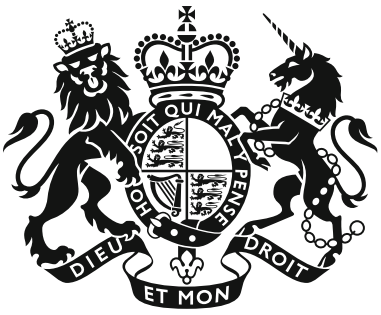
Office for
Budget Responsibility

Economic and fiscal outlook

March 2019

CP 50



Office for Budget Responsibility: Economic and fiscal outlook

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

March 2019

CP 50

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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 2023-24. 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.

We have, of course, been hugely supported in this by the staff of the OBR. We are enormously grateful for the hard work, expertise and professionalism that they have brought to the task. Given the highly disaggregated nature of the fiscal forecasts we produce, we have also drawn heavily on the work and expertise of 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 Business, Energy and Industrial Strategy, the Department for Education, the Ministry of Justice, the Home Office, the Oil and Gas Authority, the Office for National Statistics, the UK Debt Management Office, the Scottish Government and Scottish Fiscal Commission, the Welsh Government, the Department for Communities in Northern Ireland, Transport for London and various public service pension schemes. We are grateful for their time and patience.

Given the legal requirement for the OBR to base its forecasts on current Government policy, we once again asked the Government to provide us with any detail on post-Brexit policies in relation to trade, migration and EU finances. We also requested guidance on the policy assumptions we should make in the event of a 'no deal' exit from the EU:

- On future migration and trade regimes, as on previous occasions, the Government directed us to the July 2018 White Paper on the future relationship between the UK and EU.[1] It also pointed us to its December 2018 White Paper: *The UK's future skills-based immigration system*, which sets out high-level objectives for future migration policy.[2]

- On future financial flows, the Government directed us to the Withdrawal Agreement, which puts in legal form the financial settlement that was set out in the December 2017 *Joint Report*.[3,4] In addition, the Government directed us to the Political Declaration, which sets out the aims of a framework for areas of possible future collaboration.[5]

[1] Department for Exiting the European Union, *The future relationship between the United Kingdom and the European Union*, July 2018.
[2] Home Office, *The UK's future skills-based immigration system*, December 2018.
[3] Department for Exiting the European Union, *Withdrawal agreement and Political Declaration*, November 2018.
[4] Prime Minister's Office and Department for Exiting the European Union, *Joint report on progress during phase 1 of negotiations under Article 50 TEU on the UK's orderly withdrawal from the EU*, December 2017.
[5] Department for Exiting the European Union, *Withdrawal agreement and Political Declaration*, November 2018.

- On **'no deal'** planning the Government directed us to the 106 *technical notices* published over Autumn 2018 and the *no deal readiness assessment* published in February 2019.[6]

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, once the process of withdrawal has been settled.

Our forecasts continue to be based on the provisional broad-brush adjustments that we made in our November 2016 *EFO* to incorporate the possible impact of Brexit. These are set out in Chapter 3 (economy) and Chapter 4 (fiscal) of this document. We will review these assumptions once the final Withdrawal Agreement has been approved (or not) by both the UK and the EU, and as more flesh is put on the bones of the accompanying Political Declaration.

In the *Foreword* to our October 2018 *EFO* we identified several shortcomings in the forecast process on that occasion that led to inconsistencies between our final forecast and the Treasury's policy package, resulting from the late delivery of policy information from the Treasury. We have worked with the Treasury to make mutually beneficial improvements to the process, including agreeing a timetable that incorporates earlier deadlines for policy measures to be sent to us and enhancing the process for assessing and incorporating the indirect effects of the policy package on the economy.

These changes have made the process smoother this time around, albeit in a forecast that does not incorporate wide-ranging policy measures with a large cumulative effect. We are satisfied that the Treasury recognises the importance of the changes we have made to the process.

While the forecast process has improved since October, it is unfortunate that we did not receive confirmation of the Spring Statement date until 29 January, almost four weeks later than the 10-week minimum set out in the *Memorandum of Understanding* between the OBR, HM Treasury and other departments.[7] Some uncertainty around timing was understandable given the critical stage of the Brexit process. But compressing the timetable can adversely affect the accuracy and consistency of our forecasts, so it is essential that this is not allowed to set a precedent for future fiscal events.

The full forecast timetable has been as follows:

- On 5 December the Treasury notified us that we should prepare to publish a forecast, no earlier than the week beginning 25 February, without confirming the specific date necessary to ensure a robust timetable. We agreed to start the process on this basis, but requested that the specific date be confirmed in early January. We continued to prepare our forecasts to this provisional timetable until the Spring Statement date was publicly confirmed by the Chancellor on 29 January. At the Treasury's request, we incorporated deadlines within the timetable that allowed for the possibility of changing the Spring Statement to a full policy event.

[6] Department for Exiting the European Union, *Implications for business and trade of a no deal exit on 29 March 2019*, February 2019.
[7] Office for Budget Responsibility, *Memorandum of understanding between the Office for Budget Responsibility, HM Treasury, the Department for Work & Pensions and HM Revenue & Customs*, 2017.

- We began the forecast process with the preparation by OBR staff of a revised economy forecast, drawing on data released since our previous forecast in October and with our preliminary judgements on the outlook for the economy. We sent our first economy forecast to the Chancellor on 22 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 31 January.

- 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 14 February.

- We then produced a third economy and fiscal forecast, which allowed us to take on latest data and to ensure that our judgements on the fiscal forecast had been reflected. We completed this final pre-policy-measures forecast and sent it to the Chancellor on 27 February.

- In line with the forecast timetable agreed with the Treasury, we were provided with details of policy decisions with a potential wider impact on the economy forecast on 1 March. The BRC met the Chancellor to discuss the forecast on 5 March.

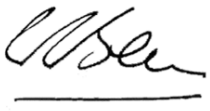
- Meanwhile, we were scrutinising the costing of tax and spending measures that had been announced since the Budget, and revisiting the universal credit costings we were unable to certify then. After scrutinising updated and additional material provided by DWP analysts, some corrections to these costings proved necessary, although thankfully these were relatively small. At the time of closing this forecast, we still had queries about the analysis and modelling that underpinned the estimated effects on disability benefits spending of the changes associated with completing the transition of working-age claimants from disability living allowance to personal independence payment. And, as usual, the BRC requested changes to almost all the draft costings prepared by departments.

- 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 8 March. This allowed the Treasury to prepare the Chancellor's statement. We also provided pre-release access to the full and final *EFO* on 12 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 8 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 Economic growth in the UK and globally has slowed since the Budget in October, leading us to revise down our near-term GDP forecast. But tax receipts have performed better than we expected in the final months of 2018-19 and we judge that much of this buoyancy will endure. Together with downward pressure on debt interest spending from lower market interest rates, this delivers a modest medium-term improvement in the public finances. The Chancellor has banked most of it in lower borrowing, but has spent some on higher planned public services spending. Of the six forecasts we have produced since the EU referendum, four have shown an improved outlook for the public finances and two have shown a deterioration – but each one has been accompanied by some fiscal giveaway.

1.2 This forecast has been produced against the backdrop of considerable uncertainty over the next steps in the Brexit process. With discussions in Brussels continuing and Parliament scheduled to vote on various Brexit-related questions in the week of the Spring Statement, we have no meaningful basis for changing the broad-brush assumptions that have underpinned our forecasts since the referendum. So we continue to assume – consistent with government policy at the time we finalised our forecast – that the UK makes an orderly departure from the EU on 29 March into a transition period that lasts to the end of 2020.

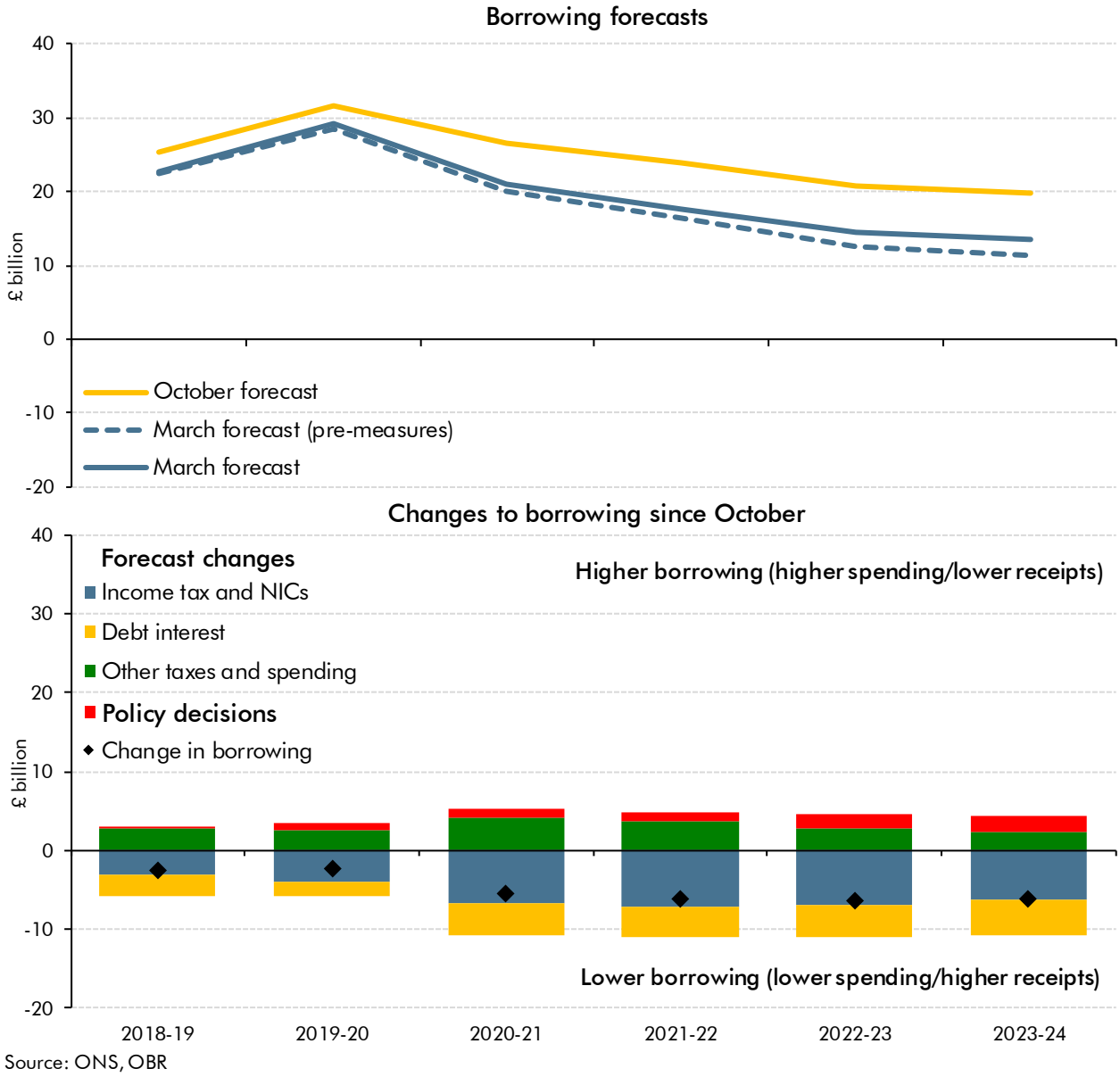
1.3 Alternative outcomes, including a disorderly 'no deal' exit, remain the biggest short-term risks to the forecast. But the smoothness, or otherwise, of the UK's withdrawal from the EU is but one step in the Brexit process, as negotiations on the terms of the UK's future relationship with the EU have yet to begin in earnest. So many decisions remain to be taken that will help determine the eventual impact of Brexit on the economy and public finances.

1.4 The economy ended 2018 growing a little less strongly than we expected in October. In recent weeks survey indicators of current activity have weakened materially, in part reflecting heightened uncertainty related to Brexit. As a result, we have revised our forecast for GDP growth this year down to 1.2 per cent – more than reversing the upward revision we made in October in response to the Government's discretionary fiscal loosening in the Budget. But we have not altered our assessment of the outlook for potential output, so our medium-term forecast is little changed: GDP growth still settles down to around 1½ per cent a year.

1.5 We now expect public sector net borrowing to come in at £22.8 billion (1.1 per cent of GDP) this year, down £2.7 billion since October thanks primarily to higher income tax receipts and lower debt interest spending. By 2023-24 the improvement since October is £6.3 billion, again thanks primarily to higher income tax receipts and lower debt interest spending (Chart 1.1). These downward pressures on borrowing are partially offset by the

£2.1 billion net cost of 20 policy decisions announced since the Budget – notably the £1.7 billion of additional planned public services spending announced at the Spring Statement. This leaves the expected deficit in 2023-24 at £13.5 billion (0.5 per cent of GDP).

Chart 1.1: Public sector net borrowing: March versus October



Source: ONS, OBR

1.6 The Government's stated 'fiscal objective' is to balance the budget by 2025-26 and past forecast performance suggests that it now has a 40 per cent chance of doing so by the end of our forecast in 2023-24. But in the years beyond the forecast the ageing population is likely to be putting increasing upward pressure on spending and the potential impact of different Brexit outcomes makes the medium-term outlook more than usually uncertain. In particular, our past scenario analysis has illustrated the importance of medium-term potential growth rates – both productivity growth and the contribution of net migration to population and employment growth – to medium-term fiscal health. Uncertainty around these judgements is always significant, but Brexit only makes it more so.

1.7 As regards the Government's other fiscal targets, the forecast changes and policy decisions leave the Chancellor with £26.6 billion (1.2 per cent of GDP) of headroom against his fiscal mandate, which requires the structural budget deficit to lie below 2 per cent of GDP in 2020-21. This is up from £15.4 billion in October, as the fiscal costs of the temporary near-term cyclical weakness of the economy have been swamped by the fiscal gains from higher income tax and lower debt interest spending. The Chancellor also meets his supplementary target of reducing net debt as a share of GDP in 2020-21. In this forecast it falls by 3.2 per cent of GDP in that year, unchanged from October. (The ending of the Bank of England's Term Funding Scheme contributes 2.2 percentage points of the decline.)

1.8 One risk to the public finance metrics that we do expect to crystallise over the coming months is an improvement in the accounting treatment of student loans. From September the Office for National Statistics will treat them partly as loans and partly as grants, reflecting the fact that a large proportion of the loan outlays and associated interest are not expected to be repaid. We do not yet know exactly how this will be done, so cannot reflect the change in our central forecast. But we estimate that it could increase the structural budget deficit by around £12 billion or 0.5 per cent of GDP in 2020-21. This would absorb almost half the Government's current headroom of 1.2 per cent of GDP against the fiscal mandate as well as making a balanced budget harder to achieve.

Economic developments since our previous forecast

1.9 Real GDP grew by 0.8 per cent in the second half of 2018. That was a little weaker than we expected in October, as an upside surprise in the third quarter was more than offset by an unexpectedly large slowdown in the fourth. Net trade and private investment were markedly weaker than expected, weighed down by a slowing global economy and Brexit-related uncertainty. Business investment has fallen for four consecutive quarters – its longest continuous decline since the financial crisis. Although the figures are volatile, monthly data suggest that GDP fell in December. Moreover, a broad range of survey indicators suggest that the softness has continued into 2019.

1.10 There is growing survey evidence that firms are building up stocks ahead of Brexit, although this is less evident in the official data. The CIPS UK manufacturing PMI reported sharp rises in both purchasing activity and a record stockpiling of inputs in February. But much of this is likely to be imported goods and materials – especially those imported from the EU – so that its impact on real GDP growth is likely to be largely offset by higher imports.

1.11 The recent growth disappointment has not been confined to the UK. Quarterly GDP growth slowed in most major economies at the end of 2018. Growth in the euro area slowed to 0.2 per cent in each of the third and fourth quarters of 2018. US GDP growth was supported by fiscal policy in 2018, but still slowed to 0.6 per cent in the fourth quarter. Thanks to the relatively sharp slowdown in most other G7 economies, the UK moved from the bottom of the G7 GDP growth league table at the start of 2018 to the middle of it by the end.

1.12 Despite slightly weaker GDP growth, the 211,000 increase in employment in the second half of 2018 was slightly higher than we forecast in October. This was entirely accounted for

by a rise in participation, leaving the unemployment rate broadly flat at 4.0 per cent of the labour force rather than dipping to 3.8 per cent as we expected in October. Average earnings growth was also somewhat higher than expected, leading to stronger growth in labour income that helps explain the buoyancy in income tax receipts in 2018-19.

1.13 Oil prices rose steadily in the first three quarters of 2018, then fell sharply to average $68 a barrel in the fourth quarter – around 20 per cent lower than we assumed in October, based on futures prices at the time. Partly as a result, CPI inflation fell back to 2.3 per cent in the fourth quarter and to 1.8 per cent in January 2019. This is the first time for two years that inflation has fallen below the Government's 2 per cent target. GDP deflator inflation has been in line with forecast. Combined with the weakness in activity, this means nominal GDP growth in the second half of 2018 was 0.1 per cent lower than we expected in October.

The economic outlook

1.14 Parliament requires us to produce our forecasts on the basis of stated government policy, but not necessarily assuming that particular objectives are achieved. With the terms of the UK's exit from the EU, and the nature of the future relationship, still to be settled, this is not straightforward. In November 2018, the Withdrawal Agreement and Political Declaration setting out the framework for the future relationship between the UK and EU were published. The UK Government also published an immigration White Paper in December, setting out proposals for the UK immigration regime in the post-transition period.

1.15 At the point we finalised this document (10 March) the precise terms on which the UK will depart from the EU remained unclear. With no meaningful basis on which to predict the nature of the future relationship between the UK and the EU, we have retained the broad-brush assumptions on productivity, trade and migration in our previous post-referendum forecasts. Reflecting the Withdrawal Agreement, we incorporate a transition period until December 2020, during which the terms on which the UK and EU trade with each other will remain unchanged. This means that we continue to assume that the UK makes an orderly transition to a new – though as yet undefined – long-term relationship. But there remains considerable uncertainty about the economic and fiscal implications of different potential outcomes, including the impact of any policy response that might accompany them.

1.16 On this basis, we have left our assumptions about potential output growth unchanged in this forecast. We judge that the economy was operating slightly above potential in the fourth quarter of 2018 – by 0.2 per cent, little changed from the margin we assumed in October. We have revised real GDP growth in 2019 down from 1.6 to 1.2 per cent, below our estimate of potential output growth. This pushes the output gap into negative territory in 2020 (which is also the fiscal mandate target year). The downward revision is in part due to slackening momentum in 2018 and our judgement that this will continue into early 2019, offsetting the discretionary fiscal loosening announced in the Budget. As Brexit uncertainty begins to dissipate, and productivity growth gradually improves, we expect GDP growth to pick up to 1.4 per cent in 2020 and to 1.6 per cent a year thereafter as the small margin of spare capacity is absorbed.

1.17 In the near term, the weakness in activity is concentrated in business investment and net trade. Uncertainty related to the Brexit process sees business investment fall for a second successive calendar year in 2019 – its weakest performance since the financial crisis. A softening in the global outlook – and in particular a reduction in the trade intensity of world GDP growth due to ongoing trade disputes – has dampened the outlook for UK export market growth relative to October. As a result, net trade is now expected to reduce output growth modestly in every year of the forecast.

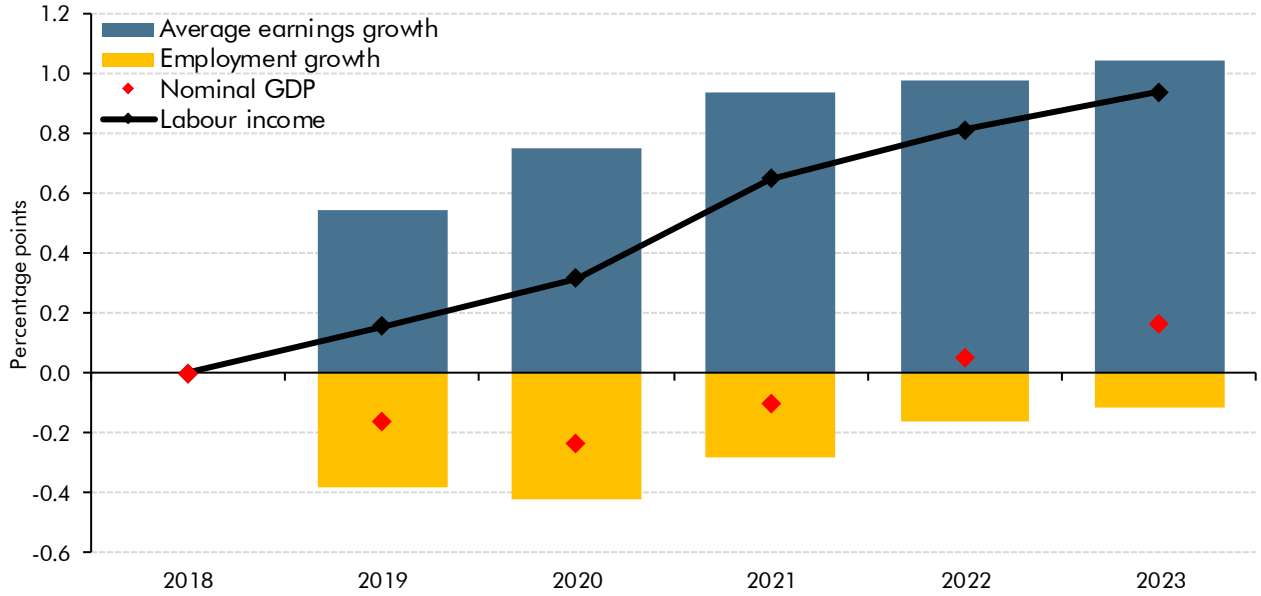
1.18 Consistent with surveys suggesting an easing in employment intentions, we expect the unemployment rate to rise marginally to 4.1 per cent in 2019 as output falls below potential. We then expect it to fall back to our estimate of its equilibrium of rate of 4 per cent by late 2022. The increase in employment over the forecast is more than accounted for by population growth.

1.19 Average earnings growth has been stronger than we expected in our previous forecast. We assume that some of this momentum is maintained, with growth of 3.1 per cent in 2019, up from 2.5 per cent in our October forecast. Average earnings growth reaches 3.3 per cent by 2023, reflecting a modest increase in productivity growth.

1.20 We have revised down our forecast for CPI inflation since October, reflecting the recent fall in the oil price and the modest disinflationary effect of the small degree of spare capacity we expect to open up. CPI inflation dips to 1.9 per cent in 2020, returning to the 2 per cent target thereafter. We have made a larger downward revision to RPI inflation due to the much weaker outlook for house prices in 2019 and 2020.

1.21 The small revisions to our GDP and inflation forecasts leave nominal GDP growth virtually unchanged from October over the forecast, growing by 18.6 per cent between 2018-19 and 2023-24, up from 18.4 per cent in October. But the composition of that growth is more 'tax-rich' than we expected then. Looking at the income measure, the upward revision to earnings growth means that cumulative labour income growth is just under 1 percentage point higher than we forecast in October, despite slightly weaker than expected employment growth (Chart 1.2). This boosts income tax and NICs receipts. In the expenditure measure of nominal GDP, we expect this higher labour income to raise nominal consumer spending as a share of GDP relative to our October forecast, which in turn boosts VAT receipts.

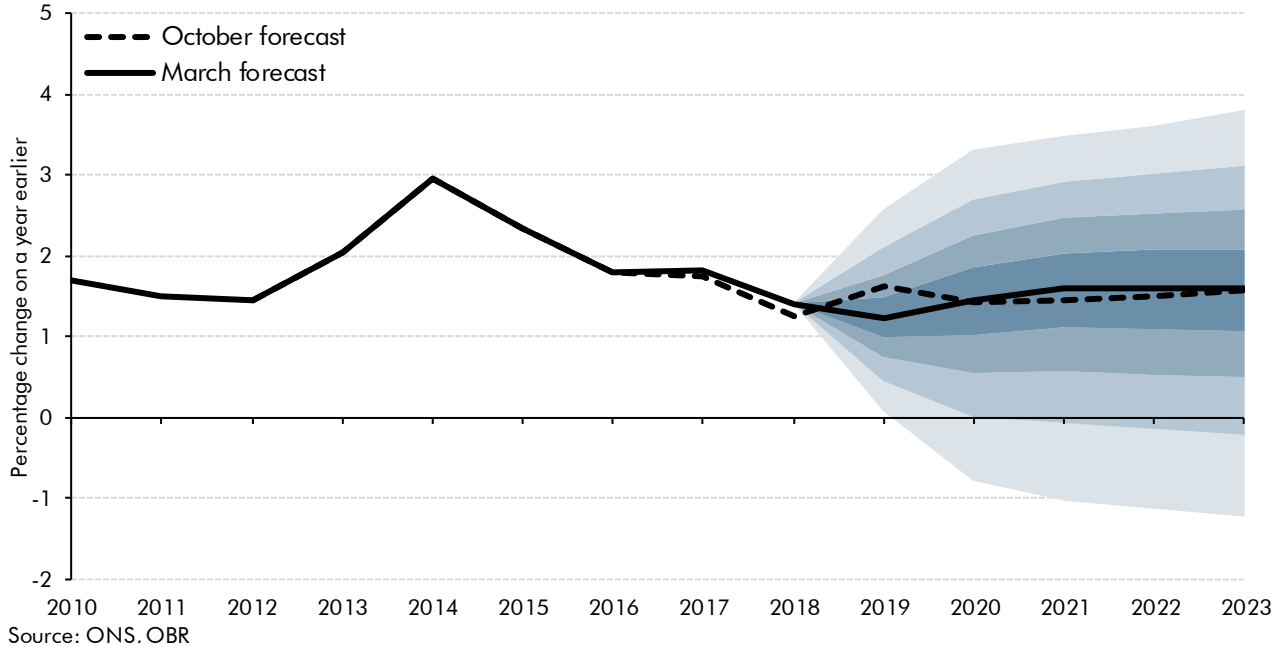
Chart 1.2: Revisions to cumulative labour income and nominal GDP growth



Source: OBR

1.22 The future is, of course, uncertain and no central forecast will be fulfilled in its entirety. Indeed, past experience suggests that the growth path over the next five years is unlikely to be as smooth as that depicted in our central forecast and that there is a roughly 50-50 chance of a recession in any five-year period. One way of illustrating the uncertainty around our GDP growth forecast is shown in Chart 1.3. 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-five chance of the economy shrinking in calendar year 2020. And a similar probability of growth exceeding 2½ per cent – closer to the average pre-crisis growth rate.

Chart 1.3: 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					
	2017	2018	2019	2020	2021	2022	2023
Output at constant market prices							
Gross domestic product (GDP)	1.8	1.4	1.2	1.4	1.6	1.6	1.6
GDP per capita	1.2	0.8	0.6	0.9	1.1	1.1	1.1
GDP levels (2017=100)	100.0	101.4	102.7	104.1	105.8	107.5	109.2
Output gap	0.0	0.2	-0.1	-0.2	-0.1	0.0	0.0
Expenditure components of real GDP							
Household consumption	2.1	1.7	1.1	1.5	1.6	1.6	1.6
General government consumption	-0.2	0.2	2.1	1.7	1.6	1.6	1.7
Business investment	1.5	-0.9	-1.0	2.3	2.3	2.4	2.4
General government investment	3.7	0.5	5.9	1.8	2.2	0.9	2.0
Net trade[1]	0.5	-0.2	-0.5	-0.2	-0.1	-0.1	-0.2
Inflation							
CPI	2.7	2.5	2.1	1.9	2.0	2.0	2.0
Labour market							
Employment (millions)	32.1	32.4	32.6	32.7	32.9	33.0	33.2
Average earnings	2.8	3.0	3.1	3.0	3.1	3.1	3.3
LFS unemployment (rate, per cent)	4.4	4.1	4.1	4.1	4.1	4.0	4.0
	Changes since October forecast						
Output at constant market prices							
Gross domestic product (GDP)	0.1	0.1	-0.4	0.0	0.1	0.1	0.0
GDP per capita	0.1	0.1	-0.4	0.0	0.1	0.1	0.0
GDP levels (2017=100)	0.0	0.1	-0.2	-0.2	-0.1	0.0	0.1
Output gap	0.0	0.0	-0.4	-0.4	-0.2	-0.1	-0.1
Expenditure components of real GDP							
Household consumption	0.3	0.4	-0.1	0.3	0.3	0.2	0.1
General government consumption	-0.1	-0.8	0.0	-0.3	-0.1	0.0	0.1
Business investment	-0.2	-1.4	-3.2	0.2	0.3	0.3	0.2
General government investment	2.0	0.7	0.3	-1.5	0.4	0.1	0.6
Net trade[1]	-0.1	-0.4	-0.3	-0.1	-0.1	0.0	0.0
Inflation							
CPI	0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.0
Labour market							
Employment (millions)	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0
Average earnings	0.0	0.4	0.6	0.2	0.2	0.0	0.0
LFS unemployment (rate, per cent)	0.0	0.1	0.4	0.3	0.2	0.1	0.0

[1] Contribution to GDP growth.

The fiscal outlook

1.23 Public sector net borrowing has fallen sharply over the past decade, from its post-crisis peak of 9.9 per cent of GDP (£153.1 billion) in 2009-10 to 1.1 per cent of GDP (£22.8 billion) in 2018-19 on our latest forecast. With the output gap in 2018-19 assumed to be slightly positive, we judge that the structural deficit (which excludes the effect of the economic cycle) will be a little higher than the headline deficit at 1.2 per cent of GDP. It is therefore already below the 2 per cent of GDP target ceiling the Chancellor has set himself for 2020-21.

1.24 Table 1.2 shows that on current policy – including our assumptions regarding the UK's exit from the EU and new policies announced since our October forecast – we expect the deficit to remain below 2 per cent of GDP throughout the forecast. It rises modestly in 2019-20, then falls slowly in the four years to 2023-24. Our central forecast is for a structural deficit of 0.8 per cent of GDP in 2020-21, well below the ceiling set in the 'fiscal mandate'.

Table 1.2: Overview of the fiscal forecast

	Per cent of GDP						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Revenue and spending							
Public sector current receipts	36.4	37.0	36.9	37.1	37.1	37.2	37.2
Total managed expenditure	38.5	38.1	38.2	38.0	37.9	37.7	37.8
Deficit: Current and previous fiscal mandate measures							
Cyclically adjusted net borrowing	2.0	1.2	1.3	0.8	0.7	0.6	0.5
Public sector net borrowing	2.0	1.1	1.3	0.9	0.7	0.6	0.5
Cyclically adjusted current budget deficit	-0.1	-0.9	-0.8	-1.4	-1.5	-1.5	-1.6
Debt: Supplementary target							
Public sector net debt	84.7	83.3	82.2	79.0	74.9	74.0	73.0
	£ billion						
Revenue and spending							
Public sector current receipts	753.1	789.0	811.4	844.0	874.0	906.6	941.5
Total managed expenditure	795.0	811.8	840.7	865.2	891.7	921.0	954.9
Deficit: Current and previous fiscal mandate measures							
Cyclically adjusted net borrowing	41.5	24.9	28.7	18.9	15.9	13.9	13.4
Public sector net borrowing	41.9	22.8	29.3	21.2	17.6	14.4	13.5
Cyclically adjusted current budget deficit	-1.3	-18.3	-18.3	-31.6	-34.5	-37.3	-40.4
Debt: Supplementary target							
Public sector net debt	1779	1803	1838	1828	1796	1838	1878

Changes in public sector net borrowing

1.25 As in October, we have revised down our pre-measures forecast for borrowing in every year – but by only about half as much as in that forecast. This is driven by the relatively unusual combination of an upward revision to receipts and a downward revision to debt interest spending – only the fifth time that revisions to receipts and debt interest spending have pushed borrowing in the same direction in the 19 forecast revisions since June 2010.

1.26 The drivers of these revisions are dominated by two factors:

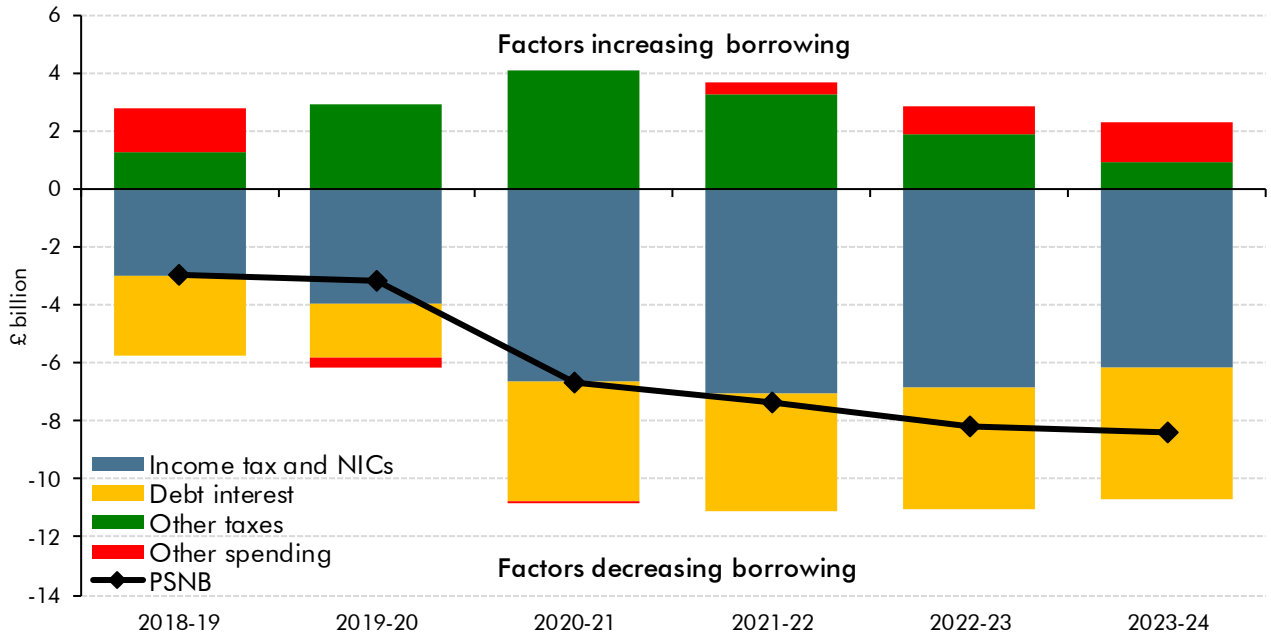
- Despite little change in our forecast for nominal GDP growth, the **tax-to-GDP ratio** has been revised up. This largely reflects near-term momentum in earnings growth and a buoyant effective tax rate on labour income due to particularly strong earnings growth among the highest earners. Both have boosted income tax and NICs receipts.

- Market-derived expectations of future interest rates are lower than in October, reducing our forecast for **debt interest payments**. This is, however, likely to reflect the market pricing in some probability of a 'no deal' Brexit and an associated monetary

policy easing. So to some extent it will not be consistent with the assumption of a smooth exit that underpins our economy and receipts forecasts. If a smooth Brexit is achieved, market interest rates – and our debt interest forecast – could rise again.

1.27 Chart 1.4 breaks down the main movements in our forecast since October.

Chart 1.4: Sources of revisions to our pre-measures PSNB forecast



Source: OBR

1.28 Presented with this improvement in the outlook for the public finances, the Government has once again decided to loosen discretionary fiscal policy – albeit modestly. This is the sixth time in the six Budgets, Autumn and Spring Statements since the EU referendum that the Chancellor has loosened the purse strings. Taken together, these discretionary moves have significantly eased the squeeze on public spending that he inherited from his predecessor.

Underlying revisions to borrowing in 2018-19

1.29 Over the first 10 months of 2018-19, borrowing has fallen somewhat faster than we assumed in our full-year forecast from October. This mainly reflects strong receipts growth in January, the largest month for central government receipts, which were 9.8 per cent higher than a year earlier.

1.30 Around half the January strength reflected self-assessment (SA) income tax and capital gains tax payments that relate largely to liabilities incurred in 2017-18. Initial HMRC analysis indicates that this strength was broadly based across the various SA tax streams, leading us to revise up our 2018-19 SA income tax and CGT forecast by £1.7 billion. Our revisions to other receipts forecasts for this year are largely offsetting, with higher PAYE income tax and NICs receipts (partly driven by the continued strength in earnings growth, especially among the highest earners) offset by weaker VAT and corporation tax revenues.

1.31 We have revised our spending forecast for 2018-19 down by £0.9 billion. That is more than explained by lower debt interest, where RPI inflation in January 2019 – the key month for accrued interest on index-linked gilts – was lower than we had predicted in October. (RPI inflation feeds through to accrued interest on index-linked gilts with a lag of two months.)

1.32 Taking those factors into account, and bearing in mind that the new policy decisions do not affect borrowing materially this year, we have revised overall borrowing in 2018-19 down by £2.7 billion to £22.8 billion. That is broadly in line with the in-year forecast that would be generated by extrapolating the year-to-date performance of the public finances.

Underlying revisions to borrowing from 2019-20 onwards

1.33 From 2019-20 onwards, our pre-measures borrowing forecast has been revised down in every year, by £6.8 billion (0.3 per cent of GDP) a year on average:

- Just over half the revision reflects higher **receipts**, which are up by £3.5 billion a year on average. That is more than explained by strength in income tax and NICs receipts, thanks to the higher 2018-19 starting point and slightly stronger earnings growth. This is partly offset by downward revisions to oil and gas revenues (due to lower oil and gas prices), capital tax receipts (due to lower equity prices) and interest and dividend receipts (due to lower market expectations of future interest rates).

- Just under half the revision reflects lower **spending**, which is down by £3.3 billion a year on average. This is dominated by lower spending on debt interest, reflecting lower near-term RPI inflation and lower market expectations for interest rates across the forecast. Other spending revisions are largely offsetting, with higher welfare spending (largely driven by an upward revision to our disability benefits forecast) offset by other smaller items.

Government decisions

1.34 The Government does not consider this Spring Statement to be a full 'fiscal event' and has not produced a 'scorecard' of policy measures. But several measures have been announced since the Budget and departmental spending totals were increased again in the Statement itself. Overall, these changes add to borrowing by increasing amounts over the forecast period, rising from £0.7 billion in 2019-20 to £2.1 billion in 2023-24:

- Total **departmental spending** has been increased by £0.2 billion in 2019-20, rising to £1.7 billion in 2023-34. This comprises two main parts. First, the decision to keep non-NHS current departmental spending flat in real terms despite higher GDP deflator inflation adds amounts rising to £0.8 billion in 2023-24. Second, a further addition to NHS funding – again to maintain real-terms funding in the face of revisions to GDP deflator inflation – adds amounts that also rise to £0.8 billion in 2023-24.

- Several policy changes to **universal credit (UC) and disability benefits**. These include delaying the rollout of personal independence payment and stopping the review of some existing cases to free up capacity to finish the rollout. This costs £0.2 billion a

year on average from 2020-21 onwards. The decision not to limit the number of UC child elements for some new UC claims and changes to the profile of the UC managed migration phase have broadly offsetting effects over the five years.

- **Other policy changes** are smaller and their effects are largely offsetting. They include raising the fees payable for an application for a grant of probate and the doubling of the 'immigration health surcharge'. Annex A provides more detail.

1.35 The modest net giveaway led us to revise our nominal GDP forecast up a fraction. This reduces borrowing marginally in every year via higher tax revenues. Higher departmental spending raises contributions to public service pension schemes, reducing net expenditure. These effects are shown in the 'Indirect effects' row in Table 1.3.

Table 1.3: Changes to public sector net borrowing since October

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	39.8	25.5	31.8	26.7	23.8	20.8	19.8
March forecast	41.9	22.8	29.3	21.2	17.6	14.4	13.5
Change	**2.1**	**-2.7**	**-2.4**	**-5.5**	**-6.2**	**-6.4**	**-6.3**
Underlying revisions to receipts	**0.9**	**-1.7**	**-1.0**	**-2.5**	**-3.7**	**-5.0**	**-5.2**
of which:							
Income tax and NICs	1.1	-3.0	-4.0	-6.6	-7.1	-6.9	-6.1
VAT	-0.1	0.5	0.6	0.4	0.1	-0.1	-0.3
Onshore corporation tax	0.4	1.2	0.7	0.2	-0.4	-0.6	-0.7
Capital taxes	0.0	-0.6	1.1	2.2	2.2	2.0	2.1
Other	-0.4	0.2	0.6	1.3	1.4	0.5	-0.1
Underlying revisions to spending	**1.2**	**-1.2**	**-2.2**	**-4.1**	**-3.6**	**-3.2**	**-3.2**
of which:							
Debt interest	0.0	-2.7	-1.9	-4.1	-4.0	-4.1	-4.6
Welfare spending	0.0	0.0	0.0	0.4	0.6	1.0	1.7
Departmental spending	0.5	-0.8	-0.8	0.0	0.0	0.0	0.0
Other changes	0.7	2.4	0.5	-0.4	-0.2	-0.1	-0.3
Total effect of Government decisions	**-**	**0.3**	**0.7**	**1.2**	**1.2**	**1.8**	**2.1**
of which:							
Departmental spending	-	0.3	0.2	1.4	0.8	1.7	1.7
Other measures	-	0.0	1.0	0.1	0.8	0.4	0.7
Indirect effects	-	0.0	-0.4	-0.3	-0.4	-0.3	-0.3
Memo: March pre-measures forecast	*41.9*	*22.5*	*28.6*	*20.0*	*16.4*	*12.6*	*11.4*

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

Changes to public sector net debt

1.36 Our forecast for public sector net debt (PSND) has been revised down since October, by steadily increasing amounts that reach 1.1 per cent of GDP in 2023-24.

1.37 We have revised down our pre-measures forecast due to:

- Modestly higher **nominal GDP**, which reduces the debt-to-GDP ratio slightly from 2020-21 onwards.
- The downward revisions to our pre-measures forecast for **public sector net borrowing** reduce cash debt and the debt-to-GDP ratio by progressively larger amounts. This is the largest source of change to our debt forecast since October.
- Upward revisions to our pre-measures **financial transactions** forecast, mainly due to changes related to the timing of onshore corporation tax payments.
- Early redemptions in the **Term Funding Scheme** reduce debt at the start of the forecast but this unwinds by 2021-22. Higher gilt prices and the assumption that the APF no longer sells any assets within the forecast period increasingly add to debt.

1.38 As regards Government policy decisions, a short delay to a large UK Asset Resolution (UKAR) asset sale increases debt in 2018-19 but this unwinds in 2019-20, after which the effects of lower departmental spending dominate.

Table 1.4: Changes to public sector net debt since October

	Per cent of GDP					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	83.7	82.8	79.7	75.7	75.0	74.1
March forecast	83.3	82.2	79.0	74.9	74.0	73.0
Change	**-0.4**	**-0.6**	**-0.7**	**-0.8**	**-1.0**	**-1.1**
of which:						
Change in nominal GDP[1]	-0.1	-0.1	-0.1	-0.2	-0.3	-0.3
Change in cash level of net debt	-0.3	-0.6	-0.6	-0.6	-0.7	-0.7
	£ billion					
October forecast	1810	1851	1841	1809	1856	1896
March forecast	1803	1839	1828	1796	1838	1878
Like-for-like change in cash debt	**-7**	**-12**	**-13**	**-13**	**-18**	**-19**
of which:						
Underlying forecast revisions	**-11**	**-11**	**-12**	**-13**	**-20**	**-23**
Public sector net borrowing (pre-measures)	-3	-6	-13	-20	-28	-37
Financial transactions (pre-measures)	-6	-3	1	5	5	6
Valuation changes	-1	-2	0	2	3	8
Effect of Government decisions	**4**	**-1**	**-1**	**0**	**2**	**4**
Affecting public sector net borrowing	0	1	3	5	7	9
Affecting financial transactions	4	-2	-3	-3	-3	-3
Indirect effects	0	0	-1	-1	-1	-2

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

The accounting treatment of student loans

1.39 The ONS plans to improve the accounting treatment for student loans. Compared to the current treatment, spending will rise and receipts will fall, reflecting estimates of how much of the principal extended and interest charged will never actually be paid. Our preliminary estimate is that this will raise the recorded deficit by amounts rising from around £10 billion in 2018-19 to £14 billion in 2023-24. These changes also produce lower valuations of the stock of outstanding loans and so increase public sector net financial liabilities. This would rise by 2.8 per cent of GDP compared to our central forecast from 2018-19 onwards. Cash based measures such as the central government net cash requirement (CGNCR) and PSND will not be affected by the change. Annex B provides further detail.

Performance against the Government's fiscal targets

1.40 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]

1.41 The current *Charter* states 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 that it was drawn up, 'the next Parliament' was expected to run from 2020 to 2025.

1.42 The *Charter* also sets out targets for borrowing, debt and welfare spending that require:

- The **structural deficit** (cyclically adjusted public sector net borrowing) to lie below 2 per cent of GDP by 2020-21 (the 'fiscal mandate').
- **Public sector net debt** to fall relative to GDP in 2020-21 (the 'supplementary target').
- Welfare spending (excluding the state pension and payments closely linked to the economic cycle) to lie below a '**welfare cap**'. The latest version sets the effective cap 3 per cent above our November 2017 forecast for 2022-23 at £135 billion, with the level of spending to be adjusted for subsequent changes in our inflation forecast.

1.43 Our central forecast implies that all three targets are on course to be met:

- **Fiscal mandate:** the structural deficit falls to 0.8 per cent of GDP in the target year, giving a margin against the mandate of 1.2 per cent of GDP (£26.6 billion). These margins are up from 0.7 per cent of GDP and £15.4 billion in October, with a little under half due to lower structural spending and the rest from higher structural receipts.
- **Supplementary target:** public sector net debt falls by 3.2 per cent of GDP in 2020-21, unchanged from our October forecast. The repayment of loans issued under the Bank's Term Funding Scheme at the end of their four-year term accounts for 2.2 per cent of GDP of the year-on-year fall.

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

- **Welfare cap:** the relevant welfare spending is forecast to be £1.6 billion below the cap in 2022-23, and £5.5 billion below the cap-plus-margin.

1.44 Achieving the broader balanced budget fiscal objective in 2025-26, looks challenging (although this lies beyond our formal forecasting horizon). In particular, this is a period in which population ageing will continue to exert upward pressure on spending, and more so than in recent years when the state pension age has been rising. That said, the chances of the Government balancing the budget by 2025-26 – ignoring the potential effects of the new accounting treatment for student loans – look greater than they did in October. The probability of balancing the budget as early as 2023-24 (based purely on past forecast performance), is now 40 per cent, up from 35 per cent in October.

1.45 The uncertainties around our central forecast reflect those regarding the outlook for the economy and those regarding the performance of revenues and spending in any given state of the economy. We assess the robustness of our judgements in three ways:

- First, by looking at **past forecast errors**. If our central forecasts are as accurate as official forecasts in the past, then the chance that the structural deficit would be below 2 per cent of GDP in 2020-21is around 75 per cent – slightly higher than in October.

- Second, by looking at the **sensitivity of the deficit to key features of the economy forecast**. The 1.2 per cent of GDP margin relative to the 2 per cent structural deficit ceiling would fall to zero if potential output were 2.4 per cent lower, or if the effective tax rate were 1.2 per cent of GDP lower for structural reasons.

- Third, drawing on our **previous economic scenarios** to examine the channels through which a 'no deal' Brexit could affect the public finances. We conclude that the range of possible fiscal outcomes is clearly large, given the uncertainty both around the economic impact and around the nature and effectiveness of any policy response. But while the short-term shock to the economy would no doubt have fiscal costs, the more significant channels would probably be via its longer-term impact on potential output. The direct fiscal effects of any policy response (such as tariff policy or fiscal stimulus) would also affect the final path of the deficit, though this is presently unknowable.

2 Developments since the last forecast

2.1 This chapter summarises:

- the main **economic and fiscal developments** since our previous forecast in October (from paragraph 2.2); and
- recent **external forecasts** for the UK economy (from paragraph 2.12).

Economic developments

GDP growth since our October 2018 forecast

2.2 Since our October forecast, the ONS has published Quarterly National Accounts for the third quarter of 2018, which included upward revisions to GDP in 2017. The ONS has also published its first estimate of GDP for the fourth quarter of 2018, which included upward revisions to GDP in the first half of 2018. The net effect was to increase real GDP growth from the fourth quarter of 2016 to the second quarter of 2018 from 1.9 to 2.1 per cent. Private consumption more than explained this upward revision (Table 2.1).

Table 2.1: Contributions to real GDP growth from 2016Q4 to 2018Q2

	Percentage points						
	Private consumption	Government consumption	Government investment	Private investment	Net trade	Stocks	GDP growth, per cent
October forecast	1.5	0.0	0.0	1.0	0.0	-0.8	1.9
Latest data	1.9	-0.1	0.0	1.0	-0.3	-0.9	2.1
Difference[1]	0.4	0.0	0.0	0.0	-0.2	-0.1	0.2

[1] Difference in unrounded numbers, rounded to one decimal place.
Note: Components may not sum to total due to rounding, chain linking and statistical discrepancy. The statistical discrepancy is 0.0 percentage points for the latest data, and -0.2 percentage points for our October forecast.

2.3 In the second half of 2018, GDP grew by 0.8 per cent – a little lower than in our October forecast (Table 2.2). The largest contributors were stockbuilding and private consumption, which were both stronger than expected. In contrast, the contributions from net trade and private investment were both markedly weaker than expected. The unexpectedly negative contribution from net trade largely reflects weaker than expected export growth.

Table 2.2: Contributions to real GDP growth from 2018Q2 to 2018Q4

	Percentage points						
	Private consumption	Government consumption	Government investment	Private investment	Net trade	Stocks	GDP growth, per cent
October forecast	0.2	0.3	0.2	0.2	0.6	-0.6	0.9
Latest data	0.5	0.2	0.2	-0.5	-0.1	0.4	0.8
Difference[1]	0.3	-0.1	0.0	-0.7	-0.6	1.0	-0.1

[1] Difference in unrounded numbers, rounded to one decimal place.
Note: Components may not sum to total due to rounding. The statistical discrepancy is 0.0 percentage points for the latest data, and 0.0 for our October forecast.

2.4 GDP deflator inflation in the second half of 2018 was in line with our October forecast (Table 2.3). Import prices rose less than expected (implying less of a drag on GDP deflator inflation) and there were modest upside surprises in the government consumption and government investment deflators. But these were offset by lower than expected inflation for the export and private consumption deflators.

Table 2.3: Contributions to GDP deflator inflation from 2018Q2 to 2018Q4

	Percentage points							Deflator inflation, per cent
	Private consumption	Government consumption	Government investment	Private investment	Exports	Imports	Stocks	
October forecast	0.8	0.0	0.0	0.1	0.5	-0.9	0.3	0.9
Latest data	0.7	0.1	0.0	0.1	0.2	-0.6	0.3	0.9
Difference[1]	-0.1	0.1	0.1	0.0	-0.3	0.3	0.0	0.0

[1] Difference in unrounded numbers, rounded to one decimal place.
Note: Components may not sum to total due to rounding, the statistical discrepancy, and changing weights. The statistical discrepancy is 0.0 percentage points for the latest data, and 0.0 percentage points for our October forecast. Contributions are calculated on a fixed weight basis, except the stocks contribution which includes the effects of price and volume changes.

2.5 Putting real GDP growth and GDP deflator inflation together, nominal GDP grew by 1.7 per cent in the second half of 2018 – slightly below our October forecast (Table 2.4). Smaller contributions than expected from private investment and net trade were only partly offset by larger ones from stockbuilding, private consumption and government investment.

Table 2.4: Contributions to nominal GDP growth from 2018Q2 to 2018Q4

	Percentage points						GDP growth, per cent
	Private consumption	Government consumption	Government investment	Private investment	Net trade	Stocks	
October forecast	1.1	0.4	0.1	0.3	0.2	-0.3	1.8
Latest data	1.3	0.3	0.2	-0.4	-0.5	0.6	1.7
Difference[1]	0.2	0.0	0.1	-0.7	-0.7	1.0	-0.1

[1] Difference in unrounded numbers, rounded to one decimal place.
Note: Components may not sum to total due to rounding. The statistical discrepancy is 0.0 percentage points for the latest data, and 0.0 for our October forecast.

Conditioning assumptions

2.6 Sterling oil prices have fallen significantly since our October forecast. Our latest assumption for the first quarter of 2019 is just under £48 per barrel – around 23 per cent down since October (Table 2.5). Our current conditioning assumption for the sterling effective exchange rate is slightly below October's, largely reflecting a depreciation against the dollar. The FTSE all-share index rose at the start of 2019, but this followed large falls in late 2018. The level assumed for the first quarter of 2019 is just over 7 per cent below our October assumption. Mortgage interest rates have been only a little lower than in our October forecast.

Table 2.5: Conditioning assumptions in 2019Q1

	Oil price (£ per barrel)	US$/£ exchange rate	€/£ exchange rate	Sterling exchange rate index	Equity prices (FTSE all-share index)	Mortgage interest rates (%)[1]
October forecast	62.2	1.31	1.12	78.2	4142	2.55
Latest assumption	47.7	1.29	1.13	78.0	3850	2.50
Per cent difference	-23.3	-1.8	1.6	-0.2	-7.1	-0.05

[1] Difference is in percentage points.
Note: Conditioning assumptions in October were based on a 10-day average of data up to 4 October 2018. The latest assumptions are based on data up to 14 February 2019.

The labour market

2.7 The unemployment rate was 4.0 per cent in the fourth quarter of 2018. This was unchanged from the second quarter (Table 2.6) but higher than we expected in October. Over the same period, the employment rate increased by 0.2 percentage points, in line with our October forecast. Average earnings growth – on the National Accounts derived measure that we focus on in our economy forecast – was somewhat stronger than we expected.

Table 2.6: Labour market indicators from 2018Q2 to 2018Q4

	Change in thousands			Change in rate		Percentage change
	Total employment	Unemployment	Participation	Employment rate	Unemployment rate	Average earnings
October forecast	189	-87	102	0.2	-0.3	1.5
Latest data	211	1	212	0.2	0.0	2.1
Difference[1]	22	88	110	0.0	0.2	0.6

[1] Difference in unrounded numbers, rounded to one decimal place.

