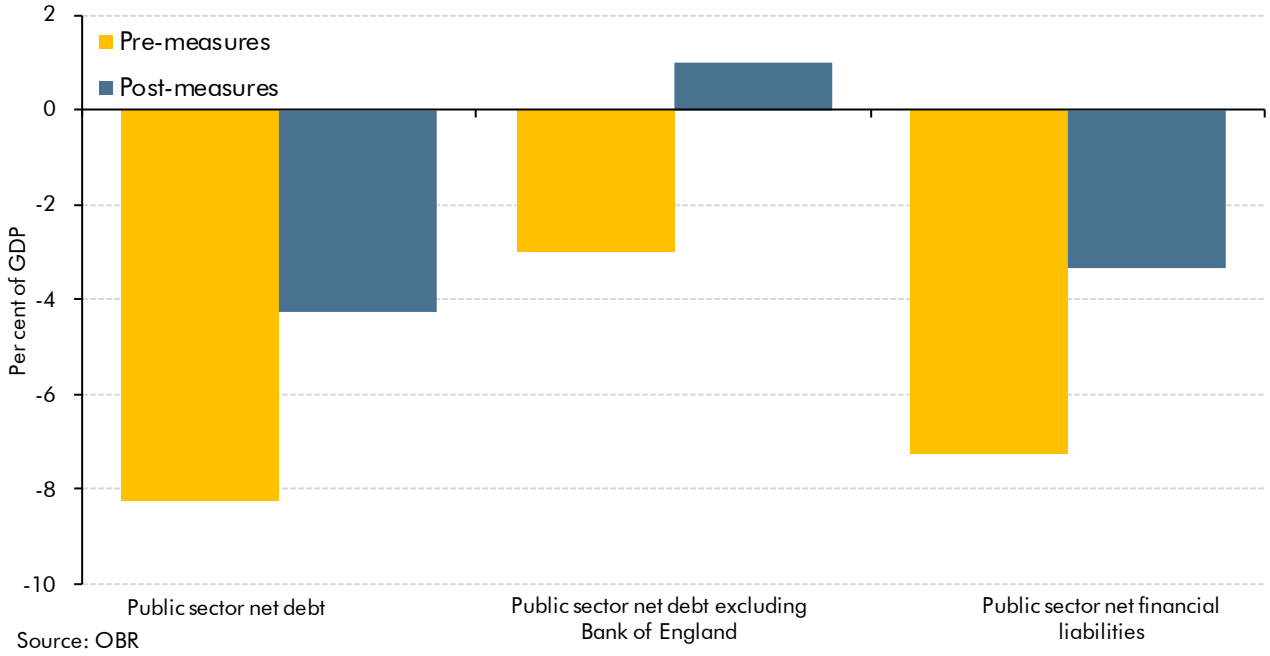
Chart 3.12: The public sector balance sheet: various measures



Source: ONS, OBR

3.175 Chart 3.13 shows the change between 2019-20 and 2024-25 for each of these metrics on a pre- and post-measures basis. All three fall pre-measures, with the measure excluding the Bank of England falling the least. The post-measures improvements are around 4 per cent of GDP smaller, with PSND excluding the Bank of England actually rising slightly. Headline PSND still falls as TFS loans are repaid and PSNFL still declines as assets not included in PSND (such as student loans and those of funded pensions schemes) increase in value.

Chart 3.13: Balance sheet changes between 2019-20 and 2024-25



Source: OBR

Financing and the balance sheet

3.176 Our debt interest forecast requires us to judge how changes in PSND translate into movements in the stocks of assets and liabilities on the public sector balance sheet.

3.177 At each Budget and Spring Statement, the Government states how it intends to meet its financing needs in the 'financing remit'.[23] This calculates the gross financing requirement from our forecast for CGNCR ex, the amount of gilts redeeming, any plans for additional financing of the foreign exchange reserves and adjustments as necessary for any under- or over-financing from the previous year. Alongside this Budget the Government has confirmed the financing arithmetic for 2019-20 and published initial plans for 2020-21.

3.178 The Government usually meets most of its gross financing requirement by issuing gilts.[24] The rest is met via changes to the stock of Treasury bills, from NS&I products (such as premium bonds) or from other sources. As Table 3.37 shows, 89 per cent of the 2019-20 gross financing requirement (which is largely complete) is expected to be met by issuing gilts.

3.179 In our March 2019 forecast, the remit for 2019-20 intended index-linked gilts (ILGs) to make up 20.7 per cent of all gilts issued. Since then the Government has revised the remit several times, expanding gilt sales by £22.7 billion in anticipation of larger financing needs. The extra sales have mostly been of conventional gilts, so the proportion of ILGs in 2019-20 issuance is now expected to be just 16.5 per cent.

[23] HM Treasury, *Debt management report 2019-20*, 2020.
[24] The financing remit does not allocate all gilt issuance (leaving the DMO with some flexibility through the year), so we assume that the unallocated portion will ultimately be allocated in proportion to announced sales. We also assume that changes in the DMO's net cash position are met entirely by reductions in its assets.

3.180 In our March 2019 forecast, and in line with the Government's stated plan, the proportion of ILGs was assumed to fall by 1.5 percentage points each year over the remainder of the forecast. Had our forecast at the time extended to 2024-25, the ILG proportion would have fallen to 13.2 per cent in that year. In its remit for 2020-21, the Government plans to issue 13.2 per cent of gilts as ILGs. So absent any further clarification of what this means for future financing plans, we have assumed that the proportion of ILGs will remain at this level.

3.181 In the remit for 2020-21, Government has accommodated the decline in the proportion of ILGs issued primarily by issuing 'short' (up to 7 years) conventional gilts. Our March 2019 forecast assumed these would make up 27.9 per cent of total gilt issuance whereas the plan is now 33.7 per cent. The higher share of shorter maturity gilts reduces debt interest costs (all else equal), but at the expense of a greater sensitivity to gilt rate movements as the debt will have to be rolled over sooner.

Table 3.37: Total gross financing

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Central government net cash requirement[1]	43.1	65.3	73.1	69.9	64.0	72.6
Gilt redemptions	98.9	97.6	79.3	73.3	71.8	90.6
Financing for the reserves	6.0	0.0	0.0	0.0	0.0	0.0
Change in DMO cash position[2]	0.5	0.0	0.0	0.0	0.0	0.0
Total gross financing	**148.5**	**162.9**	**152.4**	**143.2**	**135.8**	**163.2**
of which:						
Conventional gilts	110.2	133.6	126.8	119.0	112.7	136.1
Index-linked gilts	22.1	22.7	21.5	20.2	19.1	23.1
Treasury bills	6.0	0.0	0.0	0.0	0.0	0.0
NS&I	10.1	6.0	4.0	4.0	4.0	4.0
Other central government	0.1	0.6	0.1	0.0	0.0	-0.1

[1] Excluding Northern Rock, Bradford and Bingley, and Network Rail.
[2] Change in Debt Management Office cash position.

3.182 Table 3.38 shows how we expect the public sector's debt liabilities and liquid financial assets to evolve over the forecast.[25] The table is presented in line with that used by the ONS in the monthly public sector finances release: general government and non-financial public corporations are presented gross, but the Bank of England is shown only on a net basis.

3.183 The overall level of public sector debt liabilities reduces slightly over the forecast with the stock of index-linked gilts declining most as a result of the Government's plan to reduce its exposure to these instruments. The stock of conventional gilts rises across the forecast as they remain the Government's main source of financing. Assets decline as a share of GDP, most notably in the reserves; in recent years the cash level of the reserves has been boosted by regular financing through the remit and by a recent temporary boost to the reserves. The Government does not plan more cash injections in the forecast period and so the level declines as a share of GDP. By far the largest contribution to falling debt comes from the Bank of England as reserves fall when TFS loans are repaid.

[25] A similar table for PSNFL assets and liabilities is presented in the supplementary fiscal tables accompanying this forecast.

Table 3.38: The composition of public sector net debt

	Per cent of GDP[1]					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector debt liabilities[2] (a)	**81.3**	**80.8**	**81.2**	**81.3**	**81.3**	**81.0**
of which:						
Conventional gilts	46.9	47.1	47.3	48.2	48.8	49.1
Index-linked gilts	19.7	19.2	19.6	19.2	18.8	18.4
T-bills	3.6	3.4	3.3	3.2	3.1	3.0
NS&I	7.8	7.8	7.7	7.6	7.5	7.4
Other central government	2.9	2.8	2.7	2.6	2.5	2.4
Local government[3]	0.9	1.0	1.1	1.2	1.2	1.3
Non-financial public corporations[4] (b)	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
Public sector liquid assets[2] (c)	**9.4**	**8.8**	**8.8**	**8.5**	**8.2**	**8.1**
of which:						
Reserves	5.6	5.3	5.1	5.0	4.8	4.6
Other central government	1.9	1.8	1.7	1.7	1.6	1.5
Local government[3]	1.0	0.8	0.8	0.7	0.7	0.7
Non-financial public corporations[4]	0.9	0.9	1.2	1.1	1.1	1.3
Bank of England net contribution (d)	**7.6**	**5.5**	**2.7**	**2.5**	**2.5**	**2.3**
Public sector net debt (PSND) (a-c+d)	**79.5**	**77.4**	**75.0**	**75.4**	**75.6**	**75.2**
Memo: PSND excluding Bank of England (a-c)	*71.9*	*71.9*	*72.3*	*72.9*	*73.1*	*72.9*
Memo: general government gross debt (a-b)	*81.9*	*81.4*	*81.8*	*82.0*	*81.9*	*81.6*

[1] Non-seasonally adjusted GDP centred end-March.
[2] Excluding the Bank of England.
[3] Net of debt liabilities / liquid assets held by central government.
[4] Net of debt liabilities / liquid assets held by central and local government.
[5] Largely reserves issued to fund TFS loans and the APF's corporate bond purchases, plus premia on the APF's conventional gilt holdings.

Financial sector interventions

3.184 Table 3.39 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. This is not an attempt to quantify their overall effect on the public finances relative to a counterfactual where the Government had not intervened as the crisis unfolded. The costs of the crisis would almost certainly have been much greater in the absence of direct interventions to restore the financial system to stability.[26]

3.185 In total, £136.6 billion was disbursed by the Treasury during and following the crisis. By mid-February 2020, principal repayments had amounted to £97.3 billion, up slightly relative to March 2019, reflecting ongoing repayments from UKAR. This has fed through to a smaller net cash shortfall of £12.5 billion.

3.186 As of mid-February, virtually all the Treasury's loans to the financial sector had been repaid. The value of its RBS shares had fallen to £16.7 billion,[27] down from the £18.2 billion

[26] We discussed the fiscal implications of financial crises in Chapter 3 of our 2019 *Fiscal risks report*.
[27] Based on the average RBS share price over the ten days to 11 February, as with other market-derived assumptions in our forecast.

recorded in our March 2019 *EFO*. (The sharp fall in stock markets in the period since we closed our pre-measures forecast affected the RBS share price too, with the Government's shareholding on 6 March worth £11.8 billion.) The value of the Treasury's holdings in UKAR has risen slightly relative to last year to £8.9 billion (although this figure does not reflect UKAR's most recent repayments, so is likely to be revised down in its next set of accounts). If the Treasury were to receive all loan payments in full and to sell its remaining shares at their mid-February values, it would realise an overall cash surplus of £13.1 billion.

3.187 But the 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 the then prevailing market rates, the Treasury estimates that the additional debt interest costs would have amounted to £40.0 billion by February, mainly due to the costs associated with RBS and UKAR.[28] This cost is larger than estimated last year, partly reflecting twelve more months servicing debt on interventions yet to be repaid or sold. Together this implies an overall cost of £26.9 billion to the Government (1.7 per cent of 2008-09 GDP), £0.4 billion less than we estimated last March.

Table 3.39: Gross and net cash flows of financial sector interventions

	£ billion								
	Lloyds	RBS	UKAR[1]	FSCS[1]	CGS[1]	SLS[1]	Other	**Total**	Change since March 2019[2]
Cash outlays	-20.5	-45.8	-44.1	-20.9	0.0	0.0	-5.3	**-136.6**	0.0
Principal repayments	21.1	6.3	43.7	20.9	0.0	0.0	5.3	**97.3**	2.3
Other fees received[3]	3.2	6.2	7.2	3.5	4.3	2.3	0.3	**26.8**	4.6
Net cash position	3.8	-33.3	6.7	3.5	4.3	2.3	0.2	**-12.5**	6.9
Outstanding payments	0.0	0.0	0.0	0.0	0.0	0.0	0.1	**0.1**	-2.3
Market value[4]	0.0	16.7	8.9	0.0	0.0	0.0	0.0	**25.6**	-1.2
Implied balance	3.8	-16.6	15.6	3.5	4.3	2.3	0.3	**13.1**	3.4
Exchequer financing[5]	-4.2	-15.5	-13.0	-8.3	1.3	0.3	-0.6	**-40.0**	-3.0
Overall balance	**-0.4**	**-32.1**	**2.6**	**-4.8**	**5.5**	**2.6**	**-0.2**	**-26.9**	**0.4**
Memo: changes in overall balance since March 2019[2]	*-0.2*	*-1.2*	*2.2*	*-0.6*	*0.1*	*0.0*	*0.0*	*0.4*	

[1] These are 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 2019 *EFO* figures were consistent with mid-February data.

[3] RBS figure contains fees related to the asset protection scheme and contingent capital facility. UKAR has dividends paid to the Treasury.

[4] UKAR is book value of equity, derived from its accounts as at 31 March 2019 published in June 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	-3.7	-15.5	-13.0	-7.6	0.3	0.0	-0.6	-40.0
After close	-0.5			-0.7	1.0	0.3		0.1

[28] 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 3.39.

Table 3.40: Fiscal aggregates

	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Receipts and expenditure							
Public sector current receipts (a)	37.5	37.7	37.9	38.0	38.3	38.4	38.5
Total managed expenditure (b)	39.3	39.8	40.3	40.8	40.8	40.8	40.7
of which:							
Public sector current expenditure (c)	35.0	35.3	35.4	35.7	35.6	35.5	35.4
Public sector net investment (d)	2.0	2.2	2.6	2.9	3.0	3.0	3.0
Depreciation (e)	2.3	2.2	2.3	2.3	2.3	2.3	2.3
Legislated fiscal mandate and supplementary target							
Cyclically adjusted net borrowing	1.9	2.2	2.4	3.0	2.7	2.5	2.2
Public sector net debt[1]	80.6	79.5	77.4	75.0	75.4	75.6	75.2
Budget 2020 fiscal targets							
Current budget deficit (c+e-a)	-0.3	-0.1	-0.2	-0.1	-0.5	-0.7	-0.8
Debt-interest-to-revenue ratio (per cent)	4.1	3.8	3.3	3.5	3.3	3.1	2.9
Other deficit measures							
Public sector net borrowing (b-a)	1.8	2.1	2.4	2.8	2.5	2.4	2.2
Cyclically adjusted current budget deficit	-0.1	0.0	-0.2	0.1	-0.2	-0.5	-0.8
Primary deficit	0.3	0.7	1.2	1.5	1.2	1.2	1.1
Cyclically adjusted primary deficit	0.4	0.8	1.2	1.7	1.5	1.3	1.1
Financing							
Central government net cash requirement	2.4	2.0	2.8	3.1	2.8	2.5	2.7
Public sector net cash requirement	2.1	1.4	1.1	0.3	2.9	2.6	2.7
Alternative balance sheet metrics							
Public sector net debt ex. Bank of England	72.3	71.9	71.9	72.3	72.9	73.1	72.9
Public sector net financial liabilities	67.4	66.7	65.9	65.3	64.9	64.5	63.4
Stability and Growth Pact							
Treaty deficit[2]	1.8	2.2	2.5	3.1	2.6	2.4	2.4
Cyclically adjusted Treaty deficit	1.9	2.3	2.5	3.3	2.8	2.5	2.4
Treaty debt ratio[3]	84.1	83.2	82.9	83.2	83.3	83.3	83.0
				£ billion			
Current budget deficit	-5.8	-1.7	-4.9	-2.7	-11.7	-16.7	-21.2
Public sector net investment	44.3	49.1	59.7	69.3	73.2	77.0	79.1
Public sector net borrowing	38.4	47.4	54.8	66.7	61.5	60.2	57.9
Cyclically adjusted net borrowing	41.4	48.2	55.3	71.8	68.1	63.9	58.7
Cyclically adjusted current budget deficit	-2.8	-1.0	-4.4	2.5	-5.1	-13.1	-20.4
Public sector net debt	1774	1799	1818	1827	1900	1969	2031
Net debt interest	32.5	30.9	28.1	31.2	30.6	29.3	28.5
Non-interest receipts	788.9	811.8	845.3	881.9	918.6	952.3	988.4
Memo: Output gap (per cent of GDP)	*0.3*	*0.0*	*0.1*	*0.4*	*0.4*	*0.1*	*0.0*

[1] Debt at end October; GDP centred on end October.
[2] General government net borrowing.
[3] General government gross debt. Uses financial year GDP.

Risks, uncertainties and contingent liabilities

Risks and uncertainties

3.188 We always emphasise the uncertainties that lie around our central fiscal forecast. For example, those around the UK's future trading relationship with the EU and the economic and fiscal effects of the new migration regime. But unusually in this forecast it is already clear that downside risks predominate as coronavirus spreads, with negative implications for the economy and public finances that are impossible to quantify reliably at this stage.

3.189 As usual, we have exposed our judgements to various sensitivities in Chapter 4, although not the presently unquantifiable risks posed by coronavirus. Several of the risks we highlighted in our 2019 *FRR* remain key sources of uncertainty too:

- Macroeconomic risks: such as risks to potential output growth from productivity and migratory flows and the cyclical risks that the economy falls into recession at some point in the next five years – quite possibly this year if some predictions for the possible effects of coronavirus were to be realised, causing widespread economic disruption.

- Financial sector risks: the UK remains home to one of the world's largest financial sectors, both in absolute terms and relative to the size of the economy. The fiscal risks that can be associated with this have been illustrated clearly over the past 15 years.

- Revenue-specific risks: we highlighted potential pressures on the sustainability of various tax bases. In recent forecasts, we have seen several near-term upside surprises, some of which have already been partly reversed. Asset prices have fallen sharply since we closed our forecast, which would hit capital tax receipts if they were to persist. The policy-related risks we have previously highlighted – such as the continued year-by-year freezing of duties on fuel – have crystallised yet again in this forecast.

- Primary spending risks (i.e. spending on everything other than debt interest): the fiscal policy response to coronavirus could raise public spending materially in the short term to address the crisis, but may also limit the Government's ability to ramp up capital spending as quickly as it hopes. The scale and persistence of any spending rise will of course depend on the severity of the effects in the UK. These costs will come on top of other pressures that have not gone away – notably long-term pressures in health care and pensions. The 'austerity fatigue' risks we noted in the *FRR* have crystallised in this Budget with the multi-billion increases in departmental spending plans.

- Balance sheet risks: these can relate to real-world events or statistical changes. In this forecast, risks to our debt forecast from delays to asset sales have partly crystallised through further delays in sales of RBS shares and the cancellation of student loans sales (the latter increases our debt forecast but improves broader balance sheet measures). We have also highlighted the potential changes in the treatment of leases and of Pool Re, a terrorism reinsurer, as potential sources of risk to the forecast.

- **Debt interest risks**: in the *FRR* we discussed the risks associated with the 'growth-corrected interest rate' – i.e. the gap between interest rates and economic growth, which influences the path of debt relative to GDP. We noted the historically favourable position at present, but also the risks to it given the extent and persistence of past variations. The Government has pointed to historically low interest rates as a reason to be content with a broadly flat debt-to-GDP ratio in the medium term. This starting position could pose risks if interest rates were to rise relative to GDP growth.

Comparison to the pre-crisis picture

3.190 The Government's new fiscal plans in some ways resemble those of the Labour Government ahead of the financial crisis in the late 2000s. Both seek to balance the current budget and sustain higher public investment, leaving borrowing relatively high and the debt-to-GDP ratio broadly stable. As Chart 3.14 shows:

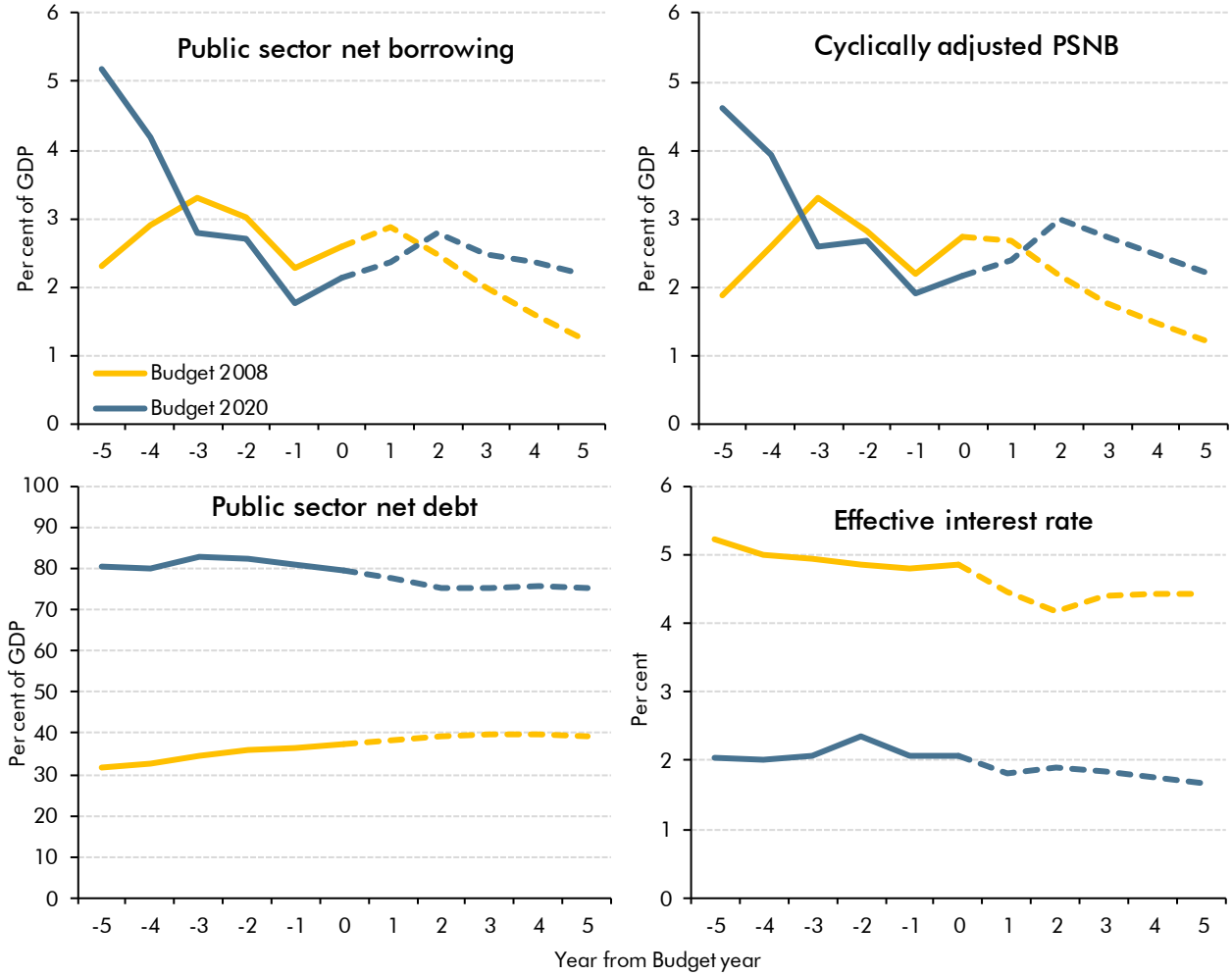
- The **headline deficit** (PSNB) averages 2.4 per cent of GDP in the five years from 2020-21 to 2024-25, which compares with 2.0 per cent in the five years from 2008-09 to 2012-13 that was predicted in Budget 2008 and the 2.8 per cent of GDP that it had averaged between 2003-04 and 2007-08.

- The **structural deficit** (cyclically adjusted PSNB) averages 2.6 per cent of GDP over that period, compared with 1.9 per cent over the equivalent period in Budget 2008 and 2.7 per cent in the five years preceding that Budget.

- The **debt-to-GDP ratio** ends the forecast 4.3 per cent of GDP lower than it starts it, which compares with the 2.2 per cent of GDP rise expected in Budget 2008. But the level of debt is much higher now – 75.2 per cent of GDP by 2024-25 versus just 39.3 per cent of GDP at the Budget 2008 forecast horizon.

- Both forecasts assumed that **interest rates** would remain broadly stable, with the effective interest rate paid on government debt falling by 0.4 percentage points between 2019-20 and 2024-25 in our latest forecast and by the same amount over the Budget 2008 forecast horizon. But the level of interest rates is much lower now than it was then, with the effective rate expected to be just 1.7 per cent in 2024-25 versus 4.4 per cent at the Budget 2008 horizon.