CPI inflation

2.8 CPI inflation was above the 2 per cent target throughout 2018, averaging 2.5 per cent. In the fourth quarter of 2018 it had fallen back to 2.3 per cent – somewhat lower than we expected in our October forecast. CPI inflation fell further in January 2019 to 1.8 per cent, largely reflecting lower gas, electricity and petrol prices. This was the first time in two years that inflation was below the 2 per cent inflation target.

The housing market

2.9 Average house prices rose 2.7 per cent in the fourth quarter of 2018 – slightly below our October forecast. Annual growth in the Nationwide and Halifax indices both slowed to 1.3 per cent in the fourth quarter of 2018 and leading indicators of housing activity and prices have weakened noticeably since our October forecast.

The global economy

2.10 World GDP is estimated to have grown by 3.7 per cent in 2018 – in line with our October forecast. Although euro area and US GDP are estimated to have risen by 1.8 per cent, and 2.9 per cent respectively, quarterly growth slowed in the second half of 2018. The rate of quarterly growth fell by 0.2 percentage points in the euro area and 0.4 percentage points in the US between the second and fourth quarter of 2018. Inflation has risen in the euro area by 0.5 percentage points between the fourth quarter of 2017 and fourth quarter of 2018 to 1.9 per cent. Inflation in the US rose by 0.1 percentage points to 2.2 per cent.

Fiscal developments

2.11 Over the first 10 months of 2018-19, the deficit has fallen faster than our October forecast for the full year. In the year to date, the deficit is down by £18.5 billion (46.6 per cent) on a year earlier, versus our October forecast for a full-year fall of £16.4 billion (39.2 per cent). The unexpectedly rapid fall largely reflects strength in January tax receipts, with central government receipts up 9.8 per cent on a year earlier. Nearly half of this relates to self-assessment income tax and capital gains tax, largely reflecting income and capital gains tax liabilities generated in 2017-18. Our latest fiscal forecast – which includes a small downward revision to borrowing this year – is detailed in Chapter 4.

Developments in outside forecasts

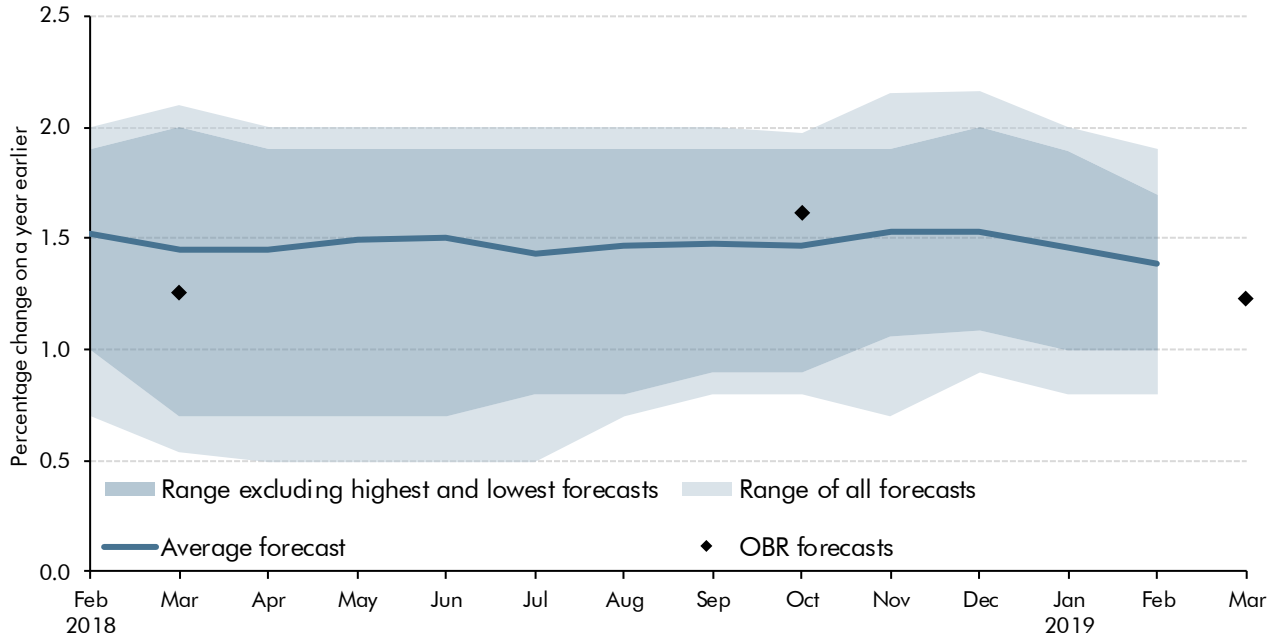
2.12 Many private sector, academic and other outside organisations produce forecasts for the UK economy.[1] This section sets out some of the movements in these forecasts since our October *EFO*. When interpreting the average of outside forecasts, it is important to bear in mind that different bodies may forecast somewhat different definitions of the same variables and that the average forecast need not be internally consistent. At the current juncture, it is worth noting in particular that forecasters may differ in their Brexit assumptions.

Real GDP growth

2.13 The average forecast for real GDP growth in 2019 currently stands at 1.4 per cent (Chart 2.1). This is slightly lower than the average forecast of 1.5 per cent in October, which probably reflects the effect of relatively weak quarterly GDP growth at the end of 2018. The average GDP growth forecast then rises to 1.6 per cent in 2020. Our forecast for GDP growth in 2019 is currently a little below the average, at 1.2 per cent.

[1] See HM Treasury, *Forecasts for the UK economy*: February 2019. A full list of contributors is available at the back of the Treasury publication. Several financial reporting services also monitor average or consensus figures.

Chart 2.1: Forecasts for real GDP growth in 2019

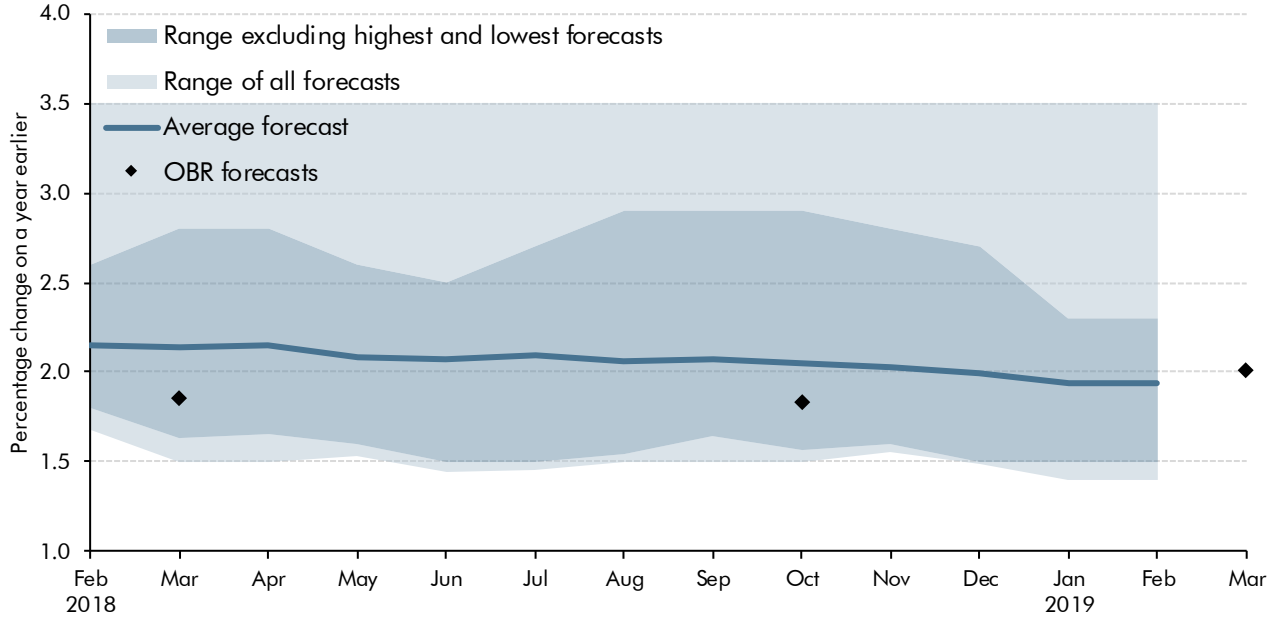


Source: HM Treasury, OBR

Inflation

2.14 The latest average forecast for CPI inflation in the fourth quarter of 2019 is 1.9 per cent – 0.1 percentage points lower than the average forecast in October (Chart 2.2). That downward revision may reflect the fall in the oil price, but the average forecast is unlikely to reflect fully the recent Ofgem announcement of a rise of around 10 per cent in the energy price cap from April this year. We have revised our forecast up by 0.2 percentage points since October to 2.0 per cent.

Chart 2.2: Forecasts for CPI inflation in 2019Q4

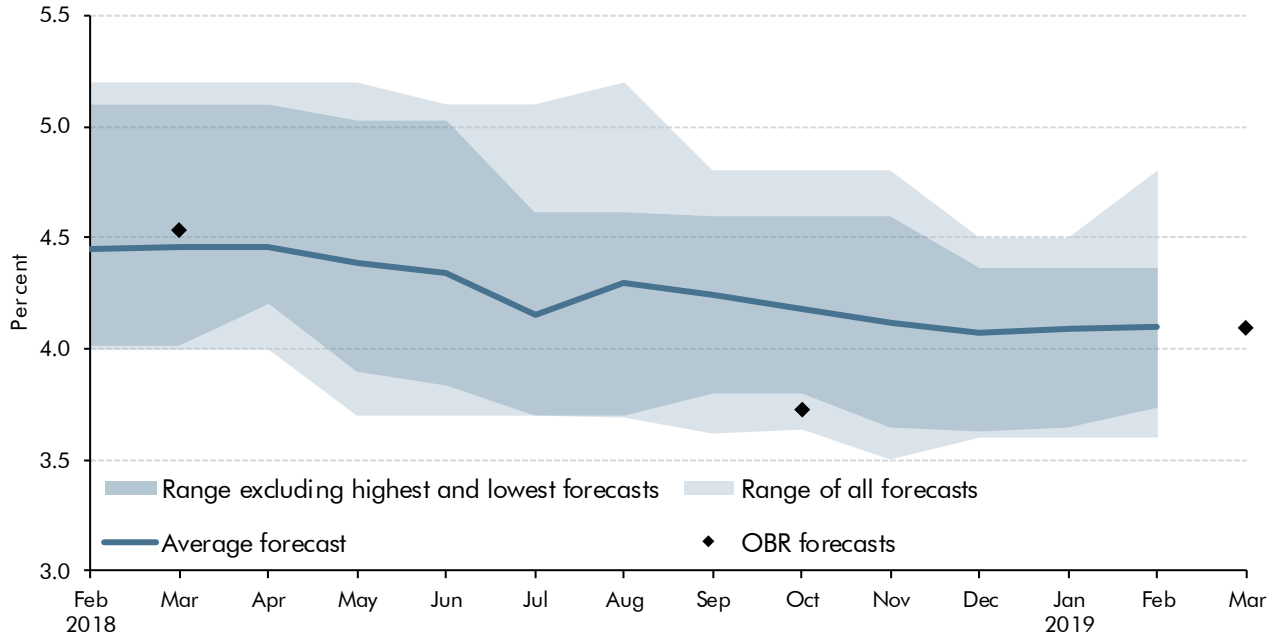


Note: One forecaster has consistently forecast 3.5 per cent CPI inflation for the fourth quarter of 2019 over the period presented.
Source: HM Treasury, OBR

The labour market

2.15 The latest average forecast for the unemployment rate in the fourth quarter of 2019 is 4.1 per cent (Chart 2.3) – down 0.1 percentage points from October. We have revised our forecast up since October by 0.4 percentage points. It is now in line with the latest average.

Chart 2.3: Forecasts for unemployment in 2019Q4



Source: HM Treasury, OBR

The public finances

2.16 Public sector net borrowing has fallen slightly faster than we expected in October and in this *EFO* we have lowered our full-year forecast by £2.7 billion to £22.8 billion. The latest average forecast for borrowing in 2018-19 is higher than ours at £33.1 billion, although these forecasts were all prepared before the latest *Public sector finances* data release on 21 February that reported strong growth in January tax receipts.

2.17 The average of the smaller sample of medium-term forecasts suggests that borrowing will continue to fall modestly year on year, reaching £27.4 billion in 2023-24. This is a slower decline from a higher level than in our central forecast. As well as reflecting differences in views about the economic outlook, most external forecasts will be based on what their authors consider to be the most likely path of fiscal policy. In contrast, Parliament requires us to base our forecasts solely on the Government's current policies. Outside forecasters may also have made different assumptions about the fiscal consequences of Brexit, beyond those captured by their views on how it will affect the economy – for example, regarding contributions to the EU after March 2019 and any offsetting spending in other areas.

3 Economic outlook

Introduction

3.1 This chapter:

- describes our assumptions and judgements in respect of **the UK's forthcoming exit from the EU** (from paragraph 3.2);
- sets out our estimates of the amount of spare capacity in the economy and our judgement regarding the **growth in the economy's productive potential** that underpins our forecasts for actual GDP growth (from paragraph 3.9);
- describes the key **conditioning assumptions** for the forecast, including credit conditions, the exchange rate and the world economy (from paragraph 3.20);
- sets out our **real GDP growth forecasts** (from paragraph 3.38) and the outlook for **inflation** (from paragraph 3.46) and **nominal GDP** (from paragraph 3.52);
- discusses recent developments and prospects for the **household, corporate, government and external sectors of the economy** (from paragraph 3.54); and
- outlines **risks and uncertainties** (from paragraph 3.91) and compares our central forecast with those of selected **external organisations** (from paragraph 3.93).

Assumptions and judgements for the UK's exit from the EU

Current assumptions and judgements

3.2 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 terms of the UK's exit from the EU and the nature of the future relationship between the two 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 the July 2018 White Paper on the future relationship between the UK and EU and the immigration White Paper published in December 2018.[1, 2]

[1] Department for Exiting the European Union, *The future relationship between the United Kingdom and the European Union*, July 2018.
[2] HM Government, *The UK's future skills-based immigration system,* December 2018.

3.3 Parliament is scheduled to vote on various Brexit-related questions in the week of the Spring Statement – after we closed the forecast. But reflecting the draft Withdrawal Agreement published in November 2018, our forecast incorporates a transition period until December 2020 – during which time the terms on which the UK and EU trade with each other will remain unchanged.[3] This means that we continue to assume that the UK makes an orderly transition to a new – though, as yet, undefined – long-term relationship. Our remit does not allow us to produce scenarios based on alternative government policy, such as the UK leaving the EU without the implementation of a Withdrawal Agreement. But our Brexit *discussion paper* sets out how different trading and migration relationships could affect our forecasts,[4] and Chapter 5 summarises some of our previous scenarios that shed light on the responsiveness of the public finances to changes in the outlook.

3.4 Given the relatively high-level nature of the Political Declaration – which accompanied the Withdrawal Agreement – and the current uncertainty as to how the Government will respond to the choices and trade-offs it faces during the negotiations regarding the future relationship between the UK and the EU, we still have no meaningful basis for predicting the post-Brexit trading relationship beyond the near term. We have not made any changes to our net migration forecast on the basis of the Government's immigration White Paper as the Government only plans to publish final immigration rules after a year of consultation. We have therefore retained the same broad-brush assumptions regarding Brexit that underpinned our previous post-referendum forecasts. Specifically, for the economy forecast, we assume that:

- **The UK leaves the EU on 29 March 2019** – two years after Article 50 was invoked – but there is a transition period until December 2020.

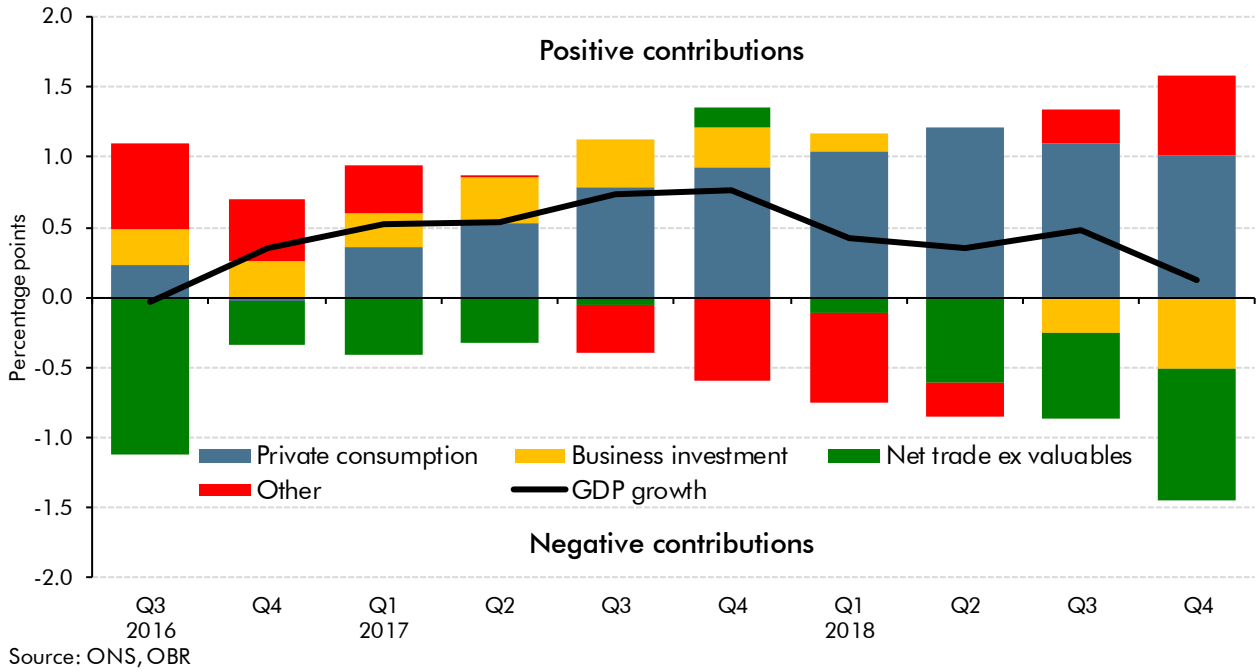
- The extra frictions associated with new trading arrangements with the EU and other countries **slows import and export growth over a 10-year period.** We calibrated this based on external studies of different possible trade regimes and have assumed broadly offsetting impacts from exports and imports on net trade and GDP growth.

- The vote to leave the EU will be associated with **lower net inward migration,** but that net inward migration will remain above 'tens of thousands'. We assume that the UK adopts a tighter migration regime than that currently in place and that 'pull factors' – such as a fall in the value of UK wages in prospective immigrants' home currencies due to the past depreciation of the pound – will be weaker. The data do indeed suggest that inward migration from the EU has fallen since the referendum, consistent with the weakening of pull factors. But overall net inward migration has not fallen to the extent implied by the ONS principal migration projections (which we use as the base for our forecast), as the fall in net immigration from the EU has been partially offset by a rise in net immigration from non-EU countries.

[3] For more information, see European Commission, *Draft Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community*, 2018.
[4] OBR, *Brexit and the OBR's forecasts*, 2018.

3.5 As well as these broad-brush assumptions about the Brexit process, our recent forecasts have incorporated specific judgements regarding the short-term impact of the referendum result on the UK economy. In our first post-referendum forecast in November 2016, we judged that the vote to leave the EU would result in a period of lower real GDP growth and this appears to have been borne out. Growth initially held up better than we expected but has been weaker than anticipated more recently (Chart 3.1). Overall, we expected cumulative GDP growth between the second quarter of 2016 and the fourth quarter of 2018 of 4.1 per cent (revised down from 5.5 per cent in our March 2016 forecast). The ONS currently estimates that growth over this period was very close to that at 4.2 per cent.

Chart 3.1: Contributions to forecast errors for cumulative real GDP growth in November 2016 forecast



Source: ONS, OBR

3.6 In terms of the composition of GDP growth:

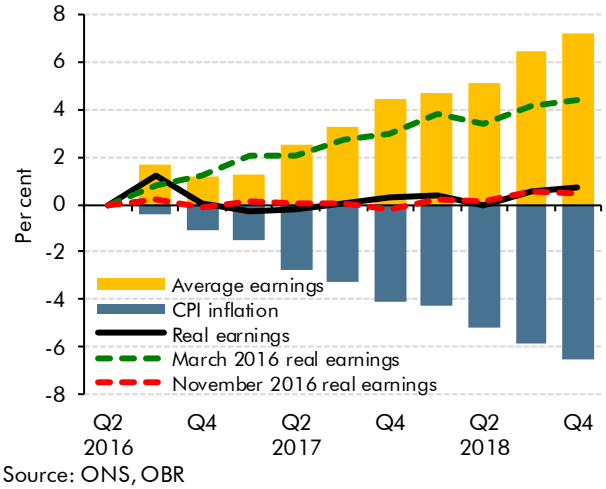
- Real earnings have evolved broadly in line with our November 2016 forecast, showing total growth of less than 1 per cent since the referendum rather than rising by over 4 per cent as we predicted in our final pre-referendum forecast (Chart 3.2). But real **consumption** has consistently held up better than we anticipated (Chart 3.1), thanks to a further decline in the household saving ratio.

- **Business investment** initially held up better than we expected, perhaps due to the lead times involved in major investment projects or to the effect that the unexpected strengthening of the global economy in 2017 had on exporting firms. More recently, however, business investment has been significantly weaker than expected – falling in each quarter of 2018 – so that cumulative growth since the referendum now lies well below our November 2016 forecast. While it is difficult to know exactly how investment would have performed in the absence of a vote to leave the EU, it is notable that

growth in non-dwellings investment has been significantly weaker in the UK than in the other G7 economies since the referendum (Chart 3.3).

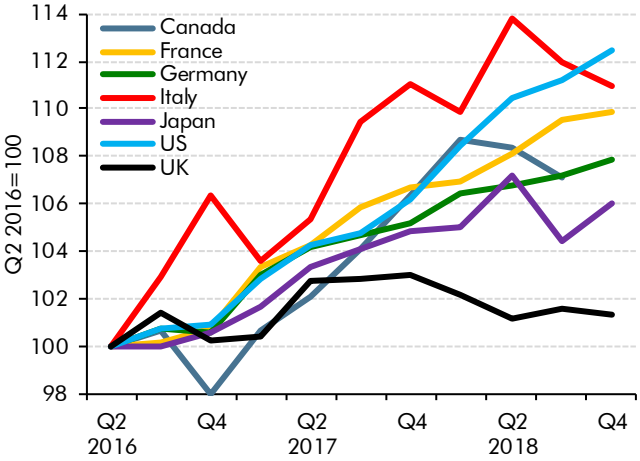
- We expected the substantial fall in the pound around the time of the referendum to provide only a modest boost to **net trade**. While trade outturns have been volatile, net trade has been significantly weaker than we expected – reducing GDP growth since the referendum rather than raising it. This suggests that the fall in the pound around the time of the referendum has not provided much of a boost to GDP growth.

Chart 3.2: Contributions to real earnings growth



Source: ONS, OBR

Chart 3.3: G7 non-dwellings investment



Source: OECD

Future forecast issues

3.7 When more substantive detail is available on the future trade and migration relationship between the UK and EU, we will adjust our Brexit assumptions appropriately. Our November 2016 lowering of the path of potential output largely reflected the effects of weaker business investment on potential productivity growth and of lower migration on labour supply. But as time passes, impediments to the exploitation of comparative advantage as a result of increased trade barriers are likely to become more salient. We will also need to assess the likely impact on both the volume and composition of migrant flows of any new migration regime.

3.8 These are static effects – one-off shifts in the potential level of output in the economy, although they affect growth rates as the economy moves to that new steady-state. But some studies suggest that increased barriers to trade, migration and foreign direct investment are also likely to have further adverse dynamic effects – persistent effects on the growth rate of potential output – for example, by impeding technology transfer and slowing innovation and technological progress. There is little consensus on the size of such effects and they are likely to interact. So, rather than quantify them individually, we will probably take them into account in a broad-brush fashion in our top-down judgements on potential productivity and output.

The output gap and potential output

3.9 Judgements about the margin by which economic activity currently exceeds or falls short of its potential or sustainable level, and about the future growth of potential output provide the foundations of our forecast. They determine the scope for growth in GDP over the next five years consistent with the Bank of England meeting its inflation target over the medium term.

3.10 An estimate of the output gap is also necessary for us to judge the size of the structural budget deficit – the deficit that would be observed if the economy were operating at its sustainable level.[5] If the economy were running below potential, part of the headline deficit would be cyclical, and could therefore be expected to diminish as the output gap closed and above-trend growth boosted revenues and reduced spending. The opposite would be the case if the economy were running above potential.

3.11 In this section, we describe our latest estimates for the output gap and consider the pace at which potential output will grow in the future. Then we describe our central forecast for the path that actual output will take over the next five years, relative to that for potential.

Our latest estimates of the output gap

3.12 The first step in our forecast is to assess how the current level of activity compares with the level consistent with stable inflation in the long term (or 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 limitations and none avoids the need for judgement.[6] We therefore consider a broad range of evidence at each forecast. Specifically, our judgement is informed by estimates of the output gap implied by nine different approaches (Charts 3.4 and 3.5), although we place more weight on some than others and this can vary from forecast to forecast:

- Surveys from the Confederation of British Industry (CBI) and British Chambers of Commerce (BCC) suggest that firms faced heightened recruitment difficulties and were operating at full capacity in 2018. Both the **'principal components' and 'aggregate composite'** estimates derived from these surveys moved into positive territory in 2017, and have stayed significantly positive as firms have reported elevated recruitment difficulties. We put limited weight on these measures in our overall assessment as they tend to be volatile and have recently suggested implausible degrees of overheating.

- The two **'statistical filters'** that utilise output data alone imply that the economy is currently operating slightly below potential. We place less weight on these measures too, as they are prone to substantial revision as new data becomes available.

[5] The methodology we use is described in Helgadottir et al (2012): *OBR Working Paper No.3: Cyclically adjusting the public finances*.
[6] Methodological details, along with some of the strengths and weaknesses of each approach, were set out in Murray (2014): *OBR Working Paper No.5: Output gap measurement: judgement and uncertainty*. See also our *Briefing Paper No.2: Estimating the output gap* and Pybus (2011): *OBR Working Paper No.1: Estimating the UK's historical output gap*.

- 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 being close to potential. The 'unemployment-augmented' measure points to a significant positive output gap, reflecting the continued falls in unemployment. We tend to place most weight on these measures.

- Our **'production function'** approach currently points to a small negative gap.

Chart 3.4: Survey-based and univariate-filter output gap estimates

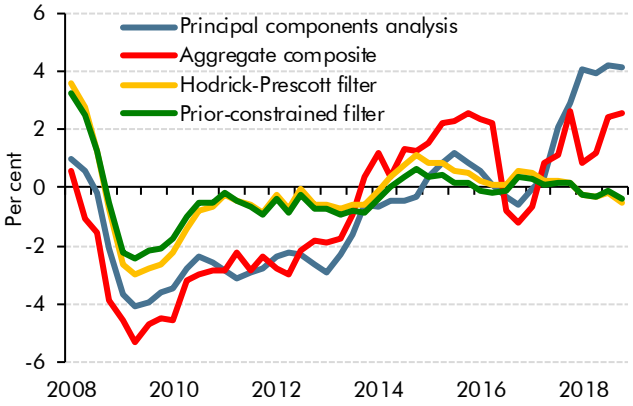
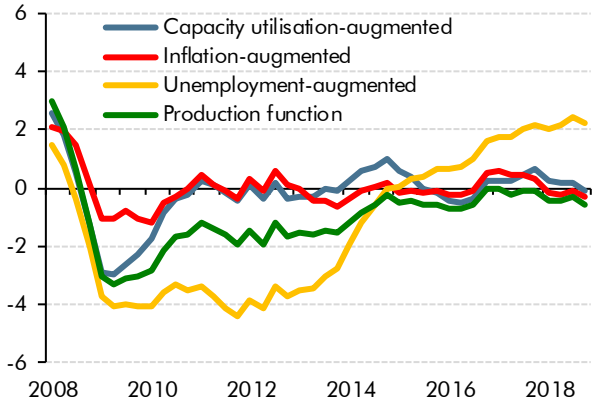


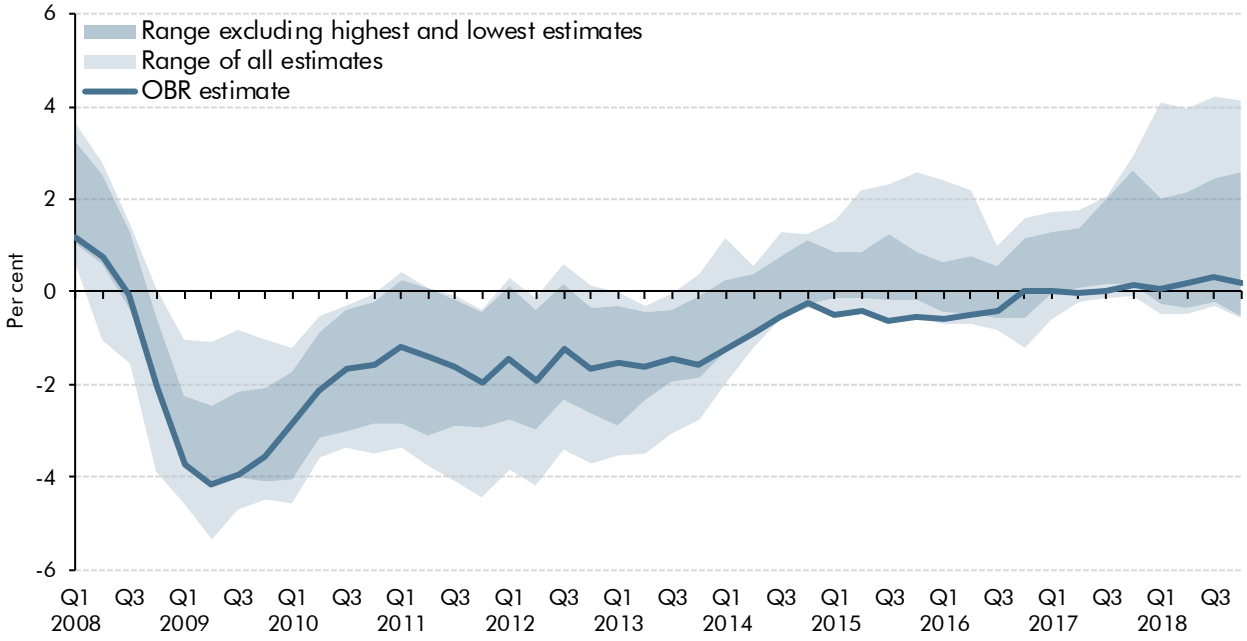
Chart 3.5: Multivariate-filter estimates of the output gap



Notes: The production function model shown here is based on a filter-based estimate of the equilibrium unemployment rate up to 2011, which then falls towards our judgement-based central estimate by the fourth quarter of 2018.
The charts show eight of the nine models used to estimate the output gap. Another multivariate filter model (incorporating data on inflation, capacity utilisation and unemployment) is not shown but is included in our supplementary economy tables on our website.
Source: OBR

3.13 Overall, we judge that the economy was operating slightly above potential in the fourth quarter of 2018 – by 0.2 per cent, broadly in line with our forecast in October. Chart 3.6 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. Our current judgement is that the output gap lies in the bottom half of the swathe, but not far from those individual estimates that we place the most weight on at the current juncture.

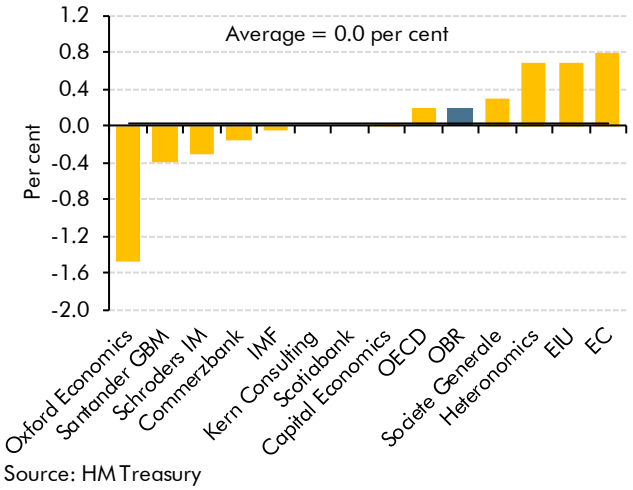
Chart 3.6: Range of output gap estimates



Source: OBR

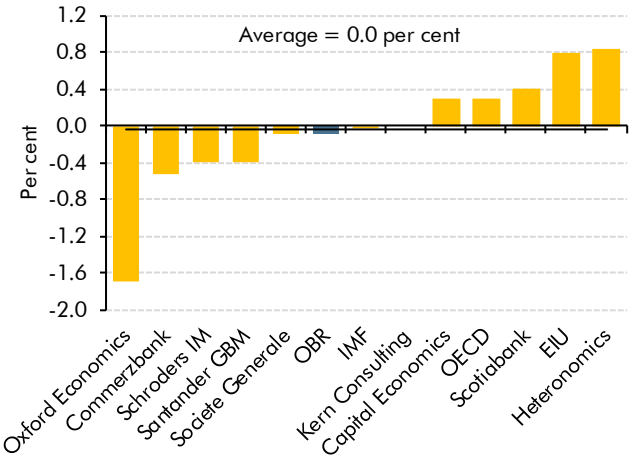
3.14 Charts 3.7 and 3.8 compare our estimates of the output gap for 2018 and 2019 to those of other forecasters, as set out in the Treasury's *Forecasts for the UK economy*.[7] These may differ as a result of differences of judgement, or because of differences in the associated concepts of potential output. The average estimate of the output gap is around zero in both 2018 and 2019, which is close to our estimates (+0.2 per cent and -0.1 per cent respectively). These differences are very small relative to previous estimates of the output gap and the uncertainty surrounding them.

Chart 3.7: Output gap estimates: 2018



Source: HM Treasury

Chart 3.8: Output gap estimates: 2019



[7] 2018 and 2019 output gap estimates are from HM Treasury, *Forecasts for the UK economy,* January and February editions respectively.

The path of potential output

3.15 Our forecast for the size of the economy in five years' time is in large part derived from our judgement regarding the prospective path for potential output, as a persistent output gap would be incompatible with the Monetary Policy Committee (MPC) achieving and maintaining its inflation objective over the medium term. There is considerable uncertainty surrounding this judgement, which is only heightened by the UK's prospective departure from the EU.

3.16 A key judgement relates to whether the stagnation in productivity since the financial crisis will continue or unwind (and, if the latter, at what pace). Given that the unemployment rate is nearing historical lows and it is government policy to limit inward migration, it is unlikely that strong employment growth can continue to compensate for weak productivity growth. A revival in productivity growth is therefore essential if even the subdued output growth rates of the past few years are to be maintained.

3.17 There are four elements to our forecast for the potential total number of hours worked in the economy: 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, in turn, would be willing and able to work:

- **Population**. Net inward migration in the year to the third quarter of 2018 has fallen back from the levels seen in 2015 and 2016. The ONS has highlighted unusually high uncertainty around the recent data, with different sources suggesting very different paths for net migration of students in particular.[8] Net inward migration was slightly higher than implied by the ONS 'principal' population projection, which assumes a gradual decline in net inflows, reaching 165,000 a year in 2023. This part of our forecast is unchanged from October. While the immigration regime following Brexit is still uncertain, were it to be stricter, the result would be a smaller population and labour force which in turn would reduce potential output.

- **Participation**. We forecast the participation rate using the same cohort-based labour market model that underpins our long-term projections.[9] It delivers a participation rate that rises slightly in the near term before falling in the medium term, as the rising share of the elderly outweighs the effect of increased participation by those nearing retirement. Trend participation rates in this forecast are similar to those assumed in our July 2018 *Fiscal Sustainability Report*.

- **Employment**. The proportion of those active in the labour force that would be able to find employment sustainably is governed by our judgement regarding the equilibrium unemployment rate. We expect it to remain around 4 per cent across the forecast.

- **Average hours**. We continue to assume that equilibrium average hours worked will remain broadly flat.

[8] See the ONS February 2019 Migration Statistics Quarterly Report for more information.
[9] Annex A of our July 2014 *Fiscal sustainability report* discusses our longer-term approach to labour market modelling in more detail.

3.18 The outlook for potential (or trend) productivity is the most important, yet most uncertain, element of potential output growth. We continue to assume that trend hourly productivity growth will rise gradually over the forecast period, reaching 1.3 per cent in 2023. We would expect an increase in trend productivity growth as a tighter labour market exerts pressure on firms to extract more output from their existing workforce, and as a fading of Brexit-related uncertainty leads to a pick-up in business investment.

3.19 Table 3.1 summarises our potential output growth forecast. Of course, there is a high degree of uncertainty surrounding these projections, which is further elevated by the prospect of Brexit. In the near term, recent investment outturns and surveys suggest that heightened uncertainty has slowed the pace of capital deepening and productivity growth with it. In the longer term, impediments to the exploitation of comparative advantage are likely to become more important. The dynamic effects of migration on productivity and potential output are uncertain in size, but likely to interact with those of trade and foreign direct investment. Our recent Brexit *discussion paper* discussed these issues in more detail.[10]

Table 3.1: Potential output growth forecast

	Percentage change on a year earlier, unless otherwise stated					
	Population[1]	Equilibrium employment rate[1]	Equilibrium average hours	Potential productivity[2]	**Potential output[3]**	*memo: Equilibrium unemployment rate (per cent)*
2018	0.5	0.0	0.0	0.7	**1.2**	*3.9*
2019	0.5	0.0	0.0	0.9	**1.5**	*4.0*
2020	0.5	0.0	0.0	1.0	**1.5**	*4.0*
2021	0.5	-0.1	0.0	1.1	**1.6**	*4.0*
2022	0.6	-0.2	0.0	1.2	**1.6**	*4.0*
2023	0.6	-0.2	0.0	1.3	**1.6**	*4.0*

[1] Corresponding to those aged 16 and over.

[2] Output per hour.

[3] Components may not sum to total due to rounding.

Note: Our trend growth forecast for 2018 is lower because we assumed that weak growth in the first quarter also lowered potential output, given that weather-related disruption reduced supply in that quarter. The first quarter has a disproportionate impact on the annual growth rate.

Key economy forecast assumptions

3.20 We base our economic forecasts on several assumptions. Among them, we assume that domestic and international interest rates, the exchange rate and oil prices move in line with market expectations, taking the 10-day average to 14 February. We also base our forecasts on the Government's current stated policies on taxes, public spending and financial transactions, as required by Parliament. And we continue to adopt broad-brush assumptions about the effects of Brexit, as described in paragraph 3.4. The risks to our forecasts are discussed later in the chapter.

[10] OBR, *Brexit and the OBR's forecasts*, 2018.

Credit conditions

3.21 The MPC voted unanimously to maintain Bank Rate at 0.75 per cent at its February meeting. The Committee also voted unanimously to maintain the stock of corporate and UK government bond purchases at its current level. This decision reflected the view of the Committee that "*the current stance of monetary policy is appropriate*", based on a judgement that "*demand and potential supply are currently broadly in balance*".

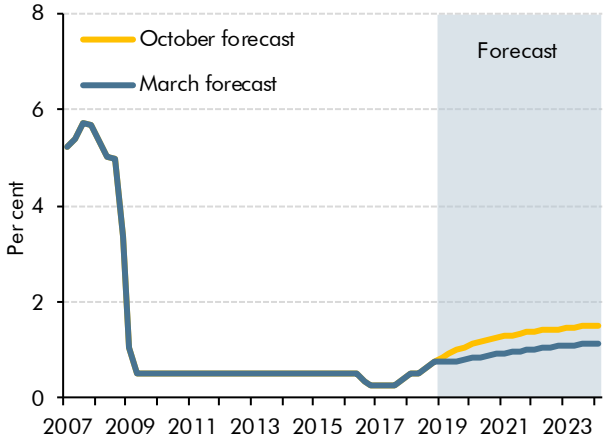
3.22 The market interest rates which our forecasts are based on suggest that market participants expect Bank Rate to rise gradually over the next five years (Chart 3.9), but more slowly than in our October forecast. Bank rate reached 1.52 per cent the first quarter of 2024 in our October forecast, but it only reaches 1.16 per cent in this one. The MPC noted in February that "*an ongoing tightening of monetary policy over the forecast period…would be appropriate to return inflation sustainably to the 2% target*", but that any future increases in Bank Rate are likely to be "*at a gradual pace and to a limited extent*".[11]

3.23 The fall in interest rate expectations since October may reflect market participants pricing in a higher probability of a 'no deal' Brexit and associated monetary policy easing. This may not be consistent with the assumption of a smooth exit that underpins the rest of our forecast. If that were the case, interest rate expectations could rise if the possibility of a disorderly Brexit were to be removed. Interest rate expectations increased slightly in the period after we closed our pre-measures forecast. The four-day average to 1 March (following the Prime Minister's announcement of the three Brexit votes from 12 to 14 March) showed Bank Rate reaching 1.26 per cent in the first quarter of 2024. In recent testimony at the Treasury Select Committee, Governor Mark Carney stated: "*Given the exceptional circumstance associated with Brexit, I would expect the Committee to provide whatever monetary support it can consistent with the price stability remit given to the Committee by Parliament.*"

3.24 Gilt rates have remained relatively stable over the past few quarters, but are presently a little below the level assumed in our October forecast. The 20-year gilt rate was 1.9 per cent in the fourth quarter of 2018 compared to the 2.0 per cent in our October forecast. Gilt rates are expected to edge up, but to remain below the level in our October forecast. Global bond yields are projected to be below the rates we assumed in October (Chart 3.10).

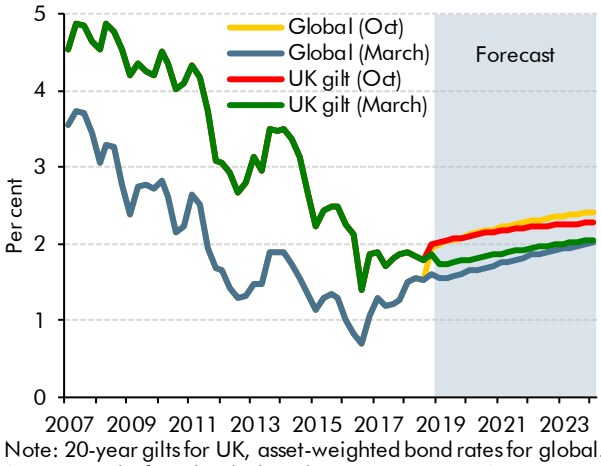
[11] Bank of England, *Inflation Report,* February 2019.

Chart 3.9: Bank Rate



Source: Bank of England, OBR

Chart 3.10: Global bond yields



Note: 20-year gilts for UK, asset-weighted bond rates for global.
Source: Bank of England, Bloomberg, Datastream, OBR

3.25 Mortgage rates have risen slightly since the second quarter of 2018, reflecting the Bank Rate rise in August. Although Bank Rate expectations have come down since October, the effect on mortgage rates is offset by an increase in bank funding costs, so that our current assumption remains in line with our October forecast.

Equity prices

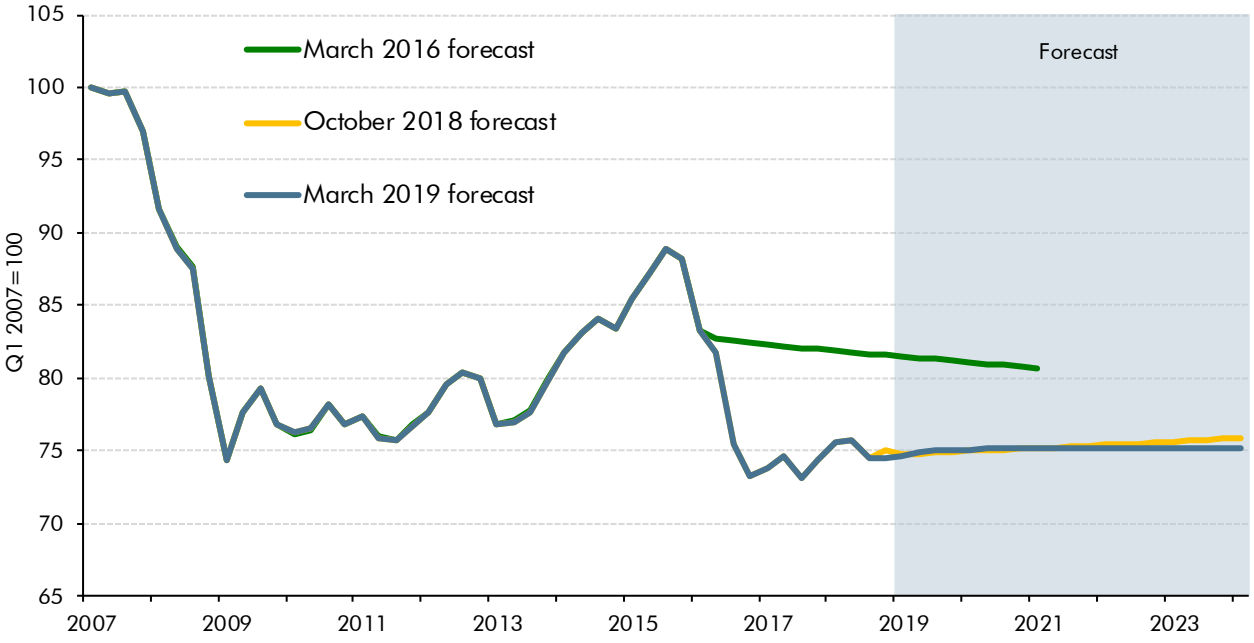
3.26 UK equity prices were 6.8 per cent lower in the fourth quarter of 2018 than assumed in our October forecast. Based on outturn data so far in 2019, we assume that equity prices are set to fall in the first quarter of 2019. We then assume they will rise in line with nominal GDP. This means that equity prices are expected to rise by 18.9 per cent over the forecast period, although they are 6.9 per cent lower on average across the period than in our October forecast.

Sterling exchange rate

3.27 Sterling has so far risen slightly in the first quarter of 2019. Against the dollar, it is assumed to be 1.8 per cent weaker in the first quarter of 2019 than projected in our October forecast, but 1.6 per cent stronger against the euro. Compared to our March 2016 forecast – our final one before the referendum – the pound is assumed to be down 9.8 per cent against the euro and 10.3 per cent against the dollar in the first quarter of 2019.

3.28 From its current level, we assume that the exchange rate will follow the path implied by uncovered interest parity: namely, that it will move to reflect the difference between UK and overseas interest rates so as to equalise the expected return to investing at home and abroad. On average, our latest assumption is 0.2 per cent below our October assumption, and 7.5 per cent below our final pre-referendum assumption (Chart 3.11).

Chart 3.11: Sterling effective exchange rate

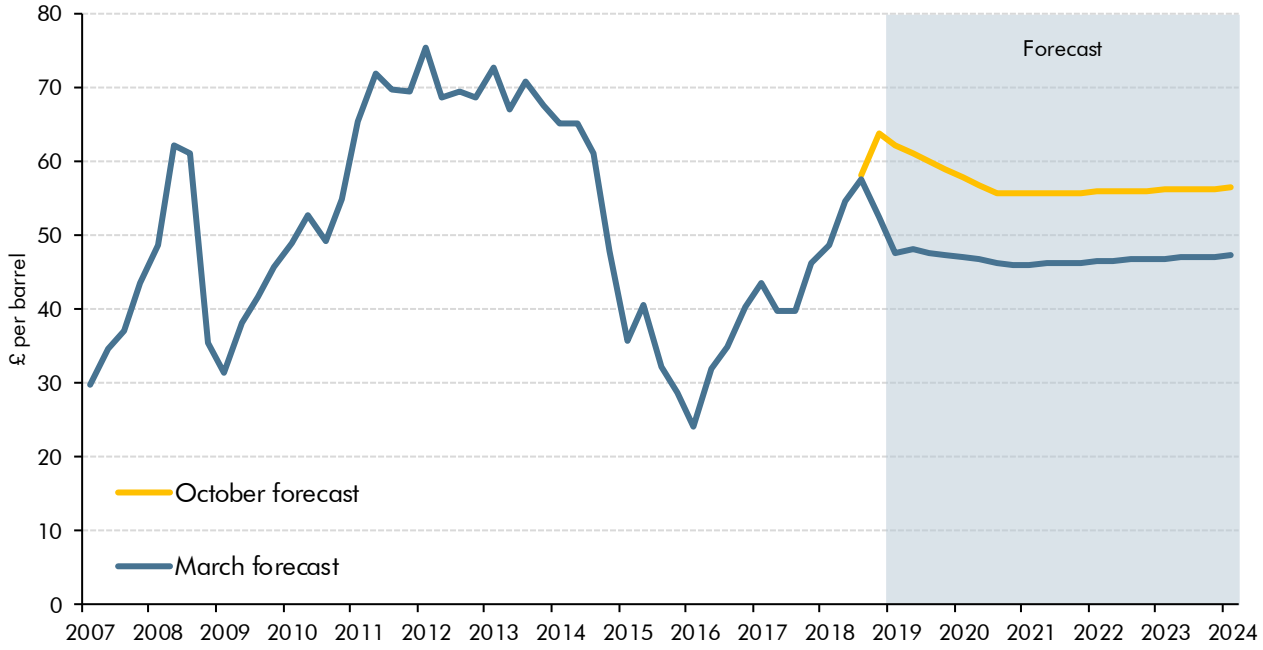


Source: Bank of England, Bloomberg, OBR

Oil prices

3.29 Oil prices rose steadily in the first three quarters of 2018, then dropped in the fourth quarter (Chart 3.12). The recent fall reflected both demand and supply factors. The prospect of slowing global economic activity and declining global trade weighed on demand. And though OPEC maintained production curbs last year and plans to cut production further in the first half of 2019, that was outweighed by market expectations of an increase in supply elsewhere. Our assumption for the first quarter of 2019 lies 23 per cent below our October assumption (25 per cent in dollar terms). The oil price futures curve remains at this level in the near term, and oil prices are assumed to stabilise at about £47 per barrel, 18 per cent below our October projection.

Chart 3.12: Oil price



Source: Datastream, IMF, OBR

Oil and gas production

3.30 Our potential output forecast excludes the small but volatile oil and gas sector, so to complete our GDP forecast we add on 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 an early version of the OGA's latest *Stewardship Survey*, we have revised production down compared to October. Since we closed our forecast, BEIS announced an upward revision to the 2018 oil production data, which came too late for us to incorporate into our forecast. The latest estimate is that oil production in 2018 rose by 9.4 per cent on a year earlier, higher than the 1.7 per cent rise we had assumed in our forecast. We will incorporate this revision into our next forecast. Our oil and gas expenditure forecasts are also informed by OGA projections. We have revised overall expenditure down since October, reflecting weaker than expected spending in 2018.

Fiscal policy

3.31 Our forecast is based on current government policy and announced plans for spending and taxes. Since October, the Government has announced modest increases in departmental spending and several other tax and spending measures (see Annex A). Using 'multipliers' to estimate the effect of fiscal policy changes on GDP,[12] they imply a negligible effect on real GDP growth. The higher level of government consumption raises cumulative nominal GDP growth by 0.1 percentage points by the end of the forecast. The fiscal implications of these measures are discussed in Chapter 4 and Annex A.

[12] For further details see Box 3.2 of our July 2015 Economic and fiscal outlook.

World economy

3.32 Our projection for global growth is informed by the forecasts in the IMF's October 2018 *World Economic Outlook* (WEO) and its January 2019 update. Outturn data for world GDP growth in 2018 is still incomplete, but the latest data suggest an estimate of 3.7 per cent growth. The IMF then expects world GDP growth to ease a touch in 2019 and 2020, to 3.5 and 3.6 per cent respectively (Table 3.2). In light of this, we have revised our October forecast down by 0.1 percentage points in those years. These revisions reflect weaker euro-area growth and contractions in some emerging markets.

Table 3.2: Global GDP and trade growth

	Percentage change on a year earlier						
	Outturn	Forecast					
	2017	2018	2019	2020	2021	2022	2023
GDP							
Euro Area	2.5	1.8	1.6	1.7	1.6	1.5	1.4
US	2.2	2.9	2.5	1.8	1.7	1.5	1.4
World	3.7	3.7	3.5	3.6	3.6	3.6	3.6
Trade							
UK export markets	4.8	3.9	3.3	3.5	3.5	3.5	3.3
World	5.1	4.0	3.8	3.9	3.9	3.8	3.6

3.33 Euro-area GDP is estimated to have grown by 1.8 per cent in 2018, down from 2.5 per cent in 2017. Consistent with weaker outturn data than expected, we have revised down our forecast for annual growth in 2019 by 0.3 percentage points to 1.6 per cent. We expect growth to rebound slightly in 2020 before returning to its trend rate.

3.34 Supported by expansionary fiscal policy, US GDP growth rose from 2.2 per cent in 2017 to 2.9 per cent in 2018. We expect this above-trend growth to subside as the fiscal stimulus ebbs and the effect of tighter monetary policy works through. Our forecast for US growth is unchanged, at 2.5 and 1.8 per cent in 2019 and 2020 respectively.

World trade and UK export market growth

3.35 World trade growth has softened a little since its recent high, slowing to 4.0 per cent in 2018. Weak outturn data from the end of 2018 has prompted us to revise down our forecast by 0.2 percentage points in both 2019 and 2020. We expect a continuation of trade disputes to see growth ease over the forecast period to 3.6 per cent in 2023.

3.36 We expect UK export market growth to be weaker than world trade growth over the forecast, but to follow a similar profile. The downward revision to world trade growth is concentrated in advanced economies, which generally have a higher share in UK export markets. We now expect growth of 3.9 per cent in 2018, down from our previous forecast of 4.1 per cent after particularly weak growth in the euro area, our largest trading partner. We have therefore revised down UK export market growth by 0.4 percentage points in 2019 and 2020 to 3.3 and 3.5 per cent respectively.

Summary

3.37 The key assumptions underpinning our central forecast are that:

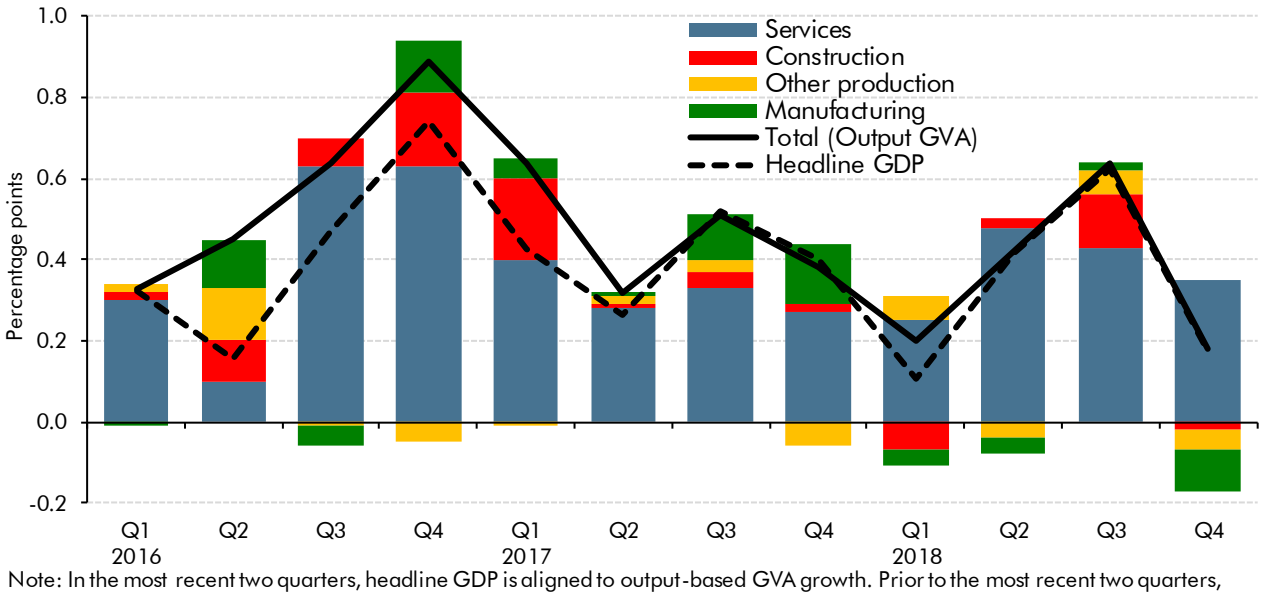
- **The UK leaves the EU in March 2019**, moving in due course to a less open trade regime and a tighter migration regime than would otherwise have been the case.
- **Brexit uncertainty** appears to have weighed on business investment more than assumed in our previous forecasts. We expect this to continue in the near term.
- **Credit conditions** remain highly accommodative, and monetary policy is slightly looser than assumed in October.
- **Fiscal policy** changes since October have a negligible effect on our real GDP forecast.
- The **sterling effective exchange rate** is broadly in line with our October assumption and on average 7.5 per cent below the level assumed in our pre-referendum forecast.
- Sterling **oil prices** are significantly lower than assumed in October.
- **UK export market growth** is expected to slow after 2018, by more than world trade growth and by more than assumed in October.

Prospects for real GDP growth

The short-term outlook for GDP

3.38 Services sector growth has been relatively stable over 2018, averaging 0.5 per cent a quarter. Other sectors account for smaller shares of overall output, but they tend to be more volatile and so, in some cases, have had significant effects on recent quarterly GDP growth (Chart 3.13). The construction sector contracted at the start of 2018 as snow disrupted activity, but bounced back in the third quarter before contracting again in the fourth. The manufacturing sector weakened in 2018, with output contracting in all but the third quarter.

Chart 3.13: Contributions to quarterly output growth



Note: In the most recent two quarters, headline GDP is aligned to output-based GVA growth. Prior to the most recent two quarters, headline GDP growth may differ from output-based GVA growth as it is calculated as an average of the expenditure, income and output approaches to measuring GDP.
Source: ONS

3.39 Quarterly GDP growth slowed significantly over the final quarter of last year (Table 3.3). The latest estimates show growth of 0.6 and 0.2 per cent in the third and fourth quarters of 2018 respectively. It is possible that the strength in the third quarter was supported in part by temporary factors, such as the warm weather and the FIFA World Cup. In our October forecast, we expected some of these effects to unwind and for growth to slow to 0.3 per cent. But growth has slowed by more than we expected, with production output experiencing its biggest fall since the fourth quarter of 2012 and construction also contracting.

3.40 Monthly data suggest much of this weakness was concentrated in December. GDP fell by 0.4 per cent compared to the previous month, with negative contributions from services, construction and production. Monthly data are particularly volatile and the tendency for GDP growth to be revised means that one should not place too much weight on any particular vintage. But the slowdown in the final quarter of 2018 is also present in surveys such as the Purchasing Managers Index. We expect quarterly GDP growth of 0.2 per cent in the first quarter of 2019, as the drag from a fall in activity in December and Brexit uncertainty depresses growth. The deterioration in the outlook is consistent with several leading indicators of business confidence. The Lloyds business barometer indicated that business confidence fell in February to its lowest since June 2016. Similarly, the CBI's quarterly service sector survey reported that business optimism declined sharply in the three months to February. The deterioration was particularly marked in the business and professional services sector, which saw optimism reach its lowest since 2009.

Table 3.3: The quarterly GDP profile

	Percentage change on previous quarter											
	2018				2019				2020			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
October forecast[1]	0.1	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3
March forecast[2]	0.1	0.4	0.6	0.2	0.2	0.3	0.3	0.3	0.3	0.4	0.4	0.4
Change[3]	**0.0**	**0.0**	**0.2**	**-0.2**	**-0.2**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

[1] Forecast from the third quarter of 2018.

[2] Forecast from first quarter of 2019.

[3] Changes may not sum due to rounding.

The medium-term outlook for GDP

3.41 We continue to assume that the negotiations between the UK and the EU lead to an orderly transition to a new long-term relationship, whatever that relationship might be. In the near term, we expect uncertainty to continue to weigh on business investment. We also expect subdued consumption growth, as a further improvement in real earnings growth is offset by slowing employment growth. A weaker global outlook also means that net trade acts as a significant drag on growth.

3.42 Taking these factors together, we expect GDP growth to slow to 1.2 per cent in 2019. As Brexit uncertainty begins to dissipate, and productivity growth gradually improves, we expect it to pick up to 1.4 per cent in 2020, and remain at 1.6 per cent a year across the rest of the forecast period (Chart 3.14). The profile for real GDP growth reflects several factors:

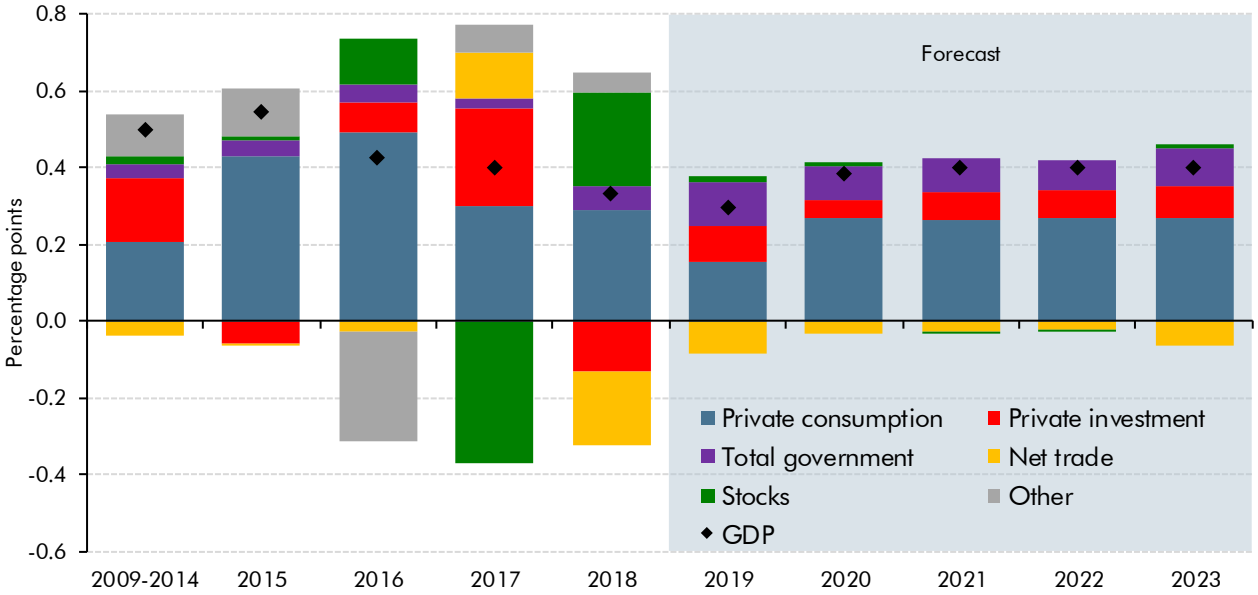
- **Real household consumption growth** is expected to remain relatively subdued in the near term. We expect it to improve steadily from mid-2019 as real earnings growth gradually increases, supporting an increase in real household income growth.

- Brexit-related uncertainty is currently weighing on **investment**, which fell throughout 2018. The gradual dissipation of uncertainty as the post-Brexit regime is clarified is expected to provide a modest boost to GDP growth later in the forecast. Business investment is also supported by measures introduced in last October's Budget.

- We expect world trade and UK export market growth to be weaker than over the past two years – and weaker than we forecast in October. This implies a lower contribution from **net trade** to GDP growth. The Brexit transition period delays the expected reduction in both export and import intensity, and we assume it has a neutral effect on net trade (Table 3.4).

- Discretionary **fiscal loosening** supports growth. Real government consumption growth steps up in 2019, driven by higher NHS spending announced in June 2018.

Chart 3.14: Contributions to average quarterly GDP growth



Note: 'Other' category includes the statistical discrepancy and the residual between GDP and the expenditure components prior to the base year (2016).
Source: ONS, OBR

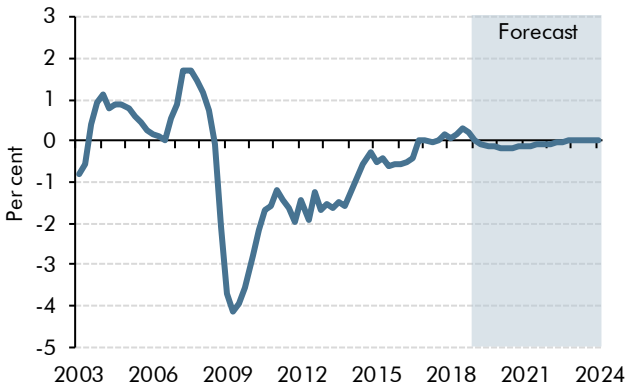
Table 3.4: Expenditure contributions to real GDP

	Percentage points, unless otherwise stated					
	Outturn	Forecast				
	2018	2019	2020	2021	2022	2023
GDP growth (per cent)	**1.4**	**1.2**	**1.4**	**1.6**	**1.6**	**1.6**
Main contributions						
Private consumption	1.1	0.7	1.0	1.1	1.1	1.1
Business investment	-0.1	-0.1	0.2	0.2	0.2	0.2
Dwellings investment[1]	0.1	0.0	0.0	0.0	0.1	0.1
Government[2]	0.1	0.5	0.4	0.4	0.3	0.4
Change in inventories	0.3	0.4	0.0	0.0	0.0	0.0
Net trade	-0.2	-0.5	-0.2	-0.1	-0.1	-0.2
Other[3]	0.1	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.

3.43 GDP growth of 1.2 per cent in 2019 would be slightly below estimated potential output growth, pushing the present small positive output gap into negative territory. GDP growth then picks up and the output gap closes in 2022 (Charts 3.15 and 3.16).

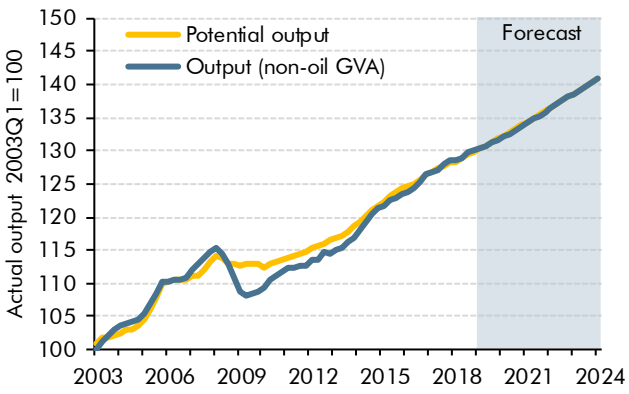
Chart 3.15: The output gap



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

Chart 3.16: Actual and potential output

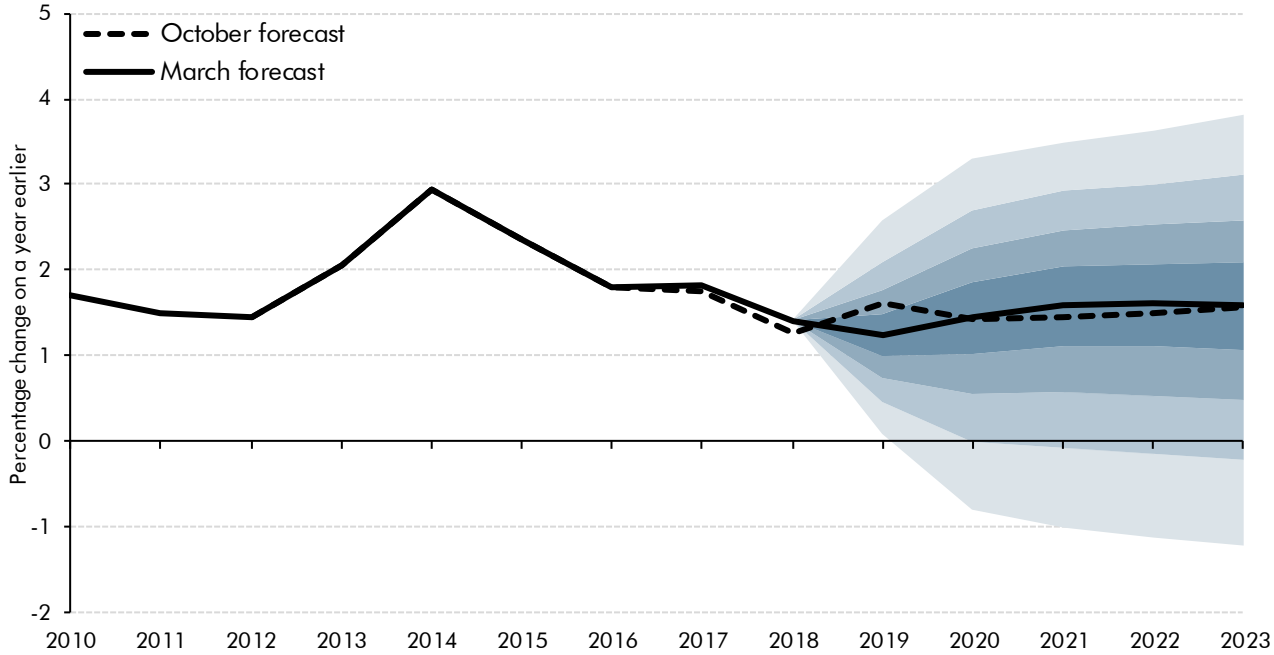


Source: ONS, OBR

3.44 Relative to October, we have revised our forecast for GDP growth in 2019 down by 0.4 percentage points. This is in part due to weaker momentum in late 2018 and our judgement that this will persist into the first part of 2019, offsetting the impact of the discretionary fiscal loosening announced in the Budget. Growth is also slightly higher in 2021 and 2022 than in October, consistent with the lower path for Bank Rate.

3.45 This analysis relates to our central projection for GDP growth, but there is of course significant uncertainty around this forecast. Chart 3.17 shows the probability distribution of different outcomes surrounding the central forecast based purely on past forecast performance. 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 one-in-five chance of the economy shrinking in calendar year 2020. And a similar probability of growth exceeding 2.5 per cent – closer to average pre-crisis growth. These estimates are based on the historical distribution of official forecast errors. They do not represent a subjective measure of the distribution of risks and uncertainties around our central forecast. Such risks and uncertainties are discussed at the end of the chapter.

Chart 3.17: Real GDP growth fan chart



Source: ONS, OBR

Prospects for inflation

3.46 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.

3.47 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.

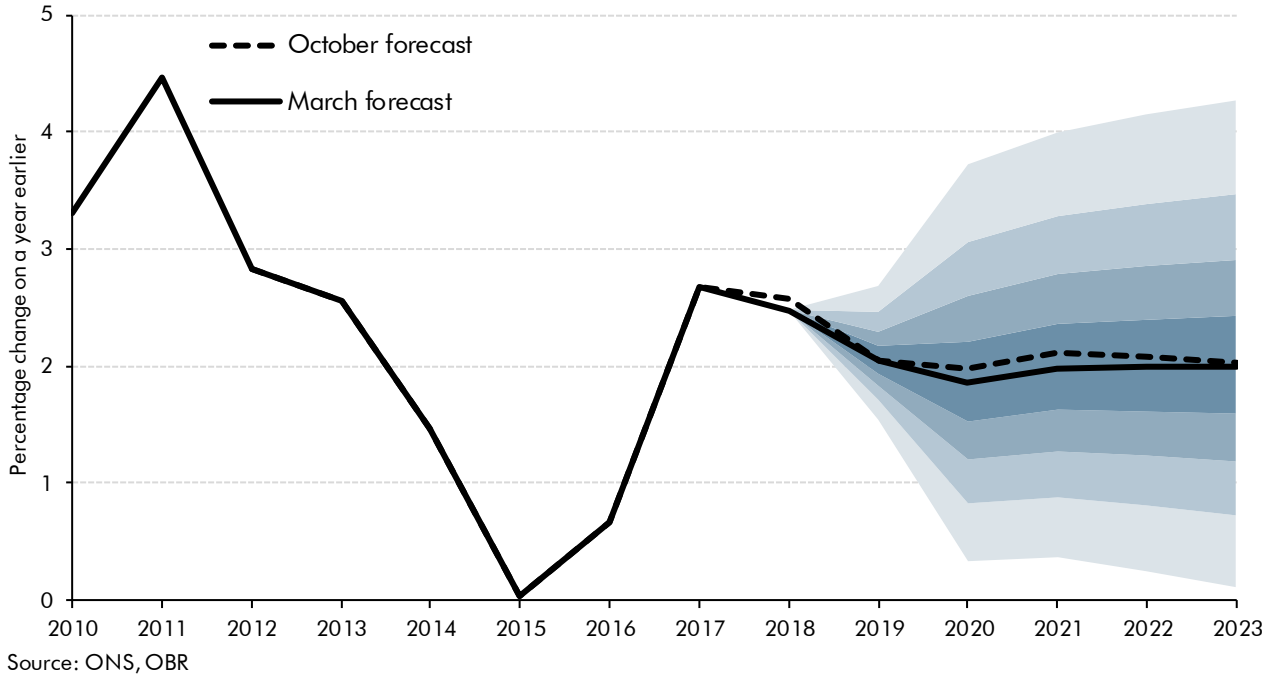
CPI inflation

3.48 CPI inflation was consistently above the 2 per cent target throughout 2018 and averaged 2.3 per cent in the fourth quarter – below our October forecast of 2.6 per cent. In January, CPI inflation fell further to 1.8 per cent. We expect the fall in oil prices since our October forecast to reduce CPI inflation in the first quarter of 2019, but the announced increase in the Ofgem energy price cap in April should increase it in the second. While the Government's announced ban on letting fees could lead to an increase in rents to compensate, we expect the effect on CPI inflation to be negligible and so have not adjusted our forecast. In the medium term, we expect CPI inflation to return to the 2 per cent target.

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

3.49 Chart 3.18 shows our latest central CPI inflation forecast within a fan chart produced using the same methodology that underpins the GDP fan chart (Chart 3.17). It illustrates the range of possible outcomes one would expect if past official forecast errors were a reasonable guide to future ones. It shows that the revisions to our forecast since October are small compared to the historical differences between forecasts and outturns.

Chart 3.18: CPI inflation fan chart



Source: ONS, OBR

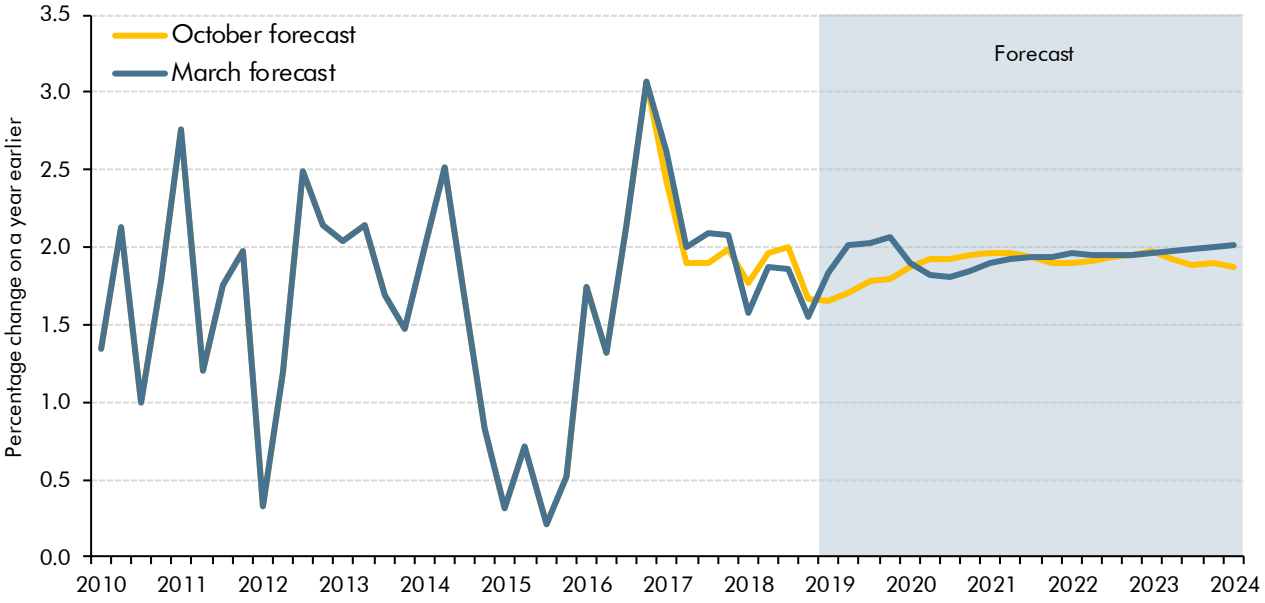
RPI inflation

3.50 RPI inflation averaged 3.1 per cent in the fourth quarter of 2018, 0.4 percentage points below our October forecast. We compile our RPI inflation forecast by adding a wedge to our CPI inflation forecast to account for differences in measurement, coverage and weights. We have revised down the wedge in 2019 and 2020 since October, largely reflecting weaker house price inflation (which affects the RPI measure of housing depreciation).

The GDP deflator

3.51 The GDP deflator is a broad measure of prices in the domestic economy. It covers all the 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'. In the fourth quarter of 2018, the GDP deflator rose by 1.6 per cent relative to the fourth quarter of 2017. We expect GDP deflator inflation to increase to 2 per cent in 2019, followed by a slight dip, and then return to 2 per cent by 2022 (Chart 3.19).

Chart 3.19: GDP deflator



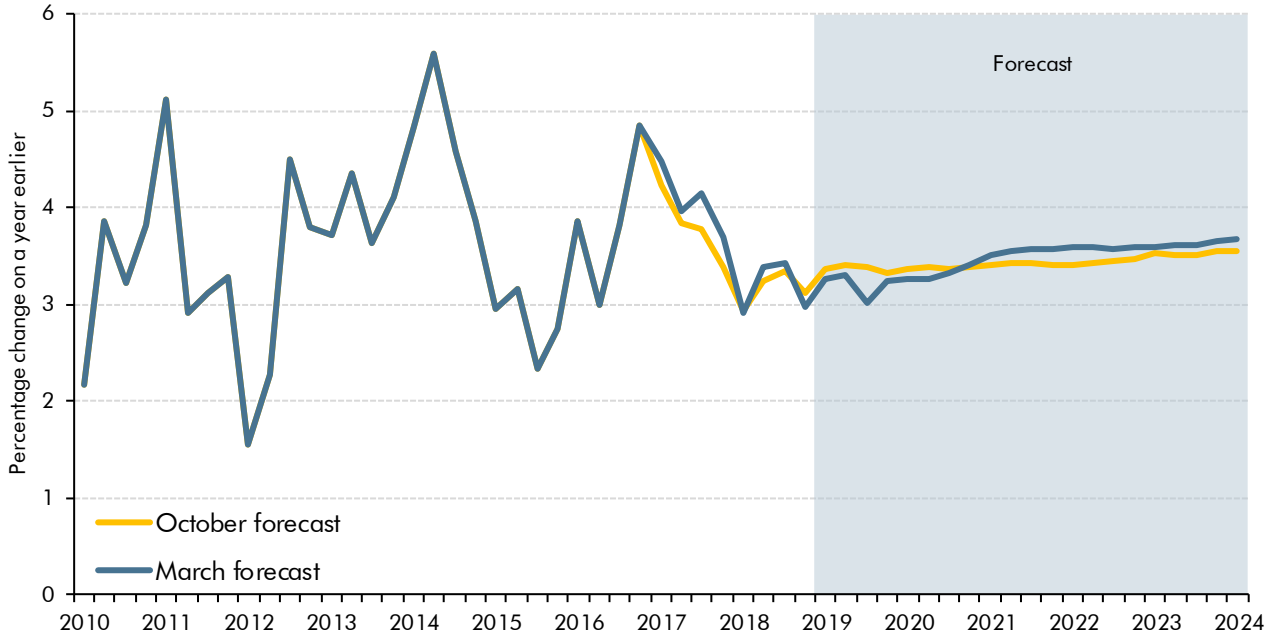
Source: ONS, OBR

Prospects for nominal GDP

3.52 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 behaviour of the public finances. Taxes are driven more by nominal 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 administration, and capital spending) or linked to measures of inflation (including benefits, tax credits and interest on index-linked gilts).

3.53 Nominal GDP growth slowed from 4.1 per cent in 2017 to 3.2 per cent in 2018, reflecting both slower real GDP growth and lower economy-wide inflation. We expect nominal GDP growth to be similar in 2019 and then pick up across the rest of the forecast as real GDP growth strengthens (Chart 3.20). Cumulative nominal GDP growth from the fourth quarter of 2018 to the first quarter of 2024 is 19.8 per cent, up only slightly on the 19.4 per cent in our October forecast.

Chart 3.20: Nominal GDP growth



Source: ONS, OBR

Prospects for individual sectors of the economy

The household sector

Employment and participation

3.54 The unemployment rate fell to 4.0 per cent in Q4 2018. Employment growth this year is forecast to be somewhat weaker than in our October forecast, reflecting the slackening in output growth and consistent with surveys suggesting an easing in employment intentions. Consequently, we expect the unemployment rate to edge up to 4.1 per cent in 2019, returning to its equilibrium of 4.0 per cent by the end of 2022.

3.55 The latest data show a rise in the participation rate in the final quarter of 2018. This brings it slightly above our estimate of its present underlying equilibrium rate. We expect participation to return to its equilibrium rate in the near term and continue to decline over the rest of the forecast in line with a falling equilibrium as the population ages.

3.56 Since 2000, the number of self-employed workers has risen more rapidly than the number of employees, taking it from 12 to 15 per cent of total employment. This probably reflects a desire for more flexible working patterns, as well as the tax advantages of self-employment – although the rate of increase has slowed slightly in recent years. We expect the broad trend to continue, with the share of the self-employed in total employment rising by 0.1 percentage points a year over the forecast period.[14]

[14] ONS, *Trends in Self-Employment in the UK*, 2018.

Average earnings

3.57 We use a measure of average earnings constructed by dividing the National Accounts measure of wages and salaries by the number of employees, instead of the official ONS average weekly earnings (AWE) series. This allows us to fit the 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.

3.58 Average earnings growth has been stronger in recent data than we expected in October. This growth has outstripped the sum of labour productivity growth and whole economy inflation, resulting in a rise in labour's share of national income. We assume that some of this momentum in average earnings growth is maintained, with growth of 3.1 per cent in 2019, up from 2.5 per cent in our October forecast. From 2021 onwards, average earnings grow broadly in line with the sum of our forecasts for labour productivity growth and whole economy inflation. By 2023 average earnings growth reaches 3.3 per cent, reflecting a modest increase in productivity growth. Throughout the forecast, average earnings growth remains below the rates typical before the financial crisis.

Household disposable income

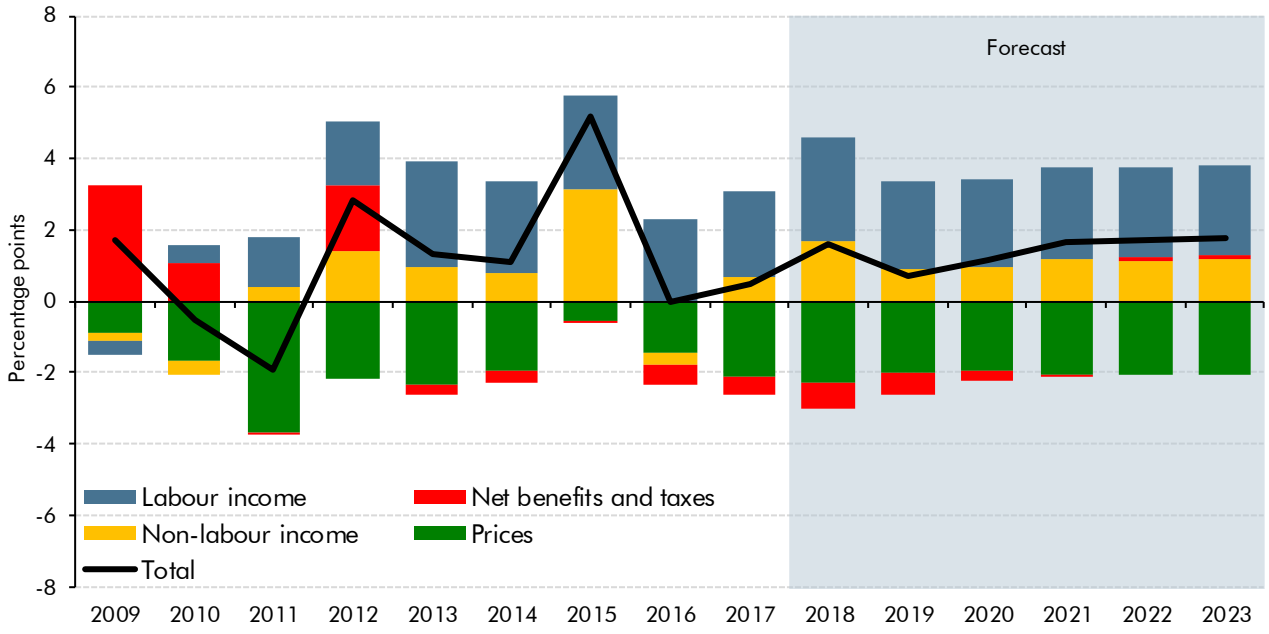
3.59 Full household income data for 2018 are not yet available, but we expect real household disposable income growth to have picked up to 1.6 per cent in 2018, from 0.5 per cent in 2017. This reflects a modest acceleration in employment and earnings, a fall in CPI inflation and the unwinding of the effect of higher dividend taxation in 2017. We then expect it to fall back to 0.7 per cent in 2019 as weaker employment growth offsets the effect of higher real earnings growth. From 2020, gradual increases in nominal earnings growth support a modest pick-up. The freeze in most working-age benefits and tax credits weighs on growth in 2019, while fiscal drag in the income tax system does so in most years (Chart 3.21). Our forecasts for per capita real earnings and real disposable income growth remain relatively weak (Table 3.5).

Table 3.5: Real earnings and real incomes

	Forecast, annual percentage change				
	2019	2020	2021	2022	2023
Real disposable income per capita	**0.1**	**0.6**	**1.1**	**1.2**	**1.3**
of which:					
Labour income[1,2]	0.6	0.7	0.8	0.7	0.8
Net taxes and benefits[2]	-0.7	-0.4	-0.1	0.0	0.0
Other non-labour income[2]	0.3	0.3	0.5	0.5	0.5

[1] Employee compensation (including net compensation from abroad) plus mixed income *less* employer social contributions.
[2] Per capita basis, deflated by consumption deflator.

Chart 3.21: Contributions to real household income growth



Source: ONS, OBR

Consumer spending and saving

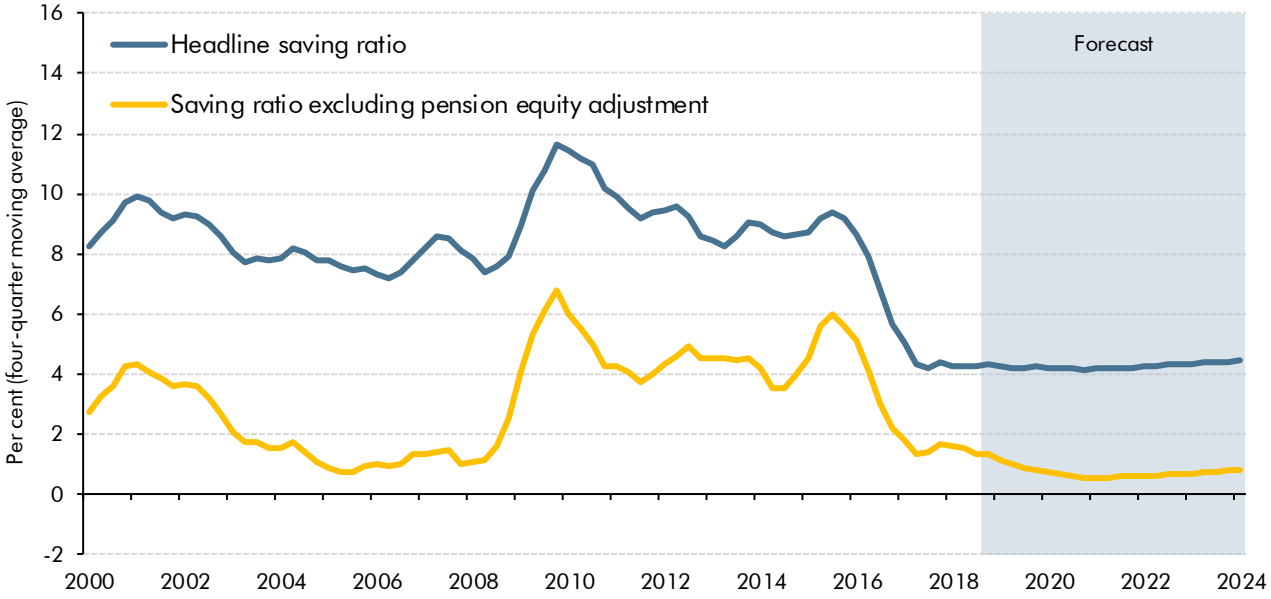
3.60 Recent indicators point to subdued consumption in the near term. Retail sales were weak at the end of last year, despite an increase in earnings growth and a fall in inflation. Other indicators – such as consumer credit, survey measures of consumer confidence and car sales – suggest a weak outlook for household spending in the short term.

3.61 While an increase in real earnings growth in 2019 – supported by a fall in CPI inflation – may provide some support to household spending, we also expect employment growth to slow, offsetting the effect of higher real earnings growth on the growth of labour income. We expect consumption growth to remain weak in the first quarter, consistent with leading indicators. On a quarterly basis, we expect it to slow to 0.1 per cent in the first quarter, before picking up to 0.2 per cent in the second. It then rises steadily from mid-2019 as real earnings growth gradually increases. Consumption growth is stronger from 2020 than in our October forecast, consistent with the stronger outlook for real earnings growth. This implies an upward revision to nominal consumption growth, which is a key determinant of our fiscal forecast (see Table 3.10).

3.62 Our forecast implies a broadly stable outlook for the saving ratio (Chart 3.22), although it remains low by historical standards. When forming our judgement about the prospective path of the saving ratio, we generally focus on a measure that excludes pension contributions, as the bulk of these – such as employers' contributions – tend to be invisible to the employee. Auto-enrolment in workplace pensions means that we expect a growing gap between the headline saving ratio and our adjusted ratio over the forecast period, as pension contributions increase.

3.63 We expect a somewhat higher path for household saving than in October, particularly when pension contributions are excluded. This partly reflects the effect of ONS revisions to recent estimates of household saving,[15] but also reflects our judgement that consumer spending will remain subdued in the near term despite upward revisions to our earnings forecast.

Chart 3.22: The household saving ratio



Note: Both series show four-quarter moving averages. The estimate of the saving ratio excluding the pension equity adjustment is calculated as household disposable income less consumption, as a proportion of household disposable income.
Source: ONS, OBR

The housing market and residential investment

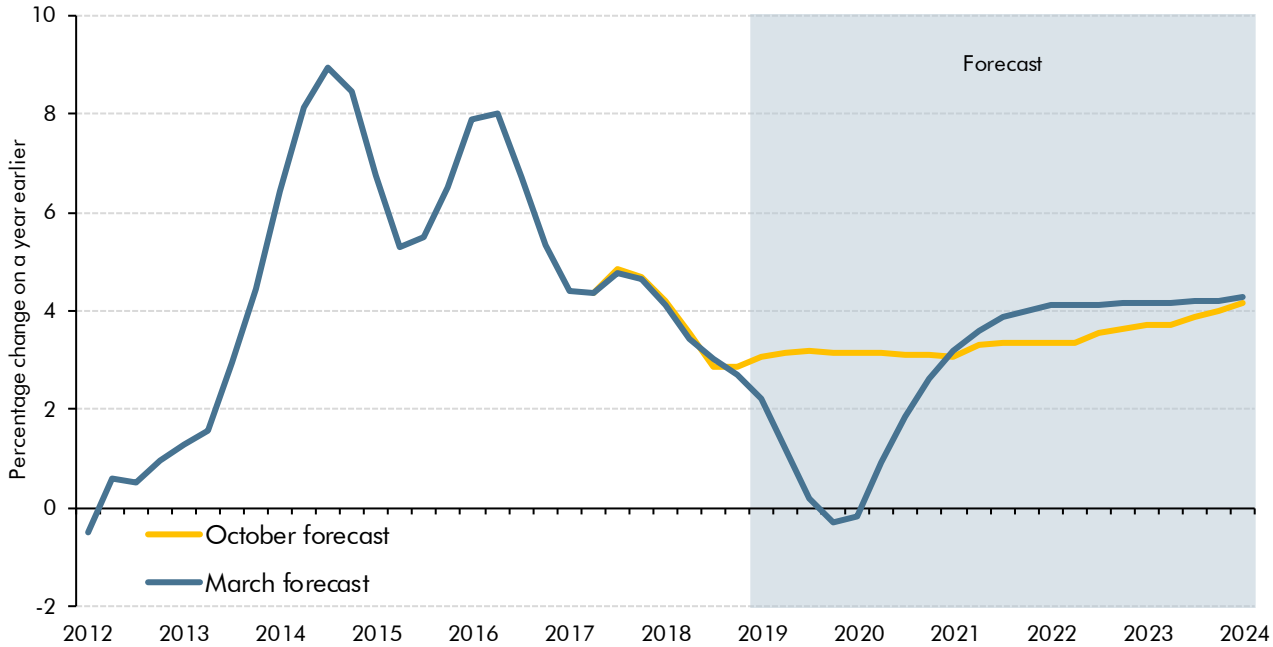
3.64 House price inflation slowed significantly during 2018 – reaching 2.7 per cent in the fourth quarter, down from 4.6 per cent in the final quarter of 2017 and significantly below the 7.0 per cent average rate recorded in 2016.

3.65 Indicators of housing market activity and price expectations have deteriorated significantly since our October forecast and are consistent with a further fall in house price inflation. The Halifax and Nationwide price indices – which are timelier than the ONS measure used in our forecast – have generally been consistent with a further slowdown. We expect annual house price inflation to fall to just below zero towards the end of 2019 (Chart 3.23).

3.66 Beyond the near term, we expect house price inflation to pick up as a result of stronger real household income growth and continued pressure of demand on supply. We expect house price inflation to reach around 4 per cent a year by the end of the forecast horizon. Overall, we expect house prices to rise by almost 17 per cent between the fourth quarter of 2018 and the first quarter of 2024 – close to household income growth over the same period. That compares with forecast growth of nearly 20 per cent in our October forecast.

[15] The tendency for recent estimates of the saving ratio to be revised means it is often more informative to look at the change in the saving ratio over the forecast, rather than the level in isolation. See Box 3.4 of our October 2018 *EFO* for further discussion.

Chart 3.23: House price inflation forecast



Source: ONS, OBR

3.67 Real residential investment has risen sharply in recent years, by 8.2 per cent in 2017 and 5.6 per cent in 2018. We expect growth to slow in the near term – reaching around 0.5 per cent in 2020 and 2021 – reflecting the recent flatlining of housing starts and subdued turnover in the housing market. Residential investment growth is then expected to rise towards the end of our forecast period – reaching around 1.5 per cent – as housing market turnover picks up and as real earnings growth rises.

3.68 Residential property transactions were around 2.6 per cent higher in the fourth quarter of 2018 than we expected in October. Transactions have picked up over 2018 after a decline the year before. But the latest near-term indicators of housing market activity point to a significant weakening. We now expect transactions to fall by 5.4 per cent between the end of 2018 and mid-2019, rising gradually thereafter by 19 per cent to a level that is broadly similar to our October forecast by 2023.

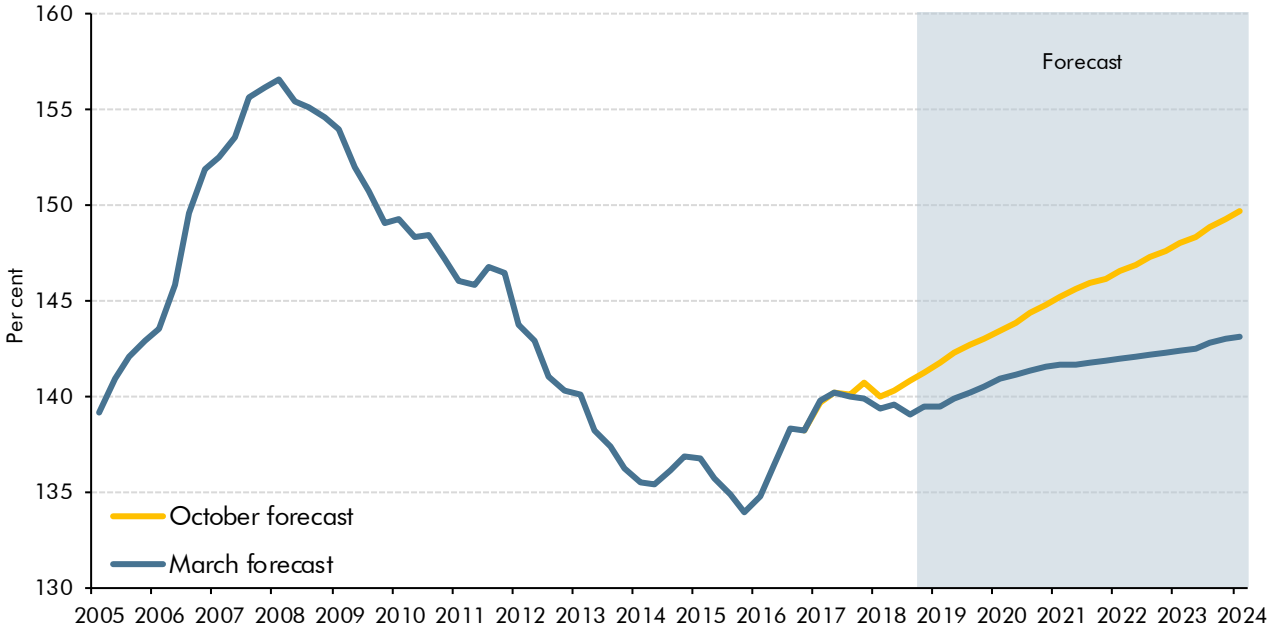
Household net lending and balance sheets

3.69 Our forecast for the household balance sheet is built up from the accumulation of assets and liabilities, constrained to be consistent with our forecast for households' net lending.

3.70 The ratio of household debt to income has been broadly stable in the past couple of years and stood at 139 per cent in the third quarter of 2018. We expect the ratio to increase modestly across our forecast, reaching 143 per cent in the first quarter of 2024, but to remain below its pre-crisis peak of 157 per cent (Chart 3.24). We expect the ratio of mortgage debt to income to fall marginally. That is weaker than the broadly flat profile in October, reflecting lower house prices. Unsecured debt is expected to rise relative to income. It is worth noting that this includes student debt, which we expect to rise strongly. This accounts for most of the rise in the unsecured debt to income ratio. Our forecast for

unsecured debt is lower than in October, consistent with a stronger path for household income relative to consumption.

Chart 3.24: Household gross debt to income



Source: ONS, OBR

The corporate sector

Corporate profits

3.71 Non-oil private non-financial corporation (PNFC) profit growth fell from 6.7 per cent in 2016 to 2.9 per cent in 2017. Annual profit growth then picked up slightly in the first three quarters of 2018, averaging 3.7 per cent. While non-oil profit data are not yet available for the fourth quarter of 2018, the high-level income breakdown suggests that corporations' operating surplus fell back slightly at the end of the year, although early estimates are particularly uncertain. As output falls below potential, we expect profit growth to be somewhat weaker than nominal GDP growth up to 2021. From 2022 onwards, we expect profits to grow broadly in line with nominal GDP.

3.72 Our forecast for financial company profits has been revised down since October. We still estimate that financial company profits grew faster than the rest of the economy in 2017-18, but have lowered assumed growth in 2018-19 in light of the recent weakness in financial company earnings and tax data. From 2020-21 onwards, we assume profit growth will lag that in the wider economy, reflecting our view that the sector is likely to be more adversely affected by the UK leaving the EU than the wider economy.

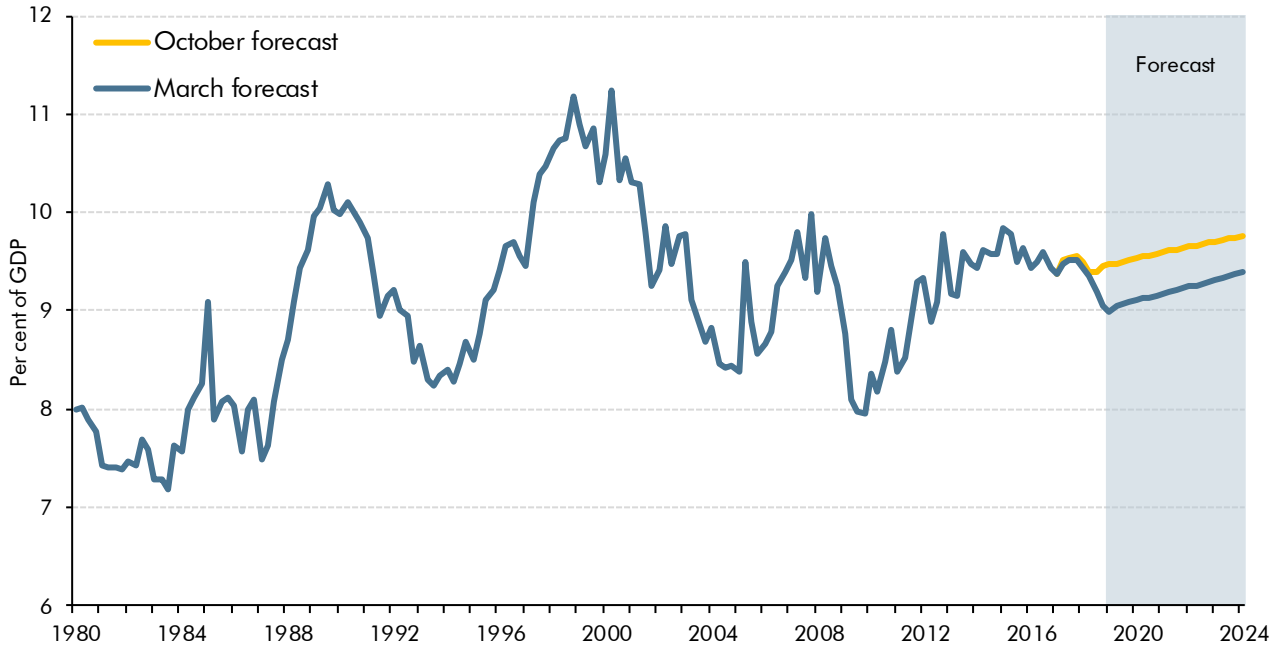
Business investment and stockbuilding

3.73 The latest data suggest business investment fell throughout last year, the first four consecutive quarterly declines since 2009. The recent weakness suggests that Brexit

uncertainty has weighed on firms' capital spending to a greater extent than we expected. Chart 3.25 shows that business investment has fallen slightly as a share of GDP since the referendum. At this stage of the economic cycle, the investment share should be rising strongly and this appears to have been the case in other G7 economies (Chart 3.3). Our forecast is based on a smooth UK withdrawal from the EU, which is reflected in our forecast for a rebound in business investment growth in 2020 as some of the worst risks are removed. Nevertheless, a considerable degree of uncertainty is likely to remain regarding the future trade and migration arrangements between the UK and EU, so any investment pick-up is likely to be limited. Therefore, while we expect a modest rise in business investment as a share of real GDP over the forecast period, the increase is less than would be typical given the limited amount of spare capacity left in the economy.

3.74 Adaptation to the post-Brexit trading regime will require some reallocation of resources within the economy. Businesses in import-competing industries that have become more profitable can be expected to invest more, but firms in exporting industries that have become less profitable will be likely to want to scrap capital. So, although gross investment may rise after Brexit, net investment may remain broadly unaffected – implying little overall impact on productivity growth. As in our October forecast, business tax measures introduced in the Budget are expected to provide modest support to business investment.

Chart 3.25: Real business investment



Source: ONS, OBR

3.75 Recent survey evidence suggests some firms have been stockpiling as insurance against a possible no-deal Brexit (Box 3.1). We have revised up our forecast for stockbuilding in the first quarter of this year, but the net effect on GDP growth is assumed to be negligible as much of the additional stocks are likely to be imported. Once this stockpiling is unwound, we expect stockbuilding to make little contribution to GDP across the forecast period.

Box 3.1: UK stockbuilding

There is growing evidence that firms are building up inventories in preparation for any Brexit-related disruptions to supply chains. While official data provides only limited evidence of material stock building at the end of 2018, survey evidence suggests that some firms have been increasing their stocks since the start of this year.

The CIPS UK Manufacturing PMI reported very sharp rises in both purchasing activity and a record of stockpiling of inputs in February. The CBI industrial trends survey painted a similar picture, indicating a large planned increase in holdings of raw materials. These indicators are consistent with a recent survey by the Bank of England's Agents, suggesting that an increasing number of companies are building stocks. Of the firms surveyed that were actively preparing for Brexit (around half of their sample), it was reported that around half were currently building inventories. Within manufacturing and services, almost two-thirds were stockbuilding. Around a fifth of companies said they were taking extra warehouse space.[a]

We forecast a further increase in the level of inventories in the first quarter of 2019. In the National Accounts, investment in inventories are a component of expenditure and therefore contribute to GDP growth. However, at the current juncture any rise in stocks is likely to be concentrated in imports from the EU. As a consequence, we expect the contribution of the additional increase in stockbuilding to GDP growth to be negligible.

Chart A: Stock of inventories

Source: ONS, OBR

[a] Bank of England, *Inflation Report*, February 2019, (Box 4).

Commercial property

3.76 Commercial property price inflation is expected to recover in 2018-19, after falls in prices in both 2016-17 and 2017-18. In line with the latest consensus outlook from the IPF,[16] prices are still expected to fall in 2019-20 and 2020-21 before recovering. Our commercial property transactions forecast is stronger for 2018-19 than it was in October, reflecting the latest outturn data from HMRC, but it is little changed thereafter.

The government sector

Government consumption

3.77 Nominal government consumption grew by 2.8 per cent in 2018, up from 2.0 per cent in 2017. Outturn data and the Government's fiscal plans imply growth of more than 3 per cent a year through the remainder of the forecast, supported by the large increase in NHS spending growth announced last year.

3.78 Real government consumption grew by 0.2 per cent in 2018, following a fall of 0.2 per cent in 2017. Taking account of the way the ONS measures government consumption, for any given forecast for nominal growth we assume that roughly half will be reflected in real growth and half in the implicit deflator. On this basis, real government consumption is expected to grow by 2.1 per cent in 2019 and then between 1.6 and 1.8 per cent a year across the rest of the forecast period.

Government investment

3.79 Nominal government investment grew by 2.9 per cent in 2018, down from 5.7 per cent in 2017. Outturn data and the Government's fiscal plans imply a sharp pick-up to over 9 per cent in 2019. The fiscal plans then imply growth slows to 4.1 per cent in 2020 and is then between 2 and 4 per cent a year over the rest of the forecast. We assume the general government investment deflator grows broadly in line with its historical average since 1998.

General government employment

3.80 In the absence of specific workforce plans, we project general government employment based on a few simple assumptions. We begin by assuming that the total paybill will grow in line with a relevant measure of current government spending. We then forecast government sector wage growth, taking account of recent data, stated government policy and private sector earnings growth. We then combine the two to derive an implied projection for general government employment.

3.81 Following the lifting of the 1 per cent cap on public sector pay rises in 2018-19, we assume that general government earnings growth will rise so that it broadly matches private sector average earnings growth in 2020. This implies general government employment will rise by a cumulative 110,000 between the third quarter of 2018 and the first quarter of 2024. This rise is similar to our October forecast.

[16] *Investment property forum UK consensus forecast*, Autumn 2018. Since we closed our pre-measures forecast, the IPF released a subsequent consensus forecast covering the winter period. We will incorporate this into our next forecast in the autumn.