Chart 3.14: The fiscal outlook: Budget 2020 versus Budget 2008

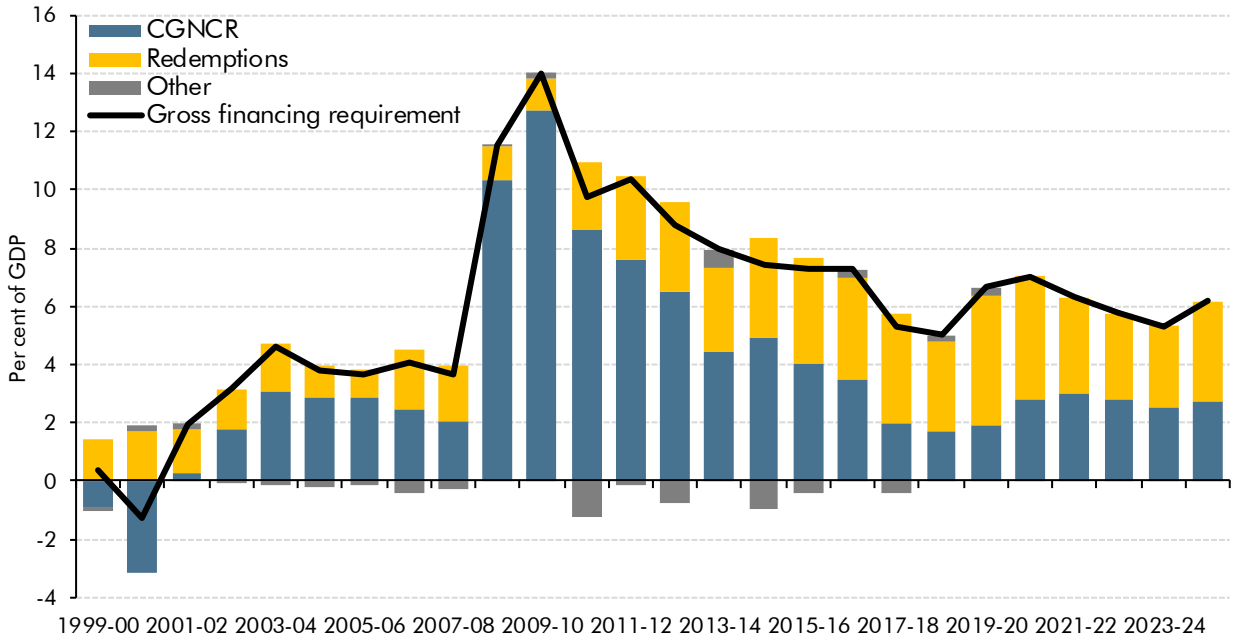


Note: Effective interest rate definied as CG debt interest (net of APF) divided by GG gross debt.
Source: HM Treasury, OBR

3.191 The current Government's fiscal plans are rooted in the assumption that its borrowing costs will remain relatively low, as market expectations indeed suggest. Rather than aim for a balanced budget overall and a significant decline in the debt-to-GDP ratio – as Philip Hammond did initially as Chancellor – the new administration is content to borrow significant sums on an ongoing basis and merely to stabilise the debt-to-GDP ratio.

3.192 This looks sustainable over the medium term on current interest rate and growth forecasts. But, as we have noted in our *Fiscal risks reports*, financing conditions may not remain this favourable. The debt-to-GDP is twice as high as in the pre-crisis period, the stock of index-linked gilts is much larger and the Bank of England's asset purchases have shortened the effective maturity of public debt. Taking both fresh borrowing and the need to roll over existing debt into account, the Government's gross financing requirement averages around 6 per cent of GDP a year over the next five years, around half as high again as in the five years prior to the crisis (Chart 3.15). So the public finances are much more vulnerable to inflation and interest rate surprises than they were.

Chart 3.15: Gross financing requirement



Source: DMO, OBR

Contingent liabilities

3.193 We have as usual asked the Treasury to identify any changes to future contingent liabilities since our March 2019 forecast. Its dedicated reporting system records 32 that were entered into over that period or that are soon to be entered into, with a total maximum exposure of £32.4 billion for those that have been quantified. We judge that overall these do not materially affect risks to the public finances as the chance of them crystallising seems generally quite remote.

3.194 In December 2018 the Court of Appeal ruled that the transitional protection offered to some members of the judges' and firefighters' pensions schemes, as part of the wider public sector pensions reforms, gave rise to unlawful age discrimination (the McCloud and Sargeant cases). On 15 July 2019 the Government confirmed to Parliament that the difference in treatment will be remedied across all the main schemes – including NHS, civil service, police – but it has not outlined the final policy. The Treasury's initial estimate suggested that remedying the discrimination would add around £4 billion a year to scheme liabilities from 2015. The Government has not yet included cash impacts in the schemes' AME spending forecasts, nor made allowances in departmental budgets.

3.195 A legal process initiated by the European Commission represents a source of risk to our fiscal forecast. It regards the UK's application of a zero rate of VAT to certain derivative transactions. The Commission has now referred the UK to the European Court of Justice.

4 Performance against the Government's fiscal targets

Introduction

4.1 This chapter:

- sets out the **current legislated fiscal targets** and assesses the chances of them being met on current policy, given our central forecast (from paragraph 4.4);
- describes the **fiscal targets that have guided the Government's policy decisions in this Budget**, and assesses the chances of meeting them (from paragraph 4.15); and
- assesses how robust these judgements are to the **uncertainties** inherent in any fiscal forecast, by looking at past differences between forecast and outturn, sensitivity to key parameters of the forecast, and alternative scenarios (from paragraph 4.27).

4.2 As set out in Chapters 2 and 3, in the period between closing these forecasts and publishing them, it has become clear that the coronavirus outbreak is likely to have a more adverse effect on the UK economy and public finances than appeared likely a few weeks ago. There is still value in assessing performance against the targets thoroughly, however, since it shows how the Government chose to set fiscal policy given the pre-measures forecasts that we presented. But it is also clear that the near-term risks to those forecasts are to the downside. The legislated fiscal targets are particularly vulnerable since they apply in 2020-21. The extent to which performance against the new targets might be affected is less clear.

4.3 The *Charter for Budget Responsibility* requires the OBR to judge whether the Government has a greater than 50 per cent chance of meeting each of its fiscal targets under current policy. The *Charter* has been updated several times as governments have revised these targets and the latest version approved by Parliament is from January 2017.[1] The policy decisions in this Budget have been guided not by the *Charter*, but by the targets that were set out in the Conservative Party manifesto and confirmed in the Queen's Speech (and that are described in the next section). The Government intends to review the fiscal framework ahead of the next Budget in the autumn, so the targets could change again.

[1] The latest and previous versions are available on the 'Legislation and related material' page of our website.

The legislated fiscal targets

4.4 The current *Charter* says that the Government's objective for fiscal policy is to "*return the public finances to balance at the earliest possible date in the next Parliament*". At the time this was drawn up, 'the next Parliament' was expected to run from 2020 to 2025. The *Charter* also sets: a 'fiscal mandate' that requires *the structural deficit* (cyclically adjusted public sector net borrowing) to lie below 2 per cent of GDP by 2020-21; a 'supplementary target' that requires *public sector net debt* to fall relative to GDP in 2020-21; and a requirement for a subset of welfare spending to lie below an effective 'welfare cap' of £135 billion in 2022-23, with the cap adjusted for subsequent changes in our inflation forecast.

The implications of our central forecast

4.5 Table 4.1 shows our central forecasts for the aggregates relevant to the legislated fiscal targets and objective: cyclically adjusted public sector net borrowing (PSNB); public sector net debt (PSND); spending subject to the welfare cap; and headline PSNB. These are described in Chapter 3. They should be interpreted as median forecasts, so outturns are as likely to come in above them as below them. But they are also conditional forecasts – they reflect current stated government policy (as Parliament requires), rather than how we might expect policy to evolve. And, more importantly for this forecast, they reflect pre-measures forecasts and conditioning assumptions that date from mid-February.

Table 4.1: Forecasts for the Government's current target aggregates

	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Fiscal mandate: Cyclically adjusted public sector net borrowing in 2020-21							
March 2019 forecast	1.2	1.3	0.8	0.7	0.6	0.5	
Restated March 2019 forecast	2.0	2.1	1.7	1.5	1.4	1.3	
March 2020 pre-measures forecast	1.9	2.2	1.8	1.7	1.5	1.3	1.1
March 2020 post-measures forecast	1.9	2.2	2.4	3.0	2.7	2.5	2.2
Supplementary target: Year-on-year change in public sector net debt in 2020-21							
March 2019 forecast	83.3	82.2	79.0	74.9	74.0	73.0	
Restated March 2019 forecast	82.2	81.3	78.2	74.3	73.6	72.7	
March 2020 pre-measures forecast	80.6	79.2	76.9	73.6	73.0	72.0	70.8
March 2020 post-measures forecast	80.6	79.5	77.4	75.0	75.4	75.6	75.2
Welfare cap: Specified welfare spending in 2022-23 (£ billion)							
March 2019 forecast	119.3	121.4	123.2	126.0	129.5	133.7	
Restated March 2019 forecast	119.3	121.4	123.2	126.0	129.5	133.7	
March 2020 pre-measures forecast	119.5	121.7	125.7	128.1	131.5	135.5	138.8
March 2020 post-measures forecast	119.5	119.0	122.6	124.3	127.0	130.2	133.5
Fiscal objective: Public sector net borrowing up to 2025-26							
March 2019 forecast	1.1	1.3	0.9	0.7	0.6	0.5	
Restated March 2019 forecast	1.9	2.2	1.8	1.6	1.5	1.3	
March 2020 pre-measures forecast	1.8	2.2	1.9	1.8	1.6	1.4	1.1
March 2020 post-measures forecast	1.8	2.1	2.4	2.8	2.5	2.4	2.2

4.6 Table 4.2 summarises expected performance against the legislated fiscal targets in the years in which they apply, and how the margins by which we expect them to be met (or not) have changed since March 2019. The rest of this section sets out the assessments we make based on these figures and the reasons for the changes observed since March 2019.

Table 4.2: Performance against the Government's current fiscal and welfare targets

		Per cent of GDP		£ billion	
		Forecast	Margin	Forecast	Margin
Fiscal mandate: Cyclically adjusted public sector net borrowing in 2020-21					
March 2019 forecast	Met	0.8	1.2	18.9	26.6
Restated March 2019 forecast	Met	1.7	0.3	37.9	7.6
March 2020 pre-measures forecast	Met	1.8	0.2	40.5	5.3
March 2020 post-measures forecast	Not met	2.4	-0.4	55.3	-9.2
Memo: Overall change since March 2019		*1.6*	*-1.6*	*36.5*	*-35.9*
Supplementary target: Year-on-year change in public sector net debt in 2020-21					
March 2019 forecast	Met	-3.2	3.2		
Restated March 2019 forecast	Met	-3.1	3.1		
March 2020 pre-measures forecast	Met	-2.3	2.3		
March 2020 post-measures forecast	Met	-2.1	2.1		
Memo: Overall change since March 2019		*1.2*	*-1.2*		
Welfare cap: Specified welfare spending in 2022-23					
March 2019 forecast	Met			129.5	5.5
Restated March 2019 forecast	Met			129.5	5.5
March 2020 pre-measures forecast	Met			131.5	2.1
March 2020 post-measures forecast	Met			127.0	3.4
Memo: Overall change since March 2019				*-2.5*	*-2.1*

The legislated fiscal mandate

4.7 The legislated fiscal mandate requires the structural deficit to lie below 2 per cent of GDP by 2020-21. Our forecast shows this being missed by 0.4 per cent of GDP, having been met in our March 2019 forecast with 1.2 per cent of GDP to spare. This reflects:

- **Statistical changes and corrections** incorporated by the ONS in its September 2019 public sector finance release and reflected in our restated March 2019 forecast. These reduced the margin from 1.2 to 0.3 per cent of GDP (£26.6 billion to £7.6 billion). The change was dominated by the new accounting treatment of student loans (adding £14.1 billion) and a correction to corporation tax receipts (adding £4.3 billion).

- **Pre-measures forecast changes** decrease the margin slightly further to 0.2 per cent of GDP (£5.3 billion), thanks largely to higher capital spending.

- **Budget policy measures and other Government decisions announced since March 2019** add 0.6 per cent of GDP (£14.8 billion) to cyclically adjusted PSNB in 2020-21, leaving the fiscal mandate missed by 0.4 per cent of GDP (£9.2 billion). This is dominated by the higher spending announced in the 2019 Spending Round.

The legislated supplementary debt target

4.8 The legislated supplementary debt target requires PSND to fall relative to GDP in 2020-21. Based on our central forecast, it falls by 2.1 per cent of GDP in 2020-21, down from the 3.2 per cent margin in March 2019. The margin was little changed by the statistical changes incorporated in our restated forecast, as they mostly related to accrued receipts and spending while leaving the cashflows that drive PSND largely unaffected. The downward revision to our pre-measures forecast for nominal GDP growth modestly reduced the margin by which the target is met. Government decisions have reduced it further, thanks largely to higher spending – the effect of which is partly offset by the indirect effects of that fiscal easing on our post-measures forecast for nominal GDP growth.

4.9 Our forecast assumes that repayment of loans issued under the Bank of England's Term Funding Scheme during 2020-21 will lower PSND by £43.7 billion, reducing the PSND-to-GDP ratio by 1.9 percentage points relative to 2019-20. So, absent these repayments, PSND would fall by just 0.2 per cent of GDP in the target year.

The welfare cap

4.10 Table 4.3 shows our latest forecast for spending subject to the welfare cap and how it compares with the cap, pathway and margin as they stood in our March 2019 forecast. As this is the first forecast of a new Parliament, this represents our formal assessment of the Government's performance against the cap. The welfare cap has been reset at this Budget in line with our latest forecast. We have revised spending up since the cap was last reset, in November 2017, leaving it above the cap and the pathway to it from 2020-21 onwards. But the terms of the target have nonetheless been met, with spending below the cap *plus margin* in all years, with or without small adjustments for revisions to our inflation forecast.[2]

[2] The *Charter* requires revisions to our inflation forecast since November 2017 to be stripped out using a methodology set by the Treasury.

Table 4.3: Performance against the current welfare cap

	£ billion, unless otherwise stated			
	Forecast			
	2019-20	2020-21	2021-22	2022-23
Welfare cap				**131.1**
Pathway	122.0	124.7	127.8	
Margin (per cent)	1.5	2.0	2.5	3.0
Margin	1.8	2.5	3.2	3.9
Welfare cap and pathway plus margin	**123.8**	**127.2**	**131.0**	**135.0**
Latest forecast and update on performance against cap and pathway				
March 2020 forecast	119.0	122.6	124.3	127.0
Inflation adjustment	-0.1	+0.0	+1.0	+1.1
Scottish welfare block grant adjustment	+0.3	+3.1	+3.3	+3.4
March 2020 forecast after adjustments	**119.2**	**125.8**	**128.5**	**131.6**
Difference from:				
Cap and pathway	-2.8	+1.1	+0.7	+0.5
Cap and pathway plus margin	**-4.6**	**-1.4**	**-2.5**	**-3.4**
Memo: cumulative percentage point change in preceding September (Q3) rates of inflation since our November 2017 forecast.	*0.4*	*0.4*	*-0.4*	*-0.5*

Note: The inflation adjustment is negative for 2019-20 and positive for future years as inflation is higher in 2019-20 than forecast in our November 2017 *EFO* and then lower for the rest of the forecast. This takes the effect of the change in inflaton out of the spending forecast.

4.11 As this is the first Budget of a new Parliament, the *Charter* requires the Government to set a new cap. The Government has retained the approach in Autumn Budget 2017 of setting a cap and pathway in line with our latest forecast and applying a progressively larger margin above it to set the effective cap. The new cap is higher than the one it replaces.

Table 4.4: The new welfare cap and margin

	£ billion					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Welfare cap						137.2
Pathway	119.3	125.7	127.5	130.5	133.8	
Margin (per cent)	0.5	1.0	1.5	2.0	2.5	3.0
Margin	0.6	1.3	1.9	2.6	3.3	4.1
Welfare cap and pathway plus margin	**119.9**	**127.0**	**129.5**	**133.1**	**137.1**	**141.3**

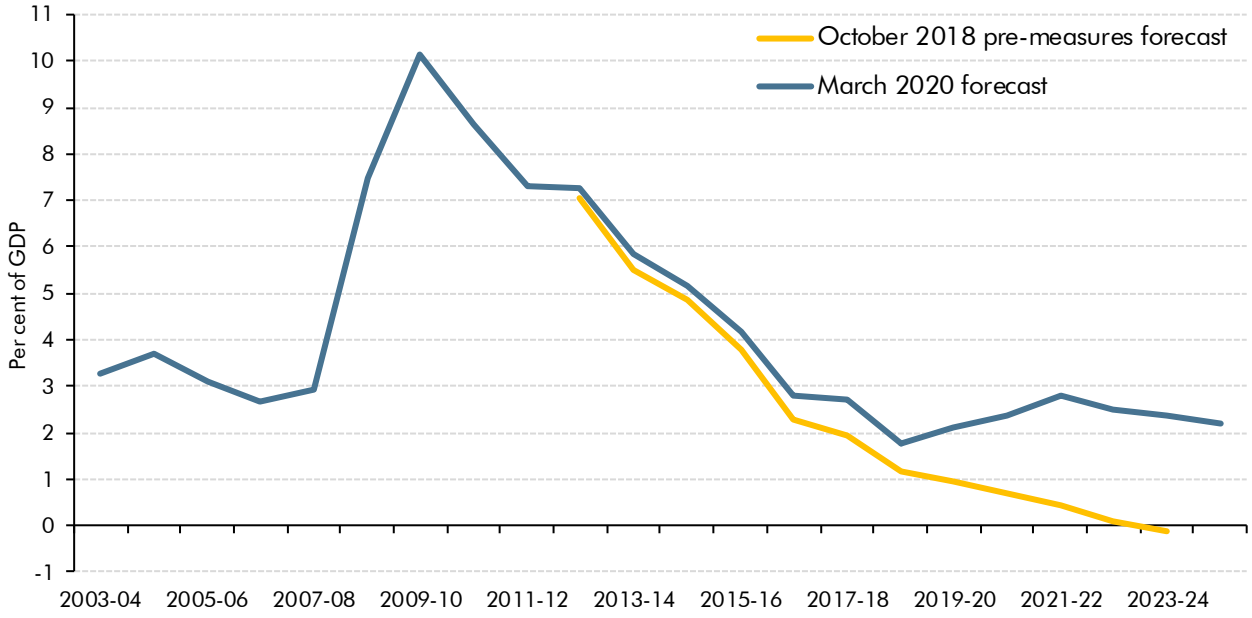
The legislated fiscal objective

4.12 The current *Charter* states that the Government's fiscal objective is to "*return the public finances to balance at the earliest possible date in the next Parliament*". When this objective was set in November 2016, the 'next Parliament' was expected to run to May 2025, so the 'earliest possible date' could have been anywhere up to 2025-26. In the event, there have already been two elections since. Our forecast horizon extends to 2024-25, so we cannot assess performance against this objective definitively using a central forecast for 2025-26.

4.13 A year and a half ago, the pre-measures forecast in our October 2018 *Economic and fiscal outlook (EFO)* showed the Government on course to balance the budget and thus meet the fiscal objective ahead of schedule in 2023-24 – with a £3.5 billion surplus projected for that

year (Chart 4.1). By contrast, this forecast shows a projected deficit of £60.2 billion (2.4 per cent of GDP) for that year. The deficit is forecast to drop to 2.2 per cent of GDP in 2024-25, but thereafter will face upward pressure on spending from an ageing population and from cost pressures in health and adult social care spending.

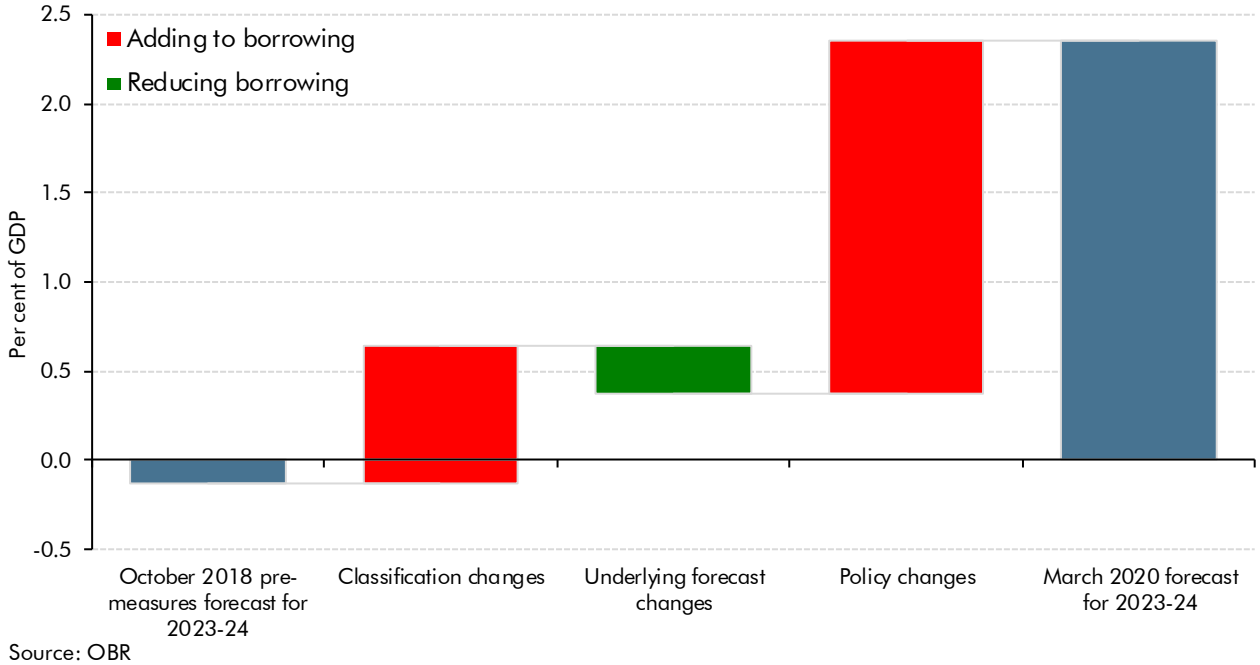
Chart 4.1: Public sector net borrowing



Source: ONS, OBR

4.14 As Chart 4.2 shows, the 2.5 per cent of GDP increase in our forecast for the deficit in 2023-24 since the October 2018 pre-measures forecast reflects: 0.8 per cent of GDP of classification changes (mostly the new treatment of student loans); a 0.3 per cent of GDP improvement in the underlying forecast; and a cumulative policy loosening of 2.0 per cent of GDP over the past three fiscal events, as the objective was rhetorically (if not legally) downplayed and then abandoned.

Chart 4.2: Change in net borrowing in 2023-24



Source: OBR

The Budget 2020 fiscal targets

Definitions of the Budget 2020 targets

4.15 The Government has informed us that its policy decisions in this Budget have been guided by the fiscal rules set out in the Conservative manifesto that were confirmed in the Queen's Speech in January. It has asked us to assess performance against these rules. The Chancellor does not intend to legislate for these rules at this Budget by laying a revised *Charter for Budget Responsibility*, but will instead review the fiscal framework ahead of the Autumn Budget. In his letter, the Chancellor defines the fiscal rules as:

- to have the **current budget** at least in balance by the third year of the rolling five-year forecast period;
- to ensure that **public sector net investment** does not exceed 3 per cent of GDP on average over the rolling five-year forecast period; and
- if the **debt-interest-to-revenue ratio** is forecast to remain over 6 per cent for a sustained period, the Government will act to ensure the debt-to-GDP ratio is falling.

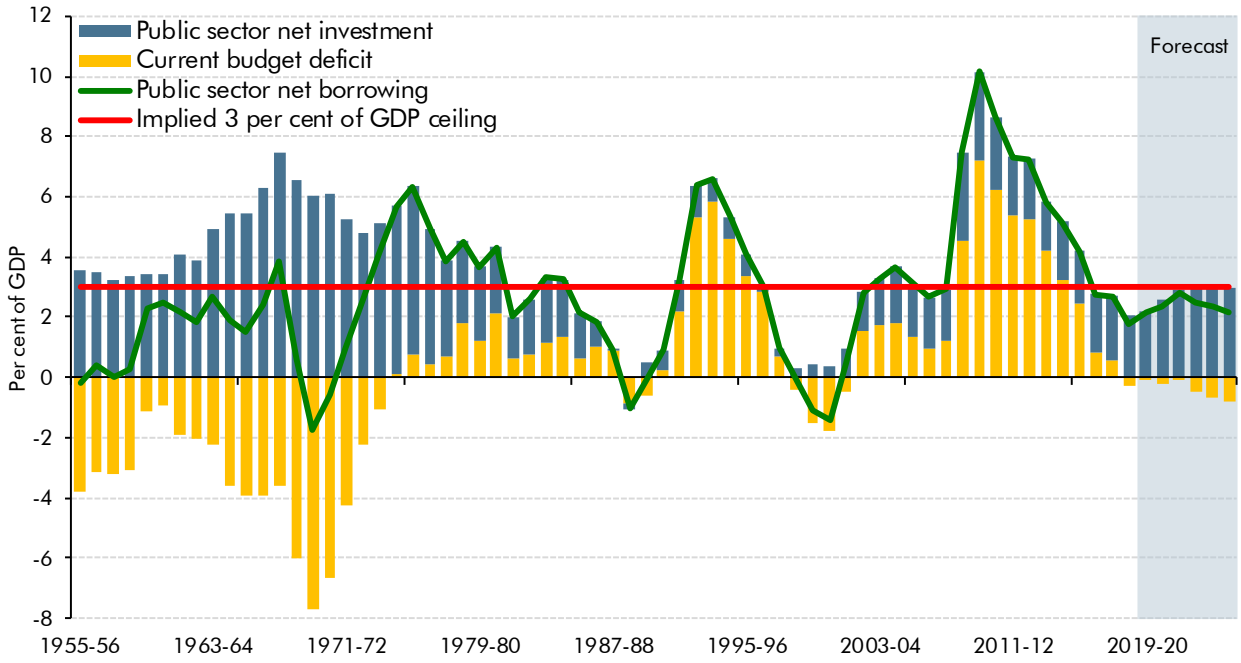
He defines the debt-interest-to-revenue ratio as public sector net interest paid (i.e. gross interest paid less interest received) as a proportion of non-interest receipts.