The external sector

The impact of the EU referendum result on trade flows

3.82 As explained in paragraph 3.6, the sharp fall in sterling following the referendum appears to have provided even less support to net trade than the small amount we expected. The depreciation has resulted in a large rise in sterling export prices which has boosted exporters' profitability. But exporters appear to have been reluctant to expand production to take advantage of this, presumably in part due to uncertainty around the future trading relationship with the EU and other countries that the EU currently has trade agreements with. Resolution of this uncertainty could boost exports in the near term, but the effect would probably be outweighed by the impact of increased barriers to trade with the EU and those non-EU countries with trading agreements with the EU that are not rolled over.

3.83 We continue to assume that leaving the EU will result in a lower trade intensity of UK economic activity. But with no meaningful basis on which to predict the eventual trading relationship with other countries, we have not made any assumptions in respect of the specific arrangements in place after the transition period ends. Instead, we calibrated the trade effect of leaving the EU by averaging the results of three major external studies.[17] We assume that the full effect will take a decade to be felt and that it will reduce exports and imports symmetrically so that the effect on net trade will be broadly neutral.

Net trade

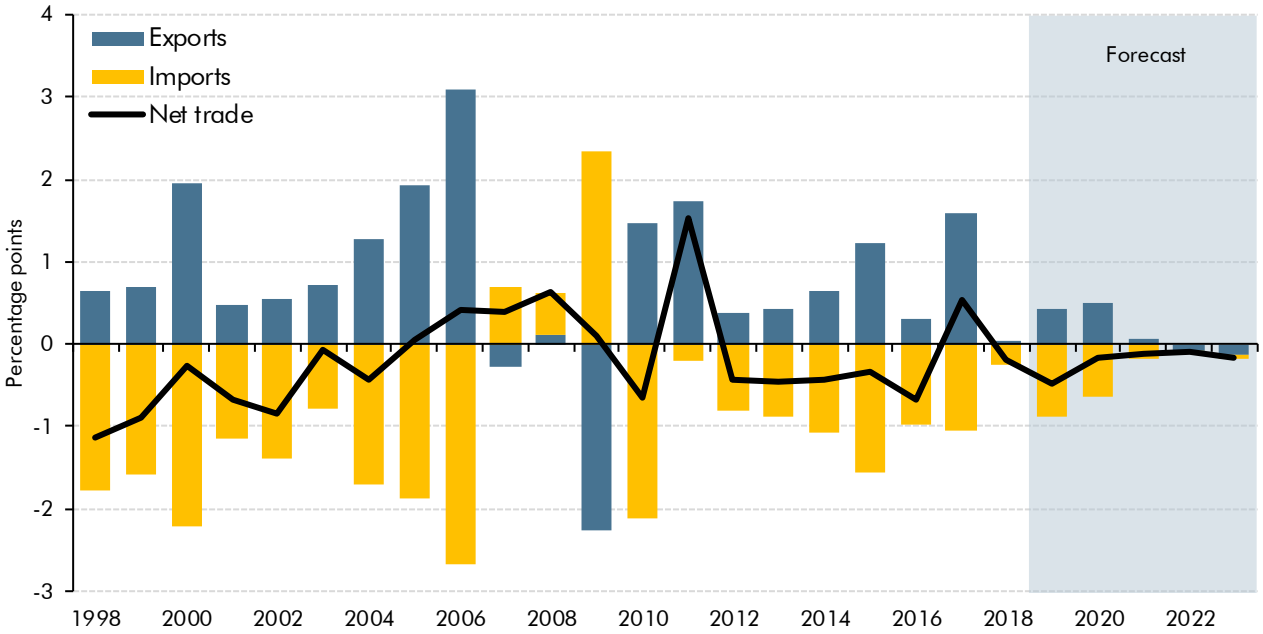
3.84 Export volumes grew by 0.2 per cent in 2018, significantly less than the 5.6 per cent seen the previous year. The fall was partly due to lower growth in the UK's export markets. Import volumes increased by 0.8 per cent in 2018, down from 3.5 per cent in 2017. Net trade is estimated to have reduced GDP growth by 0.2 percentage points in 2018, having increased it by 0.5 percentage points the previous year. The trade data are extremely volatile, prone to substantial revision and currently not accorded National Statistic status, so it is unwise to place too much weight on any particular vintage of data.

3.85 Following the weakness in 2018, we expect export volumes growth to pick up to around 1.5 per cent in 2019 and 2020. Export growth is expected to slow thereafter, as the transition period comes to an end and increased trade barriers weigh on the UK's export market share. We also expect import growth to pick up to around 3 per cent in 2019. That is mostly a consequence of the rise in import-weighted domestic demand growth, partly reflecting the heavy stockbuilding in the first quarter. We then expect import growth to flatten off by the end of the forecast period as Brexit holds back import penetration.

3.86 Overall, we expect net trade to drag on GDP growth over the forecast period (Chart 3.26). Relative to October, we have revised down the near-term contribution of net trade to GDP growth, reflecting weaker prospects in the UK's main export markets.

[17] Specifically, we have taken 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). These represent a subset of the many studies that were presented before the referendum.

Chart 3.26: Net trade contributions to GDP



Source: ONS, OBR

The current account

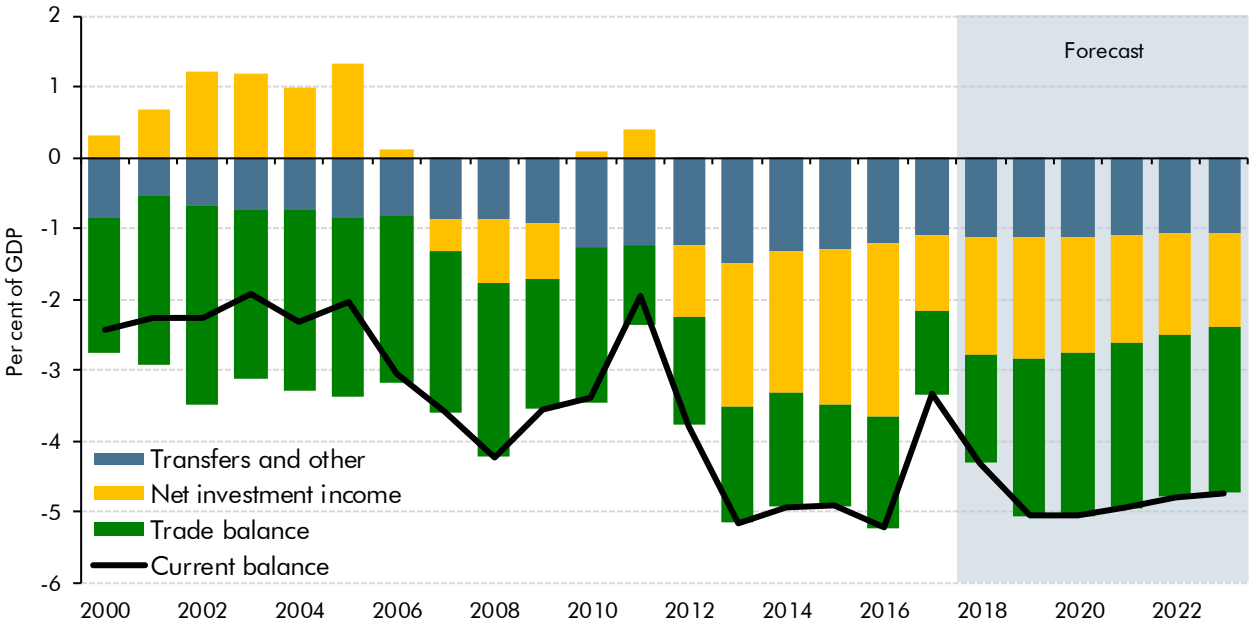
3.87 The latest ONS data suggest that the current account deficit widened to 5 per cent of GDP in the third quarter of 2018, reflecting an increase in both the trade and income deficits. We expect the current account deficit to remain at around 5 per cent of GDP until 2020, narrowing gradually thereafter (Chart 3.27). This forecast reflects several factors:

- The **trade deficit** is expected to widen in 2019 and 2020 as a slowdown in UK export market growth implies relatively weak export growth. The trade deficit is then expected to stabilise from 2021. Our trade deficit forecast is somewhat larger than in October, reflecting recent outturns and the downward revision to the near-term trade outlook.

- We expect a steady improvement in the **net investment income balance**. Early estimates of the income balance can be volatile and subject to revision, and we assume that some of the additional widening in the deficit in the third quarter unwinds in the near term. We expect further gradual improvement thereafter as GDP growth in the rest of the world outpaces that in the UK. Some of the factors behind the recent deterioration in the balance should prove temporary – for example, the effects of weak euro-area growth on foreign earnings. As with the trade deficit, our forecast for the investment income deficit is somewhat larger than in our October forecast.

3.88 Despite a modest improvement from 2021, the current account deficit is expected to remain large by historical standards, and remains a risk to the forecast (see paragraph 3.91).

Chart 3.27: Current account balance



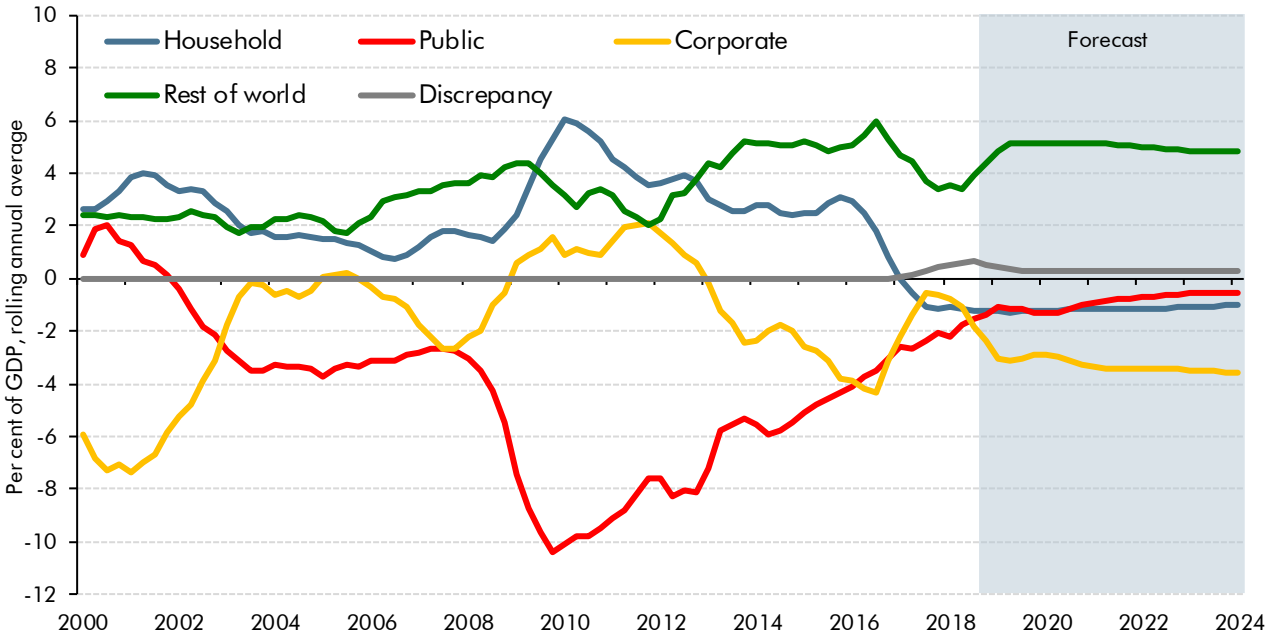
Source: ONS, OBR

Sectoral net lending

3.89 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 principle, these should sum to zero – for each pound borrowed, there must be a pound lent. In practice, ONS estimates of sector net lending do not sum precisely to zero, reflecting differences in the information sources used to construct the income and expenditure measures of GDP (the 'statistical discrepancy'). Our standard practice is to assume that this difference remains broadly flat over the forecast.

3.90 In the first three quarters of 2018, the public, household and corporate sectors were reported to be in deficit while the rest of the world was in surplus (Chart 3.28). We expect the public sector deficit to narrow slightly, offset by a small narrowing in the rest of the world surplus (i.e. a narrowing current account deficit). The corporate and household sector deficits are expected to remain broadly stable. The general profile of sector net lending is little changed from previous forecasts, although the size of the household sector deficit is slightly smaller than in our October forecast, consistent with an upward revision to our forecast for household saving. The size of the rest of the world surplus is slightly larger, reflecting the upward revision to our forecast of the current account deficit.

Chart 3.28: Sectoral net lending



Source: ONS, OBR

Risks and uncertainties

3.91 As always, we emphasise the many risks and uncertainties surrounding our central forecast. Some are common to all forecasts: conditioning assumptions may prove invalid; there may be unexpected shocks; and behavioural relationships may change.

3.92 Specific risks at the present juncture include:

- The outlook for **productivity growth** remains hugely uncertain. Over the next few years we still expect some recovery from the weak rates seen since the financial crisis. But that may not arrive, or may take longer to materialise, so that productivity continues to disappoint. Alternatively, productivity could surprise to the upside – for example if business investment rebounds more strongly than we expect.

- **Policies and regimes will evolve to supersede those presently associated with EU membership**. These changes and the responses of households and businesses to them are subject to great uncertainty. Our forecast assumes that the negotiations between the UK and the EU result in an orderly transition to a new long-term relationship. This is consistent with the UK and EU implementing the Withdrawal Agreement which would see the trading relationship between the UK and the EU remains as it is now until the end of 2020. Leaving the EU without a deal could have severe short-term effects on demand and supply in the economy. Chapter 5 summarises some relevant previous scenarios we have produced that highlight the responsiveness of the public finances to alternative economic assumptions. Meanwhile different trading and migration relationships could have significant effects on potential output over longer horizons. Our Brexit *discussion paper* provided more detail on these issues.[18]

[18] OBR, *Brexit and the OBR's forecasts*, 2018.

- We base our forecasts on several assumptions, including a path for interest rates that follows market expectations. However, market participants are likely to have attached a non-zero probability to a disorderly Brexit, whereas our central forecast assumes an orderly transition. If that is the case, **interest rate expectations could rise** if and when the possibility of a disorderly Brexit is removed. That would also have consequences for debt interest costs (discussed in Chapter 4), as well as other asset prices (including sterling) and thus output and inflation.

- The **household saving** ratio has fallen over recent years as private consumption growth has outpaced income growth. We expect the saving ratio to remain low but stable across the forecast. But an adverse shock could trigger an upwards adjustment as households increase their precautionary saving in response to expectations of rising unemployment. This would amplify the effects of the slowdown.

- There may be less labour market slack than we assume, for example if the **equilibrium unemployment rate** is higher than our current assumption. In this event, wage growth may be stronger than we expect.

- **Global trade tensions** remain high, after the US imposed tariffs on some imports causing retaliatory measures from several of its trading partners. Further tariff increases have been delayed but an escalation of trade tensions remains possible if a resolution cannot be found. In its January *WEO* update, for instance, the IMF suggested that the medium-term risks to the global economy were skewed to the downside, reflecting the ongoing trade tensions, the risk of a deterioration in financial market sentiment, and high levels of public and private debt.

- The UK's **current account deficit** remains large as a share of GDP by historical standards and is expected to remain so over the forecast period. Overseas investors are consequently significant net lenders to the UK, which could pose risks if their confidence in the UK economy were to be damaged by uncertainty regarding the economic and political outlook – including if there were a disorderly Brexit. That could lead to a sharp fall in sterling, bringing about a more abrupt demand-led narrowing of the current account deficit and a subsequent spike in inflation. But while the current account deficit remains large, it is worth noting that the UK's net international investment liabilities are modest as a share of GDP, mitigating this risk somewhat.

- In the 63 years for which the ONS has published consistent quarterly real GDP data, there have been seven recessions – suggesting that the chance of a **recession** in any five-year period is around one in two.[19] So, the probability of a cyclical downturn occurring sometime over our forecast horizon is fairly high.

[19] See Chapter 3 our 2017 Fiscal risks report for more details.

Comparison with external forecasters

3.93 In this section, we compare our latest projections with those of selected outside forecasters. The differences between our forecast and those of external forecasters are generally small compared with the uncertainty that surrounds any one of them.

Comparison with the Bank of England's *Inflation Report* forecast

3.94 Alongside the February 2019 *Inflation Report*, the Bank of England published additional information about its forecast that can be compared against our own (Table 3.6). This included the Bank staff's forecasts for the expenditure composition of GDP, consistent with the MPC's central forecasts for GDP, CPI inflation and the unemployment rate.

3.95 The MPC's modal forecast for GDP growth in 2019 is 1.2 per cent, the same as our central forecast. This represents a downward revision from their November projection, driven by softer global demand and the expectation of continued weak business investment in the first half of this year. In the medium term, the Bank is a little more optimistic than we are regarding the UK's economic prospects. The MPC's real GDP growth forecasts for 2020 and 2021 are 1.5 and 1.9 per cent respectively, 0.1 and 0.3 percentage points higher than our central forecast. The Bank forecasts a similar unemployment rate but stronger average earnings growth, despite a more pessimistic outlook for productivity.

3.96 By expenditure composition component, the Bank expects stronger consumption growth in 2019, but weaker business investment growth. It also expects a small negative contribution from net trade to GDP growth in 2019, mainly due to subdued external demand weighing on export growth. The Bank also expects a near-term boost to imports from stockbuilding.

Table 3.6: Comparison with the Bank of England's forecast and projections

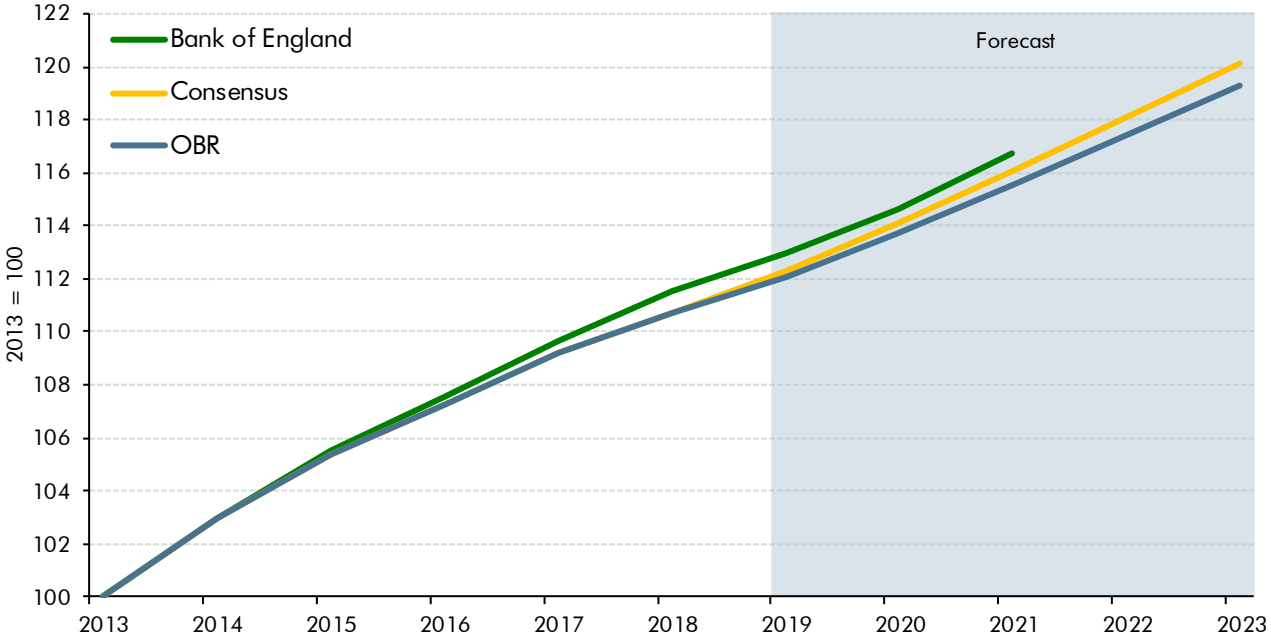
	Per cent		
	2019	2020	2021
Bank of England February *Inflation Report* forecast[1]			
Household consumption	1¼	1	1½
Business investment	-2¾	2¾	4½
Housing investment[2,3]	-½	¼	2
Exports	1	1¼	1¼
Imports	2½	1	1¼
Employment[4]	¼	½	¾
Unemployment rate[5]	4.1	4.1	3.9
Productivity[6]	¼	1	1
Average weekly earnings[3,4]	3	3¼	3¾
OBR forecast			
Household consumption	1.1	1.5	1.6
Business investment	-1.0	2.3	2.3
Housing investment[2,3]	1.1	0.4	0.4
Exports	1.4	1.7	0.2
Imports	3.0	2.1	0.6
Employment[4]	0.1	0.5	0.5
Unemployment rate[5]	4.1	4.1	4.0
Productivity[6]	0.8	0.9	1.1
Average weekly earnings[3,4]	2.7	3.1	3.1

[1] Percentage change, year on year, unless otherwise stated.
[2] Whole economy measure. Includes transfer costs of non-produced assets.
[3] The housing investment and average weekly earnings measures we use are not directly comparable to the Bank of England's.
[4] Four-quarter growth rate in Q4.
[5] LFS unemployment rate in Q4.
[6] Output per hour.

Comparison with other external forecasters

3.97 Chart 3.29 compares our forecast for the level of GDP with other forecasters. The Bank's forecast for the level of GDP is somewhat higher than the average external forecast. This reflects the higher starting point implied by the Bank's 'backcast' of GDP data, as well as stronger expected growth. Our GDP forecast is somewhat weaker than the average external forecast over the medium term. Table 3.7 presents a range of external forecasts.

Chart 3.29: External forecasters GDP comparison



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

Table 3.7: Comparison with external forecasters

	Per cent				
	2019	2020	2021	2022	2023
OBR (March 2019)					
GDP growth	1.2	1.4	1.6	1.6	1.6
CPI inflation	2.1	1.9	2.0	2.0	2.0
Output gap	-0.1	-0.2	-0.1	0.0	0.0
Bank of England (February 2019)[1,2]					
GDP growth (mean)	1.2	1.5	1.9		
CPI inflation (mean)[3]	2.0	2.1	2.1		
European Commission (February 2019)					
GDP growth	1.3	1.3			
CPI inflation	1.8	2.0			
Output gap[4]	0.5	0.3			
NIESR (February 2019)[1]					
GDP growth	1.5	1.7	1.7	1.9	1.9
CPI inflation	2.0	2.0	2.0	2.0	2.0
OECD (March 2019)[5]					
GDP growth	0.8	0.9			
CPI inflation	2.3	2.1			
Output gap	0.3	0.1			
IMF (January 2019)[6]					
GDP growth	1.5	1.6	1.6	1.6	1.6
CPI inflation	2.2	2.0	2.0	2.0	2.0
Output gap	0.0	0.0	0.0	0.0	0.0

[1] Output gap not published.

[2] Forecast based on market interest rates.

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

[4] The European Commission did not update its output gap estimates in its February 2019 Interim Economic Forecast. Output gap numbers are from the Autumn 2018 Economic Forecast, published in November.

[5] The OECD did not update its CPI inflation and output gap estimates in its March 2019 Interim Economic Outlook. CPI inflation and output gap numbers are from the November 2018 Economic Outlook.

[6] The IMF updated GDP growth projections for 2019 and 2020 in their January 2019 WEO update. All other projections are from the October 2018 WEO.

Table 3.8: Detailed summary of forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2017	2018	2019	2020	2021	2022	2023
UK economy							
Gross domestic product (GDP)	1.8	1.4	1.2	1.4	1.6	1.6	1.6
GDP per capita	1.2	0.8	0.6	0.9	1.1	1.1	1.1
GDP level (2017=100)	100.0	101.4	102.7	104.1	105.8	107.5	109.2
Nominal GDP	4.1	3.2	3.2	3.3	3.6	3.6	3.6
Output gap (per cent of potential output)	0.0	0.2	-0.1	-0.2	-0.1	0.0	0.0
Expenditure components of GDP							
Domestic demand	1.4	1.5	1.7	1.6	1.7	1.7	1.7
Household consumption[1]	2.1	1.7	1.1	1.5	1.6	1.6	1.6
General government consumption	-0.2	0.2	2.1	1.7	1.6	1.6	1.7
Fixed investment	3.5	0.0	0.6	1.8	1.9	1.9	2.1
Business	1.5	-0.9	-1.0	2.3	2.3	2.4	2.4
General government[2]	3.7	0.5	5.9	1.8	2.2	0.9	2.0
Private dwellings[2]	8.2	5.6	1.1	0.4	0.4	1.5	1.6
Change in inventories[3]	-0.6	0.3	0.4	0.0	0.0	0.0	0.0
Exports of goods and services	5.6	0.2	1.4	1.7	0.2	-0.3	-0.5
Imports of goods and services	3.5	0.8	3.0	2.1	0.6	0.0	0.1
Balance of payments current account							
Per cent of GDP	-3.3	-4.3	-5.0	-5.1	-4.9	-4.8	-4.7
Inflation							
CPI	2.7	2.5	2.1	1.9	2.0	2.0	2.0
RPI	3.6	3.3	2.9	2.8	3.0	3.1	3.1
GDP deflator at market prices	2.2	1.7	2.0	1.8	1.9	2.0	2.0
Labour market							
Employment (millions)	32.1	32.4	32.6	32.7	32.9	33.0	33.2
Productivity per hour	1.0	0.5	0.8	0.9	1.1	1.2	1.3
Wages and salaries	3.9	4.5	3.3	3.3	3.5	3.4	3.5
Average earnings[4]	2.8	3.0	3.1	3.0	3.1	3.1	3.3
LFS unemployment (% rate)	4.4	4.1	4.1	4.1	4.1	4.0	4.0
Household sector							
Real household disposable income	0.5	1.6	0.7	1.1	1.6	1.7	1.8
Saving ratio (level, per cent)	4.2	4.3	4.2	4.2	4.2	4.3	4.4
House prices	4.5	3.3	0.8	1.3	3.7	4.1	4.2
World economy							
World GDP at purchasing power parity	3.7	3.7	3.5	3.6	3.6	3.6	3.6
Euro area GDP	2.5	1.8	1.6	1.7	1.6	1.5	1.4
World trade in goods and services	5.1	4.0	3.8	3.9	3.9	3.8	3.6
UK export markets[5]	4.8	3.9	3.3	3.5	3.5	3.5	3.3

[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 3.9: Detailed summary of changes to the forecast

	Percentage change on a year earlier, unless otherwise stated						
	Outturn	Forecast					
	2017	2018	2019	2020	2021	2022	2023
UK economy							
Gross domestic product (GDP)	0.1	0.1	-0.4	0.0	0.1	0.1	0.0
GDP per capita	0.1	0.1	-0.4	0.0	0.1	0.1	0.0
GDP level (2017=100)[1]	0.0	0.1	-0.2	-0.2	-0.1	0.0	0.1
Nominal GDP	0.3	0.0	-0.2	-0.1	0.1	0.1	0.1
Output gap (per cent of potential output)	0.0	0.0	-0.4	-0.4	-0.2	-0.1	-0.1
Expenditure components of GDP							
Domestic demand	0.1	0.4	-0.1	0.1	0.3	0.1	0.1
Household consumption[2]	0.3	0.4	-0.1	0.3	0.3	0.2	0.1
General government consumption	-0.1	-0.8	0.0	-0.3	-0.1	0.0	0.1
Fixed investment	0.2	-1.0	-2.3	0.0	0.1	-0.1	0.1
Business	-0.2	-1.4	-3.2	0.2	0.3	0.3	0.2
General government[3]	2.0	0.7	0.3	-1.5	0.4	0.1	0.6
Private dwellings[3]	0.1	-1.4	-1.9	0.4	-0.4	-0.8	-0.3
Change in inventories[4]	-0.1	0.5	0.4	0.0	0.1	0.0	0.0
Exports of goods and services	-0.1	-1.2	-0.9	-0.4	-0.3	0.0	-0.1
Imports of goods and services	0.3	0.2	0.2	-0.1	0.2	0.1	0.0
Balance of payments current account							
Per cent of GDP	0.4	-0.8	-1.3	-1.4	-1.5	-1.5	-1.5
Inflation							
CPI	0.0	-0.1	0.0	-0.1	-0.1	-0.1	0.0
RPI	0.0	-0.1	-0.2	-0.3	-0.1	0.0	0.0
GDP deflator at market prices	0.1	-0.1	0.3	-0.1	0.0	0.0	0.1
Labour market							
Employment (millions)	0.0	0.0	-0.1	-0.1	-0.1	-0.1	0.0
Productivity per hour	0.2	-0.3	0.0	0.1	0.1	0.1	0.1
Wages and salaries	0.0	0.4	0.1	0.1	0.3	0.1	0.1
Average earnings[5]	0.0	0.4	0.6	0.2	0.2	0.0	0.0
LFS unemployment (% rate)	0.0	0.1	0.4	0.3	0.2	0.1	0.0
Household sector							
Real household disposable income	0.6	0.9	0.1	0.3	0.3	0.3	0.2
Saving ratio (level, per cent)	-0.3	0.2	0.2	0.2	0.2	0.3	0.4
House prices	0.0	-0.1	-2.3	-1.8	0.4	0.7	0.4
World economy							
World GDP at purchasing power parity	0.0	-0.1	-0.1	-0.1	0.0	0.0	0.0
Euro area GDP	0.0	-0.2	-0.3	0.0	0.0	0.0	0.0
World trade in goods and services	0.1	-0.1	-0.2	-0.2	-0.1	0.0	0.0
UK export markets[6]	0.3	-0.2	-0.4	-0.4	-0.2	0.0	-0.1

[1] Per cent change since October.

[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 3.10: Determinants of the fiscal forecast

	Percentage change on previous year, unless otherwise specified							Growth over forecast
	Outturn	Forecast						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
GDP and its components								
Real GDP	1.7	1.4	1.2	1.5	1.6	1.6	1.6	*9.3*
Nominal GDP[1]	3.9	3.1	3.2	3.4	3.5	3.6	3.6	*22.3*
Nominal GDP (£ billion)[1,2]	2067	2131	2200	2275	2355	2440	2529	*462*
Nominal GDP (centred end-March £bn)[1,3]	2100	2165	2236	2314	2397	2483	2574	*473*
Wages and salaries[4]	4.0	4.1	3.1	3.5	3.5	3.4	3.5	*23.2*
Non-oil PNFC profits[4,5]	2.9	2.9	2.2	3.0	3.3	3.6	3.6	*20.1*
Consumer spending[4,5]	4.2	3.9	3.2	3.4	3.7	3.7	3.7	*23.6*
Prices and earnings								
GDP deflator	1.9	1.8	2.0	1.8	1.9	2.0	2.0	*12.1*
RPI	3.7	3.1	2.9	2.8	3.1	3.1	3.1	*19.5*
CPI	2.8	2.3	2.0	1.9	2.0	2.0	2.0	*12.8*
Average earnings[6]	2.7	2.9	3.0	3.1	3.1	3.2	3.3	*20.0*
'Triple-lock' guarantee (September)	3.0	2.6	3.5	2.9	3.1	3.1	3.2	*19.9*
Key fiscal determinants								
Employment (millions)	32.2	32.5	32.6	32.8	32.9	33.1	33.2	*1.0*
Output gap (per cent of potential output)	0.1	0.2	-0.1	-0.2	-0.1	0.0	0.0	*-0.1*
Financial and property sectors								
Equity prices (FTSE All-Share index)	4059	4002	3930	4063	4208	4359	4517	*459*
HMRC financial sector profits[1,5,8]	10.0	3.2	3.1	1.7	1.8	1.8	1.8	*14.1*
Residential property prices[9]	4.5	2.8	0.2	2.2	3.9	4.1	4.2	*18.7*
Residential property transactions (000s)[10]	1208	1194	1180	1247	1291	1328	1362	*154*
Commercial property prices[10]	-7.0	3.6	-1.6	-0.9	1.9	2.0	2.0	*7.1*
Commercial property transactions[10]	-0.8	-1.4	1.2	1.5	1.6	1.6	1.6	*6.2*
Oil and gas								
Oil prices ($ per barrel)[5]	54.6	71.3	62.1	61.6	62.0	63.3	64.5	*9.9*
Oil prices (£ per barrel)[5]	42.4	53.4	47.7	46.5	46.3	46.7	47.1	*4.7*
Gas prices (p/therm)[5]	44.9	60.7	50.5	53.1	54.1	55.2	56.3	*11.3*
Oil production (million tonnes)[5]	46.6	47.3	48.4	48.4	46.0	43.7	41.5	*-5.1*
Gas production (billion therms)[5]	14.2	13.7	13.7	13.3	12.7	12.0	11.4	*-2.8*
Interest rates and exchange rates								
Market short-term interest rates (%)[11]	0.4	0.8	0.9	1.1	1.2	1.3	1.3	*0.9*
Market gilt rates (%)[12]	1.3	1.4	1.3	1.4	1.5	1.6	1.7	*0.4*
Euro/Sterling exchange rate (€/£)	1.13	1.13	1.13	1.12	1.11	1.09	1.08	*-0.05*

[1] Non-seasonally adjusted.
[2] Denominator for receipts, spending and deficit forecasts as a per cent of GDP.
[3] Denominator for net debt as a per cent of GDP.
[4] Nominal. [5] Calendar year.
[6] Wages and salaries divided by employees.
[7] Adjusted for 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 3.11: Changes in the determinants of the fiscal forecast

	Percentage change on previous year, unless otherwise specified						
	Forecast						*Growth over forecast*
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
GDP and its components							
Real GDP	0.0	-0.3	0.1	0.1	0.1	0.0	*0.0*
Nominal GDP[1]	-0.1	-0.1	0.0	0.1	0.1	0.1	*0.2*
Nominal GDP (£ billion)[1,2]	4	2	2	5	8	11	*5*
Nominal GDP (centred end-March £bn)[1,3]	1	1	3	7	9	13	*4*
Wages and salaries[4]	0.5	-0.1	0.3	0.3	0.1	0.1	*1.3*
Non-oil PNFC profits[4,5]	0.3	-0.6	-0.5	-0.2	0.1	0.1	*-1.0*
Consumer spending[4,5]	0.4	0.0	0.2	0.2	0.1	0.1	*1.2*
Prices and earnings							
GDP deflator	0.0	0.2	-0.1	0.0	0.0	0.1	*0.2*
RPI	-0.3	-0.1	-0.3	-0.1	0.0	0.0	*-0.9*
CPI	-0.2	0.1	-0.2	-0.1	-0.1	0.0	*-0.5*
Average earnings[6]	0.6	0.4	0.2	0.1	0.0	0.1	*1.5*
'Triple-lock' guarantee (September)	0.0	0.8	0.1	0.1	0.0	0.0	*1.2*
Key fiscal determinants							
Employment (millions)	0.0	-0.1	-0.1	-0.1	-0.1	0.0	*0.0*
Output gap (per cent of potential output)	-0.1	-0.4	-0.3	-0.2	-0.1	-0.1	*-0.1*
Financial and property sectors							
Equity prices (FTSE All-Share index)	-143	-299	-310	-314	-320	-327	*-327*
HMRC financial sector profits[1,5,8]	-2.0	0.0	0.0	0.1	0.1	0.0	*-1.9*
Residential property prices[9]	-0.3	-2.9	-0.9	0.6	0.6	0.3	*-3.2*
Residential property transactions (000s)[10]	7	-31	3	13	13	13	*13.1*
Commercial property prices[10]	0.7	-0.1	-0.2	0.2	0.2	0.1	*0.7*
Commercial property transactions[10]	2.6	0.1	0.1	0.0	0.0	0.0	*3.0*
Oil and gas							
Oil prices ($ per barrel)[5]	-1.7	-18.0	-14.5	-14.4	-14.7	-15.0	*-15.0*
Oil prices (£ per barrel)[5]	-1.1	-12.9	-10.0	-9.6	-9.4	-9.2	*-9.2*
Gas prices (p/therm)[5]	0.0	-19.1	-9.5	-9.7	-9.9	-10.0	*-10.0*
Oil production (million tonnes)[5]	-1.7	-0.5	0.0	-0.5	-0.9	-1.3	*-1.3*
Gas production (billion therms)[5]	-0.5	0.2	0.5	0.4	0.2	0.1	*0.1*
Interest rates and exchange rates							
Market short-term interest rates[11]	0.0	-0.3	-0.3	-0.4	-0.4	-0.4	*-0.4*
Market gilt rates[12]	-0.1	-0.4	-0.4	-0.4	-0.4	-0.3	*-0.3*
Euro/Sterling exchange rate (€/£)	0.01	0.02	0.03	0.02	0.02	0.02	*0.02*

[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) (percentage points).
[12] Weighted average interest rate on conventional gilts (ppts).

4 Fiscal outlook

Introduction

4.1 This chapter:

- specifies the assumptions that we have made in respect of **the UK's forthcoming exit from the EU** (from paragraph 4.4);
- explains the **effects of new policies** announced since October on the fiscal forecast (from paragraph 4.7);
- reviews **classification** issues affecting our forecast (in paragraph 4.14);
- describes the outlook for **public sector receipts**, including a tax-by-tax analysis explaining how the forecasts have changed since October (from paragraph 4.15);
- 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 4.60);
- presents the outlook for **the key fiscal deficit aggregates**, including headline and structural measures of the budget deficit (from paragraph 4.113);
- describes the outlook for **government lending to the private sector and other financial transactions**, including asset sales (from paragraph 4.130);
- shows the outlook for **key balance sheet aggregates**, such as public sector net debt (from paragraph 4.155);
- summarises **risks and uncertainties**, including those embodied in the reporting of contingent liabilities (paragraph 4.179); and
- compares our forecasts to those of **international organisations** (in paragraph 4.190).

4.2 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 2017-18 outturn data published by the Office for National Statistics (ONS) on 21 February. We then present an in-year estimate for 2018-19 that makes use of ONS outturn data for April 2018 to January 2019 and limited administrative tax data for some of February. Finally, we present forecasts for 2019-20 to 2023-24.

4.3 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, including some broad-brush assumptions about future policy settings in respect of the UK's exit from the EU. On that basis, we believe that, in the absence of future policy or classification changes, the outturns would be as likely to be above the forecast as below it.

- 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 October.

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

Assumptions regarding the UK's exit from the EU

4.4 The OBR is required by legislation to produce its forecasts based on current government policy (but not necessarily assuming that particular objectives will be met). With negotiations over the UK's exit from the EU still taking place, this is not straightforward. We asked the Government if it wished to provide any additional information on its current policies that would be relevant to our forecasts. As set out in the Foreword, it directed us to its July 2018 White Paper and the White Paper on immigration published in December 2018.

4.5 Since our previous forecast, the UK Government and the European Union published the latest draft Withdrawal Agreement and the Political Declaration on the future relationship between the UK and the EU on 25 November 2018. This set out in further detail the terms of the financial settlement – the so-called 'divorce bill' – to complement the draft Withdrawal Agreement from 19 March 2018. We have updated our central forecast to incorporate the latest information on the cost of the financial settlement.

4.6 Given the uncertainty as to how the Government will respond to the choices and trade-offs facing it during the negotiations, we still have no meaningful basis for predicting a precise outcome upon which we could then condition our forecast. Moreover, even if the outcome of the negotiations were predictable, its impact on the economy and the public finances would still be uncertain. Specifically, as regards this fiscal forecast, we assume that:

- **The UK leaves the EU on 29 March 2019** – two years after Article 50 was invoked. A transition period follows until December 2020.

- Any reduction in **expenditure transfers to EU institutions** – after factoring in the cost of the financial settlement – would be recycled fully into substitute spending. This assumption is fiscally neutral.

- There are no changes to the structure or membership of **tax systems for which there are common EU rules** (such as VAT and the EU emissions trading system or the customs duties that are deemed to be collected on behalf of the EU).

Policy announcements

4.7 The Government does not consider this Spring Statement to be a full 'fiscal event' and has not produced a 'scorecard' of policy measures. But several measures have been announced since the Budget and departmental spending totals were increased in the Statement itself.

4.8 We consider the effects of all policy announcements that affect the public finances, so long as they can be quantified with reasonable accuracy and assigned to specific years. We note as risks to the fiscal forecast any significant policy commitments or ambitions that are not quantifiable, for example because there is insufficient detail on the policy design or delivery.

4.9 The policy changes that we have incorporated in this forecast are summarised in Table 4.1, which follows the Treasury convention of showing costs that raise borrowing as negative and savings that reduce it as positive. Overall, these policy changes amount to a small fiscal giveaway, driven mainly by higher departmental spending across the forecast period.

4.10 The key features of these measures include:

- **Higher health spending** to maintain real-terms funding in the face of revisions to GDP deflator inflation – adding amounts rising to £0.8 billion in 2023-24.
- **Higher non-health current departmental spending** again to keep spending flat in real terms despite higher GDP deflator inflation – also adding amounts rising to £0.8 billion in 2023-24.
- Several policy changes to **universal credit and disability benefits**. Overall, these changes raise spending by £0.2 billion a year on average from 2020-21 onwards.
- **Other policy changes** are smaller and their effects are largely offsetting. They include raising the fees payable for an application for a grant of probate and the doubling of the 'immigration health surcharge', the fiscal effect of which the Government has chosen to offset via changes to the Home Office's departmental budget.

4.11 These decisions have a partially offsetting indirect effect on borrowing. This reflects the modest boost net fiscal giveaway gives to the economy and tax receipts and the increase in public service pension contributions associated with higher departmental current spending.

4.12 The overall effect of policy changes on our forecast is to increase net borrowing by amounts rising from £0.7 billion in 2019-20 to £2.1 billion in 2023-24.

4.13 We discuss their effect in more detail in Annex A, where we also set out our assessment of the degree of uncertainty associated with them. Annex A also provides an update on various previous measures, and the policy commitments and ambitions we treat as policy risks.

Table 4.1: Summary of the effect of Government decisions on the budget balance

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total effect of Government decisions	**-0.3**	**-0.7**	**-1.2**	**-1.2**	**-1.8**	**-2.1**
of which:						
Direct effects	**-0.3**	**-1.2**	**-1.5**	**-1.6**	**-2.1**	**-2.4**
Receipts	0.0	0.3	0.7	0.5	0.4	0.4
Welfare spending	0.0	0.1	-0.2	-0.3	-0.1	-0.3
Other AME	0.0	-1.3	-0.7	-1.0	-0.7	-0.8
RDEL	0.6	-1.5	-1.4	-1.4	-1.6	-2.1
CDEL	-1.0	1.3	0.0	0.6	-0.1	0.4
Indirect effects	**0.0**	**0.4**	**0.3**	**0.4**	**0.3**	**0.3**

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 changes

4.14 There have been no major classification or methodology decisions made by the ONS or the Treasury that have affected our forecast relative to October. But several live issues could have material effects on future forecasts. By far the largest of these concerns the accounting treatment for student loans. In December the ONS indicated its intention to change their methodology, but we do not yet have sufficient certainty about how this will be implemented to include it in our central forecast. The potential fiscal implications are discussed in Annex B. Other issues being considered by the ONS include:

- The classification of several policies that we have provisionally recorded as taxes in this forecast: the **digital services tax**, **probate fees** and the **immigration health surcharge.**
- Whether some or all the cost of **visa charges** should be considered as tax rather than the sale of services. Were these charges to be reclassified as taxes the switch would be deficit-neutral if the Government adjusted the DEL envelope accordingly.
- The sale of **railway arches** and **spectrum licences**, which we include as financial transactions affecting debt immediately with smaller flow effects on the deficit.
- The classification or recording of several organisations that could have sizeable balance sheet implications but smaller deficit impacts. These include the **Pension Protection Fund** and **funded public sector pension schemes**, **Pool Re** (a terrorism reinsurer) and the **Nuclear Liabilities Fund.** No changes are included in our forecast.
- Following a change to the recording of **leases** in commercial-based accounting (under 'IFRS 16'), the ONS is looking at potential impacts on the public finances.

Public sector receipts

4.15 Table 4.2 summarises our receipts forecast. On a like-for-like basis (excluding items in our forecasts that are not yet incorporated into ONS outturns[1]), receipts rise by 0.6 per cent of GDP in 2018-19 (mainly due to strong growth in income tax and NICs receipts), but then drop back in 2019-20 (reflecting measures announced in Budget 2018, including an above-inflation rise in the income tax personal allowance and higher rate threshold, and a freeze to some excise duties). Receipts rise again as a share of GDP in 2020-21, despite a cut in the main rate of onshore corporation tax from 19 to 17 per cent that year. This again reflects policy changes from last year's Budget, including reforming rules to increase the income tax and NICs paid by some people who work through their own company (known as 'IR35') and a freeze in income tax allowances and thresholds in that year. Capital taxes are also boosted in that year by the Budget 2017 measure to bring forward CGT payments for gains made on residential property. The ratio of receipts-to-GDP rises gently thereafter.

Table 4.2: Major receipts as a share of GDP

	Per cent of GDP						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Income tax	8.7	9.0	8.9	9.1	9.2	9.2	9.3
NICs	6.4	6.5	6.5	6.6	6.6	6.6	6.6
Value added tax	6.1	6.2	6.2	6.2	6.2	6.2	6.2
Onshore corporation tax	2.6	2.6	2.6	2.5	2.5	2.5	2.5
Fuel duties	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Business rates	1.5	1.5	1.4	1.4	1.4	1.4	1.4
Council tax	1.6	1.6	1.7	1.6	1.6	1.6	1.6
Alcohol and tobacco duties	1.0	1.0	1.0	1.0	1.0	0.9	0.9
Capital taxes[1]	1.5	1.5	1.4	1.4	1.4	1.5	1.5
UK oil and gas receipts	0.1	0.0	0.0	0.1	0.1	0.1	0.1
Other taxes	3.2	3.4	3.4	3.4	3.3	3.3	3.3
National Accounts taxes	**33.9**	**34.6**	**34.4**	**34.6**	**34.6**	**34.6**	**34.6**
Interest and dividend receipts	0.3	0.4	0.5	0.5	0.5	0.6	0.6
Other receipts	2.2	2.0	2.0	2.0	2.0	2.0	2.0
Current receipts	**36.4**	**37.0**	**36.9**	**37.1**	**37.1**	**37.2**	**37.2**
Memo: Items included in OBR forecast but not yet incorporated into ONS outturns	-	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*

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

Sources of changes in the receipts-to-GDP ratio

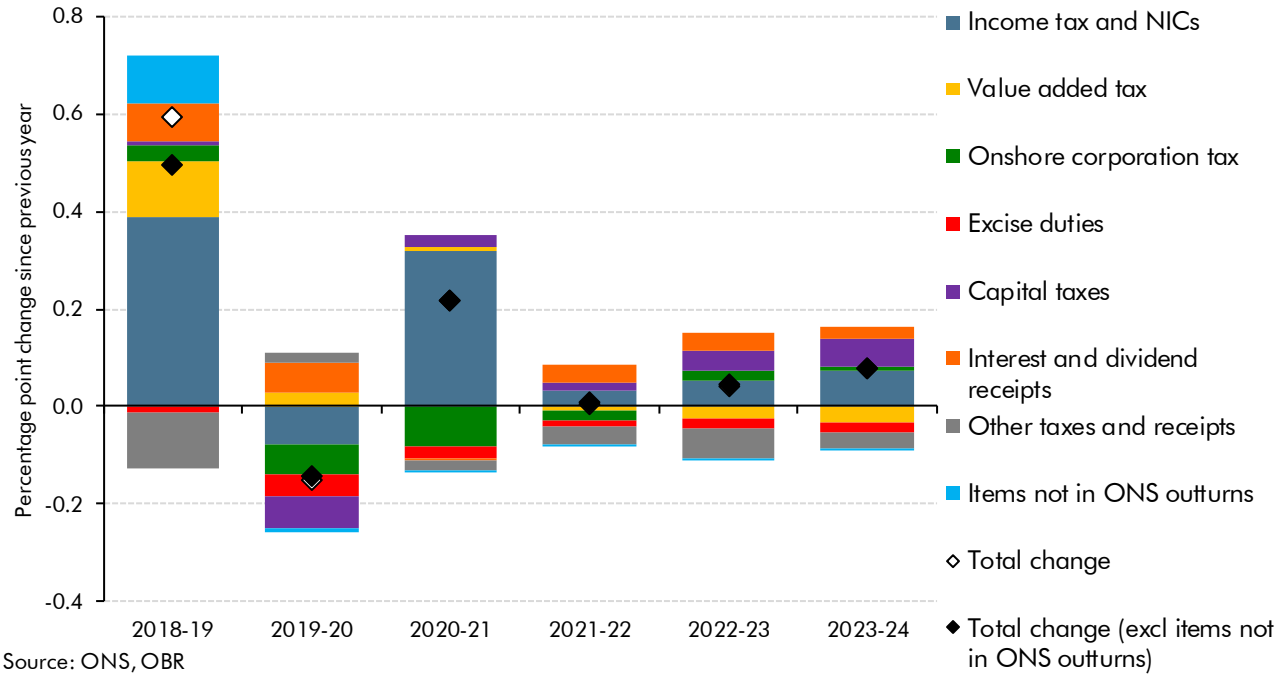
4.16 Movements in the receipts-to-GDP ratio can arise from two sources:

- 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.

[1] See the supplementary tables on our website for more information on these differences, which relate to classification decisions the ONS has taken but has not yet implemented in its statistics.

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

Chart 4.1: Year-on-year changes in the receipts-to-GDP ratio



Source: ONS, OBR

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

4.17 The receipts-to-GDP ratio ends the forecast in 2023-24 slightly higher than its 2018-19 level at 37.2 per cent, having dipped then risen in between. The composition of the economy becomes less tax rich between 2018-19 and 2023-24 (albeit to a lesser degree that was the case in October – see the Executive Summary). But this is compensated for by effective tax rates rising due to policy measures and fiscal drag (Chart 4.2).

4.18 The largest positive contributions to the change in the receipts-to-GDP ratio are:

- A 0.3 per cent of GDP rise in **PAYE income tax and NICs** receipts. With total wages and salaries set to fall slightly as a share of GDP over the forecast, this is more than explained by a rise in the effective tax rate. This reflects fiscal drag, as productivity and real earnings growth pick up (albeit to still historically subdued rates) and drag more income into higher tax brackets.

- A 0.2 per cent of GDP rise in **interest and dividend** receipts. The rise in accrued interest on student loans explains much of this change, although this effect is likely to be revised in future as the ONS has announced that the accounting treatment for student loans accrued interest will change (as discussed in Annex B).

- A 0.1 per cent of GDP rise in **self-assessment (SA) income tax** receipts. This is largely due to a rising tax base, reflecting our assumption that the share of self-employment in total employment will rise over the forecast, continuing the trend of recent years.

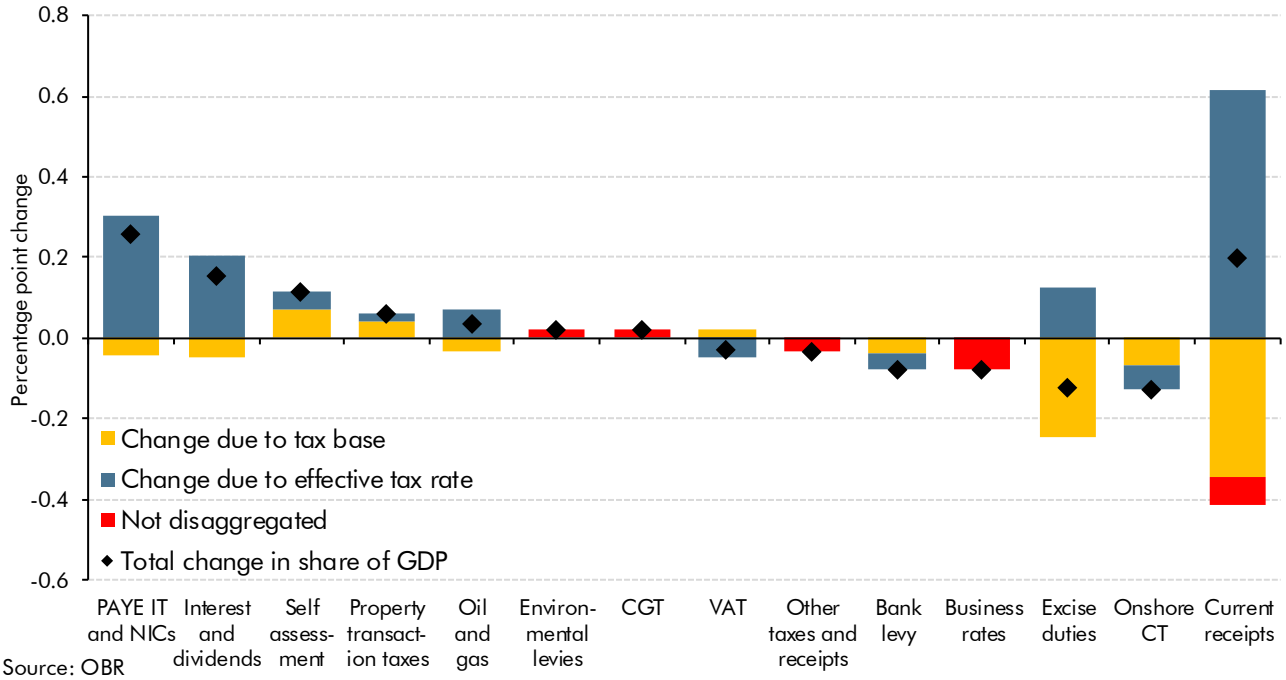
4.19 The largest negative contributions to the change in the ratio are:

- A 0.1 per cent of GDP fall in **business rate** receipts. Receipts rise in 2021-22 due to the planned revaluation, but gradually fall away in other forecast years as rateable values fall in real terms thanks to subsequent appeals.

- A 0.1 per cent of GDP fall in **excise duties**. This is explained by declining tax bases, due to falling alcohol and tobacco consumption and the rising fuel efficiency of the vehicle stock. These are only partly offset by rises in duty rates based on the Government's stated duty uprating assumptions, which raise the effective tax rate.

- A 0.1 per cent of GDP fall in **onshore corporation tax** receipts. This is partly caused by a fall in the effective tax rate – as the main rate will be cut to 17 per cent in 2020. But we also assume that profits fall as a share of the economy over the forecast.