4.16 For most of the past quarter of a century, the main 'flow' fiscal target in the UK has related to the current budget balance – notably Labour's 'golden rule' from 1997 to 2008 and the Coalition's 'fiscal mandate' from 2010 to 2015. So the target for the current budget is a

return to familiar ground. But flow targets have typically been accompanied by a stock target: Labour had a 'sustainable investment rule' that public sector net debt should not exceed 40 per cent of GDP; the Coalition had a 'supplementary debt target' stipulating the year by which debt should start falling as a share of GDP. Instead of a stock target, the Budget 2020 rules place a ceiling on the flow of investment relative to GDP (a 'maximum investment rule') and interest payments relative to receipts (the 'debt-interest-to-revenue ratio rule'), but their only mention of the level or path of debt is in specifying that the Government will act to ensure the debt-to-GDP ratio falls if the debt-interest-to-revenue ratio exceeds 6 per cent on a sustained basis.

4.17 As Chart 4.3 shows, PSNB has averaged 2.9 per cent of GDP since 1955, but has exceeded 3 per cent of GDP in 28 out of those 64 years. The deficit topped 6 per cent of GDP during the 1973 oil crisis, the ERM crisis of the early 1990s and the financial crisis of the late 2000s. In each case it remained well above 3 per cent of GDP for some years afterwards. Up to the mid-1970s, high levels of public investment were consistently offset by current budget surpluses, mostly keeping the overall deficit below 3 per cent of GDP.

Chart 4.3: Public sector net borrowing and the implied 3 per cent ceiling



Source: ONS, OBR

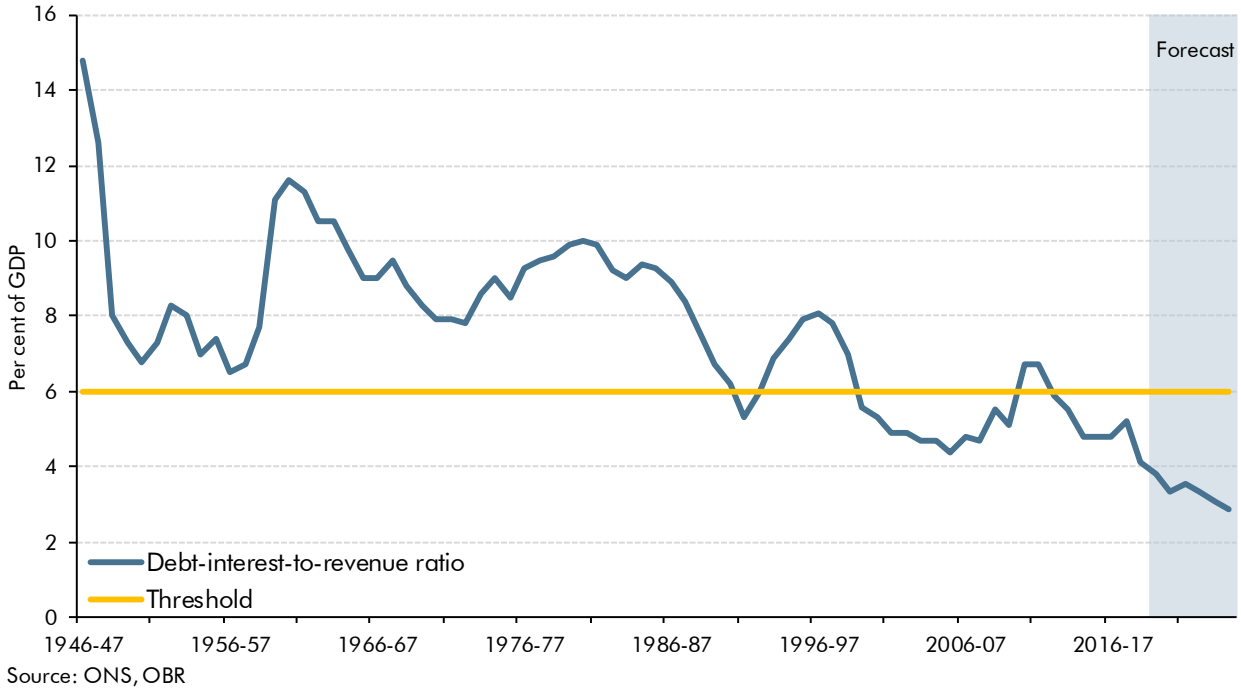
What do these rules mean for fiscal sustainability?

4.18 Relative to the legislated targets, the rules adopted for this Budget are materially looser. They require the current budget to be in balance by the third year of the forecast (2022-23 in this one) and public sector net investment (PSNI) not to exceed 3 per cent of GDP. This puts a ceiling of 3 per cent of GDP on the deficit and affords 1 per cent of GDP more space than the legislated deficit rule (£22.3 billion in today's terms) and 3 per cent of GDP more than the legislated fiscal objective (£66.9 billion). A new debt-interest-to-revenue ratio rule requires net interest costs to be less than 6 per cent of primary (i.e. non-interest) receipts.

4.19 The Conservative manifesto stated that the pursuit of these targets "*means that debt will be lower at the end of the Parliament*". But observing these rules does not mean that debt will always fall relative to GDP. As well as borrowing, the path of debt depends on two other factors: the net cost of financial transactions (which are not covered by the rules) and the rate of nominal GDP growth (over which inflation-targeting governments have little control). Given our medium-term expectations for these variables, the maximum deficit consistent with a stable debt-to-GDP ratio is around 2.5 per cent of GDP. So the Chancellor would need to over-achieve his new rules on average to ensure that debt falls in normal times.

4.20 As Chart 4.4 shows, until 1990-91 the debt interest to revenue ratio was above 6 per cent every year, reflecting much higher interest rates on government debt than is the case now and, initially, the very high post-war debt-to-GDP ratio. But the debt ratio fell through most of this period as the high interest rates were usually accompanied by high nominal GDP growth. This illustrates that a high debt interest to revenue ratio does not guarantee rising debt. Neither does a low ratio necessarily lead to debt falling – the ratio was 4.7 per cent in 2007-08 ahead of the financial crisis and only exceeded 6 per cent twice over the subsequent decade (in 2010-11 and 2011-12 thanks to spikes in RPI inflation), despite the debt-to-GDP ratio rising from 34.2 to 82.4 per cent over that period.

Chart 4.4: The debt interest to revenue ratio



Source: ONS, OBR

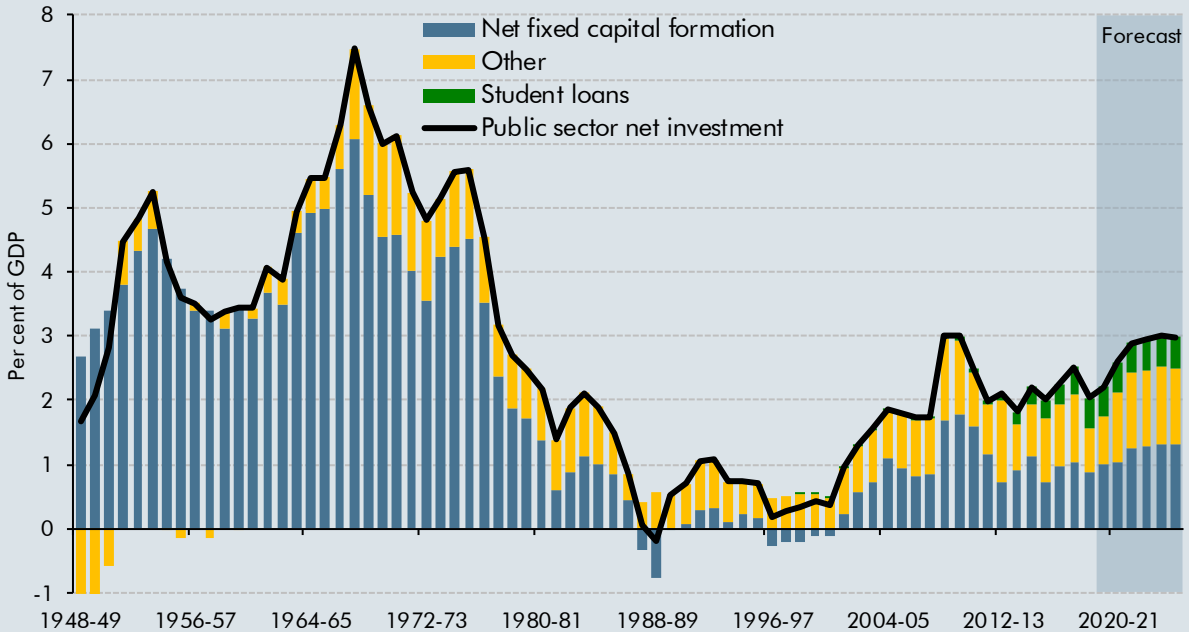
Box 4.1: Public sector net investment

Public sector net investment (PSNI) consists of three main elements:

- The largest – **gross fixed capital formation** (GFCF) – is what is normally thought of as capital spending. It is the net acquisition of fixed assets (such as roads, buildings and weapons systems) by the public sector, as well as a significant amount of R&D spending.
- The **depreciation** of these assets forms the second largest component and is negative.
- The remainder consists almost entirely of **capital grants** to and from the private sector. Some of these – for example grants for social housing – will be used to increase fixed assets in the private sector. Others – such as upfront recognition of student loan write-offs and the net assumption of pension liabilities by the Pension Protection Fund – will not.

Taken together GFCF minus depreciation (net fixed capital formation, NFCF) represents the cash increase in the public sector's net capital stock. As Chart A shows, NFCF averaged around 4 per cent of GDP up to the 1970s, when the public sector included some major industries and investment in public housebuilding was much higher than it is today. It was much smaller, and occasionally negative, over the next two decades – when industries and much social housing left the public sector – before picking up to around 1 per cent of GDP on average so far this century. Government plans will lift NFCF to 1.2 per cent of GDP over the forecast. At an average of 1.6 per cent of GDP, capital grants are larger than NFCF over the forecast period (with capital transfers associated with student loan outlays reaching 0.5 per cent of GDP in 2024-25).

Chart A: Historical trends in public sector net investment



Source: ONS, OBR

The implications of our central forecast

4.21 Table 4.5 shows our central forecasts for the fiscal aggregates relevant to the Budget 2020 fiscal targets: the current budget deficit; PSNI; the net debt interest to primary revenue ratio; and spending subject to the welfare cap. Table 4.6 summarises performance against these targets and the margins by which they are forecast to be met.

Table 4.5: Forecasts for the Budget 2020 target aggregates

	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Current budget rule: Current budget balanced by 2022-23[1]							
March 2020 pre-measures forecast	-0.3	-0.2	-0.6	-0.6	-0.8	-1.0	-1.3
March 2020 post-measures forecast	-0.3	-0.1	-0.2	-0.1	-0.5	-0.7	-0.8
Investment rule: Public sector net investment no more than 3 per cent on average							
March 2020 pre-measures forecast	2.0	2.3	2.4	2.4	2.4	2.4	2.4
March 2020 post-measures forecast	2.0	2.2	2.6	2.9	3.0	3.0	3.0
Welfare cap: Specified welfare spending in 2024-25 (£ billion)							
March 2020 pre-measures forecast	119.5	121.7	125.7	128.1	131.5	135.5	138.8
March 2020 post-measures forecast	119.5	119.0	122.6	124.3	127.0	130.2	133.5
Debt-interest-to-revenue ratio: Interest costs no more than 6 per cent of revenue							
March 2020 pre-measures forecast	4.1	3.8	3.2	3.2	3.1	2.9	2.7
March 2020 post-measures forecast	4.1	3.8	3.3	3.5	3.3	3.1	2.9

[1] A negative value means the current budget is in surplus.

The current balance rule

4.22 Our central forecast shows a current budget surplus in 2022-23 of £11.7 billion. On a pre-measures basis, the Chancellor had a margin of 0.8 per cent of GDP (£20.8 billion), but the combined effect of Budget measures and the new migration regime adds £9.0 billion to current borrowing in the target year.

The maximum investment rule

4.23 Public sector net investment averages 2.9 per cent of GDP between 2020-21 and 2024-25, thereby meeting the new target with a margin of 0.1 per cent of GDP (£2.6 billion in today's terms). On a pre-measures basis, it averaged 2.4 per cent of GDP, with the Budget package raising that by a fifth. The increase is dominated by higher CDEL spending thanks to the much higher envelope set for the Spending Review.

4.24 Some of the larger contributors to PSNI are the capital transfers recorded alongside student loan outlays to recognise the amounts expected to be written off rather than repaid. These average 0.5 per cent of GDP between 2020-21 and 2024-25 and rise over time. The decision not to go ahead with further sales of student loans at a discount to their value in the public finances means our post-measures forecast for student loan capital transfers is 0.1 per cent of GDP lower on average over the period than it would otherwise have been.

The debt interest to revenue ratio rule

4.25 Net interest payments are forecast to fall in cash terms over the next five years, so with receipts rising steadily the debt interest to revenue ratio falls from 3.8 per cent in 2019-20 to 2.9 per cent in 2024-25 – meeting the rule.

4.26 Budget measures and other Government decisions have raised the ratio in every year of the forecast and by an average of 0.2 percentage points. That difference reflects the 5.6 per cent average upward revision to net interest payments (on the back of higher effective interest rates, particularly Bank Rate, and higher cash borrowing) being greater than the 1.4 per cent upward revision to non-interest receipts (thanks to cancellation of the previously planned corporation tax cut that was due in April 2020, plus the boost to nominal GDP and the major tax bases associated with fiscal easing announced in the Budget).

Table 4.6: Performance against the Budget 2020 fiscal and welfare targets

		Per cent of GDP		£ billion	
		Forecast	Margin	Forecast	Margin
Current budget rule: Current budget balanced by 2022-23[1]					
March 2020 pre-measures forecast	Met	-0.8	0.8	-20.8	20.8
March 2020 post-measures forecast	Met	-0.5	0.5	-11.7	11.7
Investment rule: Public sector net investment no more than 3 per cent on average					
March 2020 pre-measures forecast	Met	2.4	0.6		
March 2020 pre-measures forecast	Met	2.9	0.1		
Welfare cap: Specified welfare spending in 2024-25 (£ billion)					
March 2020 pre-measures forecast	Met			138.8	4.1
March 2020 post-measures forecast	Met			133.5	4.1
Debt-interest-to-revenue ratio: Interest costs no more than 6 per cent of revenue					
March 2020 pre-measures forecast	Met	3.2	2.8		
March 2020 post-measures forecast	Met	3.5	2.5		

[1] A negative value means the current budget is in surplus.

Recognising uncertainty

4.27 The future is uncertain and unexpected economic and political developments mean that the distribution of possible outcomes around any central forecast is wide. Consequently, there are significant upside and downside risks to our central public finance forecasts. These reflect uncertainty both about the outlook for the economy and about the level of receipts and spending in any given state of the economy.

4.28 Given these uncertainties, it is important to stress-test our assessment of the Government's performance against the proposed fiscal targets. We do this by:

- looking at the evidence of **past forecast errors**;
- seeing how our central forecast changes when we apply **different individual judgements and assumptions**; and
- looking at **alternative scenarios**.

Past performance

4.29 One relatively easy way to assess the uncertainty around our central forecast is to look at the differences between previous official public finance forecasts – both our own and the Treasury's before us – and outturns. In doing so, we adjust for some changes in the definitions of these metrics (particularly when they led to systematic differences between current and contemporary estimates of outturn). The uncertainty can then be illustrated using fan charts like those in Chapter 2.

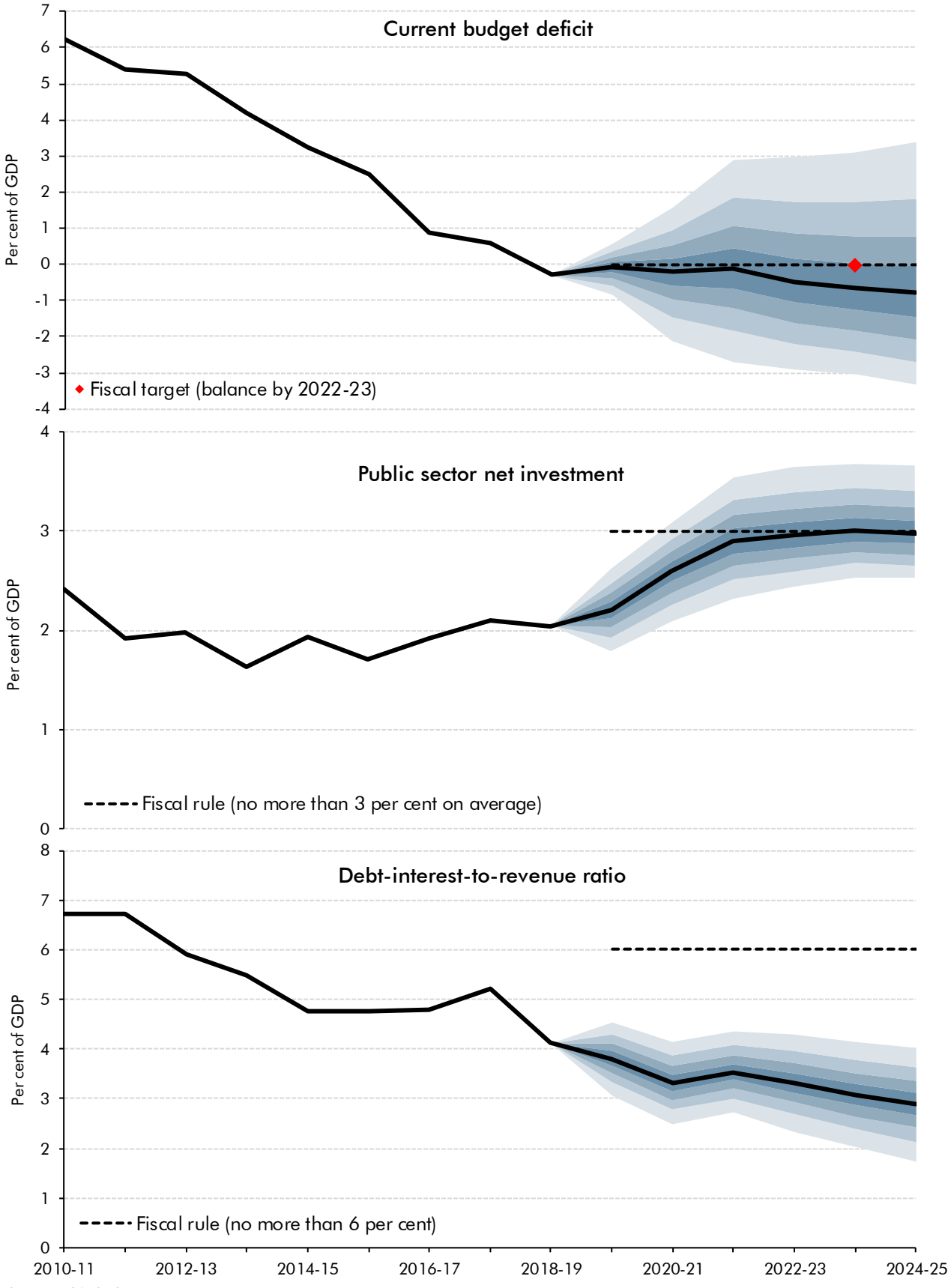
4.30 For the current budget deficit and PSNI, we have official forecasts going back to the late 1990s. But the Treasury did not publish forecasts for the debt-interest-to-revenue ratio, so we have only been able to construct historical forecasts for this from 2010 onwards. Outturn data can currently only be compared against the final forecast year for nine forecasts and, in each of these, the ratio was lower in outturn than we predicted (with an average five-year ahead forecast error of 2.6 percentage points). It is hard to see how this pattern of past forecast errors could be repeated with interest rates already close to zero. So we have simply assumed that past errors are representative of a symmetric future distribution.

4.31 The fan charts based on these forecasts do not represent a subjective assessment of specific risks to each forecast. Instead they show the outcomes someone might expect if they believed, rightly or wrongly, that the size and distribution of forecast errors in the past offered a reasonable guide to their future size and distribution.

4.32 It is important to note that the historical forecast errors that underpin our fan charts reflect both underlying forecast errors and subsequent policy responses. That helps explain why the probability distributions around borrowing and other measures of the budget balance do not widen significantly at longer horizons: when events or forecast changes push expected borrowing away from original plans, governments tend to implement policy changes to bring it back on track. This was evident in the analysis of past fiscal forecast errors and the fiscal policy response of governments presented in Annex B of our March 2016 *EFO*.

4.33 Chart 4.5 shows fans around our central forecasts for each of the Budget 2020 fiscal rules. Based on past forecast performance, the chance of the current budget being in surplus in the target year is around 60 per cent and it remains at around that level thereafter. The chance of net investment being less than 3 per cent of GDP falls from around 85 per cent in 2020-21 to around 50 per cent in 2024-25. Assuming that our forecasts will be as (in)accurate as they have been in the past, but that the risks are symmetric, the debt interest to revenue rule is almost certain to be met in every year. The Government therefore has much more room for manoeuvre relative to this rule than the other two.

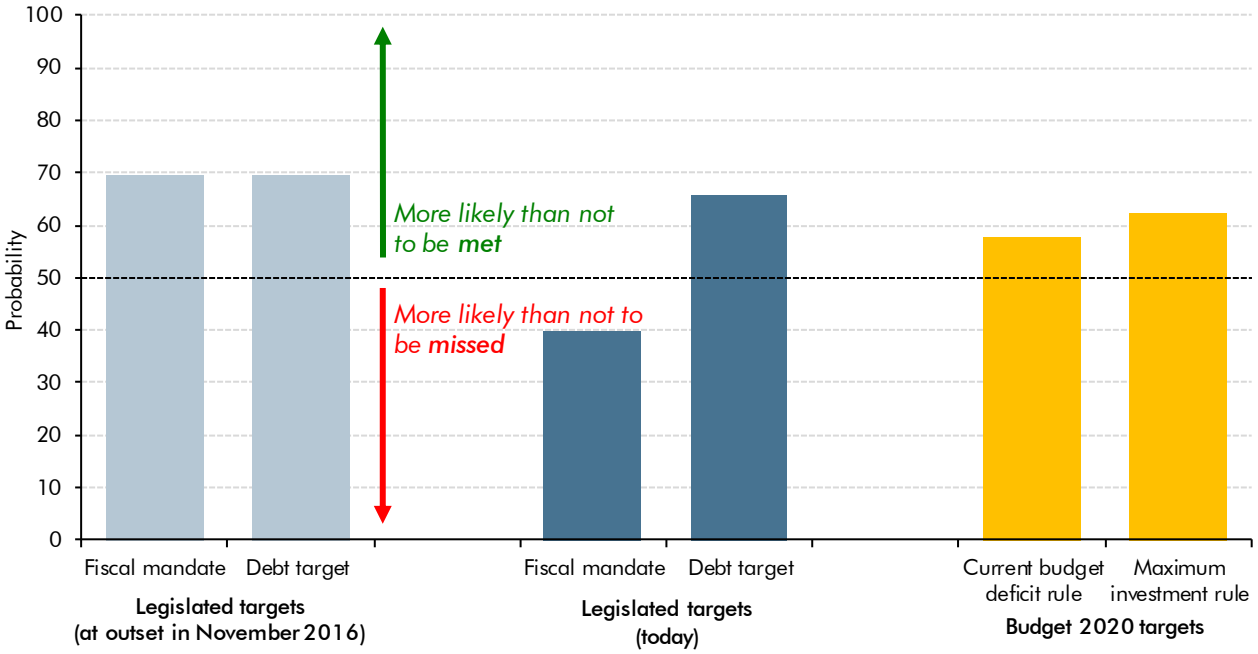
Chart 4.5: Budget 2020 fiscal rule metrics: fan charts



Source: ONS, OBR

4.34 Chart 4.6 uses these fan charts to calculate the probability of each of the Budget 2020 fiscal rules being observed and compares it to the likelihood of the legislated targets being met, based both on our latest forecast and the margins by which they were met when they were introduced in November 2016. (All are based on the full historical distribution of forecast errors.) The chart demonstrates that when the current rules were introduced in November 2016, the Government gave itself more headroom against its new borrowing and debt targets than this Government has given itself against the Conservative manifesto targets.