Chart 4.2: Sources of changes in the receipts-to-GDP ratio (2018-19 to 2023-24)



Source: OBR

Detailed current receipts forecasts

4.20 Our detailed receipts forecasts and changes since October are presented in Tables 4.3 and 4.4. 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 4.3: Current receipts

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Income tax[1]	180.6	192.4	195.7	208.1	215.8	224.7	234.4
of which: Pay as you earn	154.9	163.1	163.9	174.0	181.1	188.4	196.2
Self assessment	28.3	31.5	34.0	35.6	36.5	38.3	40.3
Other income tax	-2.6	-2.2	-2.3	-1.5	-1.7	-1.9	-2.1
National insurance contributions	131.5	137.7	143.4	149.7	155.5	161.2	167.3
Value added tax	125.5	131.7	136.6	141.5	146.3	150.9	155.6
Corporation tax[2]	55.6	58.0	58.2	58.7	60.5	63.3	66.0
of which: Onshore	53.8	56.2	56.7	56.8	58.4	61.0	63.5
Offshore	1.8	1.8	1.5	1.9	2.2	2.3	2.5
Petroleum revenue tax	-0.6	-0.8	-0.4	-0.4	-0.4	-0.4	-0.3
Fuel duties	27.9	28.2	28.4	29.2	30.2	31.1	32.1
Business rates	30.3	31.1	31.3	31.8	33.5	34.4	34.9
Council tax	32.1	34.2	36.3	37.5	38.7	39.9	41.1
VAT refunds	17.3	18.3	18.4	18.9	19.4	20.0	20.6
Capital gains tax	7.8	9.3	9.1	9.7	9.9	10.6	11.6
Inheritance tax	5.2	5.3	5.3	5.4	5.6	5.9	6.3
Property transaction taxes[3]	13.6	12.8	12.6	13.4	14.5	15.5	16.8
Stamp taxes on shares	3.5	3.7	3.7	3.8	3.9	4.0	4.2
Tobacco duties	8.8	9.1	9.1	9.0	9.0	9.0	9.0
Alcohol duties	11.6	12.1	12.6	12.9	13.5	14.0	14.5
Air passenger duty	3.4	3.6	3.7	3.9	4.0	4.2	4.4
Insurance premium tax	5.9	6.2	6.2	6.2	6.2	6.2	6.2
Climate change levy	1.9	1.9	2.2	2.1	2.1	2.1	2.4
Bank levy	2.6	2.5	2.3	1.9	1.1	1.0	1.0
Bank surcharge	1.9	1.9	1.9	2.0	2.0	2.1	2.2
Apprenticeship levy	2.6	2.7	2.9	3.0	3.1	3.2	3.3
Soft drinks industry levy	0.0	0.3	0.3	0.3	0.3	0.3	0.3
Digital services tax	0.0	0.0	0.0	0.3	0.4	0.4	0.5
Other HMRC taxes[4]	7.7	7.5	7.6	7.8	8.0	8.1	8.1
Vehicle excise duties	6.2	6.5	6.5	6.9	7.1	7.4	7.7
Licence fee receipts	3.2	3.3	3.3	3.4	3.5	3.6	3.6
Environmental levies	6.5	9.6	10.1	10.6	11.1	11.6	11.9
EU ETS auction receipts	0.3	0.6	1.3	1.4	1.2	1.4	1.4
Other taxes	6.9	7.6	8.0	8.1	8.3	8.4	8.7
National Accounts taxes	**699.7**	**737.4**	**756.7**	**787.1**	**814.2**	**844.3**	**876.0**
Less own resources contribution to EU	-3.4	-3.3	-3.4	-3.4	-3.5	-3.5	-3.5
Interest and dividends	7.1	9.0	10.6	10.9	12.2	13.5	14.5
Gross operating surplus	45.9	41.9	43.3	45.3	47.0	48.9	51.0
Other receipts	3.9	4.0	4.1	4.3	4.1	3.4	3.5
Current receipts	**753.1**	**789.0**	**811.4**	**844.0**	**874.0**	**906.6**	**941.5**
Memo: UK oil and gas revenues [5]	*1.2*	*1.1*	*1.1*	*1.4*	*1.8*	*2.0*	*2.2*

[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 from 2018-19), aggregates levy, betting and gaming duties, customs duties and diverted profits tax.

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

Table 4.4: Changes to current receipts since October

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Income tax[1]	-0.1	2.2	2.8	5.0	5.2	5.0	4.5
of which: Pay as you earn	0.0	1.4	1.9	3.2	3.8	3.5	2.8
Self assessment	0.0	1.0	1.1	2.0	1.7	1.8	2.0
Other income tax	-0.1	-0.2	-0.3	-0.2	-0.3	-0.3	-0.3
National insurance contributions	-1.0	0.8	1.5	1.9	2.1	2.0	1.8
Value added tax	0.1	-0.5	-0.6	-0.4	-0.1	0.1	0.3
Corporation tax[2]	-0.4	-1.5	-1.8	-0.9	-0.4	-0.2	-0.1
of which: Onshore	-0.4	-1.2	-0.7	-0.2	0.3	0.5	0.6
Offshore	0.0	-0.3	-1.1	-0.7	-0.7	-0.7	-0.6
Petroleum revenue tax	0.0	-0.2	0.2	0.3	0.1	0.0	0.0
Fuel duties	0.0	-0.1	0.1	0.0	0.0	0.0	0.0
Business rates	0.1	0.3	0.4	0.4	0.3	0.5	0.3
Council tax	0.0	0.0	0.4	0.5	0.5	0.6	0.8
VAT refunds	0.2	0.5	0.1	-0.1	-0.1	-0.1	-0.1
Capital gains tax	0.0	0.7	0.0	-0.8	-0.9	-0.9	-0.9
Inheritance tax	0.0	-0.1	-0.3	-0.6	-0.6	-0.6	-0.7
Property transaction taxes[3]	0.0	0.0	-0.7	-0.7	-0.5	-0.4	-0.4
Stamp taxes on shares	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Tobacco duties	0.0	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1
Alcohol duties	0.0	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1
Air passenger duty	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Insurance premium tax	0.0	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Climate change levy	0.0	-0.1	0.0	-0.1	-0.1	-0.1	-0.1
Bank levy	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bank surcharge	0.0	0.0	-0.1	0.0	0.0	0.0	0.1
Apprenticeship levy	-0.1	-0.1	-0.1	-0.1	0.0	0.0	0.0
Soft drinks industry levy	0.0	0.1	0.1	0.1	0.1	0.1	0.1
Digital services tax	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other HMRC taxes[4]	0.0	0.1	0.1	0.1	0.2	0.2	0.2
Vehicle excise duties	0.0	0.0	0.1	0.2	0.2	0.2	0.2
Licence fee receipts	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Environmental levies	0.0	-0.6	-1.1	-1.3	-1.0	-0.9	-1.2
EU ETS auction receipts	0.0	0.0	-0.3	0.2	0.0	0.0	-0.1
Other taxes	0.0	0.3	0.6	0.4	0.3	0.3	0.3
National Accounts taxes	**-1.0**	**1.4**	**0.8**	**3.6**	**4.6**	**5.2**	**4.7**
Less own resources contribution to EU	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
Interest and dividends	0.0	0.2	-0.1	-1.2	-1.2	-1.1	-0.6
Gross operating surplus	-0.6	-0.2	0.4	0.8	0.6	1.1	1.5
Other receipts	0.7	0.4	0.4	0.5	0.5	0.5	0.5
Current receipts	**-0.9**	**1.7**	**1.6**	**3.6**	**4.5**	**5.7**	**6.0**
Memo: UK oil and gas revenues [5]	*0.0*	*-0.5*	*-0.8*	*-0.4*	*-0.6*	*-0.7*	*-0.7*

[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 from 2018-19), 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 October

4.21 We have revised our pre-measures forecast up in all years compared to October:

- **Higher average earnings growth** relative to our October forecast boosts receipts by £2.1 billion in 2018-19 and by progressively larger amounts across the forecast.

- Stronger than expected **self-assessment (SA) income tax and capital gains tax (CGT)** receipts in 2018-19 increase receipts by £1.7 billion. On the income tax side, provisional HMRC analysis suggests that the strength is broadly based across the various tax streams, so we assume that it largely persists over the forecast. On the CGT side, around a third of the unexpected strength in January receipts is assumed to be a timing effect, possibly related to policy changes in recent years. So only some of the upward revision since October boosts receipts in future years. But this increases receipts by progressively larger amounts across the forecast as we assume that gains from financial assets are geared to equity prices rising in line with nominal GDP.

- Higher cumulative **consumer spending** growth across the forecast boosts VAT and some other smaller indirect tax receipts by £0.4 billion in 2018-19, and by increasingly larger amounts from 2019-20 onwards.

4.22 Partly offsetting these upward revisions, the main sources of downward revision include:

- Lower **equity prices** have reduced receipts by £1.8 billion a year on average from 2019-20 onwards. Our equity price assumption feeds into several tax forecasts, with our capital gains tax forecast the most sensitive to changes in the assumption.

- Lower **oil and gas prices** since October have reduced UK oil and gas receipts by an average of £1.6 billion a year from 2019-20 onwards.

- We have revised down near-term **employment growth** since October, particularly in 2019-20 due to our expectation that the unemployment rate will increase as output dips below potential. This reduces income tax and NICs receipts by £1.2 billion in 2019-20, but by diminishing amounts thereafter as this effect unwinds.

- Lower **interest rates** reduce interest receipts on the government's assets by around £1 billion a year from 2020-21 onwards.

4.23 The direct effect of Government decisions in this forecast boosts receipts by £0.5 billion a year on average from 2019-20 onwards. The largest changes reflect increases in the rates of both probate fees and the immigration health surcharge. The Government has decided to offset both of these measures by increasing departmental spending limits, so the effects of the measures are neutral for borrowing overall. Annex A provides more detail.

4.24 The indirect effect of the total policy package boosts earnings growth marginally, raising income tax and NICs receipts by £0.2 billion a year on average from 2019-20 onwards.

Table 4.5: Sources of change to the receipts forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	787.3	809.8	840.4	869.6	900.8	935.5
March forecast	789.0	811.4	844.0	874.0	906.6	941.5
Change	**1.7**	**1.6**	**3.6**	**4.5**	**5.7**	**6.0**
	Underlying forecast changes					
Total	**1.7**	**1.0**	**2.5**	**3.7**	**5.0**	**5.2**
of which:						
Income and expenditure	**2.8**	**2.0**	**3.4**	**4.9**	**5.7**	**6.3**
Average earnings	2.1	3.4	4.6	5.3	5.5	5.8
Employee numbers	0.0	-1.2	-1.1	-0.8	-0.5	-0.5
Non-financial company profits	-0.1	-0.3	-0.5	-0.6	-0.5	-0.5
Consumer expenditure	0.4	0.3	0.6	0.9	1.1	1.2
Self-assessment income streams	0.0	0.1	0.4	0.3	0.4	0.6
Other	0.3	-0.5	-0.6	-0.4	-0.3	-0.2
UK oil and gas	**0.3**	**-1.0**	**-0.6**	**-0.7**	**-0.6**	**-0.8**
Oil and gas prices	-0.1	-1.6	-1.5	-1.7	-1.5	-1.5
Production and expenditure	0.4	0.6	0.9	1.0	0.9	0.8
Property markets	**0.1**	**-0.7**	**-1.0**	**-0.7**	**-0.6**	**-0.5**
Market-derived assumptions	**-0.1**	**-1.3**	**-2.4**	**-2.7**	**-2.9**	**-3.0**
Oil prices	0.1	0.4	0.4	0.4	0.4	0.4
Equity prices	-0.2	-1.0	-1.8	-1.9	-2.1	-2.2
Interest rates	0.0	-0.6	-1.0	-1.1	-1.1	-1.1
Exchange rates	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Prices	**-0.1**	**-0.3**	**-0.8**	**-0.7**	**-0.5**	**-0.3**
Other economic determinants	**-0.1**	**0.4**	**0.4**	**0.4**	**0.3**	**0.4**
Other assumptions	**-1.3**	**2.0**	**3.5**	**3.3**	**3.5**	**3.1**
Non-SA IT and NICs receipts and modelling	-0.1	0.7	1.3	0.8	-0.1	-1.8
January and February receipts SA IT surplus	1.0	1.0	1.6	1.3	1.4	1.5
Corporation tax receipts and modelling	-1.1	-0.3	0.4	1.1	1.2	1.3
VAT receipts and modelling	-1.0	-1.1	-1.1	-1.2	-1.2	-1.3
Excise receipts and modelling	-0.5	-0.2	-0.2	-0.2	-0.1	-0.1
Council tax	0.0	0.3	0.3	0.4	0.4	0.6
Business rates receipts and modelling	0.3	0.4	0.4	0.4	0.6	0.5
Interest and dividend receipts and modelling	0.2	0.2	0.2	0.1	0.2	0.5
CGT outturn and modelling	0.7	0.6	0.7	0.7	0.8	0.9
Other judgements and modelling	-0.7	0.5	0.0	-0.1	0.2	0.9
	Effect of Government decisions					
Total	**0.0**	**0.6**	**1.1**	**0.7**	**0.7**	**0.8**
of which:						
Direct effects	0.0	0.3	0.7	0.5	0.4	0.4
Indirect effects	0.0	0.3	0.3	0.3	0.3	0.4
Memo: March pre-measures forecast	*789.0*	*810.8*	*843.0*	*873.3*	*905.8*	*940.7*

Tax-by-tax analysis

PAYE income tax and NICs

4.25 PAYE income tax and NICs receipts on employee salaries have been revised up by £2.3 billion in 2018-19 relative to our October forecast. This comes on top of the £3.0 billion upward revision we made in October. That £5.3 billion boost to 2018-19 receipts relative to the forecast we made a year ago reflects:

- Unexpectedly strong **earnings growth** since our October forecast adds around £2.1 billion to receipts since then. This more than offsets the £1.0 billion drag on receipts from average earnings growth revisions in our October forecast.

- Strong **employment growth** – particularly in the first half of 2018-19 – boosted our receipts forecast by just over £2.0 billion in October. This has been only partly offset by the downward revision to employment growth in this forecast.

- Real-time information (RTI) indicates that **earnings growth at the very top of the employee earnings distribution** has been particularly strong. Mean total pay between April and September for the top 0.1 per cent rose 5.9 per cent on a year earlier, compared with a 3.7 per cent rise for the whole distribution on this measure. The latest receipts data suggest that difference may have widened further since then. While this relates to just 31,000 taxpayers, they accounted for 7.9 per cent of the PAYE income tax and NIC receipts covered by the RTI system in 2017-18. This top-end strength will have boosted the effective tax rate. (Earnings growth at the bottom of the distribution has also been relatively strong, thanks to rises in the National Living Wage, but this has relatively little effect on tax receipts due to the income tax personal allowance.)

- Higher tax paid on **pension flexibility withdrawals and the effect of 'PAYE refresh'**, an HMRC operational scheme to implement more in-year coding changes when PAYE taxpayers' circumstances change. Much of the additional receipts from these sources were incorporated into our October forecast.

4.26 With bonuses in both the financial and non-financial sectors concentrated in the final months of the fiscal year, receipts for 2018-19 as a whole remain uncertain. We have assumed that financial sector bonuses will be flat on a year earlier, but at this stage there is little evidence to inform this judgement. Receipts growth from the sector so far this year has been modest, while corporation tax receipts from the sector have fallen.

4.27 Growth in PAYE income tax and NIC receipts is expected to slow from 5.0 per cent in 2018-19 to 2.2 per cent in 2019-20. This reflects the Budget 2018 measures raising the personal allowance to £12,500 (up 5.5 per cent from 2018-19) and the higher rate threshold to £50,000 (up 7.9 per cent) from April 2019. Weaker employment growth in 2019-20 also contributes to slower growth in receipts. We expect growth in the number of employees to slow from 1.2 per cent in 2018-19 to just 0.2 per cent in 2019-20.

4.28 Compared with October, we have revised our forecast up by over £4 billion a year from 2020-21 onwards. This can be more than explained by the stronger path for earnings growth over the forecast. Strength in earnings growth at the top of the distribution in the recent past also boosts fiscal drag modestly relative to our October assumptions. Several modelling changes, partly related to new data on income distributions from the latest HMRC Survey of Personal Incomes, raise receipts initially compared with October, but that boost diminishes over time and they reduce receipts in the final two years of the forecast.

Table 4.6: Key changes to the non-SA income tax and NICs forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	296.6	301.9	317.4	329.2	342.4	357.1
March forecast	298.6	305.0	322.2	334.8	347.6	361.4
Change	**2.0**	**3.1**	**4.9**	**5.6**	**5.2**	**4.3**
	Underlying forecast changes					
Total	**2.0**	**2.9**	**4.6**	**5.4**	**5.0**	**4.1**
of which:						
Economic determinants						
Average earnings	2.1	3.4	4.6	5.3	5.5	5.8
Employee numbers	0.0	-1.2	-1.1	-0.8	-0.5	-0.5
Inflation	-0.1	0.1	-0.1	0.1	0.2	0.4
Other economic determinants	0.0	-0.2	-0.3	-0.3	-0.4	-0.4
Other						
Recostings	0.1	0.0	0.3	0.3	0.3	0.6
Outturn receipts and modelling	-0.1	0.7	1.3	0.8	-0.1	-1.8
	Effect of Government decisions					
Indirect effects	0.0	0.3	0.2	0.2	0.2	0.2

Self-assessment (SA) income tax

4.29 Receipts from SA income tax in 2018-19 are expected to have risen by 11.5 per cent on the previous year. Our October forecast assumed a strong rise – in part because of further unwinding of the dividend income shifting that occurred ahead of the dividend tax rise that took effect in April 2016 (see Box 4.3 in our March 2017 *EFO*). But the rise in SA receipts in 2018-19 was even higher than we forecast – by around £1 billion. Preliminary analysis of SA returns indicates stronger underlying growth across most SA income streams.

4.30 We expect SA income tax receipts to rise a further 7.9 per cent in 2019-20. This is boosted by previously announced policy measures, including the reduction in the dividend allowance to £2,000, compliance measures and restrictions in residential landlords' deductions from taxable income. The higher personal allowance and higher rate threshold from April 2019 will reduce SA income tax receipts in 2020-21 due to the payment lag in the SA system.

4.31 Compared with October, our forecast for SA income tax receipts is up by between £1 billion and £2 billion a year. The stronger underlying growth in SA income streams is pushed through to future years. We assume that self-employment earnings grow in line with those of employees, so our stronger earnings forecast boosts SA receipts too.

Table 4.7: Key changes to the SA income tax forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	30.5	32.9	33.6	34.8	36.4	38.3
March forecast	31.5	34.0	35.6	36.5	38.3	40.3
Change	**1.0**	**1.1**	**2.0**	**1.7**	**1.8**	**2.0**
	Underlying forecast changes					
Total	**1.0**	**1.1**	**2.0**	**1.7**	**1.8**	**2.0**
of which:						
Self employment income	0.0	0.1	0.3	0.3	0.4	0.4
Dividend income	-0.1	0.0	-0.1	-0.2	-0.2	-0.2
Savings income	0.0	0.0	-0.1	-0.1	-0.1	0.0
Other economic determinants	0.0	0.1	0.3	0.3	0.3	0.4
Other modelling and receipts changes	1.0	1.0	1.6	1.3	1.4	1.5

VAT

4.32 We have revised our forecast for VAT receipts down. Table 4.8 shows the key drivers:

- We have revised our forecast for 2018-19 down by £0.5 billion. This is more than explained by **weaker-than-expected receipts over recent months**, partly reflecting weak retail sales over the Christmas period. The ONS announced in February's *Public sector finances* release that receipts related to the 'Mini One Stop Shop' (MOSS) scheme – a way for firms across the EU to pay VAT on the supply of certain digital services – have not been included in the recorded receipts data since April 2018 and will be incorporated next month. This will boost VAT receipts in 2018-19 by around £0.9 billion. We have incorporated this effect into our forecast.

- We have revised up **nominal household spending growth**, broadly in line with the upward revision to our earnings growth forecast. This boosts receipts by increasing amounts from 2020-21 onwards.

Table 4.8: Key changes to the VAT forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	132.2	137.2	141.9	146.4	150.8	155.3
March forecast	131.7	136.6	141.5	146.3	150.9	155.6
Change	**-0.5**	**-0.6**	**-0.4**	**-0.1**	**0.1**	**0.3**
	Underlying forecast changes					
Total	**-0.5**	**-0.6**	**-0.4**	**-0.1**	**0.1**	**0.3**
of which:						
Household spending	0.3	0.4	0.6	0.8	1.0	1.1
Other economic determinants	0.2	0.2	0.2	0.3	0.3	0.5
Outturn receipts and modelling	-1.0	-1.1	-1.1	-1.2	-1.2	-1.3
Memo: VAT gap (per cent)	*9.6*	*9.2*	*8.8*	*8.7*	*8.7*	*8.8*

4.33 The 'implied VAT gap' shown in Table 4.8 is the difference between a modelled theoretical total VAT receipts 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 assume that the VAT gap in 2018-19 is marginally lower than a year earlier, before falling slowly over the forecast – reflecting previously announced compliance measures.

4.34 As set out at the start of this chapter, we do not assume any changes to the structure or membership of tax systems for which there are common EU rules, including VAT. In a discussion paper last year we described these issues and our Brexit assumptions.[2]

Onshore corporation tax

4.35 We expect onshore corporation tax receipts to have risen by 4.5 per cent in 2018-19. Solid growth in receipts from industrial and commercial companies has offset falls in receipts from both the financial and life assurance sectors.

4.36 Growth in onshore corporation tax is expected to slow further to less than 1 per cent in both 2019-20 and 2020-21. This primarily reflects:

- **Weak profit growth**: Profits for non-oil, non-financial companies are expected to grow more slowly than nominal GDP over the next two years, reflecting the cyclical weakness in GDP growth. We also assume that financial sector profit growth will lag behind nominal GDP growth from 2020-21 onwards, since the sector is likely to be disproportionately affected by the UK's exit from the EU.

- **Previously announced policy measures**: The temporary rise in the annual investment allowance to £1 million for two years will weigh on receipts in both 2019-20 and 2020-21. The reduction in the main rate of corporation tax from 19 to 17 per cent in April 2020 will affect accrued receipts from 2020-21. By 2023-24, this rate cut is expected to reduce receipts by £5.4 billion a year.

4.37 Relative to October, onshore corporation tax on a National Accounts accruals basis is £1.2 billion lower in 2018-19, but is £0.6 billion higher by 2023-24. This reflects the downward revision to non-oil, non-financial profits taking around £0.5 billion off receipts in the latter years of the forecast and several modelling changes:

- **Modelling the time-shifting of cash receipts to be consistent with the National Accounts accruals treatment** involves generating a monthly profile for cash receipts. Updating our assumptions has led to a smaller proportion of receipts falling in early 2019-20 (accruing back to 2018-19). This reduces 2018-19 accrued receipts by over £1 billion.

- **Capital allowances modelling**. We have reviewed the assumptions underlying our capital allowances deduction forecast, which appear to have driven some of our recent under-forecasting of corporation tax receipts. Revising down assumed growth in use of

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

capital allowances adds progressively larger amounts to receipts, reaching around £1 billion a year by the end of the forecast.

4.38 For accounting periods starting in or after April 2019, companies with profits of over £20 million a year will have to make their quarterly instalment payments four months earlier than under the current regime. Firms will start making payments three months (rather than seven) after the start of their accounting period. This will provide a largely one-off boost to cash receipts, particularly in 2019-20 and to a lesser extent in 2020-21, without changing underlying tax liabilities. The ONS will change how cash receipts are time-shifted to proxy accrued receipts to ensure as best it can that this change does not affect the path of accrued receipts recorded in the National Accounts.

4.39 We have revised down our estimate for the effect of bringing forward instalment payments on cash receipts by £2.4 billion in 2019-20 and by £1.7 billion in 2020-21. Most of this revision is explained by changes to two key assumptions:

- **The share of tax paid by quarterly instalment payers that will be subject to the new regime** has been revised down from around two-thirds to around a half. This reflects HMRC's latest analysis of companies' corporation tax returns. This accounts for around two-thirds of the total revision across the two years.

- **The share of all corporation tax receipts paid by quarterly instalment payers** is likely to be revised down, as HMRC has identified an issue in the algorithm that splits its monthly administrative data on cash payments and repayments between larger quarterly payers and smaller annual payers. The size of this reallocation is uncertain, but HMRC's initial analysis suggests around £3 billion to £4 billion (around 5 to 7 per cent of onshore corporation tax) could be shifted from quarterly to annual payers. This assumption accounts for around a third of the downward revision.

4.40 We have only included the effect from this allocation issue in the costing for the instalment regime change in this forecast. HMRC is currently carrying out further quality assurance of its latest methodology for identifying different types of payments before it can be reflected in the ONS public sector finances data. While total cash receipts will not change, the different accruals methods for quarterly and annual payers will result in changes to both ONS outturns and our forecasts on a National Accounts basis. All else equal, a greater share of cash receipts coming from annual payers, where the payment lag is greater, will generate a larger difference between cash and accrued receipts. But corporation tax modelling is necessarily complex – reflecting the tax system being modelled – so the eventual effect of any change is very uncertain. We will reflect the full implications of these changes in our next forecast.

Table 4.9: Key changes to the onshore corporation tax forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	57.3	57.4	57.0	58.0	60.5	62.9
March forecast	56.2	56.7	56.8	58.4	61.0	63.5
Change	**-1.2**	**-0.7**	**-0.2**	**0.3**	**0.5**	**0.6**
	Underlying forecast changes					
Total	**-1.2**	**-0.7**	**-0.2**	**0.4**	**0.6**	**0.7**
of which:						
Industrial and commercial company profits	-0.1	-0.3	-0.5	-0.6	-0.5	-0.5
Other economic determinants	0.0	-0.1	-0.1	-0.1	-0.1	0.0
Recostings	0.2	0.7	0.5	0.4	0.3	0.1
Modelling	-1.2	-0.4	0.5	1.2	1.5	1.7
Outturn receipts	-0.1	-0.6	-0.6	-0.6	-0.5	-0.5
	Effect of Government decisions					
Government decisions	0.0	0.0	0.0	-0.1	-0.1	-0.1

UK oil and gas revenues

4.41 We have revised our forecast for UK oil and gas revenues down in all years and by an average of £0.6 billion a year. Table 4.10 breaks down the main sources of revision.

- **Sterling oil and gas prices** are lower across the forecast, reflecting movements since October and their effect on futures prices (which drive our near-term forecast). This reduces revenues by £1.6 billion a year on average from 2019-20 onwards.

- On the basis of the latest *Stewardship Survey* data from the Oil and Gas Authority, we have revised total **expenditure** down across the forecast after unexpectedly weak spending in 2018. We have revised **total oil and gas production** down marginally from 2019 onwards, again reflecting the latest survey data.[3]

[3] As set out in Chapter 3, at the end of February BEIS announced an upward revision to the 2018 oil production data that we were not able to incorporate into our forecast as it was released after we had closed our pre-measures forecast. The latest estimate is that oil production in 2018 rose by 9.4 per cent on a year earlier, higher than the 1.7 per cent rise we had assumed in our forecast. The direct effect of this on our receipts forecast would be more muted than might be expected. Our model forecasts receipts growth from a 2018-19 receipts base and that base is generated by analysing oil and gas companies' corporation tax instalment payments on 2018 liabilities, all of which have already been made. So higher 2018 production would not affect our forecast for 2018-19 receipts, but it could have knock-on effects to modelled growth rates when it is fed into HMRC's detailed field-level forecasting model.

Table 4.10: Key changes to the oil and gas revenues forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	1.5	1.9	1.8	2.4	2.7	2.9
March forecast	1.1	1.1	1.4	1.8	2.0	2.2
Change	**-0.5**	**-0.8**	**-0.4**	**-0.6**	**-0.7**	**-0.7**
	Underlying forecast changes					
Total	**-0.5**	**-0.8**	**-0.4**	**-0.6**	**-0.7**	**-0.7**
of which:						
Oil and gas prices	-0.1	-1.6	-1.5	-1.7	-1.5	-1.5
Production volumes	-0.2	-0.1	0.0	-0.1	-0.1	-0.2
Expenditure	0.6	0.7	0.9	1.1	1.0	1.0
Outturn receipts and modelling	-0.8	0.2	0.2	0.1	-0.1	0.1

Note: Expenditure includes operating, capital, exploration and appraisal and decommissioning expenditure. For more information, see the supplementary table on our website.

Property transaction taxes[4]

4.42 Relative to October, we have revised our property transactions tax forecast down by £0.5 billion a year on average from 2019-20 onwards. This is dominated by a lower forecast for residential stamp duty land tax in England and Northern Ireland and mainly reflects a lower house price inflation forecast. We have also revised receipts in 2018-19 down a little, which provides a lower base to which weaker expected growth rates are applied.

Taxes on capital

4.43 We have revised our **capital gains tax (CGT)** forecast down by £0.5 billion a year on average from 2018-19. This reflects several offsetting factors:

- **January SA receipts** were £0.7 billion higher than expected. Based on preliminary HMRC analysis of SA returns, some of this strength reflects a small number of large asset disposals in 2017-18, which we have assumed are unlikely to be repeated. We have therefore pushed only around two-thirds of this strength through the forecast.

- **Lower equity prices** reduce receipts by increasing amounts and by £1.8 billion in 2023-24. Our weaker residential property market forecast also lowers receipts.

- Based on new HMRC analysis, we have also increased slightly the **gearing** coefficient used to forecast financial gains. CGT receipts are geared to changes in asset prices, as the tax is paid on the gain rather than the value of the asset when sold. Our model now assumes that a 1 per cent rise in equity prices will result in a 3.2 per cent rise in CGT receipts from shares. Incorporating this change boosts receipts by around £0.3 billion across the forecast based on our current equity price assumptions.

[4] The UK Government has devolved powers over property transactions taxes to Scotland and Wales. In Scotland, stamp duty land tax (SDLT) was replaced by the land and buildings transaction tax (LBTT) in April 2015. In Wales, it was replaced by the land transaction tax (LTT) in April 2018. As these taxes are similar in design to stamp duty land tax, we combine them in this section. More information on these forecasts – both how they are constructed and how the forecast has changed since October – is included in our *Devolved tax and spending forecasts* publication on our website.

4.44 We have revised **inheritance tax** receipts down by £0.6 billion a year on average relative to October. This largely reflects weaker equity and house prices, although receipts in 2018-19 have also come in slightly lower than expected. Since inheritance tax is typically received by HMRC with a long lag, this is likely to reflect lower liabilities from previous years.

4.45 Having reviewed its initial plans, the Government has altered its proposed schedule of **fees payable for an application for a grant of probate**. The new rates come into effect in April and range between £250 and £6,000, depending on the value of the estate. Given the structure of the fees, the Treasury expects the ONS to classify them as a tax on capital rather than a payment for a service (which is treated as negative spending and had been factored into the Ministry of Justice's RDEL budget). This will add to receipts and spending equally, because the new tax is offset by the removal of the negative spending from RDEL.

4.46 The new fee structure is expected to raise around £155 million a year. We have reduced our inheritance tax forecast by around £5 million a year to reflect the incentive for individuals with estates worth close to the new probate fee thresholds to reduce the value of their estates to pay a lower fee. This effect is expected to be small, since the inheritance tax liability itself already provides a significant incentive to reduce the value of estates.

Excise duties

4.47 Our **fuel duties** forecast is little changed since October. Receipts have been a little weaker over the past few months, so we have revised down our 2018-19 estimate by just under £0.1 billion – we assume that this effect persists. Offsetting that, lower oil prices reduce the cost of driving, boosting revenues by £0.2 billion a year on average from 2019-20 onwards. Lower RPI inflation lowers the assumed duty path from 2020-21 onwards. As we note in each forecast, these assumed duty rises have not been implemented for many years.

4.48 **Alcohol duties** are lower by £0.1 billion a year on average over the forecast period. This is almost entirely explained by weaker-than-expected wine receipts over recent months. Since changes to the duty uprating timetable in Autumn Budget 2017, the effect of forestalling ahead of potential duty rate changes (which are now scheduled to take place in February rather than April) has been more challenging to predict.

4.49 We have revised **tobacco duties** down by £0.1 billion a year on average relative to our October forecast, reflecting weaker clearances in recent months. Monthly receipts have been more volatile than usual in the past two years, again reflecting the new timetable of duty uprating announced in Autumn Budget 2017. This generates significant uncertainty around our forecast, although we expect this volatility to subside once the new uprating timetable beds in. We have also made some minor changes to the specification of our forecasting models, which together increase the forecast by £0.1 billion a year.

Business rates

4.50 Business rates are calculated by multiplying the rateable value of non-domestic property by the 'multiplier', which is uprated by inflation, minus any reliefs. Since October, we have revised our forecast up by an average of £0.4 billion a year. This reflects:

- Lower **CPI inflation** reduces the multiplier later in the forecast, reducing receipts by an average of £0.1 billion a year from 2021-22 onwards.

- We have incorporated the latest provisional information from local authorities about **expected yield in 2019-20**. This suggests local authorities will raise more than previously expected in future years, adding £0.2 billion a year on average.

- We have also removed an adjustment accounting for **local authorities' historical over-forecasting** of gross rates yield, based on provisional MHCLG analysis that suggests this has fallen in recent years. This increases receipts by £0.3 billion a year.

Other taxes

4.51 **Council tax** receipts have been revised up by £0.6 billion a year on average from 2019-20 onwards. This reflects both policy measures and increases in our pre-measures forecast, discussed in the local authority spending section of this chapter.

4.52 The revisions to our forecast for **VAT refunds** are uneven across years. Receipts have been revised up in the near term, reflecting a higher path for government procurement and investment, but have been revised down in the medium term as the growth in procurement spending slows. The modest boost to RDEL announced in the Spring Statement generates a slightly higher path for VAT refunds than would otherwise have been the case.

4.53 **Environmental levies** include levy-funded spending policies such as the renewables obligation (RO), contracts for difference (CfD), feed-in tariffs, the capacity market scheme and the warm home discount. We also include receipts from the 'CRC energy efficiency scheme' until its abolition from the 2018-19 compliance year.

4.54 The capacity markets scheme (that focuses on the security of electricity supply) has been suspended following a European Court of Justice ruling that removed state aid approval of the scheme. As such, payments cannot be made to those with capacity agreements until state aid approval has been reinstated. The Government is working with the European Commission to achieve this and its intention is to honour all outstanding capacity agreement payments from all auctions held to date. When the scheme will achieve state aid approval and resume is uncertain, so we have included only the payments made in 2018-19 prior to the suspension of the scheme. Given the treatment of this scheme in the public finances, this is neutral for net borrowing with an equal reduction in both tax and spending.

4.55 At the end of December, the European Commission announced that the UK would in effect be suspended from issuing carbon allowances under the **EU emissions trading system (ETS)** (with effect from 1 January 2019). This suspension will be lifted "*on the day following the one on which the ratification instruments concerning the Withdrawal Agreement are deposited*".[5] In response to this, the Government has not auctioned EU ETS allowances so far in 2019. The Government will auction the 2019 allowances across the remainder of the

[5] European Commission, *Notice to stakeholders, Withdrawal of the United Kingdom and the EU Emissions Trading System (ETS)*, 19 December 2018.

calendar year, which we have reflected in our forecast as a policy change. The status of the UK's membership of the EU ETS post-Brexit remains an area of policy uncertainty. This is also one area where the Government has described its contingency plans for a 'no deal' Brexit, which would see the EU ETS replaced with a 'carbon emissions tax'.

Other receipts

4.56 **Interest and dividend receipts** include interest income on the government's financial assets, among them student loans and bank deposits held by the Debt Management Office and local authorities. Receipts have been revised up by £0.2 billion in 2018-19, but down by an average of around £1 billion a year from 2020-21 onwards. Market-derived expectations of short-term interest rates are between 0.3 and 0.4 percentage points lower than in our October forecast. This lowers the return on the Government's bank deposits and the older tranche of student loans. Our lower forecast for RPI inflation between 2018-19 and 2020-21 also reduces accrued interest on more recently issued student loans.

4.57 Following RBS's announcement that it would pay a special dividend on its 2018 profits, we have revised up the amount received on the Government's shareholding to £1.0 billion in 2019-20, up £0.6 billion on our October forecast. Thereafter, our RBS dividend receipts forecast is little changed. We forecast dividends per share based on market analysts' expectations, and multiply that by the number of RBS shares owned by the Government, which falls over time given its policy of selling all its shares by 2023-24.

4.58 Interest and dividend receipts more than double over the forecast, from £7.1 billion in 2017-18 to £14.5 billion in 2023-24. Accrued interest on student loans accounts for around £5.0 billion of that £7.4 billion rise. This reflects a 'fiscal illusion' in how student loan interest is currently treated in the public finances, since much of it is likely to be written off rather than ever being received. Annex B looks at the issues around the scoring of student loans in the National Accounts and changes the ONS has proposed.

4.59 We have revised our public sector **gross operating surplus (GOS)** forecast up by £0.9 billion a year on average from 2019-20 onwards. stronger in-year Transport for London (TfL) revenues and our aligning to TfL's latest business plan. Partially offsetting this is a lower forecast for general government depreciation, which is down by £0.3 billion a year on average from 2018-19 onwards, reflecting lower R&D outturns.

Public sector expenditure

Definitions and approach

4.60 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)**[6] – mostly covering spending on public services, grants, administration and capital investment, which 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 historical experience) that departments will underspend the final limits that the Treasury sets for them, so – unless otherwise stated – when we refer to PSCE in RDEL and PSGI in CDEL (or RDEL and CDEL for simplicity) we are referring to the net amount that we assume is actually spent.

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

Summary of the expenditure forecast

4.61 Table 4.11 summarises our latest forecast for public spending. TME is expected to edge lower, falling by 0.3 per cent of GDP over the forecast period, as higher (particularly capital) departmental spending (which rises by 0.9 per cent of GDP) is more than offset by lower AME spending (which falls by 1.2 per cent of GDP). In part, that reflects a 0.3 per cent of GDP switch from 2019-20 onwards in the cost of public service pensions between AME (net public service pensions) and DEL (where resource DELs factor in higher employer contributions).

Table 4.11: TME split between DEL and AME

	Per cent of GDP						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
TME	**38.5**	**38.1**	**38.2**	**38.0**	**37.9**	**37.7**	**37.8**
of which:							
TME in DEL	**16.1**	**16.2**	**16.9**	**17.1**	**17.1**	**17.0**	**17.1**
of which:							
PSCE in RDEL	14.0	13.8	14.2	14.3	14.2	14.1	14.1
PSGI in CDEL	2.2	2.4	2.7	2.9	2.9	2.9	3.0
TME in AME	**22.3**	**21.9**	**21.3**	**20.9**	**20.7**	**20.7**	**20.7**
of which:							
Welfare spending	10.6	10.5	10.3	10.2	10.2	10.2	10.3
Debt interest net of APF	2.0	1.7	1.8	1.7	1.7	1.7	1.7
Locally financed current expenditure	2.3	2.4	2.5	2.3	2.3	2.3	2.3
Net public service pension payments	0.6	0.6	0.3	0.3	0.3	0.3	0.3
Other PSCE in AME	4.9	5.2	5.1	5.1	5.1	5.1	5.0
PSGI in AME	1.9	1.5	1.3	1.2	1.1	1.1	1.0

4.62 Tables 4.12 and 4.13 detail our latest spending forecast and the changes since October.

[6] 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.

Table 4.12: Total managed expenditure

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector current expenditure (PSCE)							
PSCE in RDEL	288.6	294.1	312.2	324.6	334.3	344.6	356.8
PSCE in AME	422.5	434.2	440.4	447.6	462.9	479.3	496.9
of which:							
Welfare spending	218.8	223.0	227.3	232.2	240.0	249.5	260.5
of which:							
Inside welfare cap	118.2	119.3	121.4	123.2	126.0	129.5	133.7
Outside welfare cap	100.6	103.7	105.9	109.0	114.1	120.0	126.8
Locally financed current expenditure	48.6	51.8	54.2	53.1	55.1	56.9	58.6
Central government debt interest, net of APF[1]	41.5	37.0	40.2	38.9	40.3	41.5	42.3
Scottish Government's current expenditure	26.5	27.6	28.0	29.7	30.7	31.8	33.0
Expenditure transfers to EU institutions[2]	9.5	12.2	12.7	10.5	10.4	7.7	4.1
Assumed spending in lieu of EU transfers[2]	-	-	-	3.0	3.0	5.6	9.3
Net public service pension payments	11.8	12.6	6.7	6.4	7.3	7.9	8.2
Company and other tax credits	3.6	5.1	5.1	5.1	5.3	5.4	5.6
BBC current expenditure	3.7	3.9	3.8	3.8	3.7	3.8	3.9
National lottery current grants	1.2	1.3	1.3	1.2	1.2	1.2	1.2
General government imputed pensions	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Public corporations' debt interest	2.6	0.5	0.4	0.4	0.5	0.5	0.5
Network Rail other current expenditure[3]	1.1	0.7	-	-	-	-	-
General government depreciation	30.5	31.0	32.0	33.4	34.8	36.3	37.8
Current VAT refunds	15.2	16.0	16.2	16.9	17.3	17.8	18.4
Environmental levies	6.8	9.9	10.6	11.6	12.3	12.7	13.1
Other PSCE items in departmental AME	1.5	1.0	0.8	0.7	0.8	0.8	0.8
Other National Accounts adjustments	-1.9	-0.7	-0.5	-0.7	-1.0	-1.3	-1.7
Total public sector current expenditure	**711.2**	**728.4**	**752.6**	**772.1**	**797.2**	**824.0**	**853.7**
Public sector gross investment (PSGI)							
PSGI in CDEL	44.8	51.2	60.3	65.5	68.8	71.2	75.4
PSGI in AME	39.0	32.3	27.8	27.5	25.7	25.8	25.8
of which:							
Locally financed capital expenditure	13.6	14.1	12.3	10.1	9.8	9.6	8.9
Public corporations' capital expenditure	15.8	9.6	9.6	9.7	9.5	9.5	9.8
Network Rail capital expenditure	6.7	5.3	-	-	-	-	-
Scottish Government's capital expenditure	3.0	3.4	4.2	4.5	5.0	5.1	5.2
Tax litigation	0.0	0.0	1.3	2.4	0.4	0.4	0.4
Other PSGI items in departmental AME	0.8	0.8	0.9	1.3	1.4	1.5	1.5
Other National Accounts adjustments	-0.8	-1.0	-0.5	-0.4	-0.4	-0.2	0.1
Total public sector gross investment	**83.9**	**83.5**	**88.1**	**93.0**	**94.5**	**97.0**	**101.2**
Less public sector depreciation	-41.1	-40.2	-41.1	-42.6	-44.2	-45.8	-47.5
Public sector net investment	42.8	43.2	47.0	50.5	50.3	51.2	53.8
Total managed expenditure	**795.0**	**811.8**	**840.7**	**865.2**	**891.7**	**921.0**	**954.9**

[1] Includes reductions in debt interest payments due to the APF. For further detail, see Table 4.26.
[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. For further detail, see Table 4.20.
[3] Other than debt interest and depreciation, which are included in totals shown separately in this table.

Table 4.13: Changes to total managed expenditure since October

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector current expenditure (PSCE)							
PSCE in RDEL	0.0	-1.5	0.6	1.4	1.4	1.6	2.1
PSCE in AME	-0.4	-1.7	0.1	-2.9	-2.4	-2.0	-1.5
of which:							
Welfare spending	0.0	0.0	-0.1	0.6	0.9	1.3	2.1
of which:							
Inside welfare cap	0.0	-0.3	-0.3	-0.4	-0.1	0.2	1.0
Outside welfare cap	0.0	0.3	0.2	1.0	1.0	1.1	1.1
Locally financed current expenditure	-0.1	0.8	3.6	1.3	1.3	1.4	1.6
Central government debt interest, net of APF[1]	0.0	-2.8	-1.9	-4.1	-4.1	-4.2	-4.5
Scottish Government's current expenditure	0.0	0.0	-0.1	0.4	0.5	0.7	0.8
Expenditure transfers to EU institutions[2]	0.0	0.5	-0.8	0.0	-0.4	-0.2	-0.1
Assumed spending in lieu of EU transfers[2]	-	-	-	0.0	0.2	0.0	-0.1
Net public service pension payments	0.0	0.0	0.0	-0.3	-0.4	-0.9	-1.0
Company and other tax credits	0.0	0.5	0.6	0.5	0.5	0.6	0.6
BBC current expenditure	0.0	0.0	0.0	0.0	0.0	-0.1	-0.1
National lottery current grants	0.0	0.0	0.0	0.0	0.0	0.0	0.0
General government imputed pensions	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Public corporations' debt interest	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Network Rail other current expenditure[3]	0.0	-0.1	-	-	-	-	-
General government depreciation	0.0	-0.1	-0.2	-0.3	-0.3	-0.3	-0.2
Current VAT refunds	0.0	0.3	0.0	-0.1	-0.1	-0.2	-0.1
Environmental levies	0.0	-0.6	-1.1	-1.3	-1.0	-0.9	-1.1
Other PSCE items in departmental AME	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Other National Accounts adjustments	-0.3	-0.2	0.1	0.5	0.4	0.7	0.6
Total public sector current expenditure	**-0.4**	**-3.1**	**0.7**	**-1.5**	**-1.0**	**-0.4**	**0.7**
Public sector gross investment (PSGI)							
PSGI in CDEL	0.5	1.0	-1.3	0.0	-0.6	0.1	-0.4
PSGI in AME	1.1	1.2	-0.3	-0.4	-0.1	-0.3	-0.5
of which:							
Locally financed capital expenditure	1.2	2.6	0.7	0.1	0.2	-0.1	-0.9
Public corporations' capital expenditure	-1.4	-1.3	-1.2	-0.6	-0.7	-1.1	-1.0
Network Rail capital expenditure	0.0	0.1	-	-	-	-	-
Scottish Government's capital expenditure	0.0	0.0	0.0	0.0	0.6	0.7	0.9
Tax litigation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other PSGI items in departmental AME	0.0	0.1	-0.1	-0.1	-0.2	-0.1	-0.2
Other National Accounts adjustments	1.3	-0.3	0.3	0.2	0.0	0.4	0.6
Total public sector gross investment	**1.6**	**2.2**	**-1.6**	**-0.4**	**-0.7**	**-0.2**	**-1.0**
Less public sector depreciation	0.0	-0.2	0.2	0.3	0.3	0.2	0.2
Public sector net investment	1.6	2.0	-1.3	-0.1	-0.4	0.0	-0.7
Total managed expenditure	**1.2**	**-0.9**	**-0.9**	**-1.9**	**-1.7**	**-0.7**	**-0.3**

[1] Includes reductions in debt interest payments due to the APF. For further detail, see Table 4.26.
[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. For further detail, see Table 4.20.
[3] Other than debt interest and depreciation, which are included in totals shown separately in this table.

4.63 Table 4.14 summarises the sources of changes to our forecast since October:

- **Economy forecast changes** have a mixed impact. Lower RPI inflation reduces debt interest payments in 2018-19 by £2.8 billion. From 2019-20 onwards the net (downward) effects are more modest, averaging £0.4 billion, reflecting temporarily higher unemployment, and a more persistent downward revision to inflation and upward one to earnings.

- **Market-derived interest rate assumptions** cut spending by increasing amounts through the forecast, reaching £4.1 billion by 2023-24.

- **DEL forecast changes reduce spending** in 2018-19 and 2019-20 reflecting greater expected underspends against RDEL budgets.

- Upward revisions to **welfare spending forecast** rise steadily to reach £1.5 billion in 2023-24, primarily driven by higher spending on disability benefits.

- **Expenditure transfers to the EU** are up in 2018-19 and down in 2019-20. This largely reflects £0.4 billion of spending in calendar year 2019 shifting from 2019-20 into 2018-19. The 2019-20 surcharge is £0.3 billion lower than we assumed in October.

- **Local authority self-financed current spending** is higher by an average of £1.3 billion a year. Abstracting from a spending-neutral current-to-capital switch, the rise mainly reflects higher forecasts for council tax and retained business rates. The jump in 2019-20 is due to a £1.2 billion increase in our forecast of authorities' use of reserves.

- **Locally financed capital expenditure and public corporations' capital expenditure** is down by an average of £0.5 billion a year, although the profile of revisions is uneven. Abstracting from the current-to-capital switch, this reflects the latest in-year data, the implications of the latest 2017-18 outturns and TfL's latest business plan.

- The main **Government decisions** affecting this forecast include higher departmental current and capital spending (RDEL and CDEL respectively). The Government has added amounts rising to £1.7 billion a year by the end of the forecast. Other spending measures relate to the Treasury's Scottish block grant assumptions, welfare spending measures and higher council tax boosting local authority spending. These add £1.1 billion a year on average from 2019-20 onwards.

Table 4.14: Sources of change to the spending forecast since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	812.8	841.6	867.1	893.4	921.7	955.3
March forecast	811.8	840.7	865.2	891.7	921.0	954.9
Like-for-like change	**-0.9**	**-0.9**	**-1.9**	**-1.7**	**-0.7**	**-0.3**
	Underlying forecast changes					
Total forecast changes	**-1.2**	**-2.2**	**-4.1**	**-3.6**	**-3.2**	**-3.2**
of which:						
Economic determinants	**-2.7**	**-0.1**	**-0.7**	**-0.4**	**-0.3**	**-0.4**
Inflation changes	-2.8	-0.3	-1.4	-0.8	-0.8	-0.9
Average earnings	0.0	-0.2	-0.1	-0.1	-0.1	-0.1
Unemployment	0.1	0.4	0.4	0.2	0.1	0.1
Exchange rate	0.0	0.0	0.0	-0.2	-0.2	-0.2
Other	0.0	0.0	0.5	0.6	0.7	0.7
Market assumptions: interest rates	**-0.2**	**-1.6**	**-2.8**	**-3.4**	**-3.7**	**-4.1**
Other assumptions and changes	**1.6**	**-0.4**	**-0.7**	**0.1**	**0.8**	**1.3**
DEL forecast changes	-0.8	-0.8	0.0	-	-	-
Other changes to the welfare forecast	-0.1	-0.1	-0.3	0.1	0.7	1.5
Other changes to expenditure transfers to the EU[1]	0.5	-0.8	0.0	0.0	0.0	0.0
Locally financed current expenditure	0.8	2.5	1.2	1.1	1.1	1.3
Locally financed capital expenditure and public corporations' capital expenditure	1.3	-0.5	-0.5	-0.5	-1.2	-1.9
Other	-0.1	-0.7	-1.0	-0.5	0.3	0.4
	Effect of Government decisions					
Total effect of Government decisions	**0.3**	**1.3**	**2.3**	**1.9**	**2.5**	**2.9**
of which:						
DEL policy changes	0.3	0.2	1.4	0.8	1.7	1.7
Other spending measures	0.0	1.2	0.9	1.3	0.8	1.1
Indirect effects	0.0	-0.1	0.0	-0.1	0.0	0.1

[1] 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. For further detail, see Table 4.20.

Spending within departmental expenditure limits

DEL spending and changes since October

4.64 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 2018-19** that were sent to the Treasury in February, plus our assumptions regarding any further underspending relative to them.

- **Departments' final plans for 2019-20 as published in *Public expenditure statistical analyses* (PESA) 2018**, plus policy changes announced in the Autumn Budget, the local government finance settlement and this year's Supplementary Estimates, plus our assumptions regarding likely underspending against the latest plans.

- **The Government's latest provisional total DELs for 2020-21 to 2023-24**, in which it has raised RDEL and lowered CDEL relative to the Budget totals. The departmental allocation of these DELs will not be finalised until the 2019 Spending Review, with some exceptions, notably the increased NHS England RDEL budget up to 2023-24 that was set out by the Prime Minister last summer and was raised again in January.[7]

4.65 Table 4.15 shows our forecasts for resource (RDEL) and capital (CDEL) spending and overall changes relative to our October forecast. It shows that:

- Actual **resource spending** has been revised up in each year from 2019-20 onwards, by rising amounts, with extra spending reaching £2.1 billion in 2023-24.

- Actual **capital spending** has been revised down by £0.4 billion a year on average over the same period, but with an uneven profile of revisions across years, primarily reflecting offsetting changes in the Scottish Government spending profile.

4.66 In Table 4.15 we present plans, expected underspends and actual spending in every year. For years covered by the Spending Review, plans have been set by the Treasury and our forecasts for actual spending are generated by subtracting expected underspends. For subsequent years, we ask the Government to set out its policy on actual RDEL and CDEL spending and show the implied plans and underspends that we think would be consistent with that (the shaded years in the table). The next Spending Review is due in 2019.

4.67 Table 4.15 also shows the changes in our forecasts for actual spending since October, broken down into our underlying forecast judgements and the consequences of Government policy decisions. Our only underlying forecast changes relate to RDEL underspending in 2018-19 and 2019-20, which we have revised up by £0.8 billion in each year. This reflects the latest departmental forecasts for this year and the surprisingly large RDEL underspend in 2017-18, relative to the PESA plans for that year.

4.68 As regards policy decisions, the Chancellor has increased RDEL plans since October, on top of the large increases announced then. There are two parts to the latest increase:

- The first raises **non-NHS RDEL spending** in cash terms sufficiently to hold spending flat in real terms relative to our latest GDP deflator forecast and from a 2019-20 base that reflects our latest underspend assumptions. This adds £0.5 billion a year on average from 2019-20 onwards, rising to £0.8 billion in 2023-24.

- The second reflects further **additional funding for the NHS** to maintain the real terms rise agreed between the Government and the NHS in June 2018 given our October GDP deflator forecast. (In part, we revised our deflator forecast up due to the expected effect of higher health spending on whole economy inflation) This addition rises to £0.8 billion in 2023-24. The Treasury has told us that this now confirms the final RDEL

[7] See 'Prime Minister sets out 5-year NHS funding plan', 18 June 2018, on the original boost to NHS funding, and 'Secretary of State's oral statement on the NHS long-term plan', 7 January 2019, on the further boost relative to the figures set out by the Prime Minister.

(excluding depreciation) cash settlement for the NHS until 2023-24, although experience suggests that further top-ups remain a policy risk. The Department for Health and Social Care has also been allowed to switch £0.5 billion from CDEL to RDEL in 2018-19 – the third successive year that such a switch has been approved.

We have not adjusted our underspend assumptions further for these policy decisions.

Table 4.15: RDEL and CDEL spending and changes since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
PSCE in RDEL						
October forecast			Implied, post-Spending Review			
Limits[1]	297.8	313.2	324.8	334.5	344.7	356.3
Assumed underspend	-2.2	-1.7	-1.7	-1.7	-1.7	-1.7
Actual spending	**295.6**	**311.5**	**323.2**	**332.9**	**343.1**	**354.7**
March forecast						
Limits[1]	297.1	314.7	327.1	336.8	347.1	359.3
Assumed underspend	-3.0	-2.5	-2.5	-2.5	-2.5	-2.5
Actual spending	**294.1**	**312.2**	**324.6**	**334.3**	**344.6**	**356.8**
Changes in actual spending	**-1.5**	**0.6**	**1.4**	**1.4**	**1.6**	**2.1**
of which:						
Underspend forecast changes	-0.8	-0.8	-	-	-	-
Effect of UK Government decisions	-0.6	1.5	1.4	1.4	1.6	2.1
PSGI in CDEL						
October forecast				Implied, post-Spending Review		
Limits[1]	52.4	64.3	68.0	73.4	75.1	79.8
Assumed underspend	-2.2	-2.7	-2.5	-4.0	-4.0	-4.0
Actual spending	**50.2**	**61.6**	**65.5**	**69.4**	**71.1**	**75.8**
March forecast						
Limits[1]	53.4	63.0	68.0	72.8	75.2	79.4
Assumed underspend	-2.2	-2.7	-2.5	-4.0	-4.0	-4.0
Actual spending	**51.2**	**60.3**	**65.5**	**68.8**	**71.2**	**75.4**
Changes in actual spending	**1.0**	**-1.3**	**0.0**	**-0.6**	**0.1**	**-0.4**
of which:						
Underspend forecast changes	0.0	0.0	0.0	-	-	-
Effect of UK Government decisions	1.0	-1.3	0.0	-0.6	0.1	-0.4
	Per cent of GDP					
PSCE in RDEL (actual spending)						
October forecast	13.9	14.2	14.2	14.2	14.1	14.1
March forecast	13.8	14.2	14.3	14.2	14.1	14.1
Change	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
PSGI in CDEL (actual spending)						
October forecast	2.4	2.8	2.9	3.0	2.9	3.0
March forecast	2.4	2.7	2.9	2.9	2.9	3.0
Change	**0.0**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**

[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.

4.69 We have not made any changes to our forecast in respect of the £1.6 billion 'Stronger Towns Fund' announced by the Prime Minister on 4 March, as the Treasury has confirmed that its cost will be met from within existing DEL totals in 2019-20 and 2020-21, creating a modest further pressure on other budgets in those years, while the roughly £300 million a year cost from 2021-22 onwards merely pre-allocates some of the envelope that will be allocated in full in the Spending Review.

Annually managed expenditure

Welfare spending

4.70 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 payments that are most sensitive to the economic cycle. We provide an update on performance against the cap in Chapter 5.

4.71 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 allows 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.

4.72 Table 4.16 shows that welfare spending is forecast to increase by 17 per cent in cash terms between 2018-19 and 2023-24 (but to fall by 0.2 per cent of GDP), reaching £260 billion (10.3 per cent of GDP). Spending within the welfare cap is expected to rise by 12.1 per cent, or 1.7 per cent in real terms (relative to CPI inflation). Spending outside the cap – which is dominated by state pensions – is projected to increase by 22.3 per cent, or 12.0 per cent in real terms. Spending outside the cap increases as a share of GDP later in the forecast 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 4.16: Welfare spending forecast

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total welfare spending	**218.8**	**223.0**	**227.3**	**232.2**	**240.0**	**249.5**	**260.5**
of which:							
Inside welfare cap	118.2	119.3	121.4	123.2	126.0	129.5	133.7
Outside welfare cap	100.6	103.7	105.9	109.0	114.1	120.0	126.8
	Per cent of GDP						
Total welfare spending	**10.6**	**10.5**	**10.3**	**10.2**	**10.2**	**10.2**	**10.3**
of which:							
Inside welfare cap	5.7	5.6	5.5	5.4	5.3	5.3	5.3
Outside welfare cap	4.9	4.9	4.8	4.8	4.8	4.9	5.0

4.73 Table 4.17 sets out our detailed welfare spending forecasts and Table 4.18 sets out the changes since October. We have revised total spending up from 2020-21 onwards by progressively larger amounts, with spending subject to the cap revised down in most years, but spending outside the cap revised up in all years by more.

4.74 Our revised economy forecast has increased welfare spending modestly, with largely offsetting effects on spending inside and outside the cap. The combination of lower CPI inflation and higher average earnings growth lowers spending on child and working-age items due to lower uprating and reduced eligibility for means-tested benefits. But higher average earnings growth boosts state pensions spending via triple lock uprating, while higher near-term unemployment raises the cost of jobseeker's allowance and associated housing benefit caseloads in the legacy counterfactual forecast (and UC in the real world).

4.75 The largest revisions since October relate to disability benefits, where spending has been revised up by progressively larger amounts (reaching £1.7 billion in 2023-24), due to policy changes and revised caseload assumptions. The latter include both higher inflows and lower outflows, while policy changes relate to the Government's decision to slow the managed migration of remaining working-age disability living allowance cases to personal independence payment – a process it calls 'full PIP rollout' (FPR). Despite this delay, it has had to reduce the number of other PIP award reviews carried out to complete FPR.

4.76 Our October forecast assumed FPR would complete in early 2020. In December 2018, DWP announced that the rollout would be pushed back to enable more resources to be diverted to the identification and payment of arrears arising from legal rulings.[8] It has since informed us that it also faces longer-term capacity constraints in simultaneously delivering FPR, scheduled award reviews and the processing of new claims. DWP has confirmed that December's announcement prioritises completion of FPR over processing scheduled award reviews for some claimants. The Secretary of State subsequently announced that reviews would cease for all claimants above the State Pension age, unless they request one.[9]

4.77 DWP now expects FPR to be completed in October 2020. But given the repeated delays and evidence of pressure on operational capacity in DWP and its providers, we have assumed that the process will not be completed until February 2021. The FPR process itself has relatively small effects on spending – some DLA claimants do not receive a PIP award after an FPR assessment, but those that do tend to receive a higher amount on PIP than on DLA. So delaying FPR generates a relatively modest short-term saving relative to our October assumptions. More significantly, the large number of existing awards that will not be reviewed in order to make space for completing FPR are expected to raise spending.

4.78 At the time of closing our forecast, we still had queries about the analysis and modelling that underpinned the estimates of both elements of this policy change. We would therefore stress the significant uncertainty around these estimates – they will need to be revisited to resolve our outstanding questions. Taken together, these changes are estimated to save £0.1 billion in 2019-20, but to cost £0.2 billion a year on average from 2020-21 onwards.

[8] See House of Commons written statement HCWS1224, 'Personal Independence Payment', DWP, 20 December 2018.
[9] See House of Commons written statement HCWS1376, 'Health and Disability Announcement', Department for Work and Pensions, 5 March 2019. Claimants still have the right to seek a review, but DWP will not initiate one.

4.79 The Secretary of State for Work and Pensions has also announced several other changes to the delivery of PIP assessments from 2021. This includes testing the integration of the services providing PIP and ESA/UC work capability assessments, and the feasibility of combining the two into a single assessment. To enable this, DWP will develop a new digital platform. This announcement lacks sufficient detail for us to consider any possible effects for this forecast, but if they were implemented such changes could represent a risk to our forecast. It is likely that combining the two assessment services – and the assessments themselves – would increase take-up of both benefits as more people become aware that they may be entitled to both rather than one. In practice this would depend on delivery of the underlying digital platform. Past experience demonstrates that this sort of IT project often suffers delays and teething difficulties that can have unintended consequences for spending.

4.80 UC-related changes are described in the next section. The other main changes relate to:

- **Tax credits.** Spending has been revised up marginally in 2018-19 but down by £0.4 billion on average from 2019-20 onwards. Fewer tax credits claimants have migrated to UC in 2018-19 than we assumed in October and the claimants that have migrated over also appear to have had lower tax credits awards. Altogether, this has resulted in higher tax credits spending. Despite this, it appears that our October assumption for counterfactual tax credits spending – the cost of tax credits were UC not to exist – was too high, with lower-than-expected caseloads one driver of this. We have therefore revised spending down over the remaining years of the forecast. As this revision relates to something that cannot be observed directly, it is particularly uncertain.

- **Incapacity benefits.** Spending has been revised up by £0.4 billion in 2019-20. This principally relates to data and modelling updates, while the remainder concerns our assumptions on the payment of arrears and higher awards to claimants migrated from incapacity benefit to employment and support allowance. Fewer payments are now assumed to take place in 2018-19 and more in 2019-20. Spending in 2019-20 is also boosted by the extension of the underpayments exercise to cover further cases migrated from previous incapacity benefits to ESA from 2015 onwards.[10] But the average amounts paid out have been lower than expected, which more than offsets these caseload and timing effects, leaving the cost of overall arrears and higher award payments around £0.2 billion lower in total across the forecast at £1.5 billion.

[10] For an update on the latest status of the underpayment exercise, see 'February 2019: ESA underpayments: forecast numbers affected, forecast expenditure and progress on checking', DWP (2019).

Table 4.17: Welfare spending

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Welfare cap							
DWP social security	77.5	80.9	81.0	82.0	84.1	86.9	90.3
of which:							
Housing benefit (not on JSA)[1]	20.3	19.1	20.7	20.9	21.5	22.1	22.8
Disability living allowance and personal independence payment	17.5	18.8	20.5	21.3	22.4	23.6	25.0
Incapacity benefits[2]	15.0	15.0	16.0	15.6	15.7	15.7	15.9
Attendance allowance	5.5	5.7	5.9	6.1	6.3	6.5	6.8
Pension credit	5.4	5.1	4.9	4.8	4.6	4.5	4.5
Carer's allowance[3]	2.8	2.9	3.0	3.2	3.4	3.7	4.0
Statutory maternity pay	2.5	2.6	2.6	2.7	2.8	2.9	3.0
Income support (non-incapacity)	2.2	1.9	2.2	2.2	2.2	2.3	2.3
Winter fuel payments	2.0	2.0	2.0	1.9	2.0	2.0	2.0
Universal credit[4]	1.9	5.8	0.9	1.0	1.0	1.2	1.6
Other DWP in welfare cap	2.3	2.2	2.3	2.3	2.3	2.3	2.3
Personal tax credits	25.9	22.8	24.8	24.8	24.9	25.1	25.3
Child benefit	11.6	11.6	11.6	11.9	12.1	12.4	12.7
Tax free childcare	0.0	0.1	0.3	0.4	0.6	0.8	1.0
NI social security in welfare cap	3.5	3.8	3.7	3.8	3.9	4.0	4.1
Paternity and parental pay	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Effects of Government decisions	0.0	0.0	-0.1	0.2	0.3	0.1	0.3
Total welfare inside the welfare cap[5]	**118.2**	**119.3**	**121.4**	**123.2**	**126.0**	**129.5**	**133.7**
Welfare spending outside the welfare cap							
DWP social security	98.2	101.2	103.3	106.3	111.2	116.9	123.5
of which:							
State pension	93.8	96.7	98.9	101.5	106.3	111.9	118.4
Jobseeker's allowance	1.7	1.3	2.4	2.5	2.6	2.6	2.7
Housing benefit (on JSA)	1.4	1.1	2.1	2.2	2.3	2.4	2.5
Universal credit[4]	1.3	2.2					
NI social security outside welfare cap	2.4	2.4	2.6	2.7	2.8	3.0	3.2
Effects of Government decisions	0.0	0.0	0.0	0.1	0.1	0.1	0.1
Total welfare outside the welfare cap[5]	**100.6**	**103.7**	**105.9**	**109.0**	**114.1**	**120.0**	**126.8**
Total welfare[5]	**218.8**	**223.0**	**227.3**	**232.2**	**240.0**	**249.5**	**260.5**
Memo: spending inside the welfare cap as a proportion of total welfare spending	*54.0*	*53.5*	*53.4*	*53.1*	*52.5*	*51.9*	*51.3*

[1] Housing benefit (not on jobseeker's allowance) is made up of a number of claimant groups. The main claimant groups are pensioners, those on incapacity benefits, lone parents, and housing benefit only claimants.

[2] Incapacity benefits includes incapacity benefit, employment and support allowance, severe disablement allowance and income support (incapacity part).

[3] Carer's allowance for England and Wales only from September 2018. The UK Government devolved Scottish carer's allowance (CA) to the Scottish government from this date onwards. Spending on CA in Scotland is included under 'Scottish Government AME'.

[4] Universal credit actual spending for 2017-18 and 2018-19. Spending from 2019-20 onwards represents universal credit additional costs not already included against other benefits (i.e. UC payments that do not exist under current benefit structure).

[5] Total welfare outturn inside and outside of the welfare cap in 2017-18 is sourced from OSCAR, consistent with PESA 2018. For 2017-18 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.

Table 4.18: Sources of change to welfare spending since October

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total welfare spending							
October forecast	218.8	223.0	227.4	231.6	239.1	248.2	258.4
March forecast	218.8	223.0	227.3	232.2	240.0	249.5	260.5
Change	**0.0**	**0.0**	**-0.1**	**0.6**	**0.9**	**1.3**	**2.1**
Welfare spending inside the welfare cap							
October forecast	118.2	119.6	121.7	123.6	126.1	129.3	132.7
March forecast	118.2	119.3	121.4	123.2	126.0	129.5	133.7
Change	**0.0**	**-0.3**	**-0.3**	**-0.4**	**-0.1**	**0.2**	**1.0**
of which:							
Economic determinants	**0.0**	**-0.1**	**-0.3**	**-0.2**	**-0.4**	**-0.5**	**-0.6**
Estimating/modelling changes	**0.0**	**-0.3**	**0.1**	**-0.4**	**-0.1**	**0.5**	**1.3**
Personal tax credits	0.0	0.1	-0.4	-0.4	-0.4	-0.4	-0.4
Universal credit	0.0	-0.6	-0.2	-0.2	-0.2	-0.3	-0.3
Housing benefit	0.0	0.1	0.1	-0.2	-0.1	0.1	0.3
Incapacity benefits[1]	0.0	0.0	0.4	0.0	0.0	0.0	0.1
Disability benefits[2]	0.0	0.1	0.4	0.7	0.9	1.2	1.5
Child benefit	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Carer's allowance	0.0	0.0	0.0	0.0	0.0	0.1	0.3
Other	0.1	0.0	-0.1	-0.2	-0.1	0.0	0.0
Effects of Government decisions	**0.0**	**0.0**	**-0.1**	**0.2**	**0.3**	**0.1**	**0.3**
Other	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**
Welfare spending outside the welfare cap							
October forecast	100.6	103.4	105.7	108.0	113.0	118.9	125.7
March forecast	100.6	103.7	105.9	109.0	114.1	120.0	126.8
Change	**0.0**	**0.3**	**0.2**	**1.0**	**1.0**	**1.1**	**1.1**
of which:							
Economic determinants	**0.0**	**0.1**	**0.4**	**0.9**	**0.8**	**0.8**	**0.8**
CPI inflation	0.0	0.0	-0.1	0.0	-0.1	-0.1	-0.1
Unemployment	0.0	0.1	0.4	0.4	0.2	0.1	0.1
Triple lock	0.0	0.0	0.0	0.6	0.7	0.9	0.9
Other	0.0	0.0	0.0	0.0	-0.1	-0.1	-0.1
Estimating/modelling changes	**0.0**	**0.2**	**-0.2**	**0.0**	**0.1**	**0.2**	**0.2**
State pension	0.0	0.0	0.0	0.1	0.2	0.2	0.2
Jobseeker's allowance	0.0	-0.1	0.0	0.0	0.1	0.1	0.1
Housing benefit	0.0	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
Other	0.0	0.4	0.0	0.0	0.0	0.0	0.0
Effects of Government decisions	**0.0**	**0.0**	**0.0**	**0.1**	**0.1**	**0.1**	**0.1**
Other	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

[1] Incapacity benefits includes incapacity benefit, employment and support allowance, severe disablement allowance and income support (incapacity part).

[2] Disability benefits refers to disability living allowance and personal independence payment.

Universal credit

4.81 Large revisions to actual spending on UC inside and outside the welfare cap partially offset to give a small downward revision to total UC spending in 2018-19 of £0.2 billion. UC cases that would have received tax credits or ESA under the legacy system have been lower than expected, but those that would have received jobseeker's allowance have been higher.

4.82 From 2019-20 onwards – the period in which UC is forecast on a marginal cost basis relative to the legacy system – spending has been revised down by £0.2 billion on average. Around half of this relates to data and modelling updates, with the remainder due to revised costings of the Autumn Budget 2018 UC package, discussed in Annex A.

4.83 Following the Secretary of State for Work and Pensions' 11 January speech on UC, we have incorporated the effect of two UC policies into this forecast. The first reverses the part of the policy limiting child-related UC awards for particular claims where all the family's three or more children were born before 6 April 2017 (along with some exceptions after that date). As this would only have applied to new claims from families that had not claimed benefits in the preceding six months, the cost of not implementing it is relatively modest: £0.3 billion in total over the forecast period. In the long term this has no cost because ultimately all children in the UC caseload will have been born after April 2017 and will therefore be subject to the two-child limit policy that applies to children born after that date.

4.84 The Government has then reshaped the UC managed migration profile in a way that lowers the cost of UC by £0.2 billion over the next five years – broadly offsetting the cost of the reversal on the two child-limit policy. This includes the effect of the Secretary of State's January announcement that, rather than beginning managed migration in earnest in July 2019, it will commence with a 12-month pilot limited to just 10,000 claimants. Parliament will then vote on further regulations before it is extended to more claimants. DWP then plans to migrate more slowly initially than in October, before ramping up activity to complete the migration by December 2023.

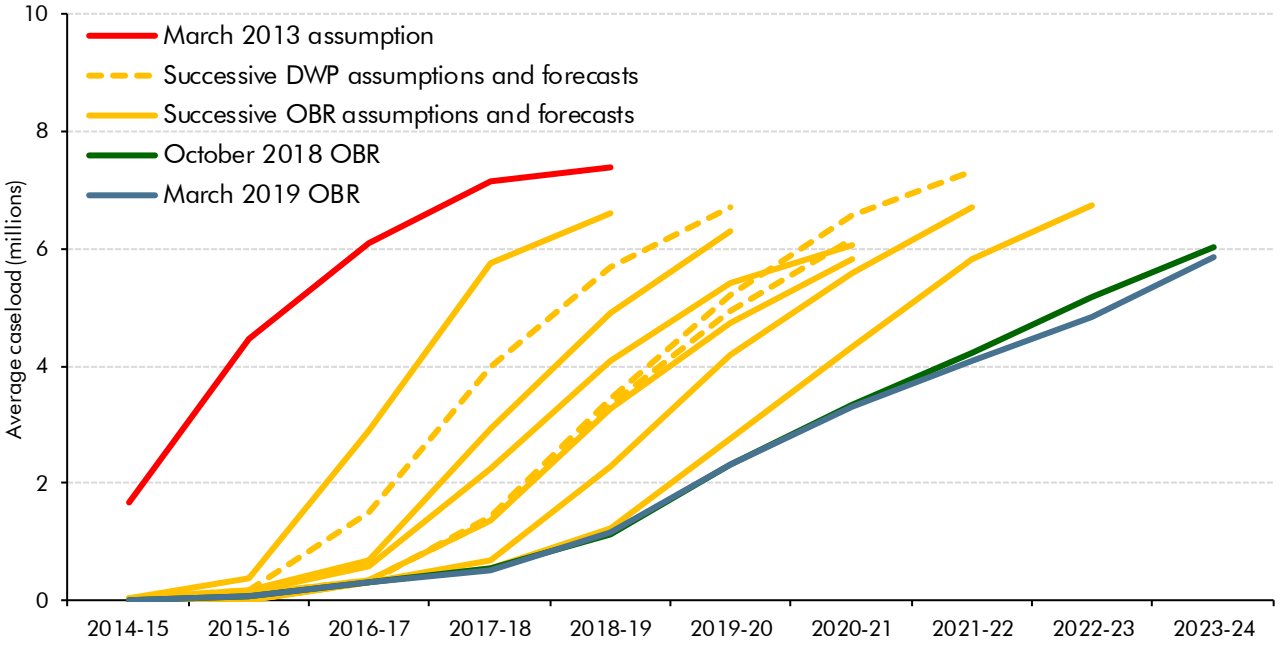
4.85 In our October forecast, we added a six-month contingency to the start and end of DWP's extant rollout plan. We still assume that the managed migration will end six months later than DWP intends, spreading out the final 12-month high-volume phase in DWP's plan over a more achievable 18-month period. That said, we now see less risk that the pilot phase will be delayed and have greater confidence that the gradual build-up in volumes that follows can be delivered. In part, this is because the Government has reduced volumes to well below DWP's operational capacity in order to reduce the costs associated with transitional protection for claimants who would otherwise lose out relative to their legacy benefit claim and those associated with claimants who would gain from UC relative to legacy benefits but are only expected to move to UC via managed migration. We have therefore removed the six-month contingency from all but the final phase of DWP's rollout plan, assuming that it ends in June 2024 (Chart 4.3).

4.86 The main outstanding risks to the managed migration timetable are the Parliamentary hurdle to be cleared after the pilot phase and the ramp-up in volumes between 2021-22 and 2022-23, where past experience indicates that when sharp rises in delivery volumes are planned they are often revised to be more gradual when the time comes to deliver them.

4.87 More generally, UC has been an area where Government policy has changed frequently, often reflecting pressure from Parliament to modify particular elements that are less generous than in the legacy system. Despite UC now being expected to cost more overall than the legacy system, there are still individual elements of it that are expected to save

money. As the number of people subject to these elements grows, calls for further policy changes could arise.

Chart 4.3: Successive revisions to the universal credit rollout assumption



Source: DWP, OBR

Public service pensions

4.88 Our net public service pensions forecast covers gross expenditure on benefits paid, less employer and employee contributions received. (The corresponding spending by departments on employer contributions is included within RDEL.) It includes central government pay-as-you-go schemes and locally-administered police and firefighters' schemes.[11] A breakdown of spending and income for the major schemes we cover is included in the supplementary tables on our website.

4.89 Table 4.19 details the changes to our forecast since October. Net spending has been revised down by an average of £0.6 billion a year from 2020-21 onwards due to:

- Slightly **lower gross expenditure**, mostly reflecting our lower CPI inflation forecast, which affects the uprating of pensions in payment.
- **Higher income from contributions** in most years. In part, this reflects the removal of an earlier top-down adjustment that accounted for Autumn Budget 2017 pay and wider DEL measures and which should have been removed when it was superseded by subsequent increases in DEL plans and the consequent increases in receipts. Teachers' pension scheme (TPS) receipts have been revised up a little, due to a technical change in how the higher employer contribution rate in academic year 2019-20 is reflected in our fiscal year forecast. The Government's latest increases to DEL spending also raise pension scheme receipts by small amounts.

[11] 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.

Table 4.19: Key changes to public service pensions since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Net public service pensions						
October forecast	12.6	6.7	6.7	7.6	8.7	9.2
March forecast	12.6	6.7	6.4	7.3	7.9	8.2
Change	**0.0**	**0.0**	**-0.3**	**-0.4**	**-0.9**	**-1.0**
Expenditure						
October forecast	42.6	44.6	46.5	48.7	50.6	52.6
March forecast	42.6	44.4	46.4	48.6	50.4	52.4
Change	**0.0**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.1**
of which:						
CPI inflation	0.0	-0.1	0.0	-0.1	-0.1	-0.2
Other	0.0	-0.1	-0.1	0.0	0.0	0.0
Income						
October forecast	-30.0	-37.9	-39.9	-41.0	-41.8	-43.4
March forecast	-30.0	-37.7	-40.0	-41.3	-42.6	-44.2
Change	**0.0**	**0.1**	**-0.2**	**-0.2**	**-0.8**	**-0.8**
of which:						
Forecast changes	**0.0**	**0.2**	**-0.1**	**-0.1**	**-0.7**	**-0.6**
Remove DEL receipts adjustment from Autumn Budget 2017	0.0	0.2	0.2	0.1	-0.4	-0.4
TPS paybill growth	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Other	0.0	0.0	-0.1	-0.1	-0.1	-0.1
Indirect effect of Government decisions	**0.0**	**-0.1**	**-0.1**	**-0.1**	**-0.1**	**-0.2**

Net expenditure transfers to EU institutions and possible substitute spending

4.90 In Annex B of our November 2017 *EFO* we provided greater detail on the UK's contributions to the EU's finances and our forecasting of them. Subsequently, in Annex B of our March 2018 *EFO*, we laid out our estimate of the UK's financial settlement with the EU – the so-called 'divorce bill'. In this forecast, we have continued to take a fiscally neutral approach to our post-Brexit spending forecast, assuming that, when the UK leaves the EU, any reductions in the UK's net expenditure transfers to the EU would be fully recycled into extra spending. This includes the Government's already stated commitments to maintain farm support, industrial strategy and science programmes after EU withdrawal.

Table 4.20: Expenditure transfers to EU institutions and possible substitute spending

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
'No-referendum' counterfactual	**9.5**	**12.2**	**12.7**	**13.4**	**13.4**	**13.2**	**13.4**
Which is reflected in our forecast as:							
Expenditure transfers to EU institutions	9.5	12.2	-	-	-	-	-
Financial settlement transfers	-	-	12.7	10.5	10.4	7.7	4.1
Assumed spending in lieu of EU transfers	-	-	-	3.0	3.0	5.6	9.3

4.91 Table 4.21 summarises the main changes to our forecast since October, which include:

- A **stronger sterling-euro exchange rate** reduces the sterling value of euro-denominated contributions by more than it increases the UK's share in the euro-denominated bases used to calculate those contributions, thereby reducing spending by a small amount in the near term and by £0.2 billion a year from 2021-22 onwards.

- The **draw-forward in 2019** – the amount the Commission requests from Member States in the first quarter of the calendar year – was confirmed as 4.7 months of contributions, slightly higher than the 4.35 months we had assumed. Relative to our October forecast this shifts £0.4 billion of spending from 2019-20 into 2018-19.

- There have been substantial revisions to the **surcharge for historical revisions to the UK's gross national income**. In our October forecast, we assumed that the UK would pay an extra £245 million in respect of *Blue Book 2018* revisions. Once the effect of other Member States' revisions – about which we had no information in October – were factored in, the outturn surcharge was in effect -£27 million.

- **EU budget implementation** assumptions have an uneven effect. The draft amending budget passed in late 2018 retrospectively increased implementation and therefore UK contributions relating to calendar year 2018 by £845 million. However, it also revised growth forecasts for the UK and other Member States' own resources contributions, which reduced UK contributions by £665 million. The reduction in contributions from growth revisions was implemented in January 2019, and therefore it affects both the 2018-19 and 2019-20 fiscal years.

- **Other factors**, including revisions to growth in the UK and other Member States and forecasts for own resources contributions, reduce our forecast by small amounts.

Table 4.21: Key changes to expenditure transfers to EU institutions on a 'no referendum' counterfactual basis since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	11.7	13.5	13.5	13.6	13.5	13.6
March forecast	12.2	12.7	13.4	13.4	13.2	13.4
Change	**0.5**	**-0.8**	**-0.1**	**-0.2**	**-0.2**	**-0.2**
of which:						
Sterling-euro exchange rate	0.0	0.0	0.0	-0.2	-0.2	-0.2
Draw-forward in 2019	0.4	-0.4	0.0	0.0	0.0	0.0
Surcharge from historical UK national income revisions	0.0	-0.3	0.0	0.0	0.0	0.0
EU budget implementation	0.2	-0.1	0.0	0.0	0.0	0.0

Note: The supplementary fiscal tables on our website show details of our latest forecasts for our GNI and VAT payments and the rebate, and the various annual adjustments to those transactions that are assumed within our forecast. They also include a table that shows our assumptions about the EU annual budgets, and the adjustments to budget ceilings under the various flexibilities allowed in the 2014-2020 Multiannual Financial Framework, and our assumptions about implementation rates against the adjusted ceilings.

4.92 We have updated our estimate of the financial settlement to be consistent with the latest information (Table 4.22). The main changes (shown in Table 4.23) are due to:

- A **stronger sterling-euro exchange rate** across the period than assumed in October, which reduces the sterling value of euro-denominated net payments to the EU.
- The **increased draw-forward in 2019**, which moves more of the 2019 contributions into the UK's period of membership and thereby reduces settlement transfers.
- **Additional income from competition fines** for which infraction procedures are started but not concluded before the end of the transition period. This reflects a change between the March and November versions of the Withdrawal Agreement. The revenue from fines is highly uncertain. Based on historical experience, we have assumed this reduces the financial settlement by £0.3 billion in total.

Table 4.22: Financial settlement components by time period

	£ billion			
	UK participation in EU annual budgets to 2020	*Reste à liquider*	Other net liabilities	**Total**
	2019-2020	2021-2028	2019-2064	**2019-2064**
October forecast	16.3	19.8	2.6	**38.7**
March forecast	15.9	19.6	2.3	**37.8**
Change	**-0.4**	**-0.2**	**-0.3**	**-0.9**
	€ billion			
October forecast	18.1	21.3	2.8	**42.2**
March forecast	17.8	21.5	2.5	**41.8**
Change	**-0.3**	**0.2**	**-0.3**	**-0.4**

Note: The *reste à liquider* (RAL) consists of the outstanding commitments at the end of the 2014-20 Multiannual Financial Framework, which have been agreed to and bugeted for but not yet paid out. See Annex B of our March 2018 *Economic and fiscal outlook* for more detail.

Table 4.23: Sources of change in the financial settlement since October

	£ billion
Exchange rates	-0.4
UK share of EU financing	0.1
Increased draw-forward in 2019 Q1 shifts transfers out of settlement period	-0.4
Lower budget implementation in 2014-2020 MFF increases RAL costs	0.1
Other net liabilities	0.0
Additional income from competition fines agreed in November 2018 draft Withdrawal Agreement	-0.3
Total	**-0.9**

Locally financed current expenditure

4.93 We forecast local authority spending by forecasting their sources of income – including grants from central government and local sources – and the extent to which authorities will then spend more or less than that by varying their reserves or borrowing. Our forecast therefore encompasses spending financed by grants, which are mostly in DELs, and local

authority self-financed expenditure (LASFE), which is in AME. Tables 4.24 and 4.25 focus on LASFE. Further detail is available in supplementary tables on our website.

4.94 Table 4.24 summarises the main changes to our current LASFE forecast since October. 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 current 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.

4.95 We have not changed our view on the extent to which local authorities will spend less than their income in 2018-19, thereby adding to reserves. But we have revised up use of reserves in 2019-20 by £1.2 billion. Abstracting from changes due to Transport for London (TfL), this reflects quarterly current spending data, which points to higher spending in 2018-19. We assume this higher spending will persist to a lesser degree in 2019-20. The effect is offset in 2018-19 and compounded in 2019-20 by £0.8 billion of reserves use moving from 2018-19 into 2019-20 in TfL's latest business plan.[12]

4.96 This assumed profile of reserves drawdowns would leave local authorities in England with £24.7 billion of reserves at the end of 2019-20. This is £8.4 billion (51.5 per cent) more than they held at the end of 2010-11. The extent to which reserves are used over the forecast period is an important source of uncertainty. Box 4.4 of our March 2018 *EFO* demonstrated that, although the aggregate picture for the level of reserves held by English authorities appears healthy, this masks considerable variation across individual authorities, with pressures most significant for those with social care responsibilities.

4.97 Other sources of change to our pre-measures forecast since October include:

- A higher forecast for **council tax** receipts, which is up £0.3 billion a year from 2019-20 onwards, due to both higher tax base growth than assumed in October and our latest pre-measures assumptions about council tax rises in 2019-20.

- Upward revisions to our forecast for the **locally retained share of business rates**, averaging £0.2 billion a year, peaking at £0.4 billion in 2019-20. These mostly reflect the same factors discussed in the receipts section – in particular, the inclusion of the latest local authority forecasts for 2019-20, which imply that authorities will record a surplus on collection in 2019-20 (where a deficit was previously expected).

- Increases averaging £0.6 billion a year in current income and spending due to less use of **capital expenditure from revenue account (CERA)** – that is, current income used to finance capital spending projects. The change mostly reflects a methodological correction to align the forecast with outturn data. It is broadly neutral for spending and borrowing overall, as it also reduces our forecast for private contributions from developers (shown in Table 4.25).

[12] TFL, *Transport for London Business plan*, December 2018.

4.98 Our forecast also includes the effects of several Government policy decisions:

- **Business rates 75 per cent retention pilots**, which are due to run for 16 authorities in 2019-20. We assume that authorities will add 75 per cent of the estimated financial gain above and beyond the grants foregone to their reserves. The net effect is to increase current LASFE by £0.8 billion in 2019-20.

- **Eliminating negative revenue support grant** in 2019-20. Again, we assume 75 per cent of the gain to authorities (which comes via higher retained business rates) will be added to their stock of reserves. The net effect of the measure is therefore small.

- The **increase in the police authority referendum principle** threshold from £12 to £24 in 2019-20, which raises council tax receipts by £0.2 billion a year from this point.

- The January decision by the Scottish Government to **lift the cap on Scottish council tax rises to 4.79 per cent**, which increases receipts by £0.1 billion a year from 2019-20.

4.99 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 to this forecast. 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 4.24: Key changes to locally financed current expenditure since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	51.1	50.7	51.8	53.8	55.5	57.0
March forecast	51.8	54.2	53.1	55.1	56.9	58.6
Change	**0.8**	**3.6**	**1.3**	**1.3**	**1.4**	**1.6**
of which, changes in sources of local finance:						
Forecast changes	**0.8**	**2.5**	**1.2**	**1.1**	**1.1**	**1.3**
Council tax	0.0	0.2	0.2	0.3	0.3	0.4
Retained business rates	0.2	0.4	0.3	0.2	0.1	0.1
Net use of current reserves	0.0	1.2	0.0	0.0	0.0	0.0
CERA	0.4	0.5	0.5	0.6	0.6	0.7
Other	0.1	0.1	0.1	0.1	0.1	0.1
Effect of Government decisions	**0.0**	**1.1**	**0.1**	**0.2**	**0.3**	**0.3**
Business rates 75 per cent retention pilots	0.0	0.8	-0.1	0.0	0.0	0.0
Retained business rates: Eliminate negative Revenue Support Grant	0.0	0.0	0.0	0.0	0.0	0.0
Council tax (England)	0.0	0.2	0.2	0.2	0.2	0.2
Council tax (Scotland)	0.0	0.1	0.1	0.1	0.1	0.1

Locally financed and public corporations' capital expenditure

4.100 Our latest forecasts for locally financed capital expenditure (capital LASFE) and public corporations' capital spending are shown in Table 4.25. These are net of asset sales, forecasts for which are shown in supplementary tables on our website. Capital LASFE is measured net of capital spending by local authorities' Housing Revenue Accounts (HRAs) and the Transport for London (TfL) subsidiaries that are treated as public corporations in the National Accounts.[13] We switch these items from capital LASFE to public corporations' capital expenditure in our forecast to ensure it is consistent with the National Accounts.

4.101 We present changes to capital LASFE and public corporations' capital spending together so that any switches between them net out and do not obscure the changes that affect TME. Spending has mostly been revised down by uneven amounts across the forecast period.

4.102 The main changes relative to October relate to our forecasts of TfL spending, which are shown in the TfL capital spending and capital grants from local authorities to public corporations lines in Table 4.25. This reflects TfL's latest business plan, which includes its view of the impact of the delay to finishing Crossrail on fare income and capital spending, as well as the Government's December 2018 decision to offer a £1.3 billion loan to the Greater London Authority from the Department for Transport. This loan is passed on to TfL as a capital grant, financing higher capital spending on Crossrail in 2018-19 and 2019-20. We have also aligned other parts of our forecast to TfL's business plan – having aimed off the previous edition – as we believe that it represents a central view of the effects of Crossrail changes and other pressures on fare income. Removing the adjustments that we previously made leads to an uneven yearly profile of small changes relative to October.

4.103 The other main changes to our forecast since October reflect:

- Relatively small revisions to our (non-TfL) **prudential borrowing** forecast. The upward revisions to 2018-19 are based on an analysis of three quarters of English authority net capital spending outturn data for the year to date. The upward revision is assumed to persist in 2019-20, but diminish in 2020-21. These upward revisions are partly offset in those years by downward revisions to the use of prudential borrowing to finance capital spending by Welsh authorities. The downward revision related to Welsh authorities then dominates in 2022-23 and 2023-24.

- Income from **asset sales** has been revised down by £0.9 billion in 2018-19, thus increasing capital spending net of asset sales by that amount. This change more than reverses judgements in our October forecast, where strong quarterly asset sales data at the time led us to revise up our 2018-19 forecast by £0.5 billion. This initial in-year strength has since subsided. The change also smooths the profile of asset sales between outturn and forecast years and over the forecast period.

[13] 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 authority sector.

- Downward revisions averaging £0.5 billion a year to **private contributions from developers**, largely reflecting the CERA changes discussed in the preceding section.

- Decreases in **other spending**, averaging £0.3 billion a year, mostly as a result of revised 2017-18 outturn data, which reduces our future year forecasts.

Table 4.25: Key changes to locally financed capital expenditure and public corporations' capital expenditure since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	22.4	22.4	20.3	19.8	20.3	20.5
March forecast	23.7	21.9	19.8	19.3	19.1	18.6
Change	**1.3**	**-0.5**	**-0.5**	**-0.5**	**-1.2**	**-1.9**
of which:						
TfL capital spending	0.6	-0.4	0.2	0.4	-0.4	-0.5
Capital grants from local authorities to public corporations	0.6	0.5	0.0	0.0	0.2	-0.3
Prudential borrowing (non-TfL)	0.2	0.3	0.1	0.0	-0.1	-0.1
Less asset sales	0.9	0.0	0.0	0.0	0.0	0.0
Private contributions from developers	-0.5	-0.5	-0.5	-0.5	-0.6	-0.6
Other	-0.5	-0.2	-0.3	-0.3	-0.4	-0.4

Public sector debt interest

4.104 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.[14] The assumptions we use to forecast the levels of debt instruments are described later in this chapter. Financial market expectations are used 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 market-derived interest rates to the APF's loan liability and to the stocks of gilt, corporate bond and loan assets.[15]

4.105 Debt interest payments are expected to fall in 2018-19, thanks to lower RPI inflation this year than in 2017-18. Central government interest payments are fairly stable across the forecast as the gently rising cost of financing new borrowing is offset by the saving associated with rolling over previously issued debt at lower interest rates than those that prevailed when it was issued. The APF continues to reduce public sector debt interest over the forecast, but by decreasing amounts each year as the gap between the average interest rate earned on its assets and that paid on its liabilities (Bank Rate) narrows.

[14] 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.
[15] Since our October forecast, assets and liabilities associated with the Term Funding Scheme have been moved from the balance sheet of the APF to the main Bank of England accounts. This accounting change has no impact on the public finances.

4.106 Table 4.26 shows the main changes to our forecast since October:

- The downward revision to our forecast for **RPI inflation** reduces spending by substantial amounts in 2018-19 and 2020-21 and more modestly in other years.
- **Market-derived gilt rate expectations** have fallen, reducing the costs of financing newly issued debt. This effect builds up over the forecast as more new debt is issued.
- **Market-derived Bank Rate expectations** have also fallen since October, increasing the debt interest saving associated with the APF. In October, Bank Rate expectations moved above 1.5 per cent in 2023-24, so we assumed (in line with MPC guidance) that the Bank would begin to run down the APF's assets at that point, reducing the associated debt interest saving. But as Bank Rate no longer exceeds 1.5 per cent within the forecast period, we do not assume any asset reductions in this forecast.

Table 4.26: Key changes to debt interest since October

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector debt interest						
October forecast	41.2	43.5	44.4	45.8	47.2	48.3
March forecast	38.4	41.6	40.3	41.7	43.0	43.8
Change	**-2.8**	**-1.9**	**-4.1**	**-4.1**	**-4.2**	**-4.5**
Central government debt interest						
October forecast	51.6	52.0	51.4	52.0	52.0	52.9
March forecast	48.9	51.1	48.7	49.3	49.2	49.7
Change	**-2.7**	**-0.9**	**-2.7**	**-2.7**	**-2.8**	**-3.1**
of which:						
Forecast changes	**-2.7**	**-0.8**	**-2.7**	**-2.6**	**-2.8**	**-3.2**
Interest rates	-0.1	-0.6	-1.4	-2.0	-2.4	-2.7
Inflation	-2.8	-0.1	-1.3	-0.6	-0.3	-0.3
Financing	0.0	0.0	0.0	0.0	-0.2	-0.3
Other factors (including outturn)	0.2	-0.1	0.0	0.1	0.1	0.1
Effect of Government decisions	**0.0**	**0.0**	**0.0**	**-0.1**	**0.0**	**0.1**
Asset Purchase Facility						
October forecast	-11.8	-9.8	-8.4	-7.5	-6.3	-6.1
March forecast	-11.9	-10.9	-9.7	-9.0	-7.7	-7.5
Change	**-0.1**	**-1.0**	**-1.4**	**-1.5**	**-1.4**	**-1.4**
of which:						
Forecast changes	**-0.1**	**-1.0**	**-1.4**	**-1.5**	**-1.4**	**-1.4**
Interest rates	-0.1	-1.0	-1.4	-1.5	-1.4	-1.3
Other changes	0.0	0.0	0.0	0.0	0.0	-0.1
Local authority and public corporation debt interest						
October forecast	1.4	1.3	1.4	1.4	1.5	1.5
March forecast	1.4	1.3	1.4	1.4	1.4	1.5
Change	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

4.107 It is likely that the market-derived interest rates on which we base this forecast include different implicit assumptions about the nature of Brexit than those underpinning the rest of our forecast. Specifically, markets appear to be placing some weight on the possibility of a 'no deal' Brexit accompanied by some monetary policy easing. These different underlying assumptions mean that debt interest spending on a fully consistent interest rate path would probably be higher, but there is no reliable way to calibrate by how much.

4.108 One indication is given by recent movements in the interest-rate expectations of market participants relative to those used in our forecast, which are based on the average of the 10 days to 14 February. Market participants interpreted the Prime Minister's announcement on 26 February of a sequence of Brexit votes in Parliament in mid-March as substantially reducing the likelihood of a 'no deal' outcome and prompted a corresponding rise in market interest rates – over the four days to 1 March, Bank Rate expectations rose by an average of 8 basis points and gilt rate expectations by 9 basis points (at 20-year maturities). The effect of using these rates on our debt interest payments forecast would be to raise it by £0.4 billion in 2019-20, rising to £0.7 billion by 2023-24, although that would unwind less than a fifth of the downward revision since October.

Scottish Government AME

4.109 In October 2018 **Scottish Government expenditure** was reclassified from central government DEL to AME, ostensibly because an increasing proportion of expenditure is self-financed from taxation and thus falls outside Treasury control. There are three main sources of funding for Scottish Government expenditure. First, the majority is funded from a (residual) block grant tightly linked to central government DELs via the Barnett formula. Second, around 45 per cent of resource expenditure is self-financed from taxation, though income tax funding is subject to potentially large reconciliations as outturn liabilities are only known after a long lag.[16] Finally, under the fiscal framework agreed between the Scottish and UK Governments, smaller amounts can be funded from Scottish reserves and borrowing.

4.110 The Scottish Government announced its latest spending plans in December 2018. We have used these as the starting point to update our forecast, but have then adjusted each of the funding sources in line with our latest forecasts. First, we have increased expenditure funded from the residual block grant. DELs from 2020-21 onwards are outside the Spending Review period, so we have used the Treasury's policy assumptions (in the same way we do for overall DEL spending). These show the Scottish residual block grant rising in line with overall DEL. They generate the largest change in our forecast since October. Further changes made in the Supplementary Estimates process have also increased our forecast. These include the Treasury granting flexibility to carry forward some of the additional funding into 2019-20 outside the normal operation of the Scotland Reserve, akin to the Budget Exchange process normally only used for spending managed under DEL budgets.

[16] For more information on the self-financed tax components of Scottish Government expenditure see our *Devolved tax and spending forecasts* publication.

4.111 We have updated our self-financed expenditure forecast by applying the Scottish Fiscal Commission's (SFC) 2019-20 income tax forecast, as this was used by the Scottish Government in its December budgeting plans. (The SFC's forecast was more pessimistic than ours, which in effect reduced the Scottish Government's planned expenditure in that year.) Over the Spending Review period we then have updated our Scottish tax forecasts, increasing them largely due to stronger than expected income tax receipts. This has increased our forecast of expenditure in these years. Finally, we have reduced expenditure funded from the drawdown of the Scottish Government's reserves by £200 million in 2018-19 and assumed a net addition to reserves of £50 million in 2019-20. We have made no changes to our Scottish Government borrowing forecasts.

Other AME

4.112 The main changes to other AME spending items include:

- Spending on **company tax credits** has been revised up by an average of £0.6 billion a year over the forecast, reflecting higher than expected outturns.

- Small downward revisions to our **general government depreciation** forecast, reducing current spending but increasing net investment spending. This largely reflects lower R&D depreciation outturns, which are assumed to continue in future years.

- **Other PSGI in AME** is lower in most years, mainly reflecting continued shortfalls in assumed provider and consumer take-up of the Lifetime ISA.

- Some elements of our spending forecast are mostly neutral for borrowing, because they are directly offset in receipts. Changes since October for these forecasts are explained in the corresponding receipts sections. These include **environmental levies** and **VAT refunds** to central and local government.

- Our AME forecast includes several **National Accounts adjustments** that are included in the definitions of PSCE and PSGI.[17] Table 4.13 shows that we have revised up the PSCE-related adjustments by £0.3 billion a year on average across the forecast period, and the PSGI-related adjustments by £0.2 billion a year on average. The former mostly reflects a higher forecast for the imputed subsidy for equity injection into the HRA, which is up by an average of £0.4 billion a year (largely as a result of the measure lifting the HRA borrowing cap that was announced in Budget 2018). This increases our forecast of local authority current spending, but is offset in our public corporations' gross operating surplus forecast. It brings the sectoral effects of the measure into line with how they will affect the National Accounts, but does not change the overall effect of the measure on PSNB from that assumed in October. PSGI-related revisions are mainly due to removing the latest estimates of local authority spending that score as financial transactions, mostly reflecting TfL's updated business plan.

[17] Further details of our forecasts for all our National Accounts adjustments are included in the supplementary spending tables on our website. Explanations and the background to National Accounts adjustments are given in Annex D to PESA 2018.

Deficit aggregates

4.113 Our central forecast for the key measures of the budget deficit incorporates the forecasts for receipts and expenditure set out earlier in this chapter. In this section we explain the changes in our forecasts for the following aggregate measures of the deficit:

- **Public sector net borrowing**: the difference between total public sector receipts and expenditure on an accrued basis each year. As the widest measure of borrowing, PSNB is a key indicator of the fiscal position and we focus on it when explaining changes since our previous forecast. It was also the target measure used for the fiscal mandate early in the last Parliament.

- **Cyclically adjusted net borrowing**: public sector net borrowing adjusted to remove the estimated impact of the economic cycle. This is an estimate of underlying or 'structural' net borrowing, in other words the borrowing we would expect to see if the economy were operating at potential. It is the current target measure for the fiscal mandate.

- The **current budget deficit**: the difference between receipts and public sector current expenditure each year. In effect, this is public sector net borrowing excluding borrowing to finance investment that boosts the public sector capital stock. This was the target measure from 1997 to 2008 under the Labour Government's 'golden rule'.

- The **cyclically adjusted current budget deficit**: the current budget deficit adjusted to reflect the estimated impact of the economic cycle. This was the target measure for the Coalition Government's fiscal mandate between 2010 and 2015.

Public sector net borrowing

Summary of changes since October

4.114 As in October, we have revised down our pre-measures forecast for borrowing in every year – but by only about half as much as in that forecast. This is driven by the relatively unusual combination of an upward revision to receipts and a downward revision to debt interest spending – only the fifth time that revisions to receipts and debt interest spending have pushed borrowing in the same direction in the 19 forecast revisions since June 2010.

4.115 The drivers of these revisions reflect two key factors:

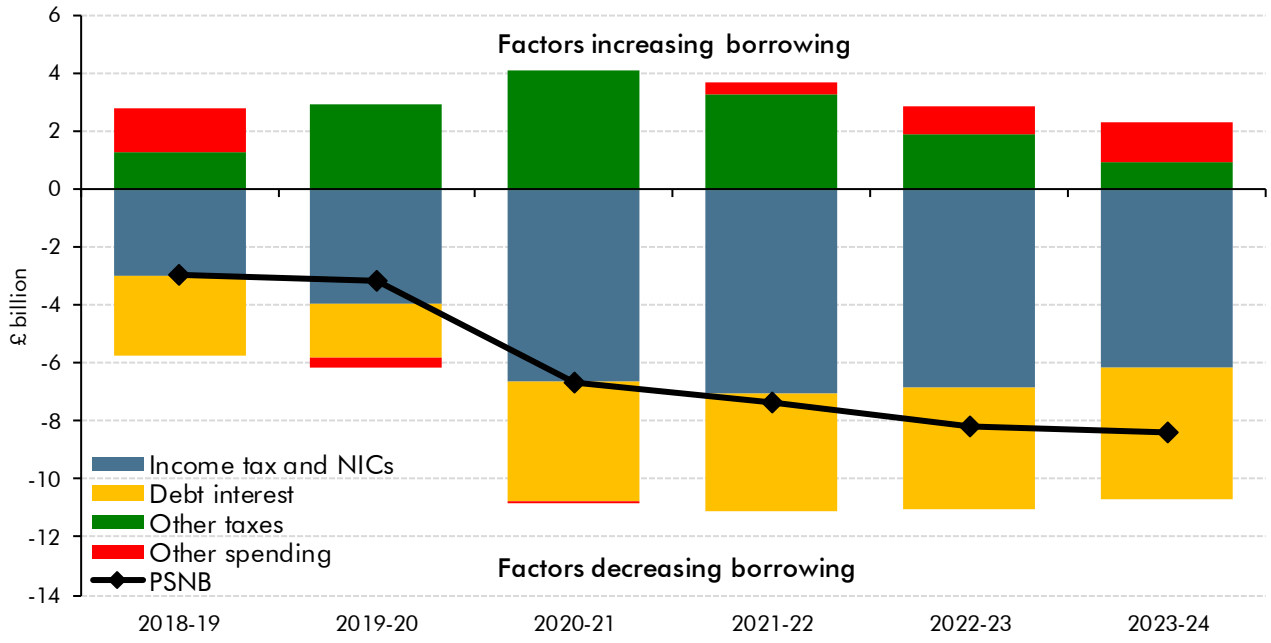
- Despite little change in our forecast for nominal GDP growth, the **tax-to-GDP ratio** has been revised up. This largely reflects near-term momentum in earnings growth and a buoyant effective tax rate on labour income due to particularly strong earnings growth among the highest earners. Both have boosted income tax and NICs receipts.

- Market-derived expectations of future interest rates are lower than in October, reducing our forecast for **debt interest payments**. This is, however, likely to reflect the market pricing in some probability of a 'no deal' Brexit and an associated monetary

policy easing. So to some extent it will not be consistent with the assumption of a smooth exit that underpins our economy and receipts forecasts. If a smooth Brexit is achieved, market interest rates – and debt interest forecast – could rise again.[18]

4.116 Chart 4.4 breaks down the main movements in our forecast since October.

Chart 4.4: Sources of revisions to our pre-measures PSNB forecast

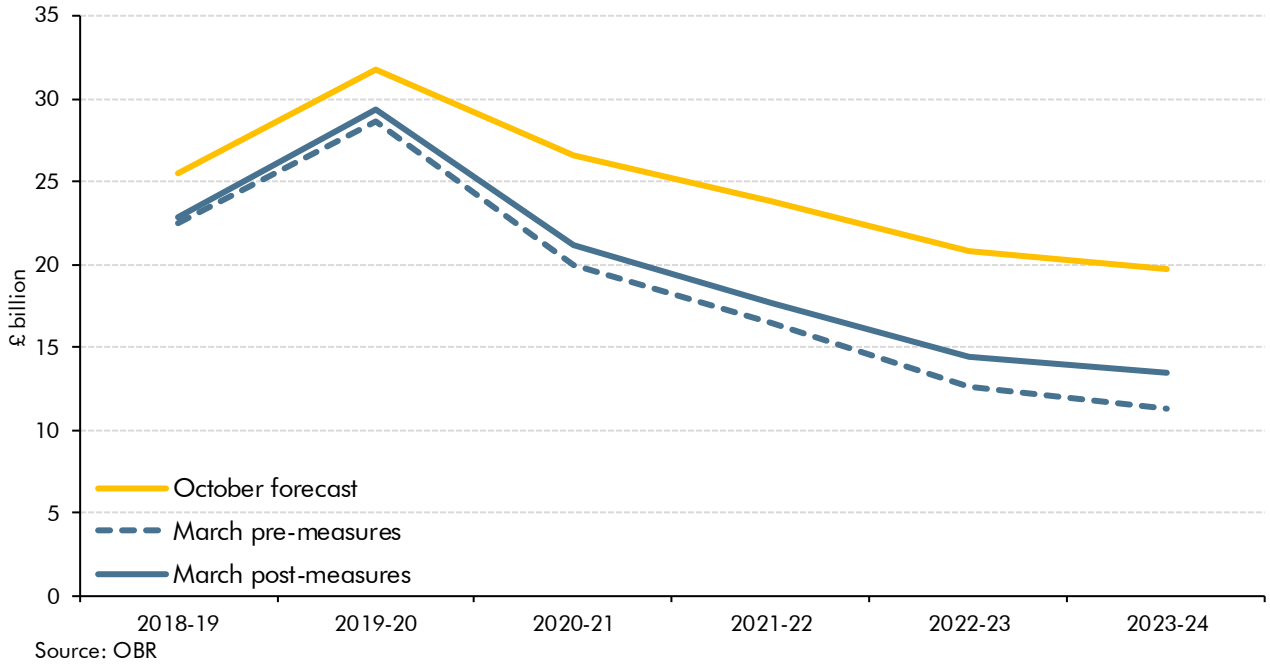


Source: OBR

4.117 Presented with this improvement in the outlook for the public finances, the Government has once again decided to loosen discretionary fiscal policy – albeit modestly. This is the sixth time in the six Budgets, Autumn and Spring Statements since the EU referendum that the Chancellor has loosened the purse strings. Taken together, these discretionary moves have significantly eased the squeeze on public spending that he inherited from his predecessor. Box 4.1 discusses how Governments have responded to past underlying forecast changes.