Chart 4.6: Likelihood of meeting the legislated and Budget 2020 fiscal rules



Source: OBR

Sensitivity analysis

4.35 It is next to impossible to produce a full probability distribution for the Government's target fiscal variables because they are affected by so many determinants – both economic and non-economic – many of which are also interrelated in complex ways. But there are several particular sensitivities that are worth singling out:

- the **sensitivity of the current budget deficit** to changes in the level of GDP, inflation, interest rates and the effective tax rate;
- the **sensitivity of public sector net investment** to changes in departmental underspends, non-departmental spending, depreciation and nominal GDP;
- the **sensitivity of the debt interest to revenue ratio** to movements in factors affecting the numerator and the denominator in the ratio; and
- the **sensitivity of the change in the debt-to-GDP ratio** to factors that are not constrained by the other targets.

The current budget deficit

4.36 As Chart 4.6 illustrated, on the basis of past forecast errors, we estimate that there is a roughly 40 per cent chance that the current budget will be in deficit in 2022-23. There are many reasons why this might happen. For example, the evolution of the economy could be less favourable than forecast (as is highly likely in the near term), or receipts or spending could turn out differently for a given state of the economy. And policy can also be expected to change at future Budgets.

4.37 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 stress that these are stylised exercises that reflect the typical impact of changes in variables on receipts and spending as embodied in our forecast models. The actual impact in any given case is likely to depend on the state of the economy at the time and the reaction of other policymakers, notably the Monetary Policy Committee. The ready-reckoners are also subject to significant uncertainty. But with all this in mind, we can use them to calibrate several possible adverse surprises relative to our central forecast that would be sufficient to push the current budget into deficit in 2022-23.

4.38 The surplus of 0.5 per cent of GDP on the current budget could fall to zero if:

- The **output gap** were 0.7 per cent more negative or **potential output** 0.9 per cent lower. As the scenario below illustrates, the nature of any shock to potential output can affect these sensitivities, with a shock that feeds through to interest rates likely to have a smaller impact than one that does not. This change in potential output is small relative to the cumulative downward revisions made since the financial crisis.

- The **effective tax rate** (as measured by the tax-to-GDP ratio) were 0.5 percentage points lower. This could reflect structural or cyclical factors.

- **Effective interest rates** on central government gross debt were 0.6 percentage points higher. The £377 billion of conventional gilts held in the APF are currently in effect financed at Bank Rate, reducing the effective interest rate across all debt by 0.4 percentage points relative to gilt rates.

- **RPI inflation** were 2.3 percentage points higher than expected in 2022-23. Higher RPI inflation would increase accrued interest on index-linked gilts. Taken in isolation, this change alone would raise debt interest costs by 0.5 per cent of GDP. Higher oil prices or a substantial fall in the exchange rate could deliver such a surprise, as they did in the wake of the financial crisis. Of course, such shocks would have other effects on the public finances.

The maximum investment rule

4.39 Average net investment over our forecast period is 2.9 per cent of GDP, giving the Government a 0.1 per cent of GDP margin against its maximum investment rule.

4.40 As this target is expressed as an average over five years, it is less sensitive to movements in public sector net investment in any individual year than a target focused on a particular year would be. That said, an increase in PSNI of only 0.1 per cent of GDP (£2.6 billion in today's terms) in *every* year would be sufficient to breach the rule. A single-year increase of 0.6 per cent of GDP (£12.8 billion in today's terms) would also be sufficiently large.

4.41 Most capital spending is subject to a degree of Treasury control rather than depending on exogenous economic factors. So this target is less sensitive to underlying forecast movements than the other two. The Treasury could change spending plans were our pre-measures forecast to overshoot the 3 per cent target.

4.42 Nonetheless, the margin against this target is much smaller than the other two, and numerous developments could see it used up:

- **Persistently higher capital spending** that averaged 0.1 per cent of GDP a year. As regards departmental spending, our central forecast assumes underspending relative to plans will average 0.3 per cent of GDP, so if actual underspending were 41 per cent lower the rule would be breached. Other public sector capital spending includes the capital transfers recorded when issuing student loans. We revised up our pre-measures forecast for these transfers by £2.0 billion a year on average in this forecast. Were that to be repeated, it would be sufficient to use up most of the margin against this rule.

- A **temporary increase in spending due to a one-off transfer** of 0.5 per cent of GDP. Capital grants to the private sector are classified as PSNI, and these, along with changes to their treatment in the public finances, can lead to large swings in this metric. Based on the accounting treatment underpinning our March 2012 forecast, the reclassification of the Royal Mail pension fund into the public sector reduced PSNI in 2012-13 by 1.8 per cent of GDP (£40 billion in today's terms). Classification changes later revised the impact on PSNI to a 0.6 per cent of GDP increase (£13 billion in today's terms). Another one-off increase of that size would be sufficient to erode the margin against this rule.

- The margin would fall to zero if the **nominal GDP denominator** were more than 3.8 per cent lower than our central forecast across the forecast period.

The debt-interest-to-revenue ratio

4.43 We forecast the debt-interest-to-revenue ratio to peak at (3.5 per cent) in 2021-22 and to fall thereafter, leaving ample room to spare. Indeed, it would take very large surprises in individual variables to use up the margin in 2021-22, when it is at its smallest. Holding non-interest revenue constant, net interest spending would need to be £22 billion higher – on its own, Bank Rate hitting 6 per cent would do that. Holding net interest payments

constant, non-interest receipts would need to be £360 billion lower – a significantly larger fall than was seen in the financial crisis.

The change in the debt-to-GDP ratio

4.44 Adhering to the Budget 2020 rules would not guarantee that debt falls relative to GDP. As well as borrowing, the path of debt depends on two other factors: the net cost of financial transactions (which are not covered by the rules) and the rate of nominal GDP growth (over which inflation-targeting governments have little control):

- Assuming our **central forecast** for financial transactions and nominal GDP growth in 2024-25, if borrowing were 3 per cent of GDP, the debt-to-GDP ratio would increase by 0.5 percentage points (rather than falling as in our central forecast).

- If borrowing in 2024-25 were 3 per cent of GDP and nominal GDP growth matched our central forecast, even if the net cost of **financial transactions** was 0.5 per cent of GDP less than we expect, debt would still rise relative to GDP in that year.

- For debt to fall relative to GDP, the growth rate of the **cash value of debt** must be less than the rate of growth of nominal GDP. Starting from our central PSND forecast of £1,969 billion in 2023-24, borrowing of 3 per cent of GDP plus financial transactions of 0.5 per cent of GDP would raise debt by 4.3 per cent in cash terms. That means nominal GDP growth would need to exceed our central forecast by 0.6 percentage points for the debt-to-GDP ratio to fall.

Scenario analysis

4.45 The sensitivity analysis discussed above focuses on ready-reckoned estimates of the impact of individual factors and therefore offers only a limited assessment of potential uncertainty. In this section, we set out the fiscal implications of illustrative alternative scenarios, designed to test how dependent our conclusions are on key judgements. We stress that these scenarios are not intended to capture all possible ways in which the economy might deviate from the central forecast and we do not attempt to attach probabilities to them occurring.

4.46 We discuss the most pressing near-term source of forecast uncertainty – the economic implications of the spread of coronavirus – qualitatively in Box 2.3 in Chapter 2. It also quantifies the mechanical effects that movements in financial markets over the past three and a half weeks would have on our fiscal forecast. It is worth stressing, however, that whatever the short-term impact of coronavirus, the impact on the public finances over the medium and longer term is likely to be less significant, unless the outbreak inflicts lasting damage on the economy's supply capacity.

4.47 In this section we therefore explore the fiscal consequences of a key source of uncertainty over the longer term, namely the path of productivity. In particular, we examine the consequences of both weaker and stronger productivity growth than in our central forecast, calibrating the scenarios to converge on the pre- and post-crisis average growth rates. The

weak productivity scenario might crystallise if the global slowdown in productivity growth continues unabated or if the productivity hit from Brexit feeds through more quickly than we have assumed (a UK-specific event). The strong productivity scenario could occur if, by contrast, there were a general global pick-up in productivity growth.

4.48 To ensure that one scenario is not simply a mirror image of the other, we assume that the weak productivity scenario is a UK-specific event. The main consequence of this lies in the resulting path of interest rates, as one would expect a global change in productivity growth to be associated with a corresponding change in the global natural real rate of interest.

4.49 Specifically:

- The **weak productivity** scenario assumes that growth in potential output per hour averages 0.5 per cent a year over the next five years, in line with the post-crisis average. The level of productivity is therefore 3.1 per cent lower than in our central forecast by the first quarter of 2025. We assume that people increase the hours they work to offset in part the effect on their incomes. This leaves the level of real GDP 2.2 per cent below our central forecast. In expenditure terms, investment is reduced proportionately more than private consumption, reducing capital deepening. Lower productivity growth feeds through to weaker earnings growth, which averages 2.9 per cent a year. That also implies slower house price inflation, which averages 4.0 per cent a year. We assume the same path for interest rates as in our central forecast.

- The **strong productivity** scenario assumes that growth in potential output per hour picks up in the coming years and reaches 2.2 per cent in the final year of the scenario, in line with the pre-crisis average. The level of productivity is 3.1 per cent higher than our central forecast at the five-year horizon. We again assume that people adjust their hours, leaving real GDP 2.2 per cent higher than in our central forecast, and that investment is boosted proportionately more than consumption. Earnings growth averages 3.7 per cent a year and house price inflation 5.7 per cent a year. We assume higher interest rates than in our central scenario, consistent with the view that a revival of productivity growth globally would also raise the natural rate of interest.

4.50 In both scenarios, the output gap profile is unchanged, so that potential and actual growth are adjusted in equal measure. CPI inflation and unemployment are therefore also unchanged from our central forecast. RPI inflation is adjusted to reflect different paths for house prices and interest rates, which affect the housing depreciation and mortgage interest payments components of the RPI.

4.51 We have also considered a third scenario in which the Government delivers all the capital spending plans it has set out in the Budget, rather than assuming significant underspends relative to those plans as we do in our central forecast:

- This **no underspend** scenario adds between 0.1 and 0.2 per cent of GDP to CDEL spending across the forecast period, since our central forecast assumes that 20 per cent of the large increases in CDEL totals will go unspent. We have then used a

simplified version of the modelling in our central forecast to calculate the implications for GDP growth, interest rates and inflation. The scenario has relatively modest effects on economic outcomes. Higher government investment raises near-term GDP growth a little more than in our central forecast. But this induces a modestly higher path for Bank Rate, with GDP growth slowing slightly more than in our central forecast as a little more private sector expenditure is crowded out. We assume the supply side of the economy is unchanged within the forecast period, so the level of GDP at the end of the five-year period is the same as in our central forecast.

Table 4.7: Key economic aggregates under alternative scenarios

	Per cent on a year earlier, unless otherwise stated					
	Central forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
GDP growth	1.1	1.3	1.7	1.4	1.3	1.5
Output gap (per cent of potential GDP)	0.0	0.1	0.4	0.4	0.1	0.0
CPI inflation	1.8	1.4	1.9	2.1	2.0	2.0
Bank Rate (per cent)	0.8	0.8	0.8	0.8	0.8	0.8
Nominal GDP	3.0	3.3	3.9	3.5	3.4	3.6
	Weak productivity scenario					
GDP growth	1.1	1.2	1.3	1.0	0.8	0.9
Output gap (per cent of potential GDP)	0.0	0.1	0.4	0.4	0.1	0.0
CPI inflation	1.8	1.4	1.9	2.1	2.0	2.0
Bank Rate (per cent)	0.8	0.8	0.8	0.8	0.8	0.8
Nominal GDP	3.0	3.2	3.5	3.1	2.8	3.0
	Strong productivity scenario					
GDP growth	1.1	1.4	1.9	1.9	1.9	2.1
Output gap (per cent of potential GDP)	0.0	0.1	0.4	0.4	0.1	0.0
CPI inflation	1.8	1.4	1.9	2.1	2.0	2.0
Bank Rate (per cent)	0.8	0.8	1.0	1.3	1.4	1.3
Nominal GDP	3.0	3.4	4.1	4.0	4.0	4.2
	No underspend scenario					
GDP growth	1.1	1.4	1.7	1.4	1.2	1.4
Output gap (per cent of potential GDP)	0.0	0.1	0.5	0.4	0.2	0.0
CPI inflation	1.8	1.4	2.0	2.1	2.1	2.0
Bank Rate (per cent)	0.8	0.8	0.8	0.8	0.8	0.8
Nominal GDP	3.0	3.4	3.9	3.5	3.3	3.6

Fiscal implications

4.52 Based on these assumptions, Table 4.8 sets out each scenario's main fiscal effects:

- In the **weak productivity** scenario, lower growth in average earnings, profits, house prices and equity prices lower receipts and increase borrowing and debt. Spending increases initially, as a greater proportion of student loan outlays is written off at outlay. But it is lower from 2022-23 onwards, as lower RPI inflation reduces debt interest and weaker earnings growth lowers the cost of the state pensions triple lock.

- In the **strong productivity** scenario, the boost to receipts from stronger growth in all the major tax bases more than offsets higher spending. The increase in state pension spending due to the triple lock eventually outweighs the lower spending on student loans from writing off a smaller proportion of loans on outlay. The fiscal implications of this scenario are not quite the weak productivity scenario in reverse: interest rates are higher, so debt interest rises by £6.8 billion in 2024-25, partly offsetting the saving associated with lower primary borrowing.

- The main effect in the **no underspend** scenario is, of course, higher capital spending – by just under £4 billion a year on average from 2021-22 onwards. There are relatively small effects on the rest of our forecast. Higher spending boosts the economy in the near term, which raises tax receipts and lowers borrowing, but this effect dissipates by the end of the period. Higher borrowing and higher interest rates increase debt interest spending in all years, while higher capital spending also raises depreciation costs modestly. By 2024-25, these indirect effects raise borrowing by around £0.4 billion.

Performance against the fiscal targets

4.53 The Government is not on course to meet its legislated fiscal mandate in our central forecast, nor in any of the scenarios either. The legislated fiscal objective looks even more unlikely to be met in the weak productivity and no underspend scenarios. Indeed, borrowing is still around 2 per cent of GDP in 2024-25 in the high productivity scenario. The Government still meets the legislated supplementary target for debt to fall in 2020-21 in all scenarios, as TFS loans are repaid.

4.54 What about the Budget 2020 fiscal targets? As Table 4.8 shows, the current budget rule is met in all scenarios, though the margin drops to just 0.2 per cent of GDP in the weak productivity scenario. The maximum investment rule is met in both productivity scenarios, although in the weak one PSNI tops 3 per cent of GDP from 2022-23 onwards, so it is only met thanks to investment being well below 3 per cent in 2020-21. The rule is missed in the no underspend scenario, so the Government's plans are in a sense inconsistent with its rule. The debt-interest-to-revenue ratio remains comfortably below 6 per cent in all years of all three scenarios.

Table 4.8: Key fiscal aggregates under alternative scenarios

	Per cent of GDP, unless otherwise stated					
	Central forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Legislated objective and targets						
Public sector net borrowing	2.1	2.4	2.8	2.5	2.4	2.2
Cyclically adjusted net borrowing	2.2	2.4	3.0	2.7	2.5	2.2
Public sector net debt	79.5	77.4	75.0	75.4	75.6	75.2
Budget 2020 fiscal targets						
Current budget deficit	-0.1	-0.2	-0.1	-0.5	-0.7	-0.8
Public sector net investment	2.2	2.6	2.9	3.0	3.0	3.0
Debt-interest-to-revenue ratio	3.8	3.3	3.5	3.3	3.1	2.9
	Weak productivity scenario					
Legislated objective and targets						
Public sector net borrowing	2.2	2.5	3.0	2.8	2.9	2.9
Cyclically adjusted net borrowing	2.2	2.5	3.2	3.1	3.0	2.9
Public sector net debt	79.5	77.6	75.6	76.6	77.6	78.3
Budget 2020 fiscal targets						
Current budget deficit	-0.1	-0.2	0.0	-0.2	-0.2	-0.2
Public sector net investment	2.2	2.6	3.0	3.0	3.1	3.1
Debt-interest-to-revenue ratio	3.8	3.3	3.5	3.3	3.1	2.9
	Strong productivity scenario					
Legislated objective and targets						
Public sector net borrowing	2.1	2.4	2.7	2.3	2.0	1.7
Cyclically adjusted net borrowing	2.1	2.4	3.0	2.6	2.1	1.7
Public sector net debt	79.5	77.4	74.8	74.8	74.2	73.0
Budget 2020 fiscal targets						
Current budget deficit	-0.1	-0.2	-0.1	-0.6	-0.9	-1.2
Public sector net investment	2.2	2.6	2.9	2.9	2.9	2.9
Debt-interest-to-revenue ratio	3.8	3.4	3.8	3.8	3.5	3.4
	No underspend scenario					
Legislated objective and targets						
Public sector net borrowing	2.1	2.4	2.9	2.6	2.5	2.4
Cyclically adjusted net borrowing	2.2	2.5	3.2	2.9	2.7	2.4
Public sector net debt	79.5	77.4	75.1	75.7	76.0	75.8
Budget 2020 fiscal targets						
Current budget deficit	-0.1	-0.2	-0.1	-0.5	-0.7	-0.8
Public sector net investment	2.2	2.7	3.0	3.1	3.1	3.1
Debt-interest-to-revenue ratio	3.8	3.3	3.6	3.4	3.1	2.9

A Budget 2020 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 Across all measures, we have certified all but three as reasonable and central. These were:

- The effect of **delaying the managed migration of disability living allowance cases to personal independence payment** (PIP): modelling challenges related to a previous change to this policy made it impossible to isolate the effect of the new policy from corrections and other factors affecting the pre-measures baseline.

- The **introduction of an 18-month minimum review period in the PIP regime**: lack of time to scrutinise the costing. We have used the Government's estimates in this forecast and will return to them in our autumn forecast.

- The effect of the **NHS pension scheme paying certain members' annual allowance charges in 2019-20**: insufficient information to determine the reasonableness of the estimates that had been provided. This policy was announced by the Secretary of State for Health and Social Care before the election. Its effect depends on how clinicians respond to the offer, for example in terms of opting back into the scheme if they had left it to avoid such charges or increasing their hours if they had been turning down shifts for the same reason. No management information had been collected on the response to the policy since its announcement. We have used the Government's estimates in this forecast. Firmer information should be available by the autumn.

A.3 Table A.2 reproduces the scorecard alongside our subjective assessment of the uncertainty around each costing.[1] Table A.3 reports the effect of non-scorecard costings.

[1] There are further details in Chapter 3 and in the Treasury's *Budget 2020 Policy costings document*, which briefly summarises the methodology used to produce each costing and the main areas of uncertainty within each.

A.4 The costings process worked reasonably efficiently for this Budget, with more notes submitted to us earlier than has typically been the case in previous Budgets – helped in part by work that had already been done for the aborted Budget in the autumn.

Government policy decisions

A.5 Table A.1 presents the aggregate direct and indirect effects of all new policy announcements, while Tables A.2 and A.3 present the measure-by-measure breakdowns.

Table A.1: Summary of the effect of Government decisions on the budget balance

	£ billion					
	Forecast					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Total effect of Government decisions	**0.6**	**-12.3**	**-24.0**	**-22.5**	**-25.4**	**-29.1**
Direct effect of policies on the scorecard	**0.6**	**-17.9**	**-36.4**	**-38.5**	**-41.2**	**-41.9**
of which:						
RDEL spending[1]	-2.5	-14.9	-27.2	-31.9	-35.6	-38.6
CDEL spending[1]	0.0	-7.0	-16.7	-19.2	-20.0	-20.7
Use of direct Brexit fiscal savings	0.0	4.3	5.0	7.1	11.3	14.6
Receipts	1.0	1.4	3.8	7.1	7.6	7.5
Other AME spending	2.1	-1.6	-1.3	-1.7	-4.4	-4.7
Direct effect of non-scorecard policies	**0.0**	**2.3**	**5.3**	**6.3**	**7.4**	**5.6**
of which:						
RDEL spending[1]	-0.4	-0.3	0.2	0.6	0.6	-0.3
CDEL spending[1]	0.5	1.3	3.3	3.8	3.9	4.1
Receipts	0.0	0.6	0.9	0.9	1.0	1.0
AME spending	0.0	0.6	1.0	1.0	1.9	0.8
Indirect effect of Government decisions	**0.0**	**3.3**	**7.1**	**9.7**	**8.4**	**7.2**

[1] The change in 2024-25 is relative to a baseline that assumes DEL would otherwise have remained constant as a share of GDP.
Note: This table uses the Treasury scorecard convention that a positive figure means an improvement in PSNB, PSNCR and PSND.

A.6 The Government has announced a large Budget giveaway, with public spending moved to a much higher path than the previous plans that were reflected in our March 2019 forecast. It has financed this in part via the direct fiscal savings associated with Brexit – the contributions no longer made, less the divorce settlement, and the customs duties no longer remitted to the EU – and via cancelling the corporation tax cut that was due in April 2020. But for the most part higher spending is financed via higher borrowing.

A.7 The large and sustained fiscal easing provides a temporary boost to real economic activity and leaves the cash size of the economy permanently larger via its effect on whole economy inflation. This boosts all the major tax bases, raising receipts. The effect of the Budget package on borrowing and interest rates raises debt interest spending. And since more than one pound in ten from higher departmental current spending goes on pension contributions, the medium-term net cost of public service pensions is reduced materially.

A.8 The new migration regime raises borrowing by reducing population and receipts growth, but the effect is tempered by the foregone population growth being focused among the lower paid, reducing means-tested welfare spending and limiting the effect on income tax. A higher path for the National Living Wage reduces borrowing slightly.

Treasury scorecard of policy decisions

A.9 Table A.2 reproduces the Treasury's scorecard alongside our subjective assessment of the uncertainty around each costing.[2]

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

		Head[2]	£ million[1]						Uncertainty
			2019-20	2020-21	2021-22	2022-23	2023-24	2024-25[2]	
Investing in excellent public services									
	Spending review								
1	Spending Round 2019 and set resource envelope for the Comprehensive Spending Review 2020	Spend	-2,530	-12,600	-27,225	-32,095	-36,085	-42,320	N/A
2	Delivering public service commitments including on health, schools, criminal justice system (resource spending)[3]	Spend	0	-1,430	-2,685	-2,795	-2,825	-	N/A
3	EU contributions: benefit from contributions no longer paid and customs duties retained	Spend	0	+4,340	+4,990	+7,130	+11,250	+14,605	N/A
4	Farm Support: domestic direct payments[4]	Spend	0	-2,710	-	-	-	-	N/A
	Delivering excellent services								
5	National Health Service: 40 hospitals, diagnostics, operational capital[5]	Spend	0	-1,065	-	-	-	-	N/A
6	Immigration Health Surcharge: increase to £624 with £470 rate for children and extend to EEA nationals	Tax	0	+150	+355	+355	+360	+355	Medium-High
7	Pensions: increase annual allowance taper threshold and adjusted income limit, reduce minimum annual allowance	Tax	0	-180	-315	-450	-560	-670	Very High
8	Prisons: maintenance[4,5]	Spend	0	-175	-	-	-	-	N/A
9	Policing: counter terrorism[4]	Spend	0	-80	-	-	-	-	N/A
10	Safer Streets Fund: CCTV and street lighting[4,6]	Spend	0	-15	-	-	-	-	N/A
11	Public Works Loan Board: increase main rate, with reduced rates for social housing and infrastructure	Spend	+105	+60	+175	+205	+270	+325	Medium

[2] We present a more detailed tax and spending breakdown of each costing in a supplementary table that is available on our website.

Supporting people and families									
	Tax								
12	National Insurance: increase Primary Threshold and Lower Profit Limit to £9,500 in April 2020	Tax	*	-2,110	-2,185	-2,360	-2,370	-2,370	Medium
13	Fuel duty: freeze for 2020-21	Tax	0	-525	-530	-540	-555	-560	Medium-Low
14	Alcohol Duty: freeze all rates for 2020-21	Tax	-40	-285	-295	-305	-310	-320	Medium-Low
15	VAT: zero rate e-publications	Tax	0	-60	-175	-185	-190	-200	Medium-High
16	National Insurance: NICs holiday for employers of veterans in first year of civilian employment	Tax	0	0	-15	-20	-25	-25	Medium
17	VAT: abolish VAT for female sanitary products from January 2021	Tax	0	-5	-15	-15	-15	-15	Medium-Low
18	Vehicle Excise Duty: change classification of new motorhomes from 12th March 2020	Tax	*	-15	-20	-25	-30	-35	Medium
	Spending								
19	Personal Independence Payments: reduce frequency of assessments	Spend	0	0	0	-55	-75	-90	-
20	Neonatal Leave: new entitlement to up to 12 weeks paid leave	Spend	0	0	0	0	-15	-15	Medium-High
21	Housing Benefit: further shared accommodation rate exemptions	Spend	0	0	0	0	-10	-15	Medium
22	Rough sleeping[4,5]	Spend	0	-60	-	-	-	-	N/A
Backing business									
23	Capital Allowances: increase structures and buildings allowance rate to 3%	Tax	-15	-90	-165	-210	-260	-295	Medium
24	Research and Development Expenditure Credit: increase rate to 13%	Spend	0	*	-170	-275	-300	-310	Medium-High
25	Employment Allowance: increase from £3,000 to £4,000	Tax	0	-445	-455	-465	-470	-475	Medium-Low
26	Business Rates: increase retail discount to 50%, and extend to cinemas and music venues for 2020-21	Tax	+10	-270	-15	0	0	0	Medium
27	Business Rates: £1,000 discount for pubs with rateable value of less than £100,000 for 2020-21	Tax	*	-20	*	0	0	0	Medium-Low
28	Corporation Tax: relief for pre-2002 intangible fixed assets	Tax	-5	-25	-60	-95	-140	-185	High
29	Enterprise: business productivity and locally delivered business support	Spend	0	-20	-	-	-	-	N/A
Levelling up and getting Britain building									
30	Spending Round 2019 and set capital envelope for the Comprehensive Spending Review 2020	Spend	0	-2,450	-13,690	-14,465	-13,610	-22,500	N/A
31	Delivering investment commitments including on transport, health, justice, education, R&D (capital spending)[7]	Spend	0	-3,290	-4,315	-6,160	-8,150	-	N/A
32	Housing: building safety fund[4,5]	Spend	0	-1,215	-	-	-	-	N/A
33	Housing: brownfield housing fund[5]	Spend	0	-95	-	-	-	-	N/A
34	Culture: cultural investment fund, parklife, national museums maintenance[4,5]	Spend	0	-95	-	-	-	-	N/A

Growing a greener economy									
35	Ultra low emission vehicle grants[4,5]	Spend	0	-140	-	-	-	-	N/A
36	Air Quality[5]	Spend	0	-175	-	-	-	-	N/A
37	Renewable Heat Incentive: extend	Spend	0	0	-10	-30	-35	-35	Medium
38	Plastic Packaging Tax: 30% recycled content threshold and £200 per tonne	Tax	0	0	0	+240	+235	+220	High
39	Red Diesel: remove relief for sectors other than rail, home heating and agriculture	Tax	0	0	+15	+1,575	+1,640	+1,645	High
40	Climate Change Levy: two year extension to climate change agreement scheme and open to new entrants	Tax	0	*	-5	-5	-190	-190	Medium-Low
41	Climate Change Levy: increase gas rate in 2022-23 and 2023-24, freeze liquid petroleum gas and other commodities	Tax	0	0	0	+130	+260	+270	Medium-High
42	Capital Allowances for Business Cars: extend first year allowance on zero emission cars and raise eligibility criteria	Tax	0	*	-5	+10	+70	+110	Medium-Low
43	Carbon Price Support: freeze for 2021-22	Tax	0	0	-20	-15	-15	-15	Medium-Low
44	Vehicle Excise Duty: exempt zero emission vehicles from the expensive car supplement	Tax	0	-10	-15	-20	-30	-45	Medium-Low
A fair and sustainable tax system									
45	Corporation Tax: maintain at 19%	Tax	+930	+4,635	+6,120	+6,680	+7,075	+7,500	Medium
46	Capital Gains Tax: reduce the lifetime limit in entrepreneurs' relief to £1,000,000	Tax	+5	+215	+1,120	+1,470	+1,670	+1,820	Very High
47	Stamp Duty Land Tax: 2% non-UK resident surcharge	Tax	0	+250	-355	+35	+105	+105	High
48	Tobacco Duty: extend RPI plus 2ppt escalator and additional 4ppt for hand rolling tobacco in 2020-21	Tax	+5	+30	+35	+30	+15	+5	Medium-High
49	Income Tax: top slicing relief amendments	Tax	0	*	-15	-15	-15	-20	Medium-Low
50	Digital Services Tax: technical changes	Tax	+65	-5	*	*	*	+70	Medium-Low
51	Corporate Capital Loss Restriction: companies in liquidation	Tax	*	*	-5	-5	-5	-5	Medium-High
52	Aggregates Levy: freeze for 2020-21	Tax	0	-10	-10	-10	-10	-10	Low
53	Heavy Goods Vehicle VED and Levy: freeze in 2020-21	Tax	0	-10	-10	-10	-10	-10	Low
54	Car Fuel Benefit: increase by CPI in 2020-21	Tax	0	+5	+5	+5	+5	+5	Low
55	Savings: maintain £20,000 limit for adult ISA in 2020-21	Tax	0	*	*	*	*	+5	Medium-Low
Avoidance, evasion, and unfair outcomes									
56	Notification of uncertain tax treatment	Tax	*	+10	+20	+40	+45	+45	Very High
57	Tackling abuse in the construction industry scheme	Tax	0	0	0	+20	+20	+15	Medium-High
58	Conditionality: hidden economy	Tax	0	0	+5	+35	+50	+65	Very High
59	Investment in HMRC to improve tax compliance	Tax	+55	+280	+855	+1,065	+1,075	+595	Medium-High
60	Research and Development PAYE Cap: delay by one year and updated design	Spend	0	0	-60	-130	-65	-35	Medium-High
61	Housing Benefit: investment in fraud detection by Local Authorities	Spend	0	+115	+140	+125	+105	+60	High
Financial transactions									
62	Public sector net borrowing impact of financial transaction changes[8]	Spend	+2,160	+2,530	+2,900	+3,155	+990	+985	N/A

Previously announced policy decisions									
63	Independent Loan Charge Review : implementation of the recommendations	Tax	-30	-305	-245	-70	-70	-25	Medium-High
64	Windrush: tax exemption for compensation payments	Tax	*	-5	-5	*	*	*	High
65	Protecting Your Taxes in Insolvency: delay start date to December and extend to Northern Ireland	Tax	-5	-30	-85	-35	+5	+5	Medium-High
66	Company Car Tax: temporary reduction for new cars registered from 6th April 2020	Tax	0	-50	-50	*	0	0	Medium-High
67	Stamp Tax on Shares: connected company transfers	Tax	0	+5	+5	+5	+5	+5	High
68	VAT: change start date for reverse charge for building and constructions services	Tax	-85	-60	+20	+15	0	0	Low
69	Business Rates Retention Pilots: 2020-21 pilots in Devolution Deal areas and the Greater London Authority	Spend	0	-150	+45	0	0	0	Low
70	Negative Revenue Support Grant: eliminate in 2020-21	Spend	0	-65	0	0	0	0	Medium-Low
71	Communities: youth investment fund[4,5]	Spend	0	-80	-	-	-	-	N/A
72	Welfare: restrict EEA migrants' access to non-contributory benefits for first five years in UK from January 2021	Spend	0	*	+5	+25	+50	+80	Medium-High
73	Child Benefit and Child Tax Credits: end exporting for children outside the UK from January 2021	Spend	0	*	*	*	+5	+5	Medium-High
74	Universal Credit: delay surplus earnings threshold reduction by one year	Spend	0	-75	0	0	0	0	Medium-High
75	Universal Credit: additional support for claimants transferring to pension credit	Spend	0	-5	-10	-10	-15	-25	Low
76	Universal Credit: changes to severe disability premium regulations	Spend	-10	-5	-5	*	*	0	Medium
	Total policy decisions[9]		**+605**	**-17,900**	**-36,430**	**-38,530**	**-41,150**	**-41,920**	
	Total spending policy decisions[9]		-355	-19,255	-40,185	-45,640	-48,780	-49,440	
	Of which current		*-2,545*	*-13,765*	*-24,910*	*-27,860*	*-27,680*	*-27,660*	
	Of which capital		*+2,190*	*-5,490*	*-15,275*	*-17,775*	*-21,100*	*-21,780*	
	Total tax policy decisions[9]		*+960*	*+1,355*	*+3,755*	*+7,110*	*+7,625*	*+7,520*	

* 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] The overall spending level in 2024-25 has been adjusted for the costs of these measures. Settlements for 2024-25 will be set out at the Spending Review after the Comprehensive Spending Review 2020.

[4] The overall resource spending envelope has been adjusted to include funding for this measure in future years. Settlements over the period 2020-21 to 2023-24 will be set out in full at the Comprehensive Spending Review 2020.

[5] These costs are additional capital spending in 2020-21. Future profiles and total programme costs for some specific programmes are detailed elsewhere in the document. Settlements beyond 2020-21 will be set out in full at the Comprehensive Spending Review 2020.

[6] Safer Streets Fund: There is a total of £25m in this Fund, of which £10m is funded from the Home Office settlement.

[7] Departments have existing 2020-21 capital budgets. Some additions were made to 2020-21 capital budgets at the Spending Review 2019 and further additions are made at this Budget. Years beyond 2021-22 represent the overall capital envelope, which will be allocated to departments at the Comprehensive Spending Review 2020. Some specific capital allocations are set out throughout this document.

[8] Further details on financial transactions is set out in the financial transaction table.

[9] Totals may not sum due to rounding.

Policy decisions not on the Treasury scorecard

A.10 Our forecasts include the effect of policy decisions that the Treasury chooses not to present on its scorecard. Sometimes such decisions are neutral for borrowing (the focus of the scorecard), but nevertheless affect our tax or spending forecasts. Sometimes they were announced some time before the Budget or by another department. With a year having passed since our March 2019 forecast, there are 29 policy decisions included in our forecast but not reported on the Treasury's scorecard (see Table A.3).

AME spending measures

A.11 Non-scorecard measures affecting welfare spending and local authority spending include:

- **Universal credit: further delays**: the Government has once again extended the managed migration phase of the rollout of universal credit (UC) – this time by a further nine months. Since December 2014 we have been adding our own six-month contingency to this element of the rollout, given repeated previous delays. We have now decided to extend this by a further 18 months, taking our assumed end date a full two years later than DWP's assumption. This decision reflects both the accumulated experience of the past seven years and the greater emphasis in recent Ministerial statements around deliberately slowing the pace of managed migration to "*protect the interest of moving claimants*". This implies the rollout will finish in September 2026, almost nine years behind the original schedule. This saves around £0.7 billion a year by 2024-25, as the costs for those who gain under UC and transitional protection paid to those who would lose out from a managed move to UC are postponed.

- **Personal independence payment: consequences of rollout delay**: this measure has three related elements. The rollout of personal independence payment (PIP) to replace the existing disability living allowance (DLA) – known as the **'full PIP rollout' – has been delayed once again**, this time by an additional two years. The new end date of July 2023 is now seven years behind the original schedule. One of the consequences of these delays is that the rollout will not be completed until after disability benefits have been devolved to Scotland. The Scottish Government has confirmed that from April 2020 **DLA recipients in Scotland will no longer be invited to move to PIP**. The combined impact of these measures is to **increase the number of scheduled award reviews for working-age claimants.**

- **Correcting the underpayment of child tax credit for families with disabled children:** for the third time in four years the Government has identified families of disabled children that have been underpaid the amount of child tax credit (CTC) due to them. A higher level of CTC is available for disabled children in receipt of either disability living allowance or personal independence payment. HMRC relies on a data feed from DWP to identify those eligible. At Autumn Statement 2016 the Government announced it would make payments to 28,000 families that were underpaid between 2011 and 2014. By 2017 a further 17,000 affected families had been identified, and they too have now been paid. HMRC and DWP have now discovered another 24,000 families and the Government plans to pay them towards the end of 2019-20 and in 2020-21.

- **Opposite-sex civil partnerships: state pension consequentials:** the December 2019 extension of civil partnerships to opposite-sex couples has a small impact on state pension spending. This relates to the ability of some individuals to derive or inherit state pension from a partner. It costs £10 million a year by the end of the forecast.

- **Public lavatories relief:** at Budget 2018 the Government announced a mandatory relief from business rates for public lavatories, to take effect from April 2020. The legislation required to implement this measure was introduced to the House of Lords on 18 June 2019, but following the prorogation of Parliament in September, the Bill was delayed. In the absence of a precise legislative timetable we do not know when this relief will take effect, so have removed the cost of this measure from our forecast.

- **New pension scheme for former employees of Bradford & Bingley and Northern Rock:** the Government has decided to establish a new unfunded pension scheme for former employees of Bradford & Bingley (B&B) and Northern Rock. It expects to sell the assets of the existing schemes in 2023-24. The schemes are closed to new entrants and to accruals, so the only effect on borrowing will be payments to retired scheme members.

- **NHS pensions: 'scheme pays' refund:** in November 2019 the Government announced a short-term measure to compensate members of the NHS Pension Scheme for charges incurred from the annual allowance in 2019-20 if they choose to use 'scheme pays'. Members of many public sector defined benefit pension schemes whose pension accruals exceed the annual allowance can opt to have the tax charge paid by their pension scheme, a process known as 'scheme pays', rather than via self-assessed income tax. In return, the pension scheme takes the tax from the individual's pension, with interest, at retirement. This measure in effect means the Government will pay the charge but then not recoup the cost upon retirement, increasing long-term pension costs. The offer is expected to increase the use of 'scheme pays' in the NHS scheme, which will increase AME spending, and to increase hours worked by scheme members, which will generate additional annual allowance charges. The Government was not able to provide any substantive evidence on either of these behaviours. Nor were we told whether the Department for Health would receive additional DEL funding.

Tax measures

A.12 The non-scorecard measures affecting tax receipts include:

- **High-income child benefit charge: freezing threshold**: the high-income child benefit charge (HICBC) in effect removes, in part or in full, child benefit awards from households with at least one person with income over £50,000. Since its introduction, the policy thresholds have been frozen in cash terms, but at Autumn Statement 2016, following Government advice, we changed the default policy assumption to allow for the thresholds to be uprated by CPI inflation from 2020-21 onwards. We have now been advised that the default policy assumption is to keep the threshold frozen in cash terms, which lowers spending and raises income tax receipts relative to the indexed thresholds. This lowers borrowing by £0.2 billion a year by 2024-25.

- **Capital allowances: clawback from the structures and buildings allowance:** the Government announced the structures and buildings allowance at Budget 2018. On the same day, HMRC published a technical note that set out how much of the benefit gained from the allowance may eventually be clawed back through chargeable gains on disposal of the asset. This policy parameter has now been reflected in our forecast.

- **Share loss relief**: individuals or companies can gain share loss relief when investing in an eligible company. Eligibility requires that the company trades mainly in the UK. This measure widens the scope of the relief so it applies to companies trading anywhere.

- **Tobacco duty escalator: impact of Autumn Budget cancellation:** the Government's decision to cancel November's Budget and hold a General Election delayed the Budget day duty rise and ended the tobacco duty escalator, to which it was committed to the end of the Parliament. In this Budget the Government has reinstated the duty escalator, which is again due to run until the end of the current Parliament.

- **VED on motorhomes**: a new EU regulation requires all motorhomes registered from 1 September 2019 to be taxed based on their CO_2 emissions – an increase of £1,870 in the first year for the most polluting vehicles. This increases our pre-measures VED forecast by around £30 million a year. The Budget reverses this change.

- **VAT on fund management**: this measure updates UK law following two recent decisions by the European Court of Justice. It exempts two forms of fund management fees from VAT with effect from April 2020: the management of defined contribution pension funds and certain pooled pension schemes, and the management of state-supervised funds that invest in real estate. Most providers of administration services currently tax their outputs, enabling them and their clients to recover input VAT on the services. This measure removes this option, making the supplies of administration services exempt instead. Removing the scope for service providers to recover input VAT increases VAT receipts. There is significant uncertainty over the tax base and we rate this costing 'high' uncertainty overall.

- **VAT postponed accounting:** new VAT rules allowing postponed accounting for most import VAT materially affects the profile of cash receipts in 2020-21 and 2021-22, but they do not affect when the underlying VAT liability was incurred so we have assumed that they will not affect accrued VAT receipts.

- **The EU Directive on administrative cooperation (DAC 6):** this Directive is an anti-avoidance initiative that requires 'intermediaries' – "*those who design and market cross-border arrangements, and those who provide aid, assistance or advice in respect of such arrangements*" – to report certain cross-border arrangements to HMRC. The information is then subject to an automatic and mandatory exchange of information between HMRC and the tax authorities in the EU member states. The Government remains committed to DAC 6. This measure generates additional yield by changing the behaviour of taxpayers and provides additional information to guide HMRC's compliance activities. Evidence from the costings of past offshore measures seeking to

deter non-compliance and from previous information exchanges has led us to assign this costing a 'high' uncertainty rating. The directive came into force in June 2018 and the first information exchange is expected to take place in October 2020.

- **Probate fees: reversal:** the Government has scrapped its plans to change the fees payable for an application for a grant of probate. Depending on the value of the estate, the rates were initially due to increase between £300 and £20,000 from May 2017. That change did not make it through Parliament. Following a delay, the Government tried again with rates of between £250 and £6,000 from April 2019, but this did not make it into Parliament at all. This removes around £160 million a year from receipts.

- **Delay in the sales of further tranches of 5G spectrum licenses:** this policy delay is described in Chapter 3. In the National Accounts, the auction proceeds are accrued over a 20-year period, so the annual impact on receipts is relatively modest. Auctions are inherently uncertain so we give this measure a 'very high' uncertainty rating.

Fiscally neutral measures

A.13 Several policies shift spending and receipts between categories but are neutral (or broadly neutral) for borrowing. These include:

- **Council tax rates:** the local government finance settlement for 2020-21 allows local authorities to increase council tax by a core principle of up to 2 per cent in 2020-21 without the need to hold a local referendum, with additional flexibilities for some authority types. It also allows those local authorities that deliver adult social care to raise council tax by an additional 2 per cent. In recent years the majority of affected councils have increased rates by the full amount. This raises council tax receipts and local authority spending financed by them by an average of £0.6 billion a year.

- **High Speed Two Ltd (HS2) VAT treatment:** an HMRC investigation into the company responsible for delivering the Government's HS2 rail network concluded that it had been erroneously reclaiming VAT since 2014. Rather than increase HS2 funding for this, the Treasury has made HS2 eligible for VAT refunds. HS2 has repaid £0.6 billion to HMRC, which boosts our pre-measures VAT forecast in 2019-20. The Government met this cost for HS2, adding £0.6 billion to RDEL spending. For future years, the new VAT treatment will result in the inclusion of HS2's full liability in VAT receipts, offset exactly by higher VAT refunds. We have assumed these payments and refunds grow in line with our VAT forecast and will reflect HS2's funding profile in our next forecast. **S4C VAT treatment** reflects a similar situation for the Welsh language television channel, where the Treasury has made S4C eligible for VAT refunds.

- **Devolving disability benefits spending to the Scottish Parliament:** the Scotland Act 2016 makes provision to devolve several social security benefits to the Scottish Parliament. From April 2020 this will include personal independence payment, disability living allowance, attendance allowance, severe disablement allowance and industrial injuries

disablement allowance. This is a close-to-neutral switch for our forecast as it replaces DWP AME with Scottish Government AME.[3]

- **The Government's response to the ONS reclassifying HM Land Registry (HMLR) and Companies House from public corporations to the central government sector**. Both changes are fiscally neutral, switching spending from AME to DEL.

- **Green gas levy**: the Government has announced a green gas levy on suppliers to the gas grid. We assume the levy is a tax on production and the corresponding payment to producers of biomethane is a subsidy.

Other spending measures

A.14 Non-scorecard measures that impact DELs and Scottish Government AME include:

- **Public Expenditure statistical analyses (PESA) updates:** departments' final plans for 2019-20 as published in PESA 2019, plus our assumptions regarding underspends.

- **Supplementary estimates**: the supplementary estimates for 2019-20 were laid in February 2020. The changes in the supplementary estimates for 2019-20 that are not on the scorecard include an increase in resource DEL of £0.4 billion, a transfer of around £60 million of spending from capital to resource DEL, and a transfer of £0.5 billion of capital DEL from 2019-20 to 2020-21. The Treasury scorecard includes the £1.9 billion increase in resource DEL in 2019-20 from the 2019 Spending Round.

- **Scottish Government AME restatement:** this changes the methodology the Government uses to forecast Scottish Government spending. It is now assumed that the block grant grows in line with overall RDEL (excluding depreciation) in each year of the forecast, while the block grant adjustments are based on the relevant tax and welfare forecasts.

- **Assumed underspend: current:** as described in Chapter 3, we have assumed that 5 per cent of the addition to RDEL plans at the Budget goes unspent.

- **Assumed underspend: capital:** for capital spending we have assumed that 20 per cent of the additional funding goes unspent, reflecting past experience.

- **Other non-scorecard DEL changes:** these are discussed in Chapter 3.

[3] Please see our *Devolved taxes and spending forecasts* publication, published alongside this *EFO* for more details.

Table A.3: Costings for policy decisions not on the Treasury scorecard

	Head	£ million						Uncertainty
		2019-20	2020-21	2021-22	2022-23	2023-24	2024-25	
AME spending measures								
Universal credit: further delays	Total	0	-5	+30	+250	+905	+650	Medium
	AME	*0*	*-5*	*+30*	*+250*	*+905*	*+650*	
Personal independence payment: consequences of rollout delay	Total	-5	+90	+230	+210	+165	+155	
	AME	*-5*	*+90*	*+230*	*+210*	*+165*	*+155*	
Correcting child tax credit for families with disabled children	Total	+35	+50	+15	+15	+10	+10	Medium-Low
	AME	*+35*	*+50*	*+15*	*+15*	*+10*	*+10*	
Opposite-sex civil partnerships: state pension consequentials	Total	0	-5	-5	-5	-5	-10	Medium
	AME	*0*	*-5*	*-5*	*-5*	*-5*	*-10*	
Business rates: public lavatories	Total	0	+5	+10	+10	+10	+10	Low
	Receipts	*0*	*+5*	*+5*	*+5*	*+5*	*+5*	
	AME	*0*	*0*	*neg*	*neg*	*neg*	*neg*	
	RDEL	*0*	*0*	*+5*	*+5*	*+5*	*+5*	
Pension scheme for former NRAM and Bradford & Bingley employees	Total	0	0	0	0	-35	-35	Medium-Low
	AME	*0*	*0*	*0*	*0*	*-35*	*-35*	
NHS pensions: 'scheme pays' refund	Total	0	0	-15	0	0	0	
	Receipts	*0*	*0*	*+20*	*0*	*0*	*0*	
	AME	*0*	*0*	*-35*	*0*	*0*	*0*	
Tax measures								
High-income child benefit charge: freezing threshold	Total	0	+10	+40	+75	+120	+165	Medium-Low
	Receipts	*0*	*+10*	*+30*	*+55*	*+80*	*+105*	
	AME	*0*	*+5*	*+10*	*+25*	*+40*	*+60*	
	RDEL	*0*	*neg*	*neg*	*neg*	*neg*	*neg*	
Capital allowances: structures and buildings allowance clawback	Total	+5	+5	+10	+15	+20	+20	Medium
	Receipts	*+5*	*+5*	*+10*	*+15*	*+20*	*+20*	
Share loss relief	Total	neg	-5	-5	-5	-5	-5	Medium
	Receipts	*neg*	*-5*	*-5*	*-5*	*-5*	*-5*	
Tobacco duty escalator: impact of Autumn Budget cancellation	Total	+90	-190	0	0	0	0	Low
	Receipts	*+90*	*-190*	*0*	*0*	*0*	*0*	
VED on motorhomes	Total	0	+15	+20	+25	+30	+35	Medium
	Receipts	*0*	*+15*	*+20*	*+25*	*+30*	*+35*	
VAT on fund management	Total	0	+30	+15	+15	+15	+15	High
	Receipts	*0*	*+30*	*+15*	*+15*	*+15*	*+15*	
VAT postponed accounting	Total	0	0	0	0	0	0	Medium
	Receipts	*0*	*0*	*0*	*0*	*0*	*0*	
	VAT cash	*0*	*-3615*	*-185*	*+925*	*+315*	*-25*	
	VAT acc ad	*0*	*+3615*	*+185*	*-925*	*-315*	*+25*	
The EU Directive on administrative cooperation (DAC 6)	Total	neg	+5	+10	+15	+15	+15	High
	Receipts	*neg*	*+5*	*+10*	*+15*	*+15*	*+15*	
Probate fees reversal	Total	-130	-145	-150	-155	-165	-175	Low
	Receipts	*-130*	*-145*	*-150*	*-155*	*-165*	*-175*	
Delay in the sale of 5G spectrum licenses	Total	-25	+40	+40	+40	+40	+40	Very High
	Receipts	*-25*	*+40*	*+40*	*+40*	*+40*	*+40*	

Fiscally neutral measures								
Council tax rates	Total	0	0	0	0	0	0	
	Receipts	*0*	*+530*	*+545*	*+565*	*+580*	*+600*	Medium-Low
	AME	*0*	*-530*	*-545*	*-565*	*-580*	*-600*	
High Speed Two Ltd (HS2) VAT treatment	Total	-570	0	0	0	0	0	
	Receipts	*+75*	*+310*	*+320*	*+330*	*+340*	*+350*	Medium
	AME	*-75*	*-310*	*-320*	*-330*	*-340*	*-350*	
	RDEL	*-570*	*0*	*0*	*0*	*0*	*0*	
S4C VAT treatment	Total	0	0	0	0	0	0	
	Receipts	*+15*	*+15*	*+15*	*+15*	*+15*	*+20*	Medium-Low
	AME	*0*	*0*	*-15*	*-15*	*-15*	*-20*	
	RDEL	*-15*	*-15*	*0*	*0*	*0*	*0*	
Devolving disability benefits to the Scottish Parliament	Total	neg	-15	-25	-30	-40	-45	Medium
	AME	*neg*	*-15*	*-25*	*-30*	*-40*	*-45*	
Land Registry and Companies' House: reclassification	Total	0	0	0	0	0	0	
	AME	*0*	*+365*	*+375*	*+390*	*+405*	*+420*	Medium-Low
	RDEL	*0*	*-300*	*-305*	*-315*	*-330*	*-340*	
	CDEL	*0*	*-65*	*-70*	*-70*	*-75*	*-80*	
Green gas levy	Total	0	0	0	0	0	0	
	Receipts	*0*	*0*	*+5*	*+20*	*+55*	*+95*	Medium-High
	AME	*0*	*0*	*-5*	*-20*	*-55*	*-95*	
Other spending measures								
Public Expenditure statistical analyses (PESA) updates	Total	-100	0	0	0	0	0	N/A
	CDEL	*-100*	*0*	*0*	*0*	*0*	*0*	
Supplementary estimates	Total	+70	-490	0	0	0	0	
	RDEL	*-485*	*0*	*0*	*0*	*0*	*0*	N/A
	CDEL	*+555*	*-490*	*0*	*0*	*0*	*0*	
Scottish Government AME: restatement	Total	0	0	0	0	0	0	
	AME	*0*	*+750*	*+895*	*+635*	*+835*	*0*	N/A
	RDEL	*0*	*-750*	*-895*	*-635*	*-835*	*0*	
Assumed underspend: current	Total	0	+830	+1500	+1755	+1955	+2125	
	RDEL	*0*	*+745*	*+1360*	*+1595*	*+1780*	*+1930*	N/A
	AME	*0*	*+85*	*+140*	*+160*	*+175*	*+195*	
Assumed underspend: capital	Total	0	+1520	+3605	+4125	+4350	+4500	
	CDEL	*0*	*+1410*	*+3340*	*+3840*	*+4010*	*+4145*	N/A
	AME	*0*	*+110*	*+265*	*+285*	*+345*	*+350*	
Other DELs	Total	0	neg	neg	neg	neg	-990	
	RDEL	*0*	*neg*	*neg*	*neg*	*neg*	*-990*	N/A
	CDEL	*0*	*0*	*neg*	*neg*	*neg*	*neg*	
Direct effect of Government decisions		**+10**	**+2255**	**+5325**	**+6345**	**+7380**	**+5620**	

Note: The presentation of these numbers is consistent with the usual scorecard treatment, with negative signs implying an Exchequer loss and a positive an Exchequer gain. Shaded cells are illustrative and don't feed into the totals. Components may not sum to total due to rounding.