[18] As noted in the debt interest section of this chapter, movements in market interest rates after we had closed this forecast and following news that was interpreted as reducing the risk of a 'no deal' Brexit were sufficiently large to have added around £½ billion a year to our debt interest spending forecast. While not negligible, such a change would reverse less than a fifth of the downward revision by 2023-24.

Chart 4.5: Pre- and post-measures public sector net borrowing versus October



Source: OBR

4.118 On 17 December the ONS published an article laying out plans for a new accounting treatment for student loans.[19] The ONS intends to move from the current approach of treating student loans as conventional loans to one that treats them as a part-grant, part-loan hybrid (the 'partitioned loan-transfer approach'). It intends to incorporate the new estimates in the public finances data released in September 2019. There are too many uncertainties over the implementation of this methodology for us to move our central forecast onto the new basis now. In Annex B, we update our estimate of impact of this change – namely that it could see borrowing around £10 billion higher in 2018-19, rising to around £14 billion in 2023-24. This estimate is still subject to significant uncertainty.

Underlying revisions to borrowing in 2018-19

4.119 Over the first 10 months of 2018-19, borrowing has fallen somewhat faster than we assumed in our full-year forecast from October. This mainly reflects strong receipts growth in January, the largest month for central government receipts, which were 9.8 per cent higher than a year earlier.

4.120 Around half the January strength reflected self-assessment (SA) income tax and capital gains tax payments that relate largely to liabilities incurred in 2017-18. Initial HMRC analysis indicates that this strength was broadly based across the various SA tax streams, leading us to revise up our 2018-19 SA income tax and CGT forecast by £1.7 billion. Our revisions to other receipts forecasts for this year are largely offsetting, with higher PAYE income tax and NICs receipts (partly driven by the continued strength in earnings growth, especially among the highest earners) offset by weaker VAT and corporation tax revenues.

[19] ONS, *New treatment of student loans in the public sector finances and national accounts,* December 2018.

4.121 We have revised our spending forecast for 2018-19 down by £0.9 billion. That is more than explained by lower debt interest, where RPI inflation in January 2019 – the key month for accrued interest on index-linked gilts – was lower than we had predicted in October. (RPI inflation feeds through to accrued interest on index-linked gilts with a lag of two months.)

4.122 Taking those factors into account, and bearing in mind that the new policy decisions do not affect borrowing materially this year, we have revised overall borrowing in 2018-19 down by £2.7 billion to £22.8 billion. That is broadly in line with the in-year forecast that would be generated by extrapolating the year-to-date performance of the public finances.

Underlying revisions to borrowing from 2019-20 onwards

4.123 From 2019-20 onwards, our pre-measures borrowing forecast has been revised down in every year, by £6.8 billion (0.3 per cent of GDP) a year on average:

- Just over half the revision reflects higher **receipts**, which are up by £3.5 billion a year on average. That is more than explained by strength in income tax and NICs receipts, thanks to the higher 2018-19 starting point and slightly stronger earnings growth. This is partly offset by downward revisions to oil and gas revenues (due to lower oil and gas prices), capital tax receipts (due to lower equity prices) and interest and dividend receipts (due to lower market expectations of future interest rates).

- Just under half the revision reflects lower **spending**, which is down by £3.3 billion a year on average. This is dominated by lower spending on debt interest, reflecting lower near-term RPI inflation and lower market expectations for interest rates across the forecast. Other spending revisions are largely offsetting, with higher welfare spending (largely driven by an upward revision to our disability benefits forecast) offset by other smaller items.

Government decisions

4.124 The Government does not consider this Spring Statement to be a full 'fiscal event' and has not produced a 'scorecard' of policy measures. But several measures have been announced since the Budget and another increase in departmental spending totals was announced in the Statement. Overall, these changes increase borrowing by increasing amounts over the forecast period, rising from £0.7 billion in 2019-20 to £2.1 billion in 2023-24:

- Total **departmental spending** has been increased by £0.2 billion in 2019-20, rising to £1.7 billion in 2023-34. This comprises two main parts. First, the decision to respond to our forecast of higher GDP deflator inflation and keep non-NHS current departmental spending flat in real terms adds amounts rising to £0.8 billion in 2023-24. Second, a further addition to NHS funding – again to maintain real-terms funding – adds amounts rising to £0.8 billion in 2023-24.

- Several policy changes to **universal credit (UC) and disability benefits**. These include delaying the rollout of personal independence payment and stopping the review of some existing cases to free up capacity to finish the rollout. This costs £0.2 billion a

year on average from 2020-21 onwards. The decision not to limit child-related awards for some new UC claims with three or more children and changes to the profile of the UC managed migration phase have broadly offsetting effects over the five years.

- **Other policy changes** are smaller and their effects are largely offsetting. They include raising the fees payable for an application for a grant of probate and the doubling of the 'immigration health surcharge'. Annex A provides more detail.

4.125 The modest net giveaway led us to revise our nominal GDP forecast up a fraction. This reduces borrowing marginally in every year via higher tax revenues. Higher departmental spending raises contributions to public service pension schemes, reducing net expenditure. These effects are shown in the 'Indirect effect of Government decisions' row in Table 4.27.

Table 4.27: Changes to public sector net borrowing

	£ billion						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	39.8	25.5	31.8	26.7	23.8	20.8	19.8
March forecast	41.9	22.8	29.3	21.2	17.6	14.4	13.5
Change	**2.1**	**-2.7**	**-2.4**	**-5.5**	**-6.2**	**-6.4**	**-6.3**
Underlying revisions to receipts	**0.9**	**-1.7**	**-1.0**	**-2.5**	**-3.7**	**-5.0**	**-5.2**
of which:							
Income tax and NICs	1.1	-3.0	-4.0	-6.6	-7.1	-6.9	-6.1
VAT	-0.1	0.5	0.6	0.4	0.1	-0.1	-0.3
Onshore corporation tax	0.4	1.2	0.7	0.2	-0.4	-0.6	-0.7
Capital taxes	0.0	-0.6	1.1	2.2	2.2	2.0	2.1
Other	-0.4	0.2	0.6	1.3	1.4	0.5	-0.1
Underlying revisions to spending	**1.2**	**-1.2**	**-2.2**	**-4.1**	**-3.6**	**-3.2**	**-3.2**
of which:							
Debt interest	0.0	-2.7	-1.9	-4.1	-4.0	-4.1	-4.6
Welfare spending	0.0	0.0	0.0	0.4	0.6	1.0	1.7
Departmental spending	0.5	-0.8	-0.8	0.0	0.0	0.0	0.0
Other changes	0.7	2.4	0.5	-0.4	-0.2	-0.1	-0.3
Total effect of Government decisions	**-**	**0.3**	**0.7**	**1.2**	**1.2**	**1.8**	**2.1**
of which:							
Departmental spending	-	0.3	0.2	1.4	0.8	1.7	1.7
Other measures	-	0.0	1.0	0.1	0.8	0.4	0.7
Indirect effects	-	0.0	-0.4	-0.3	-0.4	-0.3	-0.3
Memo: March pre-measures forecast	*41.9*	*22.5*	*28.6*	*20.0*	*16.4*	*12.6*	*11.4*

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

Box 4.1: How do governments respond to good and bad news in our forecasts?

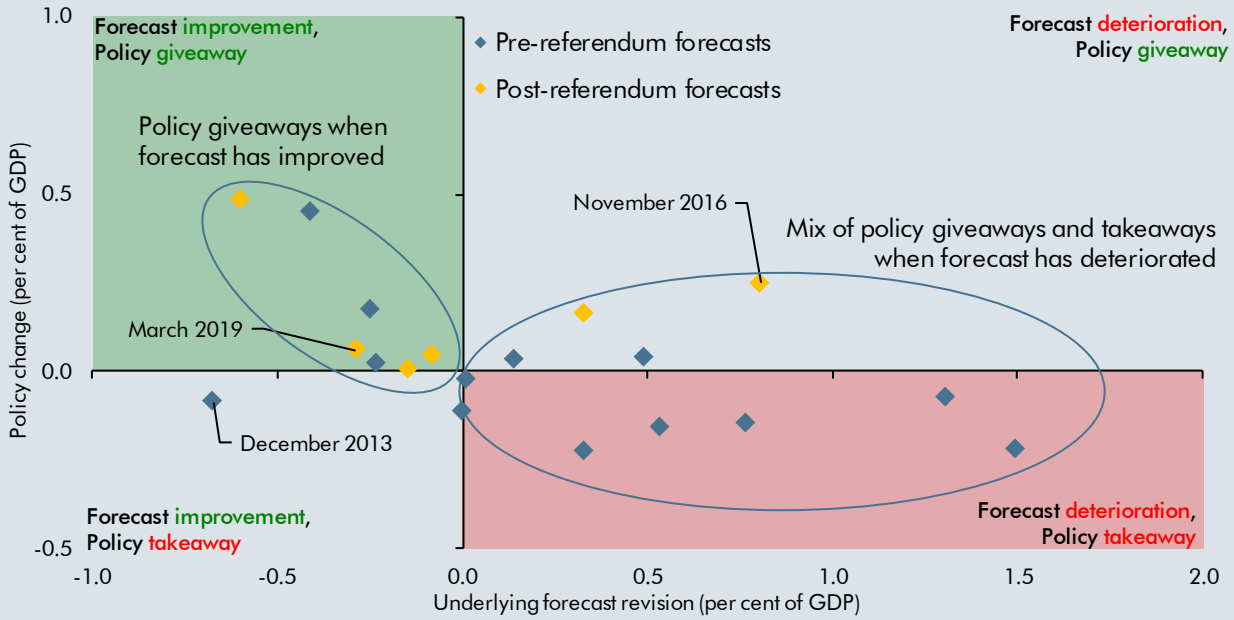
Our pre-measures fiscal forecasts provide the baseline against which governments make the tax and spending policy decisions that determine our post-measures forecasts. Whether a government chooses to ease or tighten fiscal policy with an overall policy package will be guided by its legislated fiscal targets and any other fiscal objectives. Its choices will also be influenced by the nature of the changes to our pre-measures forecasts (for example, whether they are judged to be cyclical or structural). We maintain a database of fiscal forecast revisions that splits them into pre-measures, policy and classification factors, which allows us to look for any patterns in the way governments respond to good or bad news in our underlying forecast revisions.

Chart 4.A shows policy responses to our pre-measures revisions since November 2010. The cumulative effect of policy decisions across each forecast period are shown on the vertical axis and are measured as the total cash effect on borrowing over the five-year period, as a share of total nominal GDP over the same period. This expresses the typical '£ billion' effect of giveaways or takeaways in units that do not rise over time simply because the cash size of the economy is growing. Our pre-measures forecast changes are shown on the horizontal axis using the same metric. The effect of major classification changes has been stripped out. The chart shows that:

- **When we deliver good news about the pre-measures outlook for the public finances, governments have tended to loosen fiscal policy.** They have typically done this by easing the squeeze on public spending that had previously been the stated policy intent. On some occasions, this has involved raising plans in Spending Review years, but often it has been achieved by changing policy assumptions for departmental spending beyond the years for which plans have been set. (These assumptions have sometimes implied large real terms cuts that have been revised away before plans were set – for example the December 2014 assumptions that were raised in March 2015 and again in July 2015, ahead of the Spending Review in November 2015.) The only exception was in December 2013, when the Government 'banked' the good news in our borrowing forecast and added to it by squeezing medium-term spending even more tightly. Otherwise, downward revisions to pre-measures borrowing have always been met with a net policy giveaway. On average, these have offset the forecast improvement roughly one-for-one.
- **When we deliver bad news about the pre-measures outlook, the average policy response has been more varied.** In two-thirds of cases, the Government has responded by partly offsetting the deterioration, usually by squeezing spending further in the medium term. On average, this offset is much less than one-for-one. In the other third of cases, the Government responded by loosening fiscal policy. On two occasions this has happened alongside a change in the terms of the 'fiscal mandate' (including in November 2016).
- **Since the Brexit referendum, fiscal policy has been loosened at every Budget, Autumn and Spring Statement**, regardless of whether we have delivered good or bad news in our pre-measures borrowing forecast. The bulk of the cumulative net giveaway across these six fiscal statements has come via boosting public spending. In March 2016, our post-measures forecast showed public spending falling by 2.9 per cent of GDP between 2016-17 and 2020-21 – largely thanks to policy measures squeezing departmental and welfare spending. In this forecast, after successive policy giveaways – notably the boost to NHS

spending announced last year – that fall is just 0.8 per cent of GDP and thanks entirely to the squeeze on welfare spending. The Government's latest plans would leave public spending falling very slightly as a share of GDP between 2020-21 and 2023-24.

Chart A: Policy responses to underlying fiscal forecast revisions

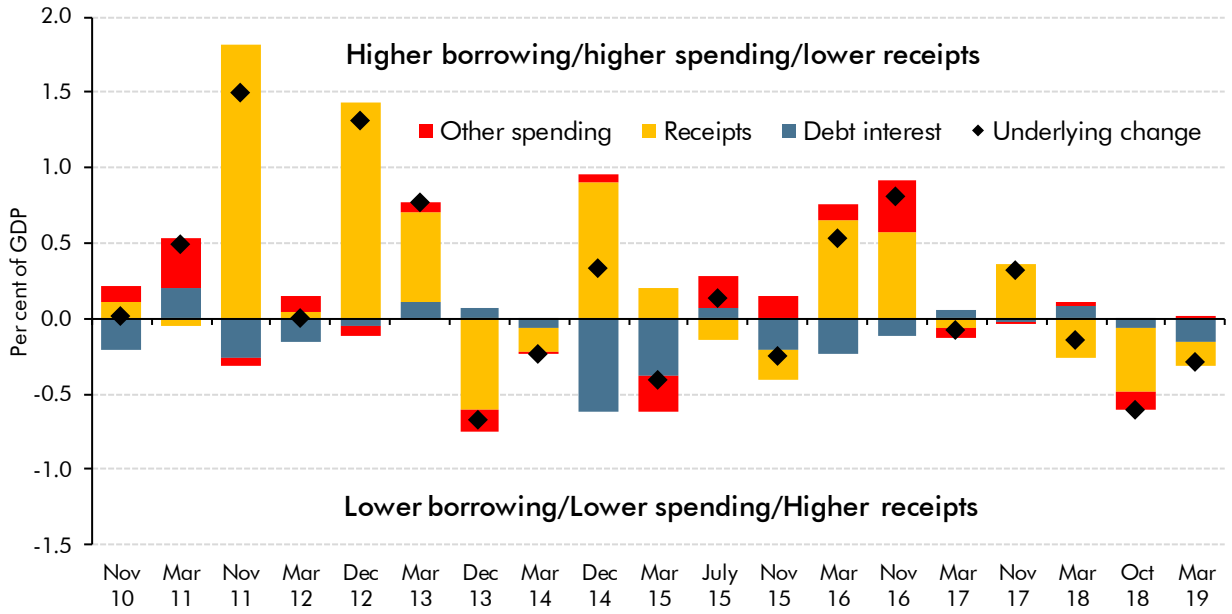


Note: Reflects the cash revision over the last 5 years of each forecast, rebased to each historic nominal GDP forecast.
Source: OBR

Forecast revision in context

4.126 Chart 4.6 puts the revision in this forecast in the context of all the revisions we have made since we produced our first forecast in June 2010. It shows that (in absolute terms) the underlying revision we have made to borrowing in this forecast (0.29 per cent of GDP on average over five years) is similar to the average of our previous spring forecast revisions (0.33 per cent of GDP). As already noted, this is only the fifth forecast revision out of 19 that we have made where revisions to debt interest and receipts have contributed in the same direction to the borrowing revision. Two of those five were our most recent two forecasts, where it is likely that market interest rate expectations have priced in some probability of a disruptive Brexit outcome whereas our receipts forecast is conditioned on a smooth exit.

Chart 4.6: Sources of underlying revisions to borrowing since June 2010



Note: Reflects the cash revision over the last 5 years of each forecast, rebased to each historic nominal GDP forecast.
Source: OBR

Cyclically adjusted net borrowing (the structural fiscal position)

4.127 Cyclically adjusted net borrowing has been revised down more than PSNB, because the strength of income tax and the downward revision to debt interest spending are treated as structural improvements to the fiscal position. The former reflects our judgement that the recent buoyancy of revenues and the effective tax rate will persist. The latter could reflect an inconsistency between the Brexit assumptions underpinning our economy forecast and those implicit in the market-derived interest rate path that drives our debt interest forecast, as discussed above. We now expect structural borrowing to fall to 0.5 per cent of GDP by 2023-24, down from 0.8 per cent in our October forecast. The Government's 'fiscal mandate' is set in terms of this measure, so its profile is discussed in Chapter 5.

Current budget balance

4.128 We continue to expect the current budget to remain in surplus over the forecast period, rising from £20.4 billion in 2018-19 (1.0 per cent of GDP) to £40.3 billion (1.6 per cent of GDP) in 2023-24. Relative to October, the surplus is larger in every year, largely reflecting our forecast for higher tax receipts and lower debt interest spending.

4.129 Cyclically adjusted, we expect the current budget to show a surplus of 0.9 per cent of GDP in 2018-19, a little smaller than the headline current budget surplus due to our assumption that the output gap is slightly positive. We continue to expect this surplus to rise in every year of the forecast, reaching 1.6 per cent of GDP in 2023-24.

Financial transactions and cash borrowing

4.130 Public sector net borrowing (PSNB) is the difference between total public sector receipts and expenditure each year, measured on an accrued basis. But the public sector's fiscal position also depends on the flow of financial transactions, such as loans and repayments between government and the private sector or the sale of financial assets to the private sector. These do not affect PSNB directly, but they do affect the Government's cash position and its stock of debt and assets. This affects interest paid and received, which do affect PSNB.

4.131 The public sector net cash requirement (PSNCR) is the most complete measure of the public sector's cash flow position in each year.[20] It drives our forecast of public sector net debt (PSND), which is also largely a cash measure. From our estimate of the PSNCR we derive an estimate of the central government net cash requirement (CGNCR), which in turn largely determines the Government's financing requirement – the amount it needs to raise from debt instruments including Treasury bills, gilt issues and NS&I products.

4.132 Differences between the PSNCR and PSNB can be split into the following categories:

- **Loans and repayments**: loans that the public sector makes to the private sector do not affect PSNB directly, but the cash flows affect the PSNCR. In Table 4.28 we divide net lending into programmes that the Government manages within DEL and others.

- **Sales or purchases of financial assets**: the public sector may acquire or sell financial assets such as loans, equity or corporate bonds. When it sells an asset for cash, the initial transaction does not affect PSNB, whereas the cash received will reduce the PSNCR. But both PSNB and the PSNCR will be higher in future years if the Government foregoes an income stream that flowed from the asset sold.

- **Bank of England schemes**: some Bank of England actions involve loans and repayments or the purchase of financial assets that affect the PSNCR. We describe the effects of these schemes, such as the Term Funding Scheme, separately from transactions involving other public sector loans and financial assets.

- **Timing effects**: PSNB is an accruals measure of borrowing in which, where possible, spending and receipts are attributed to the year of the activity to which they relate. In contrast, PSNCR is a cash measure in which spending and receipts are attributed to the year in which the cash flow takes place. These timing differences must be adjusted for.

[20] Consistent with the measures of debt and deficit used in this forecast, PSNCR excludes the public sector banks.

Table 4.28: Reconciliation of PSNB and PSNCR

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector net borrowing	**22.8**	**29.3**	**21.2**	**17.6**	**14.4**	**13.5**
Financial transactions	**5.8**	**0.3**	**-25.4**	**-51.5**	**26.0**	**21.3**
of which:						
DEL net lending	**5.4**	**6.0**	**6.5**	**5.9**	**6.4**	**2.3**
Help to Buy outlays	3.7	4.0	4.3	3.2	3.7	-
Other housing schemes	0.5	0.5	0.6	-	-	-
Devolved administrations	0.2	0.5	0.5	-	-	-
Other DEL	1.1	1.3	1.4	-	-	-
Post Spending Review DEL assumption	-	-	-	3.3	3.4	2.9
Allowance for shortfall	-0.1	-0.3	-0.3	-0.6	-0.6	-0.6
Other government net lending	**17.7**	**16.7**	**17.6**	**19.0**	**18.4**	**17.8**
Student loan outlays	18.1	19.2	20.2	21.0	21.8	22.6
Student loan repayments[1]	-2.4	-2.3	-2.3	-2.4	-2.6	-2.9
Loan to Ireland	0.0	-1.6	-1.6	-	-	-
Scottish Government	0.7	0.6	0.7	0.4	0.5	0.1
UK Export Finance	0.5	0.5	1.0	0.8	0.2	0.1
Other AME	1.7	1.4	1.1	1.1	0.9	0.6
Help to Buy repayments	-0.8	-1.1	-1.5	-1.9	-2.4	-2.7
Sales or purchases of financial assets	**-13.3**	**-16.4**	**-5.2**	**-6.6**	**-7.6**	**-5.9**
Student loans	-1.9	-2.7	-2.8	-2.9	-3.0	0.0
RBS shares	-2.5	-3.6	-2.4	-3.7	-4.6	-5.9
UKAR asset sales and rundown	-7.4	-9.6	-	-	-	-
Other sales	-1.5	-0.6	-0.1	0.0	0.0	0.0
Bank of England schemes	**-5.6**	**0.0**	**-51.1**	**-70.3**	**0.0**	**0.0**
Cash flow timing effects	**1.5**	**-6.0**	**7.0**	**0.6**	**8.8**	**7.2**
Student loan interest[1]	4.5	5.0	5.5	6.3	7.4	8.4
Corporation tax	0.9	-4.6	-2.7	1.8	1.7	1.7
Other receipts	4.6	4.6	5.7	4.8	4.4	4.7
Index-linked gilt uplift[2]	-10.7	-12.6	-2.6	-14.3	-7.4	-10.3
Other gilt accruals	4.3	4.1	4.1	3.9	4.4	4.7
Other expenditure	-2.2	-2.5	-3.0	-1.9	-1.6	-1.9
Public sector net cash requirement	**28.6**	**29.6**	**-4.2**	**-33.8**	**40.5**	**34.8**

[1] 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.

[2] This reconciliation to the public sector net cash requirement does not affect public sector net debt.

Table 4.29: Changes in the reconciliation of PSNB and PSNCR

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector net borrowing	**-2.7**	**-2.4**	**-5.5**	**-6.2**	**-6.4**	**-6.3**
Financial transactions	**0.2**	**-3.6**	**4.7**	**4.3**	**0.7**	**6.6**
of which:						
DEL net lending	**-0.6**	**-1.0**	**-0.8**	**0.0**	**0.0**	**0.0**
Help to Buy outlays	-0.1	-0.4	-0.5	-0.2	-0.2	-
Other housing schemes	-0.1	-0.6	-0.5	-	-	-
Devolved administrations	-0.2	0.0	0.0	-	-	-
Other DEL	-0.2	-0.4	-0.2	-	-	-
Post Spending Review DEL assumption	-	-	-	0.2	0.2	0.0
Allowance for shortfall	0.0	0.3	0.3	0.0	0.0	0.0
Other government net lending	**-0.1**	**-0.1**	**-0.3**	**0.4**	**0.4**	**0.3**
Student loan outlays	0.1	0.0	0.0	0.1	0.1	0.1
Student loan repayments[1]	0.0	0.0	0.1	0.1	0.1	0.4
Loan to Ireland	0.0	0.0	0.0			
Scottish Government	0.0	0.0	0.0	0.0	0.0	0.0
UK Export Finance	-0.2	-0.2	-0.4	-0.2	0.2	0.1
Other AME	0.0	0.0	-0.1	0.2	-0.2	-0.5
Help to Buy repayments	0.0	0.0	0.1	0.2	0.2	0.3
Sales or purchases of financial assets	**4.4**	**-4.6**	**0.0**	**0.1**	**0.1**	**0.1**
Student loans	0.0	0.0	0.0	0.0	0.0	0.0
RBS shares	0.0	0.0	0.1	0.1	0.1	0.1
UKAR asset sales and rundown	4.4	-4.6	-	-	-	-
Other sales	0.0	0.0	0.0	0.0	0.0	0.0
Bank of England schemes	**-5.0**	**0.0**	**2.1**	**2.9**	**0.0**	**0.7**
Cash flow timing effects	**1.6**	**2.2**	**3.7**	**1.0**	**0.2**	**5.4**
Student loan interest[1]	0.0	-0.5	-0.6	-0.6	-0.4	0.0
Corporation tax	-1.5	2.5	2.2	0.3	0.1	0.3
Other receipts	0.5	0.2	0.7	0.5	0.2	-0.3
Index-linked gilt uplift[2]	2.8	-0.2	1.1	0.4	0.0	5.1
Other gilt accruals	-0.2	0.2	0.3	0.3	0.3	0.3
Other expenditure	0.0	0.0	0.0	0.0	0.0	0.0
Public sector net cash requirement	**-2.5**	**-6.0**	**-0.8**	**-1.9**	**-5.7**	**0.3**

[1] 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.

[2] This reconciliation to the public sector net cash requirement does not affect public sector net debt.

Loans and repayments

Departmental programmes within DEL

4.133 DEL lending programmes are set department by department and subject to multi-year spending (or lending) limits. The largest of these by far is the Help to Buy: Equity Loan (HtB) scheme, which is managed within DEL even though it is entirely demand driven. The path of HtB outlays reflects how the scheme is set to change in future years. In 2021-22 and 2022-23, eligibility will be more restricted than currently – in particular, only first-time buyers will be eligible in those years. The Government plans to close the scheme to new loans in 2023-24. Outlays have been revised down a little since October thanks to lower house prices.

4.134 DEL lending across the main lending departments (BEIS and MHCLG) and the devolved administrations has also been revised down. We had anticipated such revisions in our 'allowance for shortfall' assumption (which relates to the extent to which departments will lend less than they plan to), so have revised that down in light of these latest plans.

4.135 The Government's post-Spending Review DEL policy assumption is unchanged from October – slightly lower Help to Buy outlays therefore create space for higher lending elsewhere. We have not changed our allowance for shortfall assumption in this period.

Student loans

4.136 Net outlays on student loans raise the net cash requirement relative to net borrowing in each year of our forecast. Other than policy changes, revisions to the number of new full-time undergraduate entrants to higher education institutions are generally one of the biggest drivers of change in our outlays forecast. We continue to expect student entrants to fall slightly in the 2018-19 academic year, but by less than we assumed in October. This reflects more entrants than expected in the latest Higher Education Statistics Agency (HESA) outturn for 2017-18; unexpectedly high acceptance rates by higher education institutions in the latest UCAS data for 2018-19; and more UCAS applicants by the January 2019 deadline (by which time most undergraduate applications have been made) than would have been consistent with our October forecast. This generates a modest rise in England domiciled student entrants in 2019-20, after which trends in the number of 18-year olds in the population cause entrants to decline again in 2020-21 before growing slowly thereafter.

4.137 In July 2018, the Government announced that EU students entering English universities in the 2019-20 academic year would "*be charged the same tuition fees as UK students*" and able to access financial support "*on the same basis as is available today*".[21] In the absence of a stated policy for beyond 2019-20, we assume flat EU student entrants thereafter.

4.138 Net outlays on student loans rise from £15.7 billion in 2018-19 to £19.8 billion in 2023-24. This is up slightly since October, thanks to the upward revision to student numbers. A correction to the profile of repayments foregone as a result of the Government's sales of tranches of the student loan book, and revisions to our economic forecast that affect repayment levels and fees uprating, also increase net outlays relative to October.

[21] HM Government, *Further financial support for UK and EU students*, July 2018.

4.139 In February 2018, the Government announced a review of post-18 education and funding – the 'Augar review'. Among other things, this will cover "*the level, terms and duration*" of students' financial contribution to their post-18 education. After several delays, the review is now expected to be completed later this year. Any policy changes in response to the review's recommendations could have significant implications for our student loans forecast.

4.140 Following the ONS's announcement that it intends to change the accounting treatment of student loans, we explore the potential impact of its 'partitioned loan transfer approach' in Annex B. This would not change how the cashflows described in this section are accounted for, but would have significant implications for how and when they are accrued.

Other net lending

4.141 Other net lending includes the phased repayment of a £3.2 billion loan extended to the Irish Government during the euro area crisis, loan programmes of the Scottish Government (including Help to Buy (Scotland)), lending by local authorities and UK Export Finance loan schemes. Additionally, while outlays under Help to Buy in England are recorded within DEL, the repayments are not so we record them separately here.

4.142 Changes in other lending since October are generally small. The largest are the downward revision to Help to Buy repayments, due to lower house price inflation, and downward revisions to the initial years of our UK Export Finance lending forecast, in light of lower-than-expected lending in the year-to-date and its own slower lending plans.

Sales and purchases of financial assets

4.143 The Government plans to sell several financial assets across the forecast period, raising a total of £55.2 billion. We only include the proceeds from financial asset sales in our forecasts when firm details are available that allow the effects to be quantified with reasonable accuracy and allocated to a specific year. There are several planned sales that currently meet these criteria (see Chart 4.7). All are subject to uncertainty. We have assumed that there will be sufficient private-sector demand for the sales to take place and at a sufficiently attractive price for the transaction to pass the Government's value for money criteria and go ahead. Several sales were delayed after the EU referendum vote in 2016. There is clearly a risk at present that unexpected events could lead to further delays.

4.144 Selling most financial assets will produce an upfront benefit to PSND (and a smaller one to PSNB via lower interest payments), but reduce future income, lowering interest or dividend receipts (affecting both PSNB and PSND). Their effect on the broader balance sheet measure PSNFL, which includes all financial assets not just 'liquid' ones, tends to be closer to neutral, since the sales in effect swap one asset for another (e.g. shares for cash). However, in the case of student loans, and reflecting in part the subsidy element, the sales are at a steep discount to the face value recorded in PSNFL. Sales therefore swap loan assets for a smaller sum of cash, increasing PSNFL. The ONS's proposed student loan accounting changes, discussed in Annex B, would reduce the extent of these discounts.

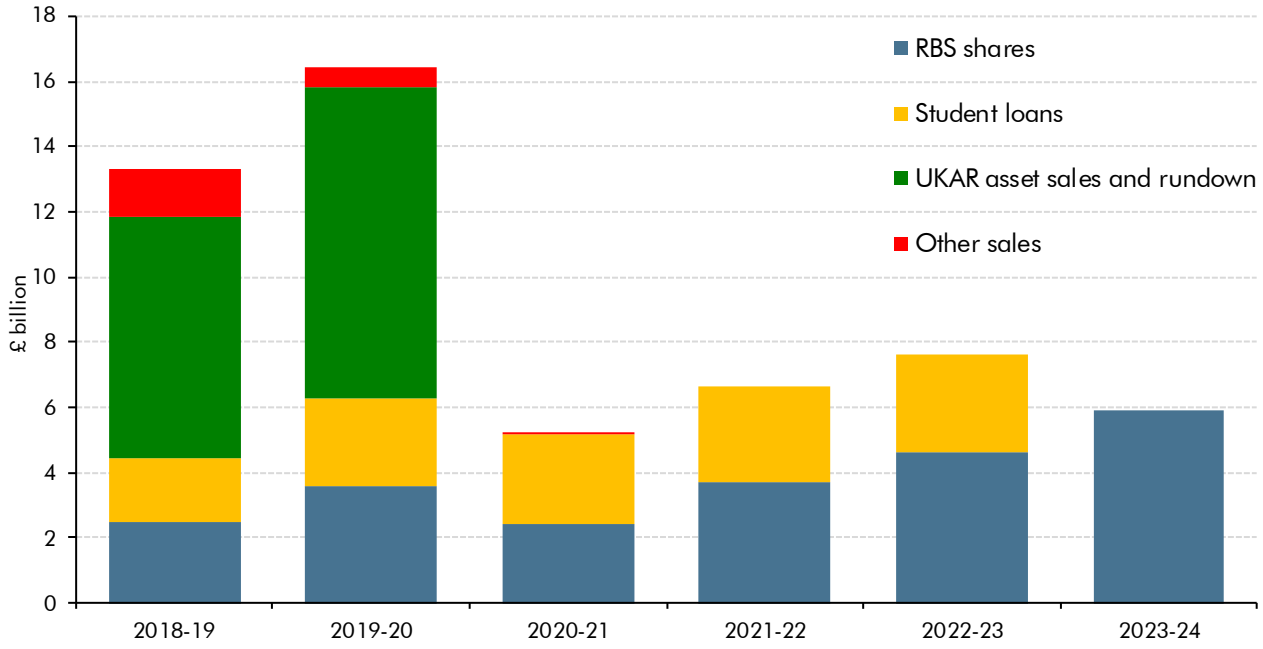
4.145 In terms of the largest financial asset sales included in our current forecast:

- The Government intends to divest itself of the remaining loan assets held within **UK Asset Resolution** (UKAR)[22] during 2019-20. A sale that in October we had expected to complete at the end of 2018-19 is now expected to complete in early 2019-20, altering the profile of receipts but not materially affecting the overall size.

- We continue to assume that sales of **RBS shares** recommence in 2019-20 and then continue across the forecast. Overall proceeds have been revised up £0.3 billion relative to our October forecast, reflecting share price movements in the interim.

- The Government raised £1.9 billion from **sales of Plan 1 student loans** in December 2018 as part of its plan to raise £15 billion up to 2022-23. As the December proceeds were close to the estimate in our October forecast, there is little change to the future years of the forecast. Details on the next sale are expected later in the year.

Chart 4.7: Proceeds from financial asset sales



Source: HM Treasury, OBR

Bank of England schemes

4.146 Since March 2009, the Bank of England's Monetary Policy Committee (MPC) has deployed unconventional forms of monetary policy to support the economy. The purchase of gilts by the Asset Purchase Facility (APF) affects PSND, but does not affect the flow measures of borrowing or the cash requirement. The flows of interest associated with those gilts have a relatively large effect on public sector debt interest spending and therefore borrowing.

4.147 In our October forecast, market-derived expectations of Bank Rate exceeded 1.5 per cent by the end of the forecast. Consequently, in line with MPC guidance, we assumed that the APF

[22] UK Asset Resolution holds the assets and liabilities of the former Northern Rock Asset Management and Bradford and Bingley.

would begin to sell its assets in 2023-24. In this forecast, Bank Rate remains below 1.5 per cent throughout, so we do not assume any change in asset holdings within the forecast period. This increases the cash requirement in 2023-24 relative to our October assumption.

4.148 The Bank's Term Funding Scheme (TFS) remains the largest source of year-to-year fluctuations in our PSNCR forecast. The scheme extended £127 billion of loans to commercial banks. Since our October forecast £5.0 billion of them have been repaid early rather than at the end of their 4-year terms in 2020-21 and 2021-22 – reflecting one large repayment and one very small one. We have therefore reduced the expected redemptions in those years by an equivalent amount. In line with the terms and conditions of the scheme there could be further repayments between now and the term of the remaining loans. However, since at this stage there is insufficient information to forecast either the size or timing of any future early repayments, we have treated the 2018 repayments as one-offs and assumed remaining loans are repaid at their original maturity date.

Timing effects

4.149 To move from PSNB to PSNCR, it is necessary to adjust for expected timing differences between cash flows and accruals. For example, as taxes are generally paid in arrears, and if receipts are forecast to rise over time, the cash received each year will generally be lower than the accrued receipts. The timing difference is large for smaller firms' corporation tax.

4.150 The largest receipts timing adjustment relates to interest on student loans. This is included in the accrued measure of public sector current receipts from the point at which the loan is issued, but cash repayments do not begin until the former students' income rises above a specific threshold. Much of the accrued interest will eventually be written off rather than received as cash payments – a 'fiscal illusion' within the public sector net borrowing calculation that is due to be addressed later this year (see Annex B). We have revised down our forecast of this part of the receipts accruals adjustment slightly relative to October.

4.151 Similar timing adjustments are made for spending. The largest relates to index-linked gilts. This is very sensitive to RPI inflation, as well as to the uneven profile of redemptions from year to year. Positive RPI inflation raises the amount that governments will have to pay on index-linked gilts when they are redeemed. This commitment is recognised in PSNB as accrued debt interest spending each year, but the actual cash payments do not occur until redemption, which can be decades into the future. This adjustment has a larger negative impact in most years than it did in our October forecast reflecting changes to our inflation forecast, partly offset by a reduction in planned index-linked gilt issuance.

4.152 The largest change in our forecast since October relates to corporation tax. The timetable for larger firms' corporation tax payments will be brought forward for accounting periods starting from April 2019 onwards, resulting in some companies making five quarterly cash instalment payments in a single fiscal year. These effects are spread across 2019-20 and 2020-21, reflecting the different accounting periods of the affected firms. These boosts to cash receipts do not reflect changes in the underlying liabilities that determine the accrued tax receipts used for PSNB estimates, so they are associated with large negative accruals

adjustments in 2019-20 and 2020-21. Relative to our October forecast, the boost to cash receipts in those two years – and therefore the accruals adjustment – has been revised down by an average of over £2 billion a year. This reflects large downward revisions to the proportion of firms assumed to pay corporation tax quarterly and the proportion of those assumed to be large enough to be affected by the measure (see paragraph 4.35).

Central government net cash requirement

4.153 The central government net cash requirement (CGNCR) is a primary determinant of government's net financing requirement. Table 4.30 reconciles CGNCR with PSNCR and Table 4.31 sets out the changes in this reconciliation since October. The reconciliation removes transactions associated with local authorities and public corporations from the PSNCR. Relative to October, the biggest change relates to our revised assumptions regarding the Bank of England's monetary policy operations, which affect public corporations' net cash requirement at the start and middle of the forecast period.

4.154 The classification 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, which forms the basis for the Government's net financing requirement.[23] This has three effects:

- The **banks' own cash requirements are included in the headline CGNCR**. Running down the banks' loan books (including through asset sales) reduces the CGNCR by £7.4 billion in 2018-19, falling to zero by 2020-21, but this does not directly affect the Exchequer (this forecast is shown in Table 4.28).

- **Interactions between the Exchequer and these bodies net off** within the headline measure. The B&B and NRAM adjustment shows the difference between net cash received by UKAR and that transferred to central government.

- The Treasury finances **Network Rail**'s new and maturing debt for a fee. Refinancing needs are estimated at £4.2 billion over the forecast.

[23] The Government is publishing revised financing arithmetic for 2018-19 and setting the financing remit for 2019-20 alongside this Spring Statement. 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.

Table 4.30: Reconciliation of PSNCR and CGNCR

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector net cash requirement (NCR)	**28.6**	**29.6**	**-4.2**	**-33.8**	**40.5**	**34.8**
of which:						
Local authorities and public corporations NCR	1.8	9.0	-46.5	-70.5	4.3	4.2
Central government (CG) NCR own account	26.8	20.6	42.3	36.7	36.2	30.6
CGNCR own account	26.8	20.6	42.3	36.7	36.2	30.6
Net lending within the public sector	7.3	4.3	4.5	4.7	5.0	5.2
CG net cash requirement	**34.0**	**24.9**	**46.8**	**41.4**	**41.2**	**35.8**
B&B and NRAM adjustment	-0.8	-0.5	0.0	0.0	0.0	0.0
Network Rail adjustment	0.8	-0.6	0.4	-0.3	-0.5	0.7
CGNCR ex. B&B, NRAM and Network Rail	**34.0**	**23.7**	**47.2**	**41.2**	**40.7**	**36.6**

Table 4.31: Changes in the reconciliation of PSNCR and CGNCR

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector net cash requirement (NCR)	**-2.5**	**-6.0**	**-0.8**	**-1.9**	**-5.7**	**0.3**
of which:						
Local authorities and public corporations NCR	-4.7	1.8	2.8	2.5	-1.1	-1.2
Central government (CG) NCR own account	2.3	-7.8	-3.6	-4.4	-4.6	1.5
CGNCR own account	2.3	-7.8	-3.6	-4.4	-4.6	1.5
Net lending within the public sector	3.0	1.4	1.7	1.9	2.1	2.4
CG net cash requirement	**5.3**	**-6.4**	**-1.9**	**-2.5**	**-2.4**	**3.9**
B&B and NRAM adjustment	-2.5	2.5	0.0	0.0	0.0	0.0
Network Rail adjustment	0.0	0.0	0.0	0.0	0.0	0.0
CGNCR ex. B&B, NRAM and Network Rail	**2.9**	**-3.9**	**-1.9**	**-2.5**	**-2.4**	**3.9**

Balance sheet aggregates

4.155 Our central forecast for public sector balance sheet aggregates incorporates the forecasts for PSNB and financial transactions set out earlier in this chapter. In this section we explain the changes in several balance sheet aggregates:

- **Public sector net debt**: a stock measure of public sector indebtedness defined as its gross liabilities minus its liquid financial assets, measured on a cash basis. It is the stock equivalent of the PSNCR, so depends on both our PSNB and financial transactions forecasts. It is used for the Government's supplementary fiscal target.

- **Public sector net debt excluding the Bank of England**: by removing the Bank's balance sheet from the headline measure, this abstracts from the uneven effect across years of the Bank's post-referendum package of monetary policy measures.

- **Public sector net financial liabilities**: a broader balance sheet measure that includes all financial assets and liabilities recorded in the National Accounts. For the most part, it is the stock equivalent of PSNB.

Public sector net debt

4.156 Table 4.32 shows the sources of year-on-year changes in PSND between 2018-19 and 2023-24. In addition to PSNB and financial transactions, the level of debt can be affected by changes in the valuation of existing assets and liabilities that make up PSND or in the classification of bodies into or out of the public sector. The main effects in our forecast are:

- The large **gilt premia** associated with low gilt yields (including negative real yields) relative to the coupons paid on the gilts. This is particularly pronounced for index-linked gilts. As PSND rises by the nominal value of gilts issued, rather than their market value, selling at a premium reduces the recorded impact on debt.

- **Index-linked gilts** are recorded at their uplifted nominal value in PSND, so positive RPI inflation adds to PSND each year but does not affect the PSNCR until the gilts redeem.

- Differences between the nominal and purchase value of **gilts held by the Bank of England's Asset Purchase Facility (APF)** add to net debt. This changes little in most years, but is material in 2021-22 when several gilts that the APF holds are due to redeem. We assume they will be rolled over for gilts of higher nominal value.

- A weaker pound increases the value of the unhedged component of the **international reserves** that are netted off PSND in 2018-19.

- The **reclassification of Scottish and Welsh housing associations** causes a step change down in 2018-19. In later years the reclassification affects PSNCR and PSND equally.

4.157 Cash borrowing as measured by the PSNCR adds to the stock of debt at the start and the end of the forecast, but reduces it in 2020-21 and 2021-22 when there is a cash surplus generated by the redemption of the Bank of England's Term Funding Scheme (TFS) loans. TFS loans are the prime driver of the uneven path of PSND over the forecast.

4.158 Valuation changes also have an uneven profile – in particular as regards the inflation uplift in the value of index-linked gilts.

Table 4.32: Year-on-year change in public sector net debt

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Level of PSND	1803	1838	1828	1796	1838	1878
Year-on-year change in PSND	**24.5**	**34.8**	**-10.3**	**-32.0**	**42.3**	**39.9**
of which:						
Due to public sector net cash requirement	**28.6**	**29.6**	**-4.2**	**-33.8**	**40.5**	**34.8**
Public sector net borrowing	22.8	29.3	21.2	17.6	14.4	13.5
Financial transactions	5.8	0.3	-25.4	-51.5	26.0	21.3
Due to valuation changes	**1.9**	**5.2**	**-6.1**	**1.9**	**1.9**	**5.1**
Gilt premia	-5.8	-8.1	-9.3	-7.2	-6.3	-5.6
Asset Purchase Facility gilt premia	1.1	0.3	0.5	-5.4	0.7	0.3
Index-linked gilts uplift	10.7	12.6	2.6	14.3	7.4	10.3
International reserves	-4.0	0.5	0.2	0.1	0.1	0.1
Due to classification changes	**-6.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**

Changes to public sector net debt

4.159 Our latest PSND forecast has been revised down in all years relative to our October forecast, by steadily increasing amounts that reach 1.1 per cent of GDP in 2023-24.

4.160 We have revised down our pre-measures forecast due to:

- Modestly higher **nominal GDP**, which reduces the debt-to-GDP ratio slightly from 2020-21 onwards.
- The downward revisions to our pre-measures forecast for **public sector net borrowing** reduce cash debt and the debt-to-GDP ratio by progressively larger amounts. This is the largest source of change to our debt forecast since October.
- Upward revisions to our pre-measures **financial transactions** forecast, mainly due to changes related to the timing of onshore corporation tax payments.
- Early redemptions in the **Term Funding Scheme** reduce debt at the start of the forecast but this unwinds by 2021-22. Higher gilt prices and the assumption that the APF no longer sells any assets within the forecast period increasingly add to debt.

4.161 As regards Government policy decisions, a short delay to a large UK Asset Resolution (UKAR) asset sale increases debt in 2018-19 but this unwinds in 2019-20, after which the effects of lower departmental spending dominate.

Table 4.33: Changes to public sector net debt since October

	Per cent of GDP					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	83.7	82.8	79.7	75.7	75.0	74.1
March forecast	83.3	82.2	79.0	74.9	74.0	73.0
Change	**-0.4**	**-0.6**	**-0.7**	**-0.8**	**-1.0**	**-1.1**
of which:						
Change in nominal GDP[1]	-0.1	0.0	-0.1	-0.2	-0.3	-0.4
Change in cash level of net debt	-0.3	-0.6	-0.6	-0.6	-0.7	-0.7
	£ billion					
October forecast	1810	1851	1841	1809	1856	1896
March forecast	1803	1838	1828	1796	1838	1878
Like-for-like change in cash debt	**-7**	**-13**	**-13**	**-13**	**-18**	**-18**
of which:						
Underlying forecast revisions	**-11**	**-12**	**-12**	**-14**	**-20**	**-22**
Public sector net borrowing (pre-measures)	-3	-6	-13	-20	-28	-37
Financial transactions (pre-measures)	-6	-4	1	5	6	8
Valuation changes	-1	-2	-1	1	2	7
Effect of Government decisions	**4**	**-1**	**-1**	**0**	**2**	**4**
Affecting public sector net borrowing	0	1	3	5	7	9
Affecting financial transactions	4	-2	-3	-3	-3	-3
Indirect effects	0	0	-1	-1	-1	-2

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

Alternative balance sheet aggregates and the true health of the public finances

4.162 In our 2017 *Fiscal risks report*, we 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 like PSND do not reflect true changes in the underlying health of the public finances.

4.163 The path of PSND is strongly influenced by several transactions that could fall under this heading. Financial asset sales serve to reduce PSND, while TFS loans raised PSND during the past two years but reduce it later in the forecast. None materially change the underlying fiscal position. Issuing student loans does affect the underlying position but by less than is apparent in PSND – as all the principal extended raises PSND, but some of it will be repaid.

4.164 Asset sales do not generally improve the sustainability of the fiscal position, as they simply exchange one asset for another: a long-term flow of receipts for an upfront lump sum. But this lump sum reduces PSND straight away and the loss of receipts only increases it gradually over time. By contrast, TFS lending raises PSND when issued and reduces it when it is repaid. This is because the loans are deemed to be illiquid and therefore do not net off PSND, even though they are backed by collateral and highly likely to be repaid.

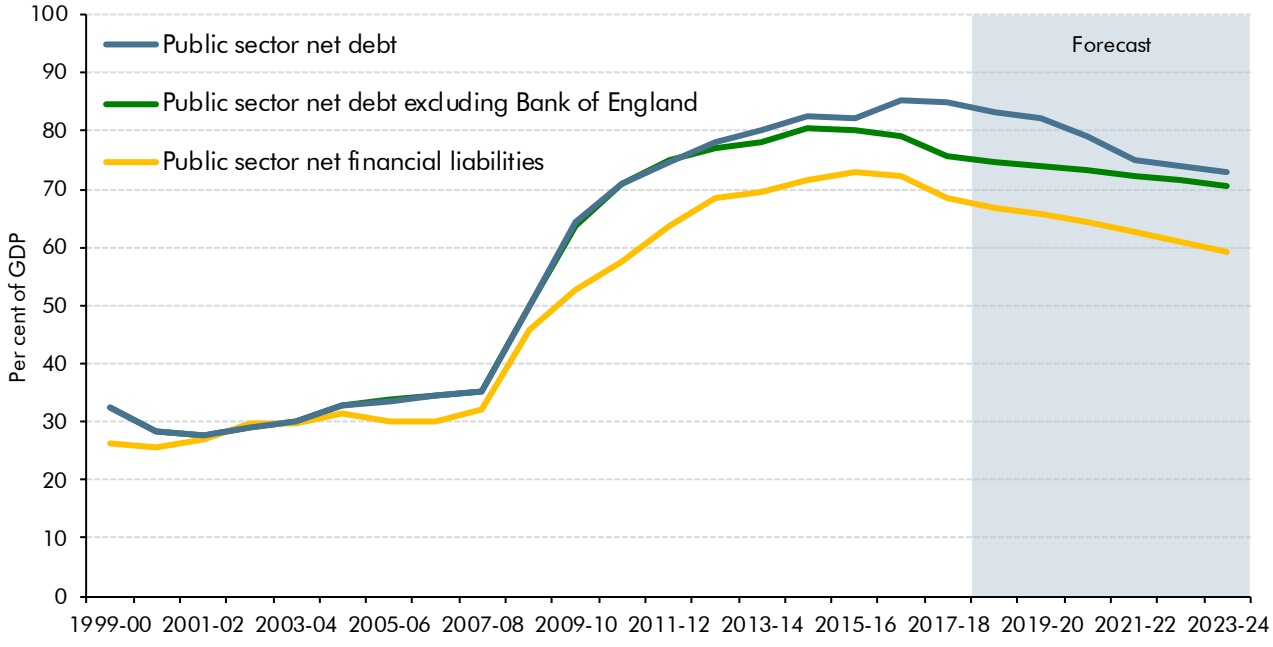
4.165 Alternative metrics often do a better job than PSND of reflecting the underlying picture:

- **PSND excluding Bank of England** removes the distortions from the TFS. This provides a more informative underlying picture during the build-up (in 2016-17 and 2017-18) and rundown (in 2020-21 and 2021-22) of the scheme.

- **Public sector net financial liabilities** (PSNFL) includes all financial assets and liabilities recognised in the National Accounts. As well as being unaffected by the TFS, this provides a more realistic picture of the effect of most asset sales. The main drawback of PSNFL is that the Government's stock of student loan assets is recorded at face value, whereas the actual value is considerably lower because the loans are not expected to be repaid in full. This issue is expected to be addressed by forthcoming ONS methodological changes that are discussed in Annex B.

4.166 Chart 4.8 shows that the paths of both PSND excluding the Bank of England and PSNFL are much smoother than PSND, although both fell in 2017-18 due to the reclassification of English housing associations. PSND declines relatively slowly when the Bank of England is excluded, falling by 4.1 per cent of GDP between 2018-19 and 2023-24. PSNFL falls somewhat more over that period – by 7.8 per cent of GDP. We estimate that the proposed change to the treatment of student loans discussed in Annex B would reduce that fall by 2.8 per cent of GDP.

Chart 4.8: The public sector balance sheet: various measures



Source: ONS, OBR

Financing and the balance sheet

4.167 Our debt interest forecast requires us to make assumptions as to how changes in PSND translate into movements in the stocks of assets and liabilities on the public sector balance sheet. Usually the largest component in the PSNCR comes from 'CGNCR ex' – the central government net cash requirement excluding UK Asset Resolution and Network Rail effects.

4.168 At each Budget and Spring Statement, the Government specifies how it intends to finance CGNCR ex in the 'financing remit'.[24] Alongside this Spring Statement the Government has published revised financing arithmetic for 2018-19 and initial plans for the financing remit for 2019-20. It also reports the level of gilts redeeming and any plans for additional financing of the foreign exchange reserves. After adjusting for any under or over-financing from the previous year, this determines the gross financing requirement.

4.169 The Government usually meets most of its gross financing requirement by issuing gilts.[25] The rest is met via changes to the stock of Treasury bills, from NS&I products (such as premium bonds) or from other sources (such as the DMO's cash position).

4.170 As Table 4.34 shows, 93 per cent of the 2018-19 gross financing requirement is expected to be met by issuing gilts – 72 per cent from conventional gilts and 22 per cent from index-linked gilts. The share of index-linked gilts falls to 18 per cent in 2019-20, in line with the Government's latest stated plans. We have based our forecast on a 1.5 percentage point a year decline thereafter, reaching 14.7 per cent of all gilt issuance in 2023-24.

Table 4.34: Total gross financing

	£ billion					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Central government net cash requirement[1]	34.0	23.7	47.2	41.2	40.7	36.6
Gilt redemptions	66.7	98.9	97.6	79.3	73.3	71.8
Financing for the reserves	6.0	6.0	0.0	0.0	0.0	0.0
Change in DMO cash position[2]	-1.4	0.5	0.0	0.0	0.0	0.0
Total gross financing	**105.4**	**129.2**	**144.8**	**120.5**	**114.0**	**108.3**
of which:						
Conventional gilts	76.4	90.5	109.8	91.8	88.2	84.9
Index-linked gilts	21.5	23.6	26.1	19.7	17.0	14.6
Treasury bills	-4.0	4.0	0.0	0.0	0.0	0.0
NS&I	11.0	11.0	9.0	9.0	9.0	9.0
Other central government	0.0	0.0	-0.1	-0.1	-0.2	-0.2

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

4.171 Table 4.35 shows how we expect the public sector's debt liabilities and liquid financial assets to evolve over the forecast.[26] 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.

4.172 We forecast public sector gross debt liabilities to fall by 5.4 per cent of GDP over the forecast. In terms of financing instrument, the largest contributor to this decline is the 4.2 per cent of GDP reduction in the stock of index-linked gilts, reflecting the Government's announcement in last year's Budget that it would reduce their share in total issuance.