Scottish and Welsh Government policy decisions

A.15 Our UK public finances forecasts are also affected by decisions taken by the devolved administrations. These can affect UK-wide taxes, such as income tax and NICs, or those that have been fully devolved, such as the Scottish land and buildings transactions tax (LBTT). Since March 2019 the Scottish Government has announced several measures that have been reflected in this forecast, while the Welsh Government has announced one (Table A.4).

Table A.4: Costings for devolved administration policy decisions

		£ million					
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Scottish Government policy decisions							
Income tax: higher rate threshold of £43,430 in 2020-21	Receipts	0	+55	+60	+65	+65	+70
LBTT: new rate for commercial leases	Receipts	neg	+10	+10	+10	+10	+10
Landfill tax: delay to the BMW ban	Receipts	0	+5	+15	+15	+15	+15
Non-domestic rates policies		0	0	0	0	0	0
of which:							
Non-domestic rates: devolution of empty property relief	Receipts	0	0	0	+100	+100	+100
Non-domestic rates: other policies	Receipts	0	+10	+20	+25	+25	+25
Non-domestic rates: LASFE impacts	AME	0	-10	-20	-125	-125	-125
Scottish child payment	AME	0	-20	-65	-95	-155	-160
Social security: other policies	AME	0	-10	-20	-20	-25	-30
Welsh Government policy decisions							
Welsh Government: minimum unit price of alcohol	Receipts	-25	-25	-25	-25	-20	-20
Direct effect of Scottish Government decisions		neg	+40	neg	-25	-90	-95
Direct effect of Welsh Government decisions		-25	-25	-25	-25	-20	-20
Direct effect of devolved administration decisions		**-25**	**+15**	**-20**	**-50**	**-110**	**-115**

Note: The presentation of these numbers is consistent with the usual scorecard treatment, with negative signs implying an Exchequer loss and a positive an Exchequer gain. These costings are included in our pre-measures forecast, with the post-measures forecast only accounting for policy decisions by the UK Government.

A.16 The costings incorporated in our forecast include:[4]

- **Income tax: freeze higher rate threshold in Scotland at £43,430 in 2020-21:** this holds the gap between the threshold in Scotland and the UK constant in 2020-21 (since the UK threshold is also frozen at £50,000 next year).

- **Land and buildings transactions tax: new tax rate for leases:** the Scottish Government has introduced a higher tax rate on commercial leases where the net present value of the rent is above £2 million. From 7 February a 2 per cent rate will apply to the portion of the value above this threshold, compared to 1 per cent applied below it.[5]

[4] For more information see our *Devolved taxes and spending forecasts*, published alongside this *EFO* and available on our website. The effects detailed here need to be considered alongside the fiscal consequences set out in the Treasury's fiscal framework agreements with the Scottish and Welsh Governments respectively, which set out the methodology by which block grant adjustments are made.
[5] The 1 per cent band begins at £150,000.

- **Delay to the ban on sending biodegradable municipal waste to landfill:** our March 2019 forecast included the impacts of the Scottish Government's decision to ban the landfill of biodegradable municipal waste from January 2021. This was expected to reduce receipts of Scottish landfill tax but increase those of the UK Government's landfill tax, as some waste affected by the ban was diverted to landfill sites in England. Introduction of the ban has now been delayed to 2025.

- **Non-domestic rates:** the Scottish Government has made several changes to business rates policy. The **'devolution of empty property relief'** which passes the cost of the relief to Scottish local authorities from April 2022 raises £100 million a year. The introduction of a new **'intermediate property rate'** that will apply to properties with a rateable value between £51,000 and £95,000 from April 2020 costs around £10 million a year. And a measure on '**properties not in active occupation'** requires ratepayers to demonstrate to the local authority that the property is in continuous active use in order to claim relief. This raises £5 million a year.[6] These measures have **implications for local authority spending**, which we have assumed will move one-for-one with the changes in local authority income they generate.

- **Scottish social security spending:** the Scottish Government announced several new welfare policies in its February Budget. The spending associated with these is captured within our Scottish Government AME forecast. The largest measure is the introduction of a **Scottish child payment** of £10 per week for low-income families with dependent children. It is expected to cost £160 million a year by 2024-25. The next largest is the **child disability payment** that will replace DLA for children in Scotland from mid-2020. The cost of this change rises to £25 million a year by 2024-25. Table A.4 also includes several smaller policies that cost around £5 million a year.[7]

- **Welsh Government: minimum unit price of alcohol:** the Welsh Government has announced that it intends to follow the Scottish Government in setting a 50p minimum unit price (MUP) of alcohol in Wales, effective from March 2020. The price per alcohol unit embodied in most drinks is already higher than 50p. Proportionately the largest effect is on some types of cider bought in supermarkets and other shops. By raising prices, the MUP can be expected to reduce the volume of alcoholic drinks consumed and so reduce tax receipts. This behavioural response is uncertain, in respect of both the degree to which consumers will reduce their purchases of duty-paid alcohol and the degree to which they switch to either the illicit or cross-border markets. The effect of the Scottish MUP on receipts has not been evaluated yet.

[6] There are a handful of other measures too. Mainstream independent schools will no longer be able to claim charitable relief from September 2020. Commercial activity on currently exempt parks and council land used for recreation will lose its exemption from non-domestic rates in April 2022. And the empty property relief reset period has been lengthened from six weeks to six months.
[7] The fixed rate of funeral support payment, which recipients can use to pay for funeral directors and venue hire, will rise from £700 to £1000 in 2020-21 and subsequently in line with CPI inflation over the rest of the forecast. Funding for the Scottish welfare fund, (which offers grants to low income and vulnerable households) and discretionary housing payments will also be increased.

Policy costings and uncertainty

A.17 In order to be transparent about the potential risks to our forecasts, we assign each certified costing a subjective uncertainty rating, shown in Table A.2 and Table 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.18 Using the approach set out in Table A.2, we have judged 11 scorecard measures and 3 non-scorecard measure to have 'high' or 'very high' uncertainty around the central costing. Together, these represent 13 per cent of the scorecard measures by number, or 18 per cent of the tax and AME measures we have certified. They represent 23 per cent of certified measures by absolute value.[8]

Plastic packaging tax

A.19 The Government has announced a new plastic packaging tax of £200 per tonne on imported or domestically produced plastic packaging with a recycled content of less than 30 per cent. The tax rate will rise each year with CPI inflation and will take effect from April 2022. It raises £240 million a year on average from 2022-23 onwards.

A.20 We have certified the methodology used to produce the costing as reasonable and central, but have assigned it a 'high' uncertainty rating. While the data available are of reasonably good quality, they do not precisely match the packaging that will be liable to the tax (the 'tax base'). There are several years between the most recent year of data and the measure taking effect. The costing also allows for several behavioural responses, the estimates for which rely largely on judgement. The multiple steps required to transform the available data into the tax base and then to capture all the different behavioural responses mean the modelling is also uncertain. We therefore assign a 'high' uncertainty rating to each of data, behaviour and modelling, with behaviour deemed the most important for the costing.

A.21 The modelling steps taken to derive the tax base are:

- **Establishing the total amount of plastic packaging currently used in the UK.** This is based on two sources of information. Packaging recovery regulations require producers with an annual turnover of £2 million or more and handling greater than 50 tonnes of packaging a year to complete packaging recovery notes (PRNs). The amount of packaging reported in PRNs is augmented by data in reports from the 'Waste and Resources Action Programme' (WRAP). On this basis around 2.3 million tonnes is estimated to have been used in 2019-20.

[8] Absolute value ignores whether they are expected to raise or cost money for the Exchequer

- **Projecting the total plastic packaging in use to 2022-23**. PRN and WRAP data suggest that plastic packaging use is declining relative to consumer spending. We estimate the amount in use – in the absence of this measure – would fall to 2.1 million tonnes in 2022-23 and somewhat further year by year.

- **Removing packaging where the recycled content is already above the 30 per cent threshold** from the tax base. This also uses information from WRAP. Different plastic types vary significantly in the extent to which recycled materials can be used in their production. For example, bottles made using polyethylene terephthalate (PET) can be produced using recycled plastics, but there is no technology that allows for recycled content in packaging films (made using low density polyethylene). Once again, the WRAP data do not precisely capture the amount of packaging above the recycling threshold, so several further assumptions are required. This adjustment reduces the tax base by around 15 per cent in 2022-23, rising to 25 per cent in 2024-25.

- **Excluding businesses producing less than a de minimis level of 10,000 tonnes** of plastic packaging a year. There are limited data on how many businesses this will affect and how much packaging will therefore be excluded. HMRC survey evidence suggests the de minimis will affect a large number of small producers, but that the volume of packing they account for is relatively small. This suggests the de minimis will remove around 3 per cent of packaging from the tax liability.

A.22 The 'static' costing – the estimated revenue raised if firms and consumers do not change their behaviour in response to the introduction of the tax – is simply the tax rate multiplied by the tax base. This averages £325 million a year from 2022-23 to 2024-25. The costing then allows for several behavioural responses:

- **An increase in the recycled content used in plastic packaging** is the largest expected behavioural response. Average recycled content is assumed to rise by almost 60 per cent between 2022-23 to 2024-25, which lowers the yield by 13 per cent a year. Producers with packaging that would otherwise be just under the 30 per cent recycled threshold are expected to increase recycled content to avoid the tax. This could be through changing domestic production or via cross-border trade. These judgements are highly uncertain – there is little international evidence regarding the introduction of such taxes on which to base them.

- **Producers switching to alternative plastics or substituting to other materials** is estimated to lower the yield by a further 3 per cent a year. Producers may switch to plastic types with sufficient recycled content to avoid incurring a tax liability. The scale of this response is also uncertain, but it is assumed to be limited by the difficulty of producing some types of packaging from recycled content. The extent to which alternative materials such as cardboard or glass will substitute for plastics is similarly uncertain.

- **A price-related reduction in consumer demand**, as producers pass their tax liability through to higher prices. This lowers the yield fractionally.

- **Forestalling or stockpiling of plastic packaging ahead of the tax** reduces the costing by around £15 million in 2022-23. The amount of forestalling is assumed to be limited due to the relatively bulky nature of packaging.

- **Non-compliance** reduces the costing by an average of £25 million a year. This is equivalent to a tax gap of 10 per cent, similar to those for alcohol and cigarette duties, and slightly lower than that for landfill tax. HMRC's default position will be that packaging is liable for the tax unless proven otherwise, with the burden of proof for demonstrating the level of recycled content falling on the producer. As with all new taxes there are challenges around the timely and effective implementation of the necessary infrastructure, and the recruitment and training of compliance staff.

A.23 The combined effect of these behaviours is to reduce the static yield by around a quarter, with the new tax estimated to raise £250 million in 2022-23, falling to £230 million in 2024-25. The measure, by reducing the volume of plastic waste, is also expected to reduce landfill tax receipts by around £10 million a year.

Migration-related policy announcements

A.24 The new migration regime that the Government plans to introduce from January 2021 has material effects on our economy and fiscal forecasts. In addition, three measures are targeted at migrants: the increase in the immigration health surcharge and its extension to EEA nationals, restricting EEA migrants' access to non-contributory benefits and ceasing the 'export' of child benefit. The yield/savings from these are relatively small because the number of migrants affected is assumed to be reduced materially by the migration regime itself. This is particularly true of restricting access to non-contributory benefits because of the overlap between those who would be affected and those whose access to the UK will be restricted. None of the costings have been assigned a high uncertainty rating, but there is huge uncertainty around prospects for migration.

Other highly uncertain measures

A.25 The other measures subject to a 'high' or 'very high' uncertainty rating are:

- **'Capital Gains Tax: reduce the lifetime limit in entrepreneurs' relief to £1,000,000'**: under this relief company owners pay a lower rate of tax of 10 per cent on disposals of shares up to a lifetime limit for each taxpayer. The measure reduces that limit from £10 million to £1 million. CGT receipts are volatile from year to year, with the element related to unlisted shares, which makes up the majority of entrepreneurs' relief claims, particularly so. But the main uncertainty relates to behaviour. The measure doubles the CGT payable on gains between £1 million and £10 million (in most cases). We might expect this to prompt a substantial behavioural response. But there is also evidence that the relief does not play a significant role in entrepreneurial decision making, often coming as a pleasant windfall to business owners when they retire.[9] To the extent that

[9] As we discussed in Chapter 4 of our 2019 *Fiscal risks report*.

that is the case, the behavioural response might be more limited. Judging the balance between these is particularly uncertain. Overall, we have assigned this costing a 'very high' uncertainty rating.

- 'Pensions: increase annual allowance taper threshold and adjusted income limit, reduce minimum annual allowance': this measure partly reverses the effect of the annual allowance taper that was introduced in 2015. The key uncertainty relates to modelling, to which we have assigned a 'very high' rating. For reasons of analytical tractability, the cost is estimated by modelling yield from the taper using the existing and new policy parameters and calculating the difference between them. The original taper has prompted large behavioural responses – in the private sector, some have converted pension contributions to pay; in the public sector, some have left pension schemes or curtailed work. The extent to which these responses are reversed by those no longer affected by the taper is highly uncertain. Overall, we have given this costing a 'very high' uncertainty rating.

- 'Conditionality: hidden economy': This measure requires drivers of taxis and minicabs to provide evidence of tax registration to licensing authorities when applying to renew their licences. It applies from April 2022. There is data uncertainty around the tax liability of those that will be affected, and modelling uncertainty about growth in that tax base. More significant is the behavioural uncertainty around how taxi drivers might respond, for example in terms of employment choices or seeking to evade the new requirements. Overall, we have assessed this a 'very high' uncertainty rating.

- 'Notification of uncertain tax treatment': this measure requires large business taxpayers to notify HMRC of potential tax disputes, where the value of the uncertain tax liability exceeds £1 million. This is based on the definition of 'uncertain tax treatment' used in international accounting standards. This is expected to make HMRC's compliance activities more productive through more and earlier notifications, and fewer cases going to litigation. The costing draws on HMRC administrative data projected forward to proxy the actual tax base. Both data and modelling are deemed a 'very high' source of uncertainty. Most importantly, the behavioural response is also very uncertain. The costing assumes that the new notification requirement will make firms less likely to interpret their tax liabilities in ways that HMRC will disagree with and more likely to seek HMRC clearance for uncertain positions. The effect of this has been estimated with reference to the 'senior accounting officer' regime, but is highly uncertain. We assign this measure a 'very high' uncertainty rating.

- 'Windrush: tax exemption for compensation payments': The modest cost of the tax relief associated with the Windrush compensation scheme is highly uncertain because the amount of compensation to be paid is itself highly uncertain. Most of the cost identified by the Home Office Impact Assessment is from employment-related compensation. Two key inputs to modelling these costs are subject to high uncertainty. First, average earnings lost by the affected population are modelled by the Department for Work and Pensions using Labour Force Survey microdata (suggesting a figure of around £21,500 a year) and an average duration affected that is based

solely on judgement. On the latter, the costing simply takes the mid-point of the scenarios presented in the Impact Assessment (i.e. 2½ years). Second, the Home Office believes that it will only be possible for between 15 and 28 per cent of those eligible for employment-related compensation to provide the documentary evidence necessary to receive their actual entitlement, with others claiming a general earnings compensation of between £8,000 and £10,000 instead. The assumption that 21.5 per cent of claims receive the amount to which they are entitled (again, the mid-point of the range presented in the Impact Assessment), while 78.5 per cent receive the fixed tariff, reduces the amount of compensation paid out by around £100 million and the cost of the associated tax relief by around £25 million (relative to all employment-related claims receiving around £54,000 – i.e. £21,500 times 2½ years). This illustrates the scale of the uncertainty associated with these assumptions. We assign this costing a 'high' uncertainty rating.

- 'Red Diesel: remove relief for sectors other than rail, home heating and agriculture': this measure removes the red diesel relief from around three-quarters of the red diesel currently consumed. The main uncertainty surrounds the behavioural response to the large price rise for those affected. This is an area with a history of non-compliance, sometimes on a large scale, and there is uncertainty over the level and effectiveness of future compliance activity. The measure does not come into effect until April 2022, so there is also uncertainty around forestalling. And further uncertainty relates to the degree of substitution to alternative fuels. Overall, we assign a 'high' uncertainty rating, with behaviour rated 'very high'.

- 'Stamp Tax on Shares: connected company transfers': stamp taxes on shares apply on the transfer of existing securities in UK companies. This measure prevents arrangements involving transfers of unlisted securities to connected companies that are deemed 'contrived arrangements'. The tax base is based on HMRC experts' judgement in the absence of relevant data – a source of high uncertainty. The costing assumes that some affected businesses would either try to avoid the charge while others would no longer engage in these transfers. The scale of such behaviour is also a source of considerable uncertainty. Overall this receives a 'high' uncertainty rating.

- 'Corporation Tax: relief for pre-2002 intangible fixed assets': this measure extends the corporation tax regime for intangible fixed assets to provide relief on all relevant acquisitions from 1 April 2020. Modelling is a 'very high' source of uncertainty, since the regime itself is complex. There is also considerable uncertainty over behaviour. The relief may increase inward investment of intangibles but perhaps also avoidance if companies seek ways to push boundaries and claim the relief. We expect the cost to increase over time due to 'attrition' – the catch-all assumption designed to capture this type of behaviour. Overall, we give this costing a 'high' uncertainty rating.

- 'Stamp Duty Land Tax: 2% non-UK resident surcharge': this measure introduces an additional 2 per cent SDLT surcharge for all purchases of residential property by non-UK residents from April 2021. The main source of uncertainty is behaviour, which we assign a 'high' rating. The policy is being announced a year before implementation,

creating an incentive to bring forward transactions. The costing assumes that around 6,500 non-resident purchases a year will be displaced by new UK-resident transactions, which is uncertain too. There is also considerable uncertainty around the tax base as there is no existing requirement for those purchasing property to declare whether they are a UK resident or not. This costing receives a 'high' uncertainty rating overall.

- **'Housing benefit: investment in fraud detection by Local Authorities'**: this measure seeks to reduce fraud and error in housing benefit claims by increasing the resources available to local authorities to carry out compliance activity. Housing benefit is part of the legacy benefits system that is being replaced by universal credit for working-age claimants. Despite that, the measure provides equal funding in each year. As a result, it will target a diminishing caseload over time, an increasing proportion of which will be pensioners. This is likely to generate diminishing returns on compliance interventions – because the remaining caseload is less likely to be in work or experience frequent changes in circumstances, so less likely to make errors in their claims. This generates data and modelling challenges. Overall, we give this a 'high' uncertainty rating.

A.26 We decided against giving a high uncertainty rating to **'investment in HMRC to improve tax compliance'** on the grounds that it largely relates to the collection of tax and tax credits debt rather than compliance activity. The element of the measure that does relate to tax compliance, affecting around a third of the yield, *is* highly uncertain, but costings relating to debt collection are less so.

Update on previous measures

A.27 We cannot review and re-cost all previous measures at each fiscal event (the volume of them being simply 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.

Policy reversals

A.28 The Budget public spending announcements reverse all the cuts in real departmental spending per person that had been implemented since 2010-11. Our forecast also reflects one previously announced tax policy that has been reversed:

- **'Corporation tax: maintain at 19%':** the corporation tax rate was scheduled to fall from 19 to 17 per cent on 1 April 2020. This cut was announced by George Osborne in Budget 2016, when he argued that corporation tax is "*one of the most distortive and unproductive taxes there is*". Not going ahead with the cut increases revenue by increasing amounts over the forecast period, reaching £7.5 billion in 2024-25.

Policy delays

A.29 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 *EFO*s, many of the Government's announced policy measures do not meet the timetable factored into the original costings – even where we have required greater contingency margins before certifying the measure. This continues to pose a risk to our forecast. The policy delays we have been notified about in this Budget include:

- **'Tax credit debt: enhanced collection':** this measure, announced in Autumn Budget 2017, and due to begin in April 2018, was designed to facilitate the smooth transfer of certain tax credits debt from HMRC to DWP. In March 2018, HMRC told us that '"*IT problems*" meant a delay to October 2018, before that timetable slipped again to March 2019. A third delay, this time due to "*testing the IT solution*", pushed this back to June 2019. DWP has now informed us that "*constraints in DWP's debt management resources*" has resulted in further delay, with 62,000 cases moved from 2019-20 to 2020-21. The original costing expected to yield £240 million across 2018-19 and 2019-20. It is now expected to yield £25 million across those two years, but is still expected to generate savings in subsequent years.

- **Delays to universal credit managed migration and the full rollout of personal independence payment:** these two delays are described earlier in this annex. They are now expected to conclude nine and seven years behind schedule respectively.

- **'Construction supply chain VAT fraud: introduce reverse charge'**: this Autumn Budget 2017 measure sought to counter construction sector fraud by introducing a reverse VAT charge. It was scheduled to take effect from October 2019, but the Government has agreed to industry requests for a one-year postponement to October 2020.

- **'Protecting your taxes in insolvency':** in Budget 2018 the Government announced a measure that would move HMRC up the order of creditors so that it ranks as a secondary preferential creditor for several tax debts. It was due to commence on 1 April 2020, but has been delayed until 1 December 2020.

Evaluation of HMRC operational measures

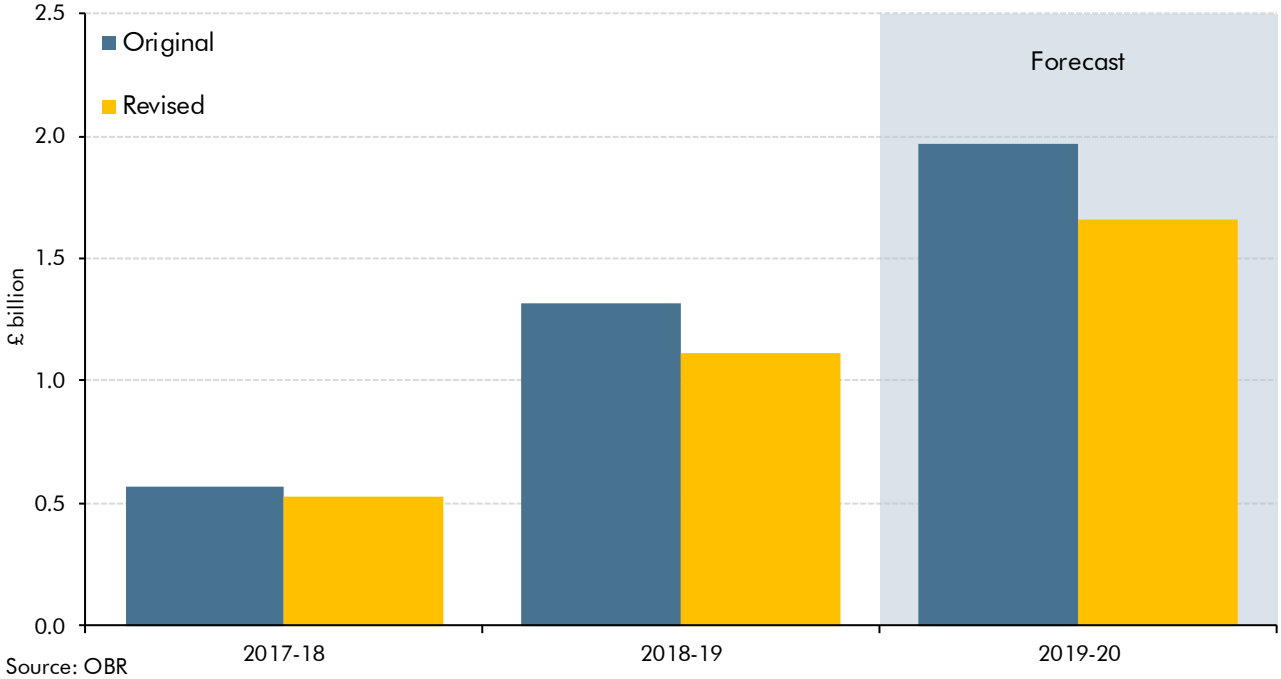
A.30 The revenue estimates from measures designed to generate yield through additional HMRC compliance resourcing and activity tend to be highly uncertain. Previous analysis has shown that the numbers of under- and over-performing measures are broadly similar, but there has been a revealed optimism bias in some larger measures.[10] At Summer Budget 2015 the Government announced a large package of measures across a range of compliance areas, supported by £1.3 billion of additional DEL funding from 2015-16 to 2020-21.

[10] Johal, OBR Working Paper No.11: *Evaluation of HMRC anti-avoidance and operational measures*, 2017.

A.31 The package included ten separate costed interventions for which HMRC has outturn data for 2017-18 and partial outturn data for 2018-19. Many of the challenges inherent in scrutinising the initial costings also apply to evaluating their performance. It is difficult to isolate the additional impact of individual measures from HMRC's wider compliance activity. Similarly, it is not straightforward to attribute even observed behaviour to a specific intervention. The outturn data relies on statistical techniques to attribute compliance yield to each measure. It is then converted to the National Accounts measure of tax receipts that we use in our forecasts. Compliance yield can also be skewed by large one-off cases.

A.32 Notwithstanding these caveats HMRC's analysis shows that performance has largely matched expectations (see Chart A.1). Total estimated outturn in 2017-18 and 2018-19 is relatively close to initial expectations, while the current forecast for 2019-20 is below the initial costings. The current estimate of the three-year total is £3.3 billion compared to the £3.8 billion from the original costings, a shortfall of 14 per cent. In an area where yields can vary hugely and we assign high uncertainty ratings, this is a narrow margin of error.

Chart A.1: Summer Budget 2015 compliance yield: original versus revised costings



Source: OBR

Updates on other measures

A.33 Our forecast reflects updates on several other measures:

- **Off-payroll working (also known as 'IR35'):** this relates to two measures that target off-payroll workers (in the public and private sectors respectively) who work through an intermediary, such as a personal services company (PSC), which enables them to pay less tax and NICs. The measures move the burden of responsibility for determining whether existing rules apply to the engager rather than the intermediary. The public sector element came into force in April 2017, while the private sector element begins in April 2020. Administrative data on the public sector measure has led us to revise up

the yield. The original costing underestimated the growth in the number of PSCs, so a larger-than-expected tax base has been affected. HMRC analysis also suggests a lower offsetting impact from dividend taxation than initially assumed. Tax records point to a higher-than-expected proclivity to retain profits within companies. One of the reasons for this appears to be owners channelling their entrepreneurial spirit by ceasing trading in order to benefit from entrepreneurs' relief on capital gains. These changes raise the expected yield of the measures by £250 million by 2024-25.

We asked the Treasury about the Chancellor's recent statement that he had "*spent time with HMRC to ensure they are not going to be at all heavy handed for the first year*" of the private sector measure and whether this posed a risk to our forecast. The Treasury confirmed that this reflected existing plans to spend the first year focusing on "*education and support*", so did not constitute a change in how it will be implemented.

- **Pensions flexibility:** this Budget 2014 measure gave individuals with defined contribution pensions the flexibility to withdraw their funds from age 55, subject to tax paid at their marginal rate rather than the 55 per cent charge previously in place. The measure raised £2.0 billion (67 per cent) more than the original estimate over the 2015-16 to 2018-19 period of the initial costing thanks to more funds being withdrawn than originally assumed. This pattern has continued in 2019-20. The earliest cohorts have continued to withdraw funds at a consistent rate, whereas we had previously expected their withdrawals to have diminished by this stage. We have increased our income tax forecast by £0.4 billion a year in light of these changes.

- **HMRC offshore initiatives:** HMRC has introduced a range of policy measures designed to tackle offshore tax avoidance and evasion, including providing opportunities for voluntary disclosure, information exchange agreements and penalty regimes. As we have reported on several previous occasions, the yield from these measures is highly uncertain given the paucity of reliable data and the tendency for individuals engaged in these activities to seek alternative opportunities. The single largest movement in the forecast is due to a downward revision of around 80 per cent to the assumed average value of relevant compliance cases worked by HMRC staff, based on evidence from existing cases. The impact is only slightly offset by a delay in expected voluntary disclosures that pushes revenue previously expected in 2018-19 to the early years of the forecast. Overall, we have revised down our receipts forecast by an average of £0.1 billion a year. We will continue to revisit these measures.

- **Restrict landlords' finance relief to the basic rate of income tax:** at Summer Budget 2015 the Government announced that the finance costs of landlords of residential property would only be relieved at the basic rate of income tax (rather than at their marginal rate). The measure has been phased in since 2017-18 with the full restriction beginning from 2020-21. A key assumption in the original costing was the proportion of landlords' finance costs relating to residential property. The original costing assumed 92 per cent, but evidence from 2017-18 self-assessment returns suggests the proportion is 72 per cent, with a far higher commercial property proportion than

initially expected. This is the primary reason we have lowered the yield from the measure by a third, taking £0.3 billion a year off our income tax forecast.

- **CGT payment window for residential property:** this measure, announced at Autumn Statement 2015, requires taxpayers to pay CGT on residential property within 30 days of a transaction taking place, instead of through self-assessment (SA). After a one-year delay from the original timetable, HMRC has confirmed that the payment window will launch in April 2020. The costing has been updated to account for the impact of **penalties for failing to meet the new 30-day filing** requirement. Additional penalties are also due if the taxpayer subsequently fails to file within six months and then again at 12 months. Despite it being more than four years since the policy was announced, HMRC believes that a lack of public awareness will lead to repeated penalties for some individuals. The net impact, once allowance is made for those individuals that would have incurred penalties under the existing SA filing regime, is to raise the initial costing by around £10 million a year.

- **Tax credits: limiting the child element to two children:** this measure, announced at Summer Budget 2015, limits the child element of child tax credits to a maximum of two children born from April 2017 onwards. The original costing allowed for the incentive for couples affected by the limit either to separate or just to tell HMRC that they had separated so that they could make two claims. The original costing assumed that 10 per cent of affected couples would respond in this way, but HMRC analysis of administrative data found no evidence of this. Removing this assumption reduces our spending forecast by amounts rising to £165 million by 2024-25.

- **Personal independence payments (PIP): response to legal judgements:** in our March 2018 *EFO* we noted that the Government was not going to appeal against a High Court decision in December 2017 that ruled against Government plans to mitigate the effects of an earlier legal defeat in November 2016. The first case, known as 'MH', related to claimants with certain mental health conditions. In March 2018 we revised our forecast up by an average of £0.4 billion a year, based on DWP's assessment of what complying with the ruling entailed. These estimates were provisional at the time and based on DWP's expectation that 5 per cent of claimants would receive a higher award in arrears. This figure has now been revised down to just 0.7 per cent, with the resulting cost reduced to just £17 million a year, 96 per cent less than expected. It is not clear why the initial assessment – provisional though it was – proved so inaccurate.

- **Transferable marriage allowance:** this Autumn Statement 2013 measure allows spouses and civil partners to transfer some of their personal tax allowance to their partner, provided neither are higher or additional rate taxpayers. The original take-up assumption was a source of high uncertainty and since the allowance was launched in 2015-16 we have made a series of revisions to the forecast. Outturn data for 2015-16 suggested take-up of only 16 per cent compared to the 70 per cent originally assumed, prompting a significant downward revision in our March 2016 *EFO*. Then in our October 2018 *EFO* we made a significant revision in the opposite direction as the outturn data now suggested take-up in 2018-19 would be over 80 per cent. In spring

2019 HMRC announced that investigations had revealed that its published statistics were erroneously including unsuccessful claims and double-counting those making back-dated claims. There were actually 1.8 million claimants in 2018-19, and not the 3.5 million published estimate. Take-up is now assumed to be around 40 per cent. This raises our income tax forecast by an average of £0.4 billion a year.

Policy risks

A.34 Parliament requires that our forecasts only reflect current Government policy. As such, when the Government sets out 'ambitions' or 'intentions' we ask the Treasury to confirm whether they represent firm policy. We use that information to determine what should be reflected in our forecast. Where they are not yet firm policy, we note them as a source of risk to our central forecast. The full list of risks to this forecast and changes from previous updates is available on our website. Below we update on risks that are particularly large, have changed materially over the past year, or are new:

- **Policy responses related to the coronavirus.** In the Budget, the Chancellor announced a series of measures to mitigate the effects of the more severe potential scenarios. Unavoidably, these were finalised after we closed our economic and fiscal forecasts. It is impossible at this point to give a reliable estimate of their fiscal consequences, as take-up and implementation will depend on how the outbreak unfolds.

- **The 'Augar' review of post-18 education funding** was launched in February 2018 and reported in May 2019. It made recommendations relating to skills, higher education, further education and student contributions. Those with significant fiscal implications include reducing the student fee cap to £7,500 a year and freezing it until 2022-23, and changes to repayment terms. The Government has not responded to the report. The Conservative manifesto stated that "*The Augar Review made thoughtful recommendations … and we will consider them carefully. We will look at the interest rates on loan repayments with a view to reducing the burden of debt on students.*"

- **Prospective reforms to adult social care.** Having postponed implementation of reforms underpinned by the 2011 'Dilnot Commission', the Government announced in December 2017 that it would publish a green paper on the future of adult social care in the summer of 2018. This did not materialise. The 2019 Conservative manifesto commits to "*urgently seek a cross-party consensus in order to bring forward the necessary proposal and legislation for long-term reform*". The Prime Minister told the BBC in January 2020 that he would be "*bringing forward a proposal*" later this year, and in relation to implementation that "*we will certainly do it in this parliament*".[11]

- The consultation on **NHS pension scheme: increased flexibility** closed in November 2019. It considered concerns that pension tax charges were making senior NHS clinicians retire early or reduce their hours. It proposed a 'flexible accrual' option where members can choose an accrual level in 10 per cent increments; and the option

[11] Prime Minister interviewed by Dan Walker, BBC Breakfast, 14 January 2020.

to 'fine tune' pension growth towards the end of the scheme year, when total earnings are clearer. The Government has not formally responded following the consultation. In November 2019, NHS England announced that for 2019-20, if clinicians were liable for the tax charge as a result of work undertaken in the 2019-20 tax year, the charge would in effect be paid by the NHS. The uncertain cost of this element is reflected in our forecast.

- A **ban on the sale of new petrol and diesel vehicles from 2035** was announced by the Prime Minister on 4 February. This accelerates the Government's previous target date of 2040. It also now extends to hybrid vehicles. The Government has not announced further details on how it will meet this target, so it has not been reflected in our central forecast. This poses a risk to VED and fuel duty receipts.

- A **consultation into decriminalising TV licence fee evasion** was published on 5 February 2020. It seeks views on whether an alternative enforcement scheme would be fairer and more proportionate, and on the potential effects on fee collection. The BBC has suggested it could reduce licence fee income by £200 million a year. This might be expected to feed through to lower BBC spending.

- The **2018 McCloud ruling** concluded that transitional protections offered as part of the 2015 public sector pension reforms were discriminatory. The Government told Parliament in July 2019 that difference in treatment will be remedied, but has not outlined the final policy. The Treasury's initial estimate suggested the liability to public service pension schemes will be around £4 billion a year. There has been no update to this estimate since July 2019. The Treasury told us that formal consultation on policy options is planned for later in the spring.

- The Government released a consultation into '**Freeports**' in February 2020. These are secure customs zones enabling business to be carried out inside a country's land border, but where different tax and customs rules apply. The model proposed in the consultation incorporates duty suspension, duty inversion, duty exemption for re-export, and simplified customs procedures. The effect on receipts will depend on the details of the tax concessions offered, any additional economic activity generated net of displacement of activity from elsewhere, and the effectiveness of associated enforcement regimes.

- The Government has announced that its new **First Homes** scheme will cut costs of a proportion of new homes by a third for first-time buyers. The Government has launched a consultation into the design and delivery of the scheme, which states that "*The primary objective of First Homes is to support people who wish to purchase a home in their local area but are unable to afford a property on the open market*". The Housing Secretary has also suggested that the discount would be prioritised for veterans and key workers including nurses, police officers and firefighters. The consultation does not close until after the Budget.

- A High Court ruling in February 2020 found that the Government's **bereavement support payment** "*unjustifiably discriminates*" against unmarried partners and their children. Bereavement support payment was introduced in 2017 replacing previous bereavement benefits. This ruling follows the August 2018 Supreme Court ruling that the exclusion of unmarried couples from widow's pension was incompatible with the principles of the European Convention on Human Rights. The Treasury has informed us that DWP is appealing against the latest ruling.

- The Government announced on 29 January that from 1 March 2020 it would take over running services on the **Northern Rail** network. It says Northern Rail is expected to be classified as a public corporation. We understand that the change will be reflected in the Department for Transport's RDEL settlement, and that the assets and liabilities of Northern Rail's pension scheme will be transferred to Government.

- In January the Government announced that the Treasury would be conducting a **review of air passenger duty** ahead of the Budget to strengthen regional connectivity. No decisions on potential reforms have yet been made.

- The Treasury has advised us that the Government will consult on implementation of the new restrictions on use of **red diesel** and that "*if clear evidence is presented that continued use of red diesel may be justified in sectors other than agriculture, rail and non-commercial heating, the Chancellor will consider the case for any policy response in the autumn.*" Should further sectors be exempted from the restriction, this would reduce the yield associated with this measure.

A.35 Several post-Brexit policy uncertainties relate to individual lines of our fiscal forecasts:

- The **post-2021 customs regime.** On 6 February, the Government launched a consultation on the tariff schedule that will apply from January 2021. The risks posed by many of the proposals are unquantifiable. In the meantime, our forecast is based on the EU 'Most-Favoured Nation' tariffs on non-EU imports not covered by alternative trading arrangements, and zero tariffs on EU imports.

- The **UK's participation in the EU emissions trading system** (ETS) beyond 2020. The Government has stated that its preference is to be part of a linked ETS, but this remains contingent on agreement from the EU.

- The Government has promised to pursue an approach to **vehicle emissions regulation** "*at least as ambitious*"[12] as the current EU arrangements. Absent firm detail on the policy that will be pursued from January 2021, our forecast is based on the UK imposing the equivalent of the EU emissions fines system.

[12] Office for Low Emission Vehicles, *The Road to Zero*, September 2018.

A.36 Not all the commitments made in the 2019 Conservative Party manifesto have been announced and costed in this Budget, so these remain policy risks:

- The manifesto committed to **increasing the NICs floor** to £9,500 by April 2020 and ultimately to £12,500. The increase to £9,500 from April 2020 has been announced, but the Government is yet to provide details of when it intends to have increased the threshold to £12,500. The threshold is linked to CPI inflation in the absence of other announcements, so would reach £12,500 by default indexation in the mid-2030s if inflation were to average 2 per cent.
- The manifesto also committed to extend **unpaid leave for carers** to one week. The Treasury informed us that this policy would be consulted on following the Budget. The manifesto costings document estimated that this would cost £25 million a year in additional welfare spending.

Costs of non-implementation of the Government's indexation policies

A.37 The Government decides how various rates and thresholds will rise over time in the absence of specific decisions to the contrary. These 'default indexation' policies are set out 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.38 In some cases, despite governments restating these policies each year, they are rarely implemented. The biggest revenue effects from these decisions have been related to fuel duty and alcohol duties, but a similar pattern has been seen with smaller taxes such as the aggregates levy and VED for heavy-goods vehicles. Table A.7 sets out the £830 million cost in 2020-21 of the latest one-year freezes announced in this Budget. The default indexation policy for each remains unchanged.

Table A.5: Costs of not following stated Government indexation policy

Measure	Stated Government policy	Actual policy	£ million Cost in 2020-21
Fuel duty	Increase rates by RPI	Rates frozen since 2010	525
Alcohol duty	Increase rates by RPI	Rates frozen for 2020-21	285
Aggregates levy	Increase rates by RPI	Rates frozen since 2009	10
HGV VED	Increase rates by RPI	Rates frozen since 2001	5
HGV levy	Increase rates by RPI	Rates frozen for 2019-20	5
Total cost			**830**

B Long-term economic determinants

Introduction

B.1 Our long-term economic determinants underpin the fiscal projections employed in each *Fiscal sustainability report (FSR)* to assess the sustainability of the public finances. They will also affect our medium-term economic forecasts when changes to the long-term outlook are associated with corresponding adjustments in the near-term behaviour of households and businesses, and our medium-term fiscal forecasts where the recording of particular items in today's public accounts depends on expected developments in the distant future – as is now the case under the new treatment of student loans. Finally, they are used by organisations inside and outside government to inform their own long-term modelling.

B.2 Growth in labour productivity – output per hour worked – is a key judgement in our long-run projections, underpinning the economy's potential growth rate. As we flagged in our 2019 *Fiscal risks report*, the continuation of the weakness seen since the financial crisis has led us to revisit our assumption that productivity growth will ultimately recover to around its pre-crisis trend rate. Consequently, in this year's *FSR*, we will assume that it returns to a steady state of 1.5 per cent a year by 2036-37, down from 2 per cent by 2030-31.

B.3 This annex:

- sets out some **historical and international evidence** on productivity growth; and
- updates our **other long-term economic assumptions**.

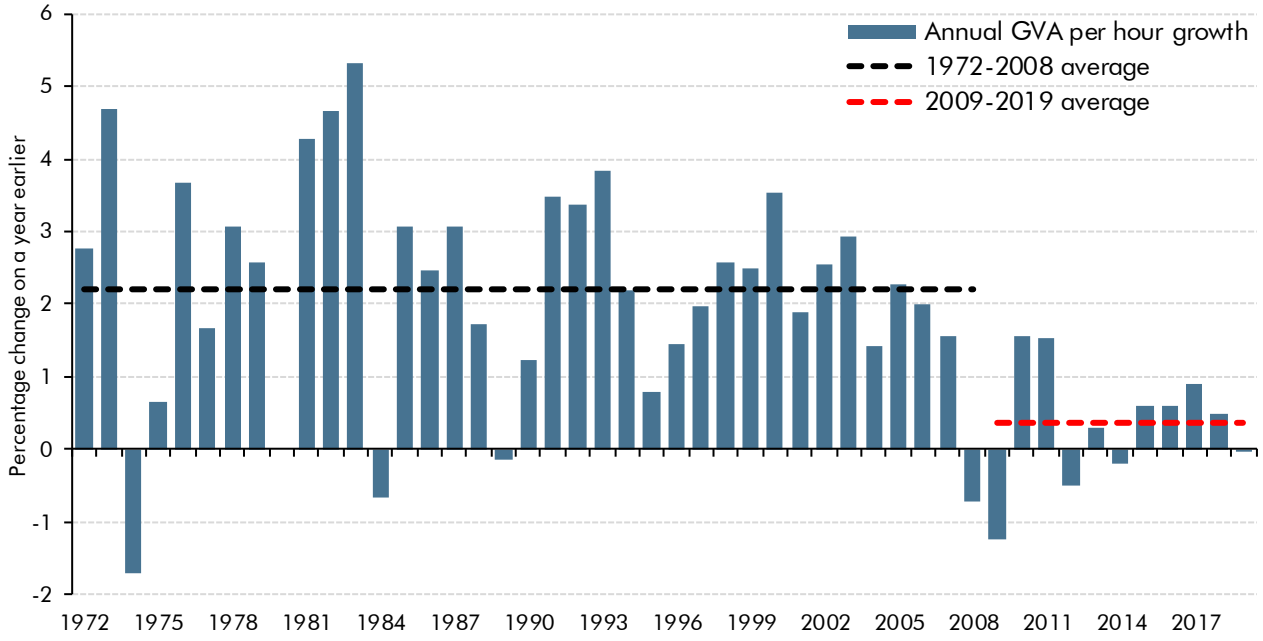
Labour productivity growth

B.4 The path of potential output reflects: growth in the population; the fraction of those people in work; the average number of hours they work; and the average amount they produce in each hour worked. But it is the last of these – labour productivity – that is the main driver of living standards over the long run. Small but persistent variations can compound into significant differences: if labour productivity grows 2 per cent a year, then living standards double every 35 years; if 1.5 per cent a year, 47 years; and if 1 per cent a year, 70 years.

Historical evidence

B.5 Growth in labour productivity has been persistently weak since around the time of the financial crisis. Since 2008, output per hour has grown by an average of just 0.3 per cent a year, compared to a little over 2 per cent over the preceding four decades (Chart B.1).

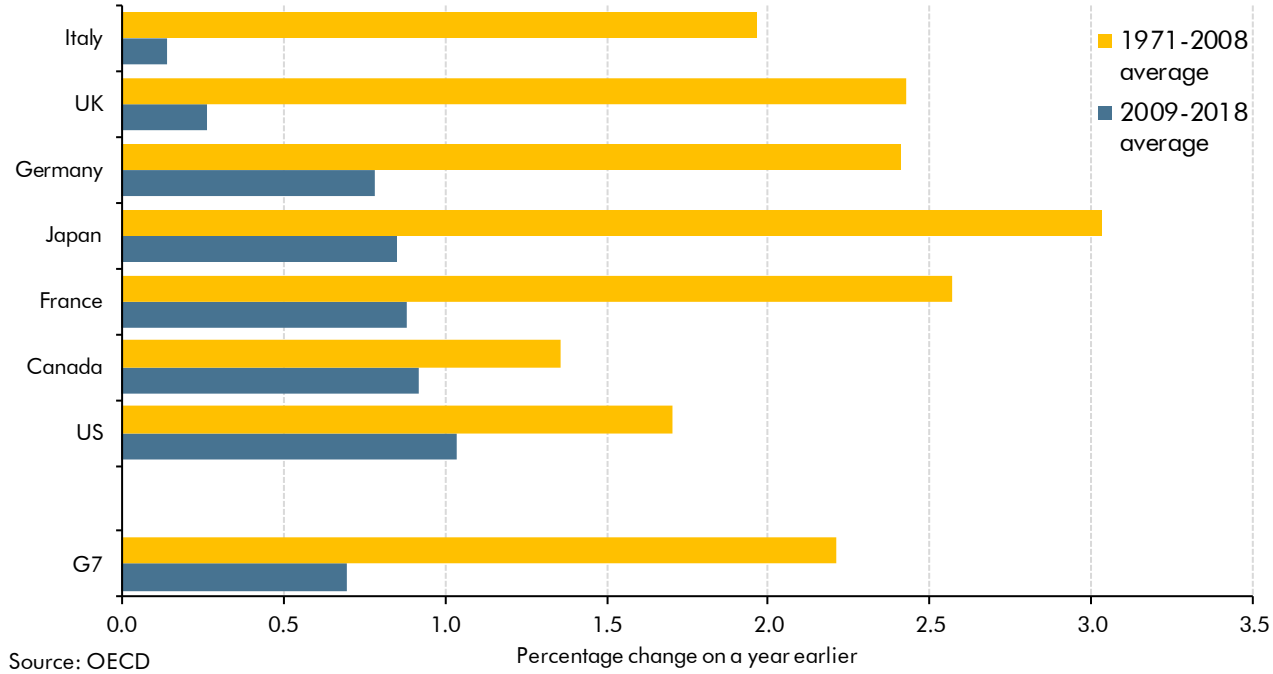
Chart B.1: Productivity growth since the 1970s



Source: ONS

B.6 Productivity growth has slowed in most advanced economies, but more in the UK than in most others where that is the case. Between 1971 and 2008 GDP per hour increased by an average of 2.2 per cent a year across the G7 group of countries, but since then growth has slowed to an average of 0.7 per cent a year (Chart B.2). That is a significant slowdown, albeit not quite as large as that experienced in the UK (from 2.4 to 0.3 per cent).[1]

Chart B.2: Growth in GDP per hour



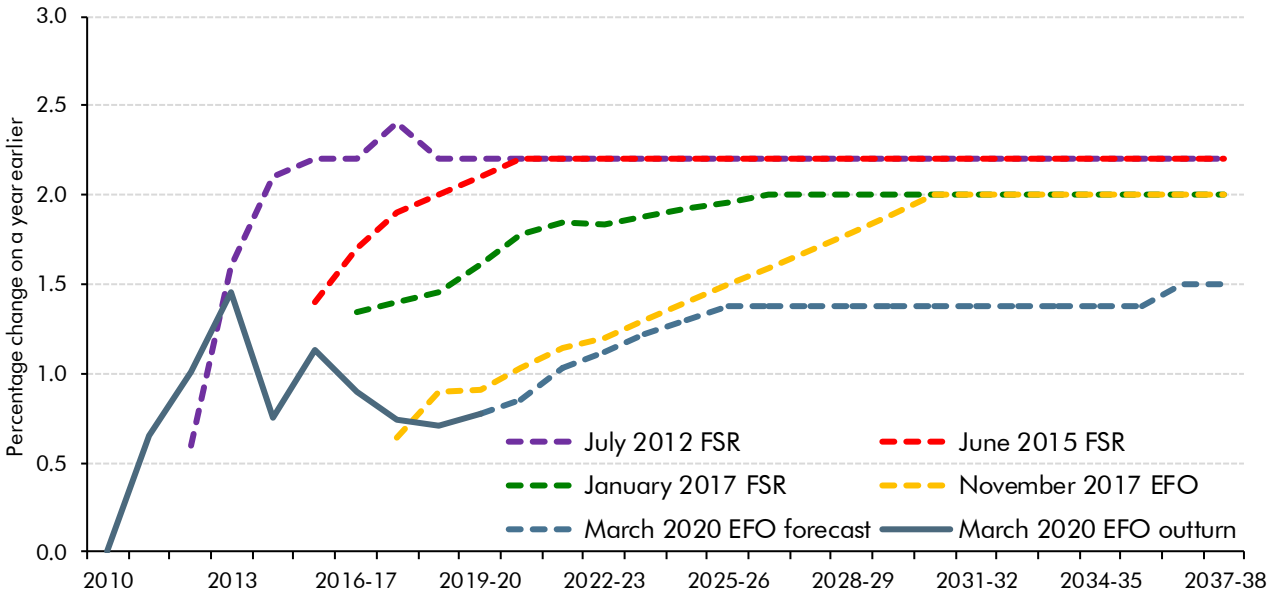
Source: OECD

[1] The data in Chart B.1 differs from that in Chart B.2 because it is GVA per hour, while in Chart B.2 it is GDP per hour.