[24] HM Treasury, *Debt management report 2018-19*, 2019.
[25] 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.
[26] A similar table for PSNFL assets and liabilities is presented in the supplementary fiscal tables accompanying this forecast.

4.173 The Government has increased its gross stock of foreign exchange reserves significantly over the fiscal year to date, from £115.5 billion in March 2018 to £134.7 billion in January 2019 and we expect this to rise further to £140.9 billion by the end of the year. Some of this increase in assets has come from exchange rate movements or from retained income and reduces net debt. But the Government will have had to finance the remaining increase, so this portion of the gross rise will be matched by a gross rise in liabilities and will therefore not affect net debt. Some £6 billion of this reflects borrowing via the financing remit (and therefore mainly increases gilt liabilities in Table 4.35) in line with stated Government policy in recent years. The remainder has been financed via the reserves account (included in 'other government liabilities' in the table). As this is in excess of the Government's stated plans we assume this portion is temporary and reverses in 2019-20.

4.174 The Bank of England's net contribution to debt falls sharply between 2019-20 and 2021-22 as loans issued under the TFS are assumed to be repaid.

Table 4.35: The composition of public sector net debt

	Per cent of GDP[1]					
			Forecast			
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Public sector debt liabilities[2] (a)	**84.3**	**82.6**	**81.6**	**80.9**	**79.8**	**78.7**
of which:						
Conventional gilts	48.4	46.8	46.1	45.0	44.6	44.1
Index-linked gilts	19.8	20.1	19.9	20.4	19.8	19.3
T-bills	2.8	2.9	2.8	2.7	2.6	2.5
NS&I	7.7	8.0	8.1	8.2	8.3	8.3
Other central government	4.4	3.6	3.4	3.3	3.2	3.1
Local government[3]	1.1	1.1	1.1	1.2	1.2	1.3
Non-financial public corporations[4] (b)	0.1	0.1	0.1	0.1	0.1	0.1
Public sector liquid assets[2] (c)	**9.5**	**8.7**	**8.4**	**8.5**	**8.2**	**8.1**
of which:						
Reserves	6.5	5.9	5.7	5.5	5.4	5.2
Other central government	1.5	1.4	1.3	1.2	1.2	1.1
Local government[3]	1.2	1.0	0.9	1.0	1.0	1.1
Non-financial public corporations[4]	0.4	0.4	0.4	0.7	0.7	0.6
Bank of England net contribution (d)	**8.5**	**8.3**	**5.8**	**2.5**	**2.4**	**2.3**
Public sector net debt (PSND) (a-c+d)	**83.3**	**82.2**	**79.0**	**74.9**	**74.0**	**73.0**
Memo: PSND excluding Bank of England (a-c)	*74.8*	*73.9*	*73.2*	*72.4*	*71.6*	*70.7*
Memo: general government gross debt (a-b)	*84.2*	*82.5*	*81.4*	*80.7*	*79.7*	*78.6*

[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

4.175 Table 4.36 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.[27]

4.176 In total, £136.6 billion was disbursed by the Treasury during and following the crisis. By mid-February 2019, principal repayments had amounted to £95.0 billion, up slightly relative to October, reflecting ongoing repayments from UKAR. This has fed through to a smaller net cash shortfall of £19.4 billion.

4.177 As of mid-February, the Treasury was still owed £2.3 billion from loans (almost entirely by UKAR). The value of its RBS shares had fallen to £18.2 billion,[28] from the £20.3 billion recorded in our October *EFO*, while the Treasury's holdings in UKAR had an equity book value of around £8.5 billion. 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 £9.7 billion.

4.178 The cash surplus estimate excludes, however, 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 £37.0 billion by February, mainly due to the costs associated with RBS and UKAR.[29] This is slightly higher than our October estimate, partly reflecting four more months servicing debt on interventions yet to be repaid or sold. Together this implies an overall cost of £27.3 billion to the Government (1.7 per cent of 2008-09 GDP), £2.8 billion higher than we estimated in October.

[27] We discussed the fiscal implications of financial crises in Chapter 4 of our 2017 *Fiscal risks report*.
[28] The RBS share price is an average over the 10 days to 14 February, consistent with other market-derived assumptions in our forecast.
[29] 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 4.36. In response to user requests, we now also report the split between financing costs up to the close of the intervention and those subsequently in a footnote to the table.

Table 4.36: Gross and net cash flows of financial sector interventions

	£ billion								
	Lloyds	RBS	UKAR[1]	FSCS[1]	CGS[1]	SLS[1]	Other	**Total**	Change since October[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	41.4	20.9	0.0	0.0	5.3	**95.0**	1.8
Other fees received[3]	3.2	4.3	4.4	3.5	4.3	2.3	0.3	**22.2**	0.3
Net cash position	3.8	-35.2	1.8	3.5	4.3	2.3	0.2	**-19.4**	2.0
Outstanding payments	0.0	0.0	2.3	0.0	0.0	0.0	0.1	**2.3**	-1.8
Market value[4]	0.0	18.2	8.5	0.0	0.0	0.0	0.0	**26.8**	-2.1
Implied balance	3.8	-17.0	12.6	3.5	4.3	2.3	0.3	**9.7**	-1.8
Exchequer financing[5]	-4.0	-14.0	-12.1	-7.7	1.1	0.3	-0.5	**-37.0**	-1.0
Overall balance	**-0.2**	**-31.0**	**0.4**	**-4.2**	**5.4**	**2.6**	**-0.2**	**-27.3**	**-2.8**
Memo: changes in overall balance since October [2]	-0.1	-2.4	-0.3	-0.1	0.0	0.0	0.0	-2.8	

[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] October *EFO* figures were consistent with end-September data.

[3] Fees relating to the asset protection scheme and contingent capital facility are included within the RBS figures.

[4] UKAR is book value of equity, derived from its accounts published 31 March 2018 (value up to date 26 February 2019).

[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	-14.0	-12.1	-7.6	0.3	0.0	-0.5	-37.6
After close	-0.3			-0.1	0.8	0.3		0.6

Table 4.37: Fiscal aggregates

	Per cent of GDP						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Receipts and expenditure							
Public sector current receipts (a)	36.4	37.0	36.9	37.1	37.1	37.2	37.2
Total managed expenditure (b)	38.5	38.1	38.2	38.0	37.9	37.7	37.8
of which:							
Public sector current expenditure (c)	34.4	34.2	34.2	33.9	33.8	33.8	33.8
Public sector net investment (d)	2.1	2.0	2.1	2.2	2.1	2.1	2.1
Depreciation (e)	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Fiscal mandate and supplementary target							
Cyclically adjusted net borrowing	2.0	1.2	1.3	0.8	0.7	0.6	0.5
Public sector net debt[1]	84.7	83.3	82.2	79.0	74.9	74.0	73.0
Deficit							
Public sector net borrowing (b-a)	2.0	1.1	1.3	0.9	0.7	0.6	0.5
Current budget deficit (c+e-a)	0.0	-1.0	-0.8	-1.3	-1.4	-1.5	-1.6
Cyclically adjusted current budget deficit	-0.1	-0.9	-0.8	-1.4	-1.5	-1.5	-1.6
Primary deficit	0.2	-0.3	-0.1	-0.4	-0.5	-0.6	-0.6
Cyclically adjusted primary deficit	0.2	-0.2	-0.1	-0.5	-0.6	-0.6	-0.6
Financing							
Central government net cash requirement	1.9	1.6	1.1	2.1	1.8	1.7	1.4
Public sector net cash requirement	3.9	1.3	1.3	-0.2	-1.4	1.7	1.4
Alternative balance sheet metrics							
Public sector net debt ex. Bank of England	75.7	74.8	73.9	73.2	72.4	71.6	70.7
Public sector net financial liabilities	68.4	66.8	65.9	64.3	62.5	60.8	59.0
Stability and Growth Pact							
Treaty deficit[2]	2.1	1.2	1.4	1.1	1.1	0.7	0.6
Cyclically adjusted Treaty deficit	2.1	1.3	1.4	1.0	1.0	0.7	0.6
Treaty debt ratio[3]	85.3	85.5	83.8	82.9	82.2	81.1	80.0
	£ billion						
Public sector net borrowing	41.9	22.8	29.3	21.2	17.6	14.4	13.5
Current budget deficit	-0.9	-20.4	-17.7	-29.3	-32.7	-36.8	-40.3
Cyclically adjusted net borrowing	41.5	24.9	28.7	18.9	15.9	13.9	13.4
Cyclically adjusted current budget deficit	-1.3	-18.3	-18.3	-31.6	-34.5	-37.3	-40.4
Public sector net debt	1779	1803	1838	1828	1796	1838	1878
Memo: Output gap (per cent of GDP)	*0.1*	*0.2*	*-0.1*	*-0.2*	*-0.1*	*0.0*	*0.0*

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

Risks, uncertainties and contingent liabilities

Risks and uncertainties

4.179 As always, we emphasise the uncertainties that lie around our central fiscal forecast. The uncertainties around the UK's departure from the EU remain elevated in this forecast. In particular, as we finalised this report the risk of a 'no deal' exit continued to represent a major source of uncertainty to our forecast. We consider the channels along which such a

scenario might affect the public finances in Chapter 5 and provided a broader discussion of how Brexit-related risks might affect our forecast in a recent discussion paper.[30]

4.180 We expose our judgements to various sensitivities in Chapter 5. Several of the risks we highlighted in our 2017 *FRR* remain key sources of uncertainty around our central forecast:

- **Macroeconomic risks**: such as risks to potential output growth from productivity and migratory flows and the risks from shocks, such as the pound falling sharply given the large current account deficit or as a result of a disorderly Brexit.

- **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 decade.

- **Revenue-specific risks**: our *FRR* highlighted potential pressures on the sustainability of various tax bases. One issue we considered was the concentration of some receipts streams on a small proportion of the tax base. Part of the reason for revising up income tax and NICs receipts in this forecast relates to earnings growth among the small number of taxpayers at the very top of the earnings distribution. This relative strength could be reversed or repeated at some point in the future.

- **Primary spending risks** (i.e. spending on everything other than debt interest): in the *FRR*, we noted how pressures can build and the risk of higher borrowing if they are accommodated. The Government addressed some of these pressures via a multi-billion pound settlement for the NHS in October, but has already chosen to top that up in light of higher inflation. The risk of further such policy changes remains.

- **Balance sheet risks**: these can relate to real-world events or statistical changes. The ONS review of the recording of public sector pension funds remains a potential source of risk to the measured balance sheet aggregates in this forecast.

- **Debt interest risks**: in the *FRR* we flagged how greater index-linked gilts issuance had increased the sensitivity of debt interest spending to inflation shocks. The Government's initial financing plans for 2019-20 further reduce the share of borrowing financed via index-linked gilts to 18 per cent (down from 26 per cent in 2017-18).

- **Policy delays and reversals**: in recent years, several tax rises and welfare spending cuts have subsequently been reversed or delayed. In Annex A, we summarise those that have affected this forecast.

4.181 Two legal processes initiated by the European Commission represent sources of risk to our fiscal forecast. The first relates to the Commission's contention that it has lost around €2 billion of customs revenue, after deducting notional collection costs (but before adding on any potential late payment interest costs), as a result of the UK failing to enforce checks

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

against customs fraud. If the Commission is not satisfied with the UK's response it may seek court proceedings against the UK. The second regards the UK's application of a zero rate of VAT to certain derivative transactions. On this issue, the Commission has now referred the UK to the European Court of Justice.

Contingent liabilities

Regular update

4.182 We have as usual asked the Treasury to identify any changes to future contingent liabilities since our October forecast. Its dedicated reporting system noted 11 were entered into over that period or soon to be entered into, with a total maximum exposure of £5.5 billion for those that can be quantified. We have reviewed these and do not consider any to represent a material increase in the fiscal risk to which the public sector is exposed.

4.183 The Treasury's 2017-18 departmental accounts disclose an unquantifiable remote contingent liability in respect of the UK's decision to leave the European Union and the Article 50 process. The Treasury has informed us that this has not changed.

4.184 On 20 December 2018, the Court of Appeal ruled that the Government's transitional pension arrangements offered to some judges and firefighters amounted to unlawful discrimination. The Chief Secretary to the Treasury announced this could cost around £4 billion a year if extended to all applicable public service pension schemes.[31] The Government has challenged the Court of Appeal's decision. We asked the Treasury whether this was being treated as a contingent liability. It explained that schemes have made provisions of £29.5 billion in respect of a potential increase in liabilities. If the Government were to lose its appeal, the Treasury would not expect that to affect scheme contribution rates until beyond the period to 2023 for which they are currently in the process of being set. As such, this case represents a longer-term fiscal risk rather than one that would be likely to affect the public finances within our current forecast horizon.

Assurances provided to Nissan in 2016 and recently reversed

4.185 Ahead of our November 2016 *EFO*, we asked the Treasury *"What if any new contingent liabilities have been created in respect of Government assurances provided to Nissan? If new contingent liabilities have been created, which department's accounts do you expect them to be reported in and how?"*. The Treasury declined to address the substance of our question and told us *"There is a standard process for departments to report to Parliament as and when they incur contingent liabilities. Any commitments incurring costs will be managed within existing overall DEL totals."*

4.186 On 4 February 2019, the Secretary of State for Business, Energy and Industrial Strategy (BEIS) published a letter addressed to Nissan and dated 21 October 2016.[32] It referenced a package of support of up to £80 million that was described as being subject to business

[31] Chief Secretary to the Treasury, *Pensions: Written statement - HCWS1286*, January 2019.
[32] Department for Business, Energy & Industrial Strategy, *Nissan's investment in the UK*, February 2019.

cases being developed and also "*contingent… on a positive decision by the Nissan Board*" to allocate the production of two of Nissan's vehicle types at its Sunderland plant. We have since asked the Treasury how its response to us in November 2016 was consistent with the Secretary of State's letter to Nissan and the OBR's right of access to information under the Budget Responsibility and National Audit Act 2011.

4.187 The Treasury told us that "*The decision as to whether government assurances regarding Nissan are classified as a contingent liability is the responsibility of the BEIS accounting officer.*"

4.188 We followed this up with BEIS, who told us that "*The BEIS accounting officer is responsible for assessing whether contingent liabilities are created by the department. This assessment is done with reference to standards in 'Managing Public Money' and International Accounting Standard 37 (Provisions, Contingent Liabilities and Contingent Assets). Observing these standards, the accounting officer judged that the department's letter to Nissan dated 21 October 2016 did not create a contingent liability because no present obligation was created by the letter. The accounting officer's judgement on this matter was reviewed and endorsed by the National Audit Office in December 2016, and subsequently in its external audit of the BEIS Annual Report and Accounts 2016-17.*"

4.189 This appears consistent with the view stated by the Comptroller and Auditor General in 2016 when he was asked by the Treasury Select Committee to review these assurances, which at the time were not in the public domain. This seems to be an artefact of the Treasury's Managing Public Money guidance to which BEIS refer, since an offer to make a payment that is contingent on a specific decision might reasonably be considered a 'contingent liability' in a broader sense.

International comparisons

4.190 International organisations, such as the European Commission and the International Monetary Fund (IMF), produce forecasts of deficit and debt levels of different countries on a comparable basis. These are based on the narrower general government definitions of debt and borrowing than the public sector definition that we focus on. They are also presented on a calendar year basis. To facilitate comparisons, Tables 4.38 and 4.39 convert our UK forecasts to a basis that is comparable with that used by these international organisations. With both modelling and reporting of much tax and expenditure in the UK carried out primarily on a fiscal year basis, the calendar year forecasts are illustrative and have been derived by simply weighting our fiscal year forecasts.

Table 4.38: Comparison with European Commission forecasts

	Per cent of GDP					
	Treaty deficit[1]			Treaty debt[2]		
	2018	2019	2020	2018	2019	2020
UK (March *EFO*)	**1.5**	**1.4**	**1.2**	**86.8**	**84.2**	**83.1**
UK (EC)	1.3	1.0	1.0	86.0	84.5	82.6
Germany	-1.6	-1.2	-1.1	60.1	56.7	53.7
France	2.6	2.8	1.7	98.7	98.5	97.2
Italy	1.9	2.9	3.1	131.1	131.0	131.1
Spain	2.7	2.1	1.9	96.9	96.2	95.4
Euro area	0.6	0.8	0.7	86.9	84.9	82.8

[1] General government net borrowing.

[2] General government gross debt.

Source: European Commission, *European Economic Forecast Autumn 2018,* OBR

Table 4.39: Comparison with IMF forecast

	Per cent of GDP					
	General government net borrowing			General government gross debt		
	2018	2019	2023	2018	2019	2023
UK (March *EFO*)	**1.5**	**1.4**	**0.6**	**86.8**	**84.2**	**80.3**
UK (IMF)	2.0	1.7	0.8	87.4	87.2	84.0
Germany	-1.5	-1.5	-0.8	59.8	56.0	44.6
France	2.6	2.8	2.8	96.7	96.5	93.9
Italy	1.7	1.7	2.2	130.3	128.7	125.1
Japan	3.7	2.8	2.0	238.2	236.6	235.4
US	4.7	5.0	4.5	106.1	107.8	117.0

Source: IMF, *World Economic Outlook,* October 2018, OBR

5 Performance against the Government's fiscal targets

Introduction

5.1 This chapter:

- sets out the Government's **medium-term fiscal targets** (from paragraph 5.2);
- examines whether the Government has a better than 50 per cent **chance of meeting them** on current policy, given our central forecast (from paragraph 5.6); 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 economic scenarios (from paragraph 5.27).

The Government's fiscal targets

5.2 The *Charter for Budget Responsibility* requires the OBR to judge whether the Government has a greater than 50 per cent chance of meeting its fiscal targets under current policy. The *Charter* has been updated several times in recent years as governments have revised their fiscal targets. The latest version was approved by Parliament in January 2017.[1]

5.3 The *Charter* states 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 that it was drawn up, 'the next Parliament' was expected to run from 2020 to 2025.

5.4 The *Charter* also sets out targets for borrowing, debt and welfare spending that require:

- The **structural deficit** (cyclically adjusted public sector net borrowing) to lie below 2 per cent of GDP by 2020-21 (the 'fiscal mandate').
- **Public sector net debt** to fall relative to GDP in 2020-21 (the 'supplementary target').
- Welfare spending (excluding the state pension and payments closely linked to the economic cycle) to lie below a '**welfare cap**'. The latest version of the cap was initially set in November 2017, to apply in 2022-23. A non-binding pathway was also specified for the years leading up to the cap year. The Government set the effective cap 3 per cent above our November 2017 forecast for 2022-23 at £135 billion, with

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

the level of spending to be adjusted for subsequent changes in our inflation forecast. The methodology for doing so is chosen by the Government, as the *Charter* requires.

5.5 In this chapter, we assess the Government's performance against the objective (which it is not yet on course to achieve on current policy) and the targets (all of which it is on course to achieve), based on our central forecast. We also summarise what the forecast implies for performance against the targets set out in previous versions of the *Charter*.

The implications of our central forecast

5.6 Table 5.1 shows our central forecasts for the fiscal aggregates relevant to the current 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 forecasts are described in detail in Chapter 4. They should be interpreted as median forecasts, so we believe it is equally likely that outturns will come in above them as below them. They are conditioned on broad-brush assumptions about a smooth exit from the EU.

Table 5.1: Forecasts for the Government's target aggregates

	Per cent of GDP, unless otherwise stated						
	Outturn	Forecast					
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Fiscal mandate: Cyclically adjusted public sector net borrowing in 2020-21							
October forecast	1.9	1.3	1.6	1.3	1.1	0.9	0.8
March pre-measures forecast	2.0	1.2	1.3	0.8	0.6	0.5	0.4
March post-measures forecast	2.0	1.2	1.3	0.8	0.7	0.6	0.5
Supplementary target: Year-on-year change in public sector net debt in 2020-21							
October forecast	85.0	83.7	82.8	79.7	75.7	75.0	74.1
March pre-measures forecast	84.7	83.1	82.3	79.0	74.9	73.9	72.8
March post-measures forecast	84.7	83.3	82.2	79.0	74.9	74.0	73.0
Welfare cap: Specified welfare spending in 2022-23 (£ billion)							
October forecast	118.2	119.6	121.7	123.6	126.1	129.3	132.7
March pre-measures forecast	118.6	119.3	121.5	123.0	125.7	129.4	133.4
March post-measures forecast	118.2	119.3	121.4	123.2	126.0	129.5	133.7
Fiscal objective: Public sector net borrowing up to 2025-26							
October forecast	1.9	1.2	1.4	1.2	1.0	0.9	0.8
March pre-measures forecast	2.0	1.1	1.3	0.9	0.7	0.5	0.4
March post-measures forecast	2.0	1.1	1.3	0.9	0.7	0.6	0.5

5.7 Table 5.2 summarises performance against the mandate, supplementary target and welfare cap in the years in which they apply, and how the margins by which they are met have changed since October. (Our forecast does not extend far enough to do the same for the fiscal objective, though our central forecast implies that it is not achieved in the first three years of the relevant period and further consolidation would be necessary to achieve it in the final two years. That said, the improvement required over those two years is now only around half that required in October.) The rest of this section sets out the assessments we make based on these figures and the reasons for the changes in them since October.

Table 5.2: Performance against the Government's fiscal and welfare targets

		Per cent of GDP		£ billion	
		Forecast	Margin	Forecast	Margin
Fiscal mandate: Cyclically adjusted public sector net borrowing in 2020-21					
October forecast	Met	1.3	0.7	30.1	15.4
March pre-measures forecast	Met	0.8	1.2	17.7	27.8
March post-measures forecast	Met	0.8	1.2	18.9	26.6
Change: October to March post-measures		*-0.5*	*0.5*	*-11.2*	*11.2*
Supplementary target: Year-on-year change in public sector net debt in 2020-21					
October forecast	Met	-3.2	3.2		
March pre-measures forecast	Met	-3.2	3.2		
March post-measures forecast	Met	-3.2	3.2		
Change: October to March post-measures		*-0.1*	*0.1*		
Welfare cap: Specified welfare spending in 2022-23					
October forecast	Met			129.3	4.6
March pre-measures forecast	Met			129.4	5.7
March post-measures forecast	Met			129.5	5.5
Change: October to March post-measures				*0.2*	*0.9*

The current fiscal targets

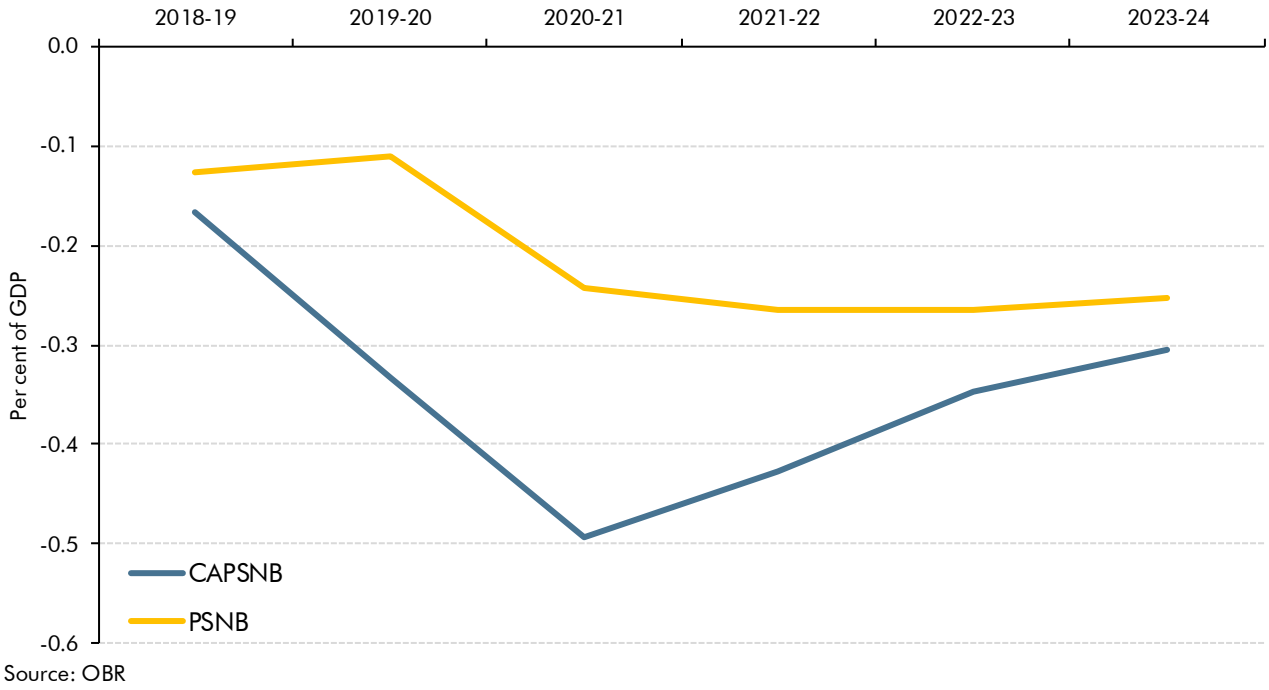
The fiscal mandate

5.8 The Government's fiscal mandate requires it to reduce the structural deficit below 2 per cent of GDP by 2020-21. On our latest output gap estimate, the structural deficit moves below this ceiling in 2018-19 – to 1.2 per cent of GDP – two years ahead of the required date.

5.9 Our latest forecast shows the structural deficit falling to 0.8 per cent of GDP in the target year, giving a margin against the fiscal mandate of 1.2 per cent of GDP. The margin is greater than in our October forecast, thanks to a combination of higher receipts and a bigger fall in spending as a per cent of GDP in the run up to the target year. In cash terms, the expected margin against the mandate stands at £26.6 billion, up from £15.4 billion in October. In the absence of the small fiscal giveaway since October, it would have been £27.8 billion.

5.10 It is worth noting that our forecast for the structural deficit (CAPSNB) has fallen by more than our forecast for the headline deficit (PSNB) when compared to October, particularly in the target year. Chart 5.1 shows that we have revised down CAPSNB by 0.5 per cent of GDP in 2020-21 compared to a downward revision of only 0.2 per cent of GDP for PSNB. This difference – and the fact that it peaks in the target year – reflects the fact that we have revised up average earnings growth despite expecting greater cyclical weakness in the economy more generally (so the composition of nominal GDP is structurally more tax-rich) compounded by other revisions to our income tax and NICs forecast that are unrelated to the cycle (notably those flowing from updated assumptions about the earnings distribution).

Chart 5.1: Change in CAPSNB and PSNB relative to our October forecast



Source: OBR

5.11 A little over half of the fall in structural borrowing as a share of GDP between 2017-18 and 2020-21 now results from higher receipts and just under half from lower spending. Chart 5.2 shows how this differs from October, estimated using cyclical-adjustment coefficients:[2]

- **Structural receipts** are expected to rise as a per cent of GDP relative to 2017-18, and by slightly more than in October. As in October, rises in income tax, NICs, VAT and other taxes (e.g. the introduction of the apprenticeship levy and higher environmental levies) are only partly offset by falls in corporation tax and fuel and excise duties. Receipts in the target year are boosted by a one-off effect of changing the timing of capital gains tax payments, which brings forward some payments into that year.

- **Structural spending** is expected to fall as a per cent of GDP between 2017-18 and 2020-21. This reflects falls in welfare, debt interest and other spending. This is only partly offset by higher departmental spending, including capital expenditure (CDEL), which increases in the run up to the target year. The fall is larger than the one we expected in October, largely due to a greater fall in debt interest payments as a share of GDP than previously forecast thanks to lower RPI inflation and interest rates.

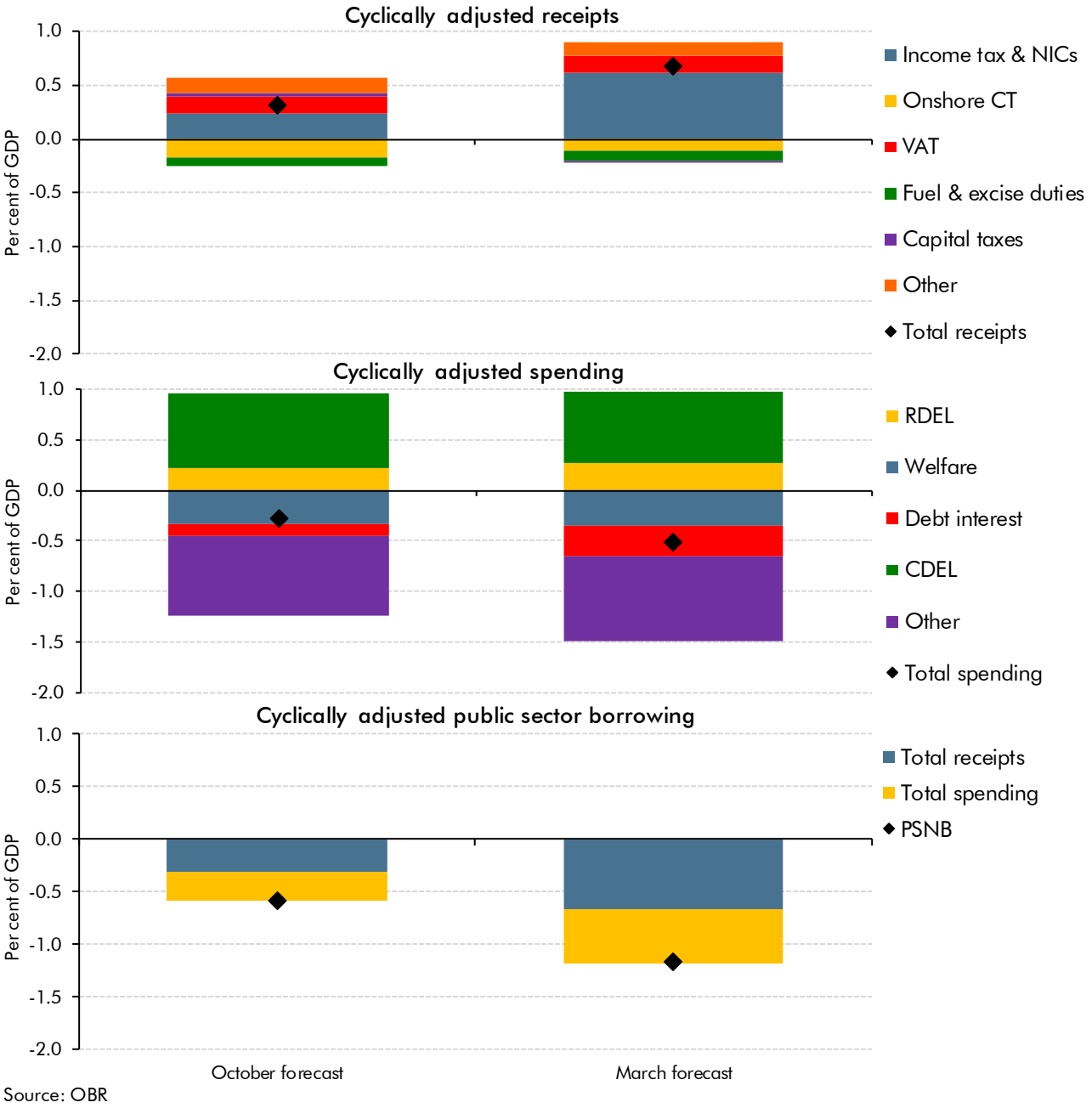
- **Structural borrowing** declines as a per cent of GDP between 2017-18 and 2020-21 by a larger amount than in our October forecast. This reflects the higher receipts and greater fall in spending.

5.12 Following the ONS's announcement that it is reviewing the accounting treatment of student loans, we explore the potential impact of its proposed 'partitioned loan transfer approach' in detail in Annex B. Should this approach be adopted, we expect it would increase CAPSNB

[2] Further details can be found in Helgadottir, T., *et al., OBR Working Paper No.4: Cyclically adjusting the public finances*, 2012.

by around £12 billion or 0.5 per cent of GDP in 2020-21, absorbing almost half the Government's current headroom relative to its fiscal mandate.

Chart 5.2: Cumulative changes in the structural deficit from 2017-18 to 2020-21



Source: OBR

The supplementary debt target

5.13 The supplementary debt target requires PSND to fall as a percentage of GDP in 2020-21. PSND was broadly stable on this basis between 2016-17 and 2017-18. We now expect it to fall in each year of the forecast, with a large drop of 3.2 per cent of GDP in the target year (unchanged from October). The Government is therefore comfortably on course to meet this target.

5.14 Chart 5.3 decomposes year-on-year changes in the PSND-to-GDP ratio over the forecast period, to show the different drivers of the decline we expect. It shows that:

- The **Bank of England's August 2016 monetary policy package** continues to have a material effect on the path of net debt. This reflects lending to commercial banks under the Term Funding Scheme (TFS). (Lending through the TFS is treated as the acquisition of an illiquid asset, which is therefore not netted off PSND. But it is secured against high-quality collateral and thus most unlikely to generate losses for the public sector.) The repayment of TFS loans after four years reduces the debt ratio significantly in the target year of 2020-21 (accounting for the majority of the decline as a per cent of GDP in that year) as well as an even larger impact in 2021-22. Excluding the TFS effect, the path of changes in the PSND as a share of GDP would be smoother.

- The **primary balance** – net borrowing excluding net debt interest spending – is in surplus every year of the forecast, lowering debt in 2020-21.

- **Nominal GDP growth is expected to exceed nominal gilt rates** throughout the forecast, reducing debt as a share of GDP by relatively large amounts each year. This 'growth-corrected interest rate' is a key driver of public sector debt dynamics, especially over longer timeframes. We explored this in our 2017 *Fiscal risks report*.

- **Net lending to the non-bank private sector** – mainly through student loans, plus other lending schemes such as Help to Buy – increases debt as a share of GDP in every year including the target year 2020-21. As a financial transaction, this lending only affects the deficit indirectly, via interest income, write-off expenses and debt interest costs. We discuss future changes to the accounting treatment of student loans in Annex B.[3]

- **Financial asset sales –** including the active sale and rundown of UK Asset Resolution (UKAR) assets and the sale of student loans and RBS shares – reduce debt by large amounts in 2018-19 and 2019-20 before smaller amounts in subsequent years. Financial asset sales usually leave the underlying fiscal position largely unaffected, as they typically bring forward cash that would otherwise have been received in later years as revenue, in the shape of mortgage repayments or dividends. So they only reduce debt temporarily.

- **Valuation changes** – largely relating to auction premia from Government sales of gilts and from changes to gilt holdings in the APF – reduce debt as a share of GDP in every year of the forecast, including the target year 2020-21.

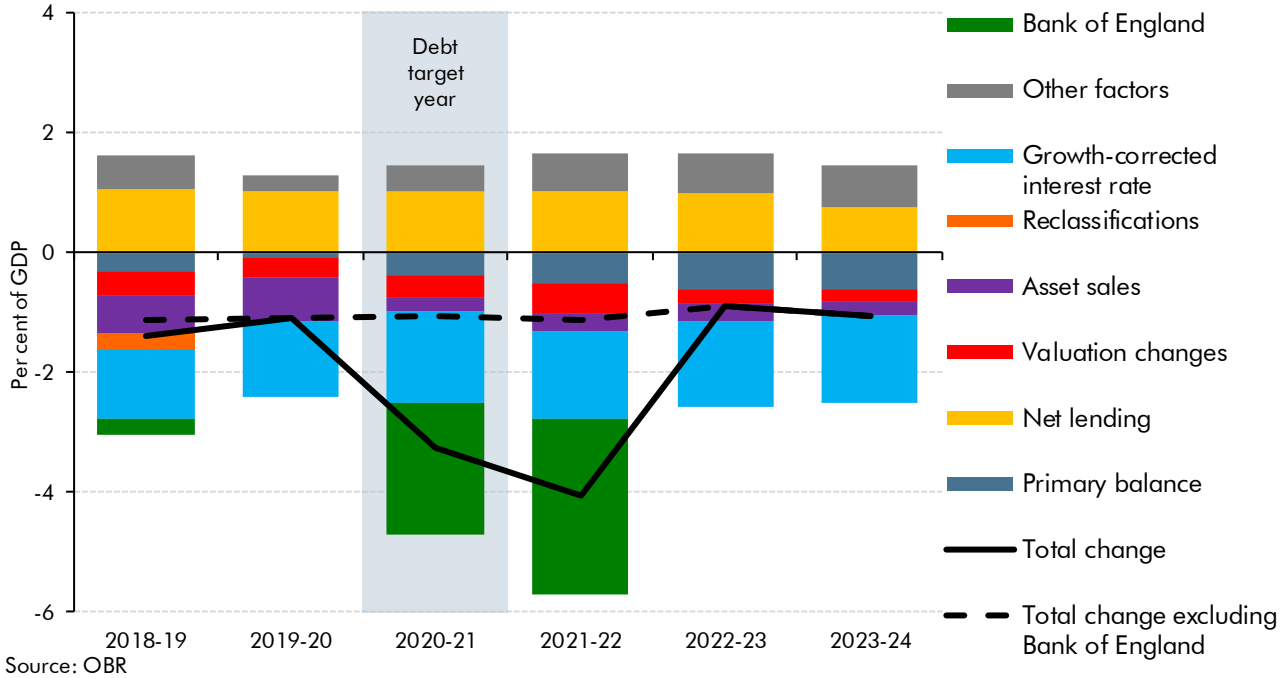
- **The reclassification of Scottish and Welsh housing associations** from the public to the private sector reduces measured debt in 2018-19.

- **Other factors** increase net debt in every year of the forecast, including the target year 2020-21, chiefly because accrued receipts exceed cash receipts over the medium term. Some receipts, including interest on student loans, are collected with a long lag.

[3] We explored this issue in more detail in Ebdon, J. and Waite, R., *OBR Working Paper No.12: Student loans and fiscal illusions,* 2018.

5.15 Abstracting from the effect of Bank of England schemes (largely the TFS), net debt is on a steady downward trajectory over the whole forecast period, falling by an average of 1.1 per cent of GDP a year. The target is met by a margin of 3.2 percentage points, and would still be met with a 1.0 per cent of GDP margin without the TFS repayments.

Chart 5.3: Year-on-year changes to the debt-to-GDP ratio



Source: OBR

5.16 Table 5.3 shows how and why the year-on-year changes in net debt shown in Chart 5.3 have changed since our October forecast. The revision to the change in the target year is small because, even though net debt as a per cent of GDP is lower in 2020-21 than it was in our October forecast, it is also lower in 2019-20 by a similar amount.

5.17 The new treatment of student loans does not affect PSND – a cash-based measure of the balance sheet – and will not therefore affect performance against the supplementary target.

Table 5.3: Changes in the profile of net debt since October

	Change in net debt as per cent of GDP on previous year					
	Forecast					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
October forecast	-1.4	-0.8	-3.2	-4.0	-0.6	-1.0
March forecast	-1.4	-1.1	-3.2	-4.1	-0.9	-1.0
Change	**0.0**	**-0.3**	**-0.1**	**-0.1**	**-0.3**	**-0.1**
of which:						
Nominal GDP[1]	0.3	0.0	-0.1	-0.1	-0.1	-0.1
Pre-measures net borrowing	-0.1	-0.1	-0.3	-0.3	-0.3	-0.3
Other pre-measures forecast changes	-0.4	0.1	0.3	0.3	0.1	0.2
Government decisions	0.2	-0.2	0.0	0.1	0.1	0.1

[1] GDP is centred end-March.

The welfare cap

5.18 The current welfare cap was set at Autumn Budget 2017, but increased at both Spring Statement 2018 and Autumn Budget 2018. It applies in 2022-23 and is preceded by a 'pathway'. It was set in line with our November 2017 forecast plus an increasing margin for error that reached 3 per cent in the target year, making the cap £135 billion. When we judge performance against the cap, the *Charter* says that we should adjust our spending forecast to remove the impact of changes in inflation, according to a methodology of the Government's choosing. Its chosen method is to use simplified ready-reckoners to remove the impact on expected uprating of changes in our inflation forecast since November 2017.[4]

5.19 Scottish carer's allowance (CA)[5] is devolved to the Scottish Government and it receives a yearly block grant adjustment based on per capita 2017-18 CA expenditure in Scotland and indexed to the England and Wales forecast for CA spending. The UK Government has decided to include this block grant adjustment within the welfare cap. We add the block grant adjustment to our forecast after adjusting for the impact of inflation.

5.20 Table 5.4 shows our latest forecast for spending subject to the welfare cap and how it compares with the cap, pathway and margin. It shows that it is substantially below the cap and the pathway in every year of the forecast. On this basis, the terms of the cap would be comfortably met, both including and excluding the margin.

Table 5.4: Performance against the welfare cap

	£ billion, unless otherwise stated				
	Forecast				
	2018-19	2019-20	2020-21	2021-22	2022-23
Welfare cap					**131.1**
Pathway	120.9	122.0	124.7	127.8	
Margin (per cent)	1.0	1.5	2.0	2.5	3.0
Margin	1.2	1.8	2.5	3.2	3.9
Welfare cap and pathway plus margin	**122.1**	**123.8**	**127.2**	**131.0**	**135.0**
Latest forecast and update on performance against cap and pathway					
March pre-measures forecast	119.3	121.5	123.0	125.7	129.4
March post-measures forecast	119.3	121.4	123.2	126.0	129.5
Inflation adjustment		-0.1	-0.5	-0.4	-0.4
Scottish carer's allowance block grant adjustment	+0.2	+0.3	+0.3	+0.3	+0.4
March forecast after adjustments	**119.4**	**121.6**	**123.0**	**125.9**	**129.5**
Difference from:					
Cap and pathway	-1.5	-0.4	-1.7	-1.9	-1.6
Cap and pathway plus margin	**-2.7**	**-2.2**	**-4.2**	**-5.1**	**-5.5**
Memo: cumulative percentage point change in preceding September (Q3) rates of inflation since our November 2017 forecast.		*0.4*	*0.7*	*0.5*	*0.6*

Note: the inflation adjustment is negative as inflation is higher overall than forecast in our November 2017 *EFO*, thus taking the effect of higher inflation out of the spending forecast.

[4] *'Removing the impact of changes in inflation from the welfare cap'*, HM Treasury, March 2017.
[5] For more on our forecast of carers allowance spending in Scotland please see our *Devolved taxes and spending forecast* publication.

Fiscal objective for the next Parliament

5.21 According to the *Charter for Budget Responsibility*, 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, the 'next Parliament' was expected to run to May 2025, so the 'earliest possible date' could have been anywhere up to 2025-26. The Conservative Party's 2017 manifesto similarly committed to "*a balanced budget by the middle of the next decade*". Our forecast horizon extends to 2023-24, so we cannot assess performance against this objective definitively using a central forecast for 2025-26.

5.22 That said, if the deficit evolves in line with the forecast in this *EFO,* achieving the fiscal objective appears challenging from a variety of perspectives. For example:

- Our 2018 *Fiscal sustainability report (FSR)* was produced on the basis of our March 2018 forecast. In the baseline projection, spending rose to accommodate the pressures of an ageing population and other non-demographic pressures on health spending. But we also showed that this could be partly offset if receipts and annually managed expenditure were **projected forward in line with the approach taken in our medium-term forecast**. This would mean that tax thresholds are uprated with inflation rather than earnings. This causes a greater proportion of income to be taxable given that earnings are projected to rise faster than inflation. Likewise, working-age benefits would also be uprated with inflation therefore becoming a lower share of the national income. The deficit then fell by 0.2 per cent of GDP over the three years to 2025-26. The fiscal tightening in this scenario raised the receipts-to-GDP ratio by a further 0.4 per cent of GDP in the three years to 2025-26 and reduced average working-age welfare payments by a further 5 per cent relative to earnings.

- Using **our baseline *FSR* projection**, the challenge looks even greater. Under that methodology, we assume that tax thresholds and working-age benefit awards move with earnings rather than inflation. This prevents receipts from rising continually relative to GDP and the incomes of working-age benefit recipients declining continually relative to those of the rest of the population. Adding in the pressures on spending from an ageing population, non-demographic pressures specific to health spending and the cost of the triple lock on the uprating of state pensions, would put the deficit on a rising path. In our 2018 *FSR*, the deficit rose by 0.5 per cent of GDP in the three years to 2025-26.

- Following the ONS's announcement that it is **reviewing the accounting treatment of student loans**, the adoption of its 'partition loan transfer approach' would increase PSNB in every year of the forecast by a sizable amount. This would make achieving the objective even more difficult compared to our current forecast which reflects the existing accounting treatment. We explore this issue in Annex B.

5.23 All this being said, the chances of the Government balancing the budget by 2025-26 look greater than they did in October and by no means remote. As shown in Chart 5.4 below, the probability of balancing the (cyclically adjusted) budget as early as 2023-24 (based on

past forecast performance), is now around 40 per cent, up from around 35 per cent in October.

Previous fiscal targets

5.24 Since the OBR was established by the Coalition Government in 2010, we have assessed performance against three previous fiscal mandates, three previous supplementary debt targets and three previous welfare caps:

- Successive **fiscal mandates** have targeted different measures of the deficit at different horizons. In the 2010-2015 Parliament, the mandate specified a surplus on the cyclically adjusted current budget balance (i.e. PSNB excluding net investment spending) by the end of the rolling, 5-year forecast period. In December 2014, this was changed to the end of the third year. At the start of the 2015-2017 Parliament, the mandate prescribed a surplus on headline PSNB by the end of 2019-20.

- The **supplementary debt target** has always referred to year-on-year changes in the ratio of PSND to GDP, but the reference year has changed. In the 2010-2015 Parliament, the Coalition Government started by targeting a year-on-year fall in the fixed year of 2015-16. In December 2014, that was moved back to 2016-17. At the start of the last Parliament, the target was changed to year-on-year falls in every year from 2015-16 onwards.

- The **welfare cap** has always referred to the same subset of welfare spending, but its level has been changed frequently. Abstracting from movements relating to classification changes, there have been three previous caps. In March 2014, the Coalition Government set the cap in line with our latest forecast at the time. During the 2015-2017 Parliament, the Conservative Government first lowered the cap in line with our July 2015 forecast, including the effects of the welfare cuts announced in the post-election Summer Budget. It then set a new higher cap in line with our November 2016 forecast, which included a rising margin and the new inflation adjustment.

5.25 The October 2015 version of the *Charter* also stated that: "*These targets apply unless and until the Office for Budget Responsibility (OBR) assess, as part of their economic and fiscal forecast, that there is a significant negative shock to the UK. A significant negative shock is defined as real GDP growth of less than 1% on a rolling 4 quarter-on-4 quarter basis.*" On our latest forecast, that escape clause would not be triggered. The current *Charter* maintains an escape clause set in terms of a 'significant negative shock', but has shifted the responsibility for assessing that to the Treasury and no longer specifies what such a shock would look like in terms of 4-quarter-on-4-quarter real GDP growth. This aligns the escape clause with the approach that the Government took after the referendum in 2016.

5.26 Table 5.5 shows performance against the previous fiscal targets. The latest outturn data and our current central forecast imply that all but the first Conservative Government fiscal mandate would be met, only the first Coalition Government supplementary target would be met, and only the second Conservative Government welfare cap would be met.

Table 5.5: Performance against the previous fiscal targets

		Margin	Target year	Forecast that rule was in force
Fiscal mandate: deficit[1]				
First Coalition	Met	£40.4 billion	Final year of forecast	Jun 2010 – Dec 2014
Second Coalition	Met	£34.5 billion	Third year of forecast	Mar 2015 – Jul 2015
First Conservative	Not Met	-£29.3 billion	End of 2019-20	Nov 2015 – Nov 2016
Supplementary target: falling public sector net debt				
First Coalition	Met	0.4 per cent of GDP	2015-16	Jun 2010 – Dec 2014
Second Coalition	Not Met	-2.8 per cent of GDP	2016-17	Mar 2015 – Jul 2015
First Conservative	Not Met	-2.8 per cent of GDP in 2016-	2015-16 onwards	Nov 2015 – Nov 2016
Welfare cap				
First Coalition	Not Met	-£0.2 billion in 2015-16	2015-16 to 2018-19	Dec 2014 – July 2015
First Conservative	Not Met	All years	2016-17 to 2020-21	Nov 2015 – Nov 2016
Second Conservative	Met	£3.7 billion	2021-22	Mar 2017 – Nov 2017

[1] The Coalition Government targeted a cyclically adjusted current budget balance whereas the Conservative Government targeted a public sector net borrowing surplus.

Recognising uncertainty

5.27 The future is uncertain and the likelihood of unexpected economic and political developments means that the distribution of possible outcomes around any central forecast is wide. Consequently, there are significant upside and downside risks to our central forecasts for the public finances. 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. The continuing Brexit process – and the lack of knowledge about the policy settings and international trading arrangements thereafter – create additional uncertainty.[6]

5.28 Given these uncertainties, it is important to stress-test our judgements regarding the Government's performance against its fiscal targets. We do this in three ways:

- by looking at the distribution of **past forecast errors**;
- by seeing how our central forecast changes if we apply **different individual judgements and assumptions**; and
- by looking at **alternative economic scenarios**.

Past performance

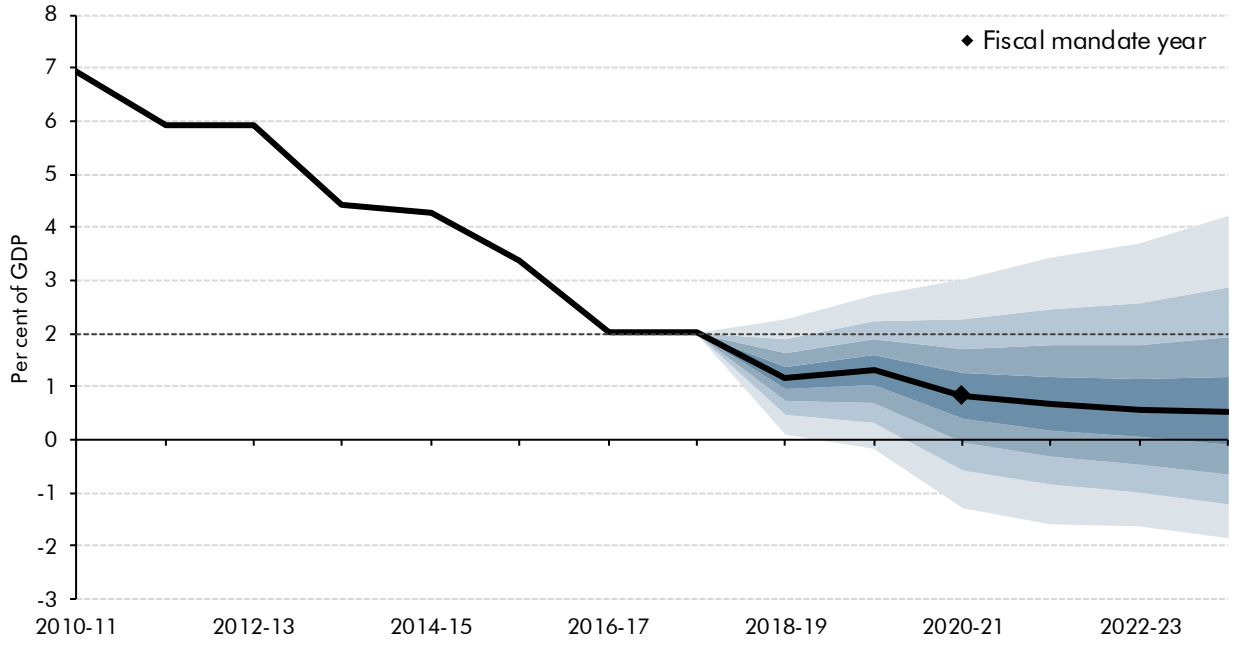
5.29 One relatively easy way to assess the uncertainty around our central forecast is to consider the accuracy of previous official public finance forecasts – both our own and the Treasury's before us. The uncertainty can then be illustrated using fan charts like the ones for GDP growth and CPI inflation in Chapter 3. The fan charts do not represent our assessment of specific risks to the central forecast. Instead they show the outcomes that someone might anticipate if they believed, rightly or wrongly, that the size and distribution of forecast errors in the past offered a reasonable guide to their likely size and distribution in the future.

[6] More on Brexit and the associated forecast uncertainties can be found in *our Discussion Paper No.3: Brexit and the OBR's forecasts.*

5.30 It is important to note that the historical forecast errors that underpin our fan charts reflect both underlying forecast errors and the effects of any subsequent policy responses. That probably helps explain why the probability distributions around borrowing and other measures of the budget balance do not widen significantly at longer time horizons: when underlying forecast changes push borrowing significantly away from original plans, governments tend to change policy to try 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*.

5.31 The probability of the Government meeting its fiscal mandate can be assessed using the distribution of forecast errors that underpins a fan chart for cyclically adjusted PSNB. Chart 5.4 shows a fan around our central forecast, in which the Government is on course to meet the fiscal mandate by 2020-21. The chance of the structural deficit being below 2 per cent of GDP is around 75 per cent from 2020-21 onwards – slightly higher than in October.

Chart 5.4: Cyclically adjusted public sector net borrowing fan chart



Source: ONS, OBR

5.32 Being able to produce a similar analysis of the uncertainties around our central forecast for debt would improve our understanding of the risks to the public finances. We are currently investigating the best way to do this. But as our central forecast shows the debt-to-GDP ratio falling in the target year, we estimate that there is a more than 50-50 chance that the supplementary target will be met in 2020-21. We do not currently have a sufficiently long disaggregated series of past welfare spending forecasts to produce a welfare cap fan chart.

Sensitivity analysis

5.33 It is next to impossible to produce a full unconditional 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 we can go further than using evidence from past forecast errors by illustrating how sensitive the central forecast is to changes in individual parameters and judgements.

5.34 In thinking about the evolution of the public finances over the medium term, there are several parameters that have an important bearing on the forecast. Here we focus on:

- the **sensitivity of the fiscal mandate** to changes to the level of potential GDP, inflation, interest rates and the effective tax rate;
- the **sensitivity of the supplementary debt target** to differences in the level of debt or the growth rate of the economy, which both affect how debt changes from year to year as a percentage of GDP; and
- some of the circumstances in which **the supplementary target could be missed while still meeting the fiscal mandate**.

The fiscal mandate

5.35 As Chart 5.4 illustrated, on the basis of past forecast errors, we estimate