B.7 There have been numerous potential explanations for the weakness of UK productivity growth over the past decade, among them: labour hoarding, subdued capital investment, a dysfunctional financial system, labour market slack, persistently loose monetary policy, sectoral differences in employment growth, anti-competitive behaviour by dominant firms, and statistical measurement issues. But, as yet, there is no consensus as to their relative importance.[2] Research does, however, suggest that the greatest slowing has taken place in those sectors and firms that had been growing fastest before the crisis.[3]

B.8 This persistent weakness has prompted us to lower our steady-state productivity growth assumption once already, as well as pushing out the date at which the economy achieves it (Chart B.3). Our 2012 to 2015 *FSRs* all assumed that productivity growth would return to its 1972 to 2008 average of 2.2 per cent (with the date at which it did so receding from 2018-19 to 2025-26). We then lowered the steady-state rate to 2 per cent in the 2017 *FSR*, reflecting continued weak outturn data. With the Brexit vote expected to depress investment for some time (as indeed it has), we also delayed the return to steady-state growth by a further year. Prompted once again by weak outturn data (both at home and abroad), we made a significant downgrade to our medium-term forecast in the November 2017 *Economic and fiscal outlook (EFO)* and delayed the return to steady state to 2030-31.

Chart B.3: Selected OBR potential productivity growth assumptions

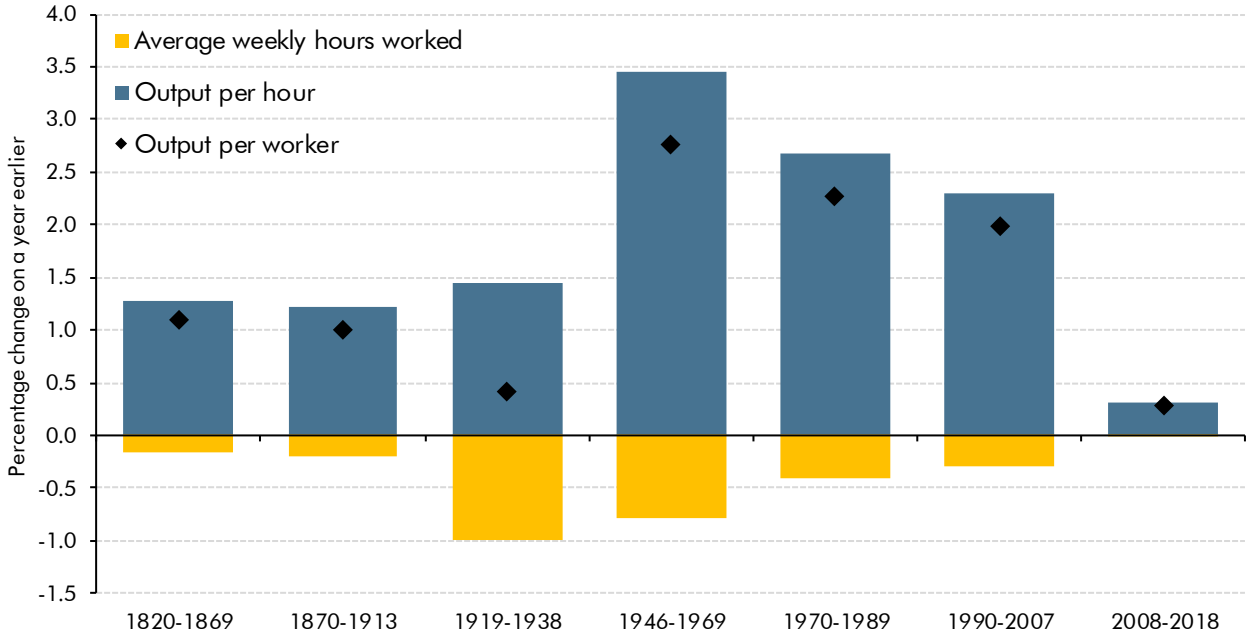


Note: Medium-term forecasts in calendar years, long-term forecasts in financial years.
Source: OBR

[2] See Chapter 3 of our November 2017 *Economic and fiscal outlook* and A. Haldane, 'Productivity puzzles', March 2017.
[3] R. Riley, A. Rincon-Aznar & L. Samek, *Below the Aggregate: A Sectoral Account of the UK Productivity Puzzle*, ESCoE Discussion Paper 2018-06, May 2018. See also P. Schneider, *The UK's productivity puzzle is in the top tail of the distribution*, Bank Underground, March 2018.

B.9 But the longer the post-crisis weakness persists, the more the post-war period of strong growth looks unusual and a less convincing anchor for our long-run projections. Chart B.4 shows that over the past 250 years growth in UK GDP per hour has averaged 1.3 per cent a year in peacetime but has varied substantially across different periods.[4] On this basis, we have judged it sensible to look once again at our steady-state growth assumption.

Chart B.4: Average annual growth rates of labour productivity and hours worked



Source: Bank of England, ONS

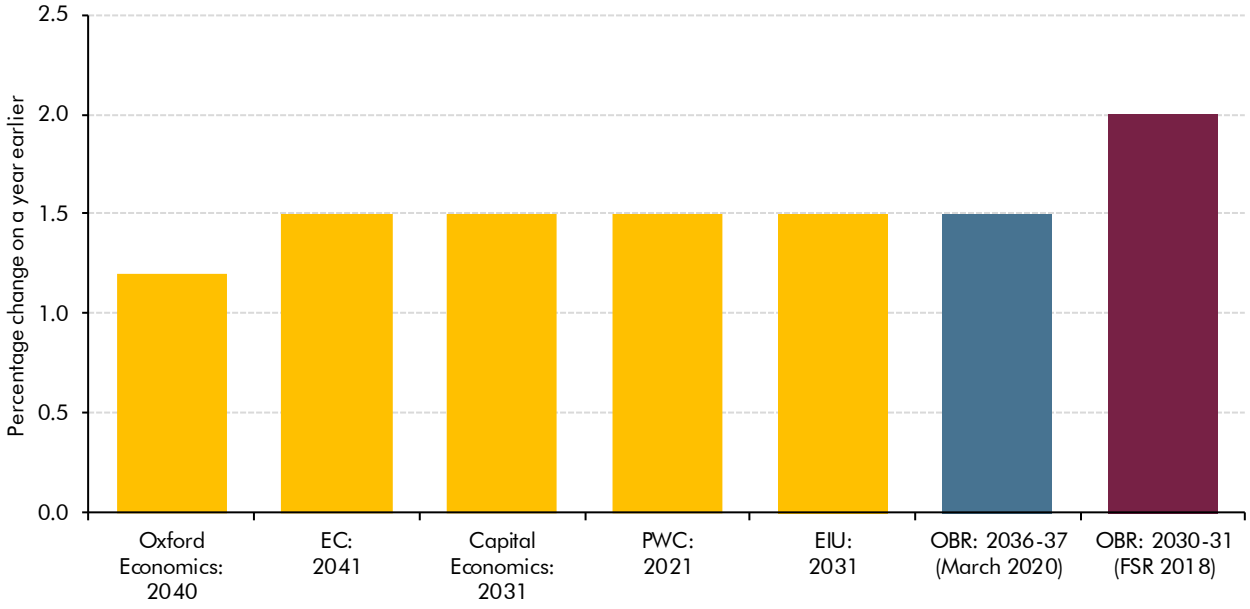
Prospects

B.10 There is plenty of room for debate as to which historical periods provide the best template for future prospects. At the pessimistic end, Robert Gordon has suggested that the rates of per capita economic growth that prevailed in the mid-part of the 20th century are unlikely to be repeated. He argues that America and the rest of the developed world benefitted from a few 'great inventions' – such as electricity, motorised vehicles and public sanitation – but that similar transformative innovations are unlikely to be repeated (in which respect he is sceptical regarding the impact of information technology).[5] At the other end of the spectrum, Erik Brynjolfsson and Andrew McAfee argue that the world is on the cusp of another period of rapid industrial progress as artificial intelligence and machine learning lead to the automation of many cognitive tasks currently undertaken by humans, potentially pushing productivity growth back to the sort of rates experienced in the mid-20th century.[6]

B.11 Several bodies produce projections of future long-run productivity growth in the UK. Comparable projections range from 1.2 to 1.5 per cent a year, with the most recent (those shown in Chart B.5) averaging 1.5 per cent a year. All these forecasts lie below the November 2017 *EFO* assumption that also underpinned our 2018 *FSR* projections.

[4] Thomas, R. and Dimsdale, N. (2017) *"A Millennium of UK Data"*, Bank of England OBRA dataset.
[5] R. J. Gordon, *The Rise and Fall of American Growth*, 2016
[6] E. Brynjolfsson, and A. McAfee, *The Second Machine Age*, 2014.

Chart B.5: Projections of UK potential labour productivity growth

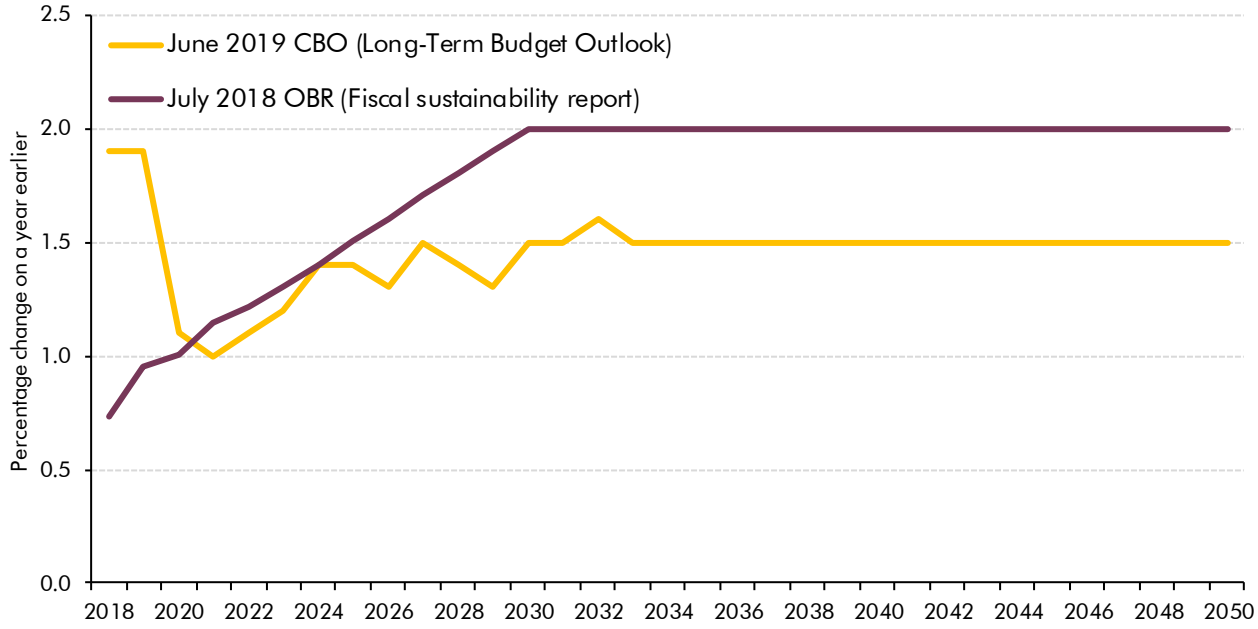


Notes: PWC only publishes US figures but all advanced economies converge to it. Dates refer to period where assumption begins.
Source: Various

International comparators

B.12 In recent years, official forecasters in several other advanced economies have reassessed long-run productivity growth prospects in the light of persistently weak outturn data. The US Congressional Budget Office (CBO) – which is relatively unusual in reviewing its estimates most years – last year revised its long-run assumption down from 1.8 per cent a year (made in 2016) to 1.5 per cent, reflecting a greater weight placed on the recent weakness of productivity growth and a more pessimistic view of future educational attainment and public investment. The CBO's productivity growth assumption for the US is thus materially lower than our 2018 *FSR* assumption for the UK (Chart B.6).

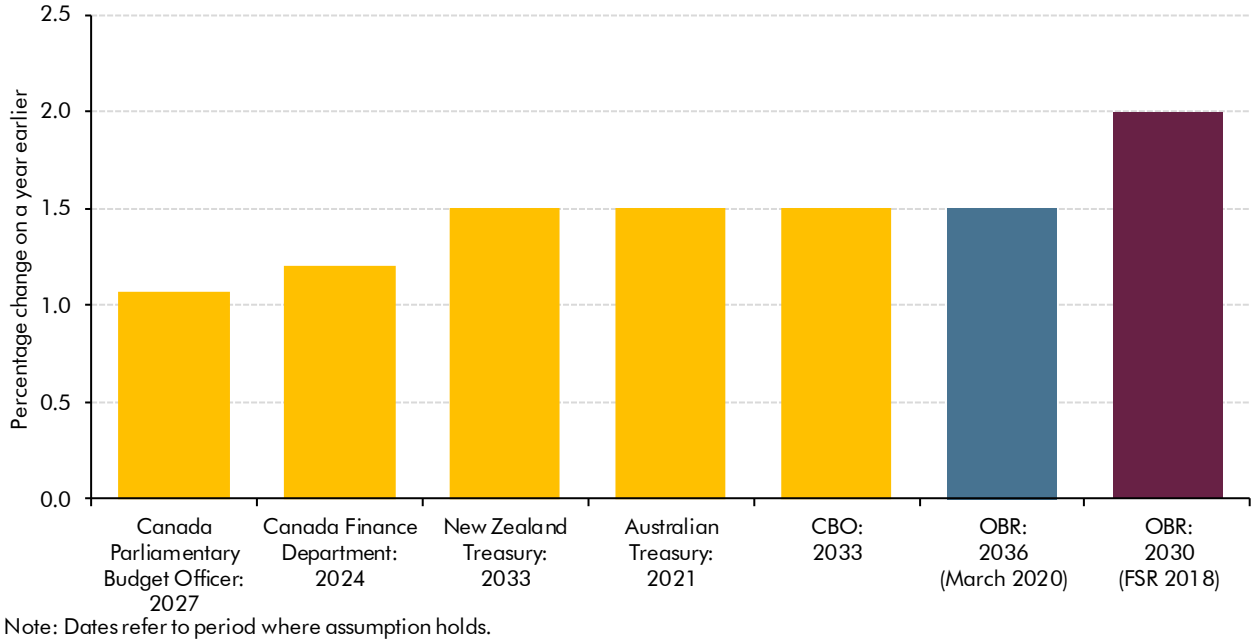
Chart B.6: CBO versus OBR long-run productivity growth assumptions



Source: CBO, OBR

B.13 The CBO's current assumption is similar to those made by institutions in other advanced economies. In its most recent projection for productivity beyond its usual two-year forecast horizon, the Australian Treasury forecast growth of 1.5 per cent a year (Chart B.7). This is the same as that produced by New Zealand's Treasury in its projection for the period 2033 to 2060, and a little higher than the 1.2 per cent a year assumption used by Canada's Finance Department. All estimates lie below our 2018 *FSR* assumption for the UK.

Chart B.7: International estimates of potential labour productivity growth



Note: Dates refer to period where assumption holds.
Source: Various

B.14 In summary, there is significant uncertainty surrounding any productivity forecast, especially over the long term. But given the historical evidence and recent international comparisons reviewed above, we no longer believe that 2 per cent a year is central (although it is still possible). We have therefore lowered the assumption that we will use in this year's *FSR* to 1.5 per cent a year in steady state, bringing it broadly into line with those of institutions in other advanced economies and other bodies' projections for the UK. While this assumption places more weight on recent outcomes, it continues to reflect our belief that there are also temporary factors currently holding back productivity growth that will eventually abate.

B.15 As well as uncertainty over the long-run steady state, there is also considerable uncertainty over the pace of the pick-up to reach it. Our *EFO* projections assume a modest recovery in potential productivity growth to 1.3 per cent by 2024. Beyond the *EFO* forecast horizon, we now assume that it takes until 2036-37 to reach its steady-state rate of 1.5 per cent.

B.16 Our productivity growth assumption is made top-down rather than bottom-up, but in forming our assessment, we have taken note of two specific countervailing forces on the productivity profile – the adjustment to a new trading relationship with the EU and the Government's announced plan to increase the level of public investment:

- As discussed in Box 2.1, our central estimate is that **the UK's departure from the EU** will reduce potential productivity by approximately 4 per cent in the long run. But we estimate that around a third of that impact has, in effect, already taken place. We assume that another third will occur over the current forecast period, while the remainder will be felt gradually from 2024-25 as the economy adjusts to the new trading regime. There is, of course, considerable uncertainty about both the size and timing of this effect.

- The planned **increase in public sector net investment** announced in the Budget is unlikely to have a material effect on potential productivity within the *EFO* forecast horizon. But if maintained indefinitely – which is broadly what we will assume to be the case in the *FSR*[7] – the gross fixed capital formation (GFCF) component of PSNI will gradually lead to a significant increase in the stock of public sector capital, potentially also boosting productivity. On the basis of the existing shares of capital spending, the higher PSNI would be associated with the addition of 0.7 per cent of GDP to general government investment in 2024. A sustained increase of this magnitude (relative to the position prior to the Budget package) could be expected to increase the public sector gross capital stock by around a quarter over the long term. Applying an average output elasticity of 0.1 – based on a range of international studies[8] – suggests an eventual increase in the level of potential productivity of around 2.5 per cent. It would, though, take many years to reach that steady state, so the impact on productivity growth would in all likelihood be less than 0.1 percentage points a year.

[7] We will also assume that investment in age-related areas – notably health – rises as a share of GDP as the population ages.
[8] Pedro Bom and Jenny Ligthart, "What have we learned from three decades of research on the productivity of public capital?", *Journal of Economic Surveys* (2014).

Long-term economic determinants

B.17 Table B.1 presents our latest long-term assumptions, consistent with the central forecast in this *EFO* on the basis of current government policy. One change relative to our 2018 *FSR* assumptions is to base them on the zero net EU migration variant of the ONS's population projections, rather than their principal variant. This better captures the likely impact on total net migration of the tighter migration regime that the Government has said will be introduced from January 2021, though that does not imply that we also believe this variant necessarily best describes the geographical composition of its component parts.

Table B.1: Long-term economic determinants

	Annual growth rate, unless otherwise stated	
Labour productivity	1.5	**OBR assumption**
Prices and earnings		
Average earnings	3.8	Sum of labour productivity and GDP deflator
Public sector earnings	3.8	Assumed to grow in line with private sector
GDP deflator	2.3	Constant from end of forecast
CPI	2.0	Constant from end of forecast at inflation target
RPI	2.9	CPI inflation plus 0.9 percentage points
RPIX	2.8	CPI inflation plus 0.8 percentage points
'Triple lock'	4.2	Average earnings plus 0.36 percentage points
Interest rates (per cent)		
Gilt rate	4.1	Nominal GDP growth plus 0.2 percentage points
Bank Rate	4.1	Nominal GDP growth plus 0.2 percentage points
Employment		
Workforce growth	0.05	OBR assumption
Memo: Average real GDP	*1.5*	*Sum of labour productivity and employment*
Memo: Average nominal GDP	*3.9*	*Sum of real GDP and GDP deflator*

B.18 The long-term assumptions underpinning these determinants do not necessarily apply to the medium-term forecast that we present in this *EFO*, which is constructed using a different approach. The long-term assumptions apply from the first year after our five-year forecast onwards. The exceptions to that are:

- **interest rates**, which stabilise 15 years after the end of the medium-term forecast;
- **RPI inflation**, which stabilises at the rate determined by the long-term wedge relative to CPI once interest rates reach a steady state;
- **productivity growth**, which converges to its steady-state rate by 2036-37; and
- **average earnings growth**, which stabilises at the same point as productivity growth.

B.19 We produce an average path for each determinant, which we publish in a supplementary table on our website. The values actually taken by these variables will vary around their average paths – and we do not attempt to predict these variations.

Employment growth

B.20 We project long-run employment growth by combining ONS population projections with our employment rate projections, which in turn are derived from our projections of the unemployment rate and the participation rate. We calculate an employment rate consistent with an assumed equilibrium unemployment rate at the end of our medium-term forecast. For this *EFO*, as well as reflecting the latest data, we have changed how we model movements into employment of younger people leaving education, where our typical approach of drawing on observed multi-year averages had been affected by education policy changes that took some years to reach steady state (see Chapter 2).

B.21 We adjust participation rates for changes in our projections for the State Pension age (SPA), reflecting the latest ONS population projections and our assumptions about the operation of the Government's 'longevity link'. In July 2017, the Government announced its intention to bring forward the SPA increase to 68 from the years 2044-46 to 2037-39, and to aim for up to 32 per cent as the average proportion of adult life people should expect to spend in receipt of the state pension. We combine this with the latest population projections to produce our employment growth projections, which vary between 0.4 and -0.1 per cent a year thanks to both demographic trends and SPA rises, and average 0.05 per cent a year.

Prices and earnings

B.22 Our long-term GDP deflator inflation projection of 2.3 per cent a year is built bottom-up by weighting assumptions for each of the expenditure components of GDP. We assume that CPI inflation remains at 2.0 per cent in the long term, consistent with the Bank of England's inflation target, and a long-run wedge between RPI and CPI inflation of 0.9 percentage points,[9] giving a long-term assumption for RPI inflation of 2.9 per cent a year.

B.23 Revising down our long-run productivity assumption reduces our long-run RPI assumption slightly because we assume that house prices rise in line with average earnings, which affects the housing depreciation and mortgage interest payments components of the RPI.

B.24 We assume that the share of labour in national income is constant in the long run. As a consequence, average earnings growth is equal to the sum of labour productivity growth and whole economy inflation.

B.25 For the purposes of our long-term projections, we assume that the 'triple lock' on state pensions uprating continues to apply. We assume that it will, on average, exceed earnings growth in the long term by 0.36 percentage points a year.

[9] See Box 2.3 of our 2019 *Forecast evaluation report* for more detail.

Interest rates

B.26 Market expectations for interest rates presently lie well below our projections for nominal GDP growth. We believe that this is likely to reflect a mix of temporary and persistent factors.[10] Once the former have abated, we assume that the long-term nominal interest rate will again slightly exceed nominal output growth, by 0.2 percentage points. We assume that it will take a further 15 years beyond our medium-term forecast for the forces that have depressed safe interest rates over the past couple of decades to unwind, leaving interest rates 0.2 percentage points above growth from then onwards.

B.27 Lower long-run productivity and employment growth have reduced our nominal GDP growth projection by approximately 0.7 percentage points a year on average. This feeds through one-for-one to a lower long-term projection for interest rates.

[10] We discussed why interest rates have fallen short of growth rates in recent years, and how the continuation of this trend might affect fiscal sustainability, in Chapter 7 of our 2019 *Fiscal risks report*.

Index of charts and tables

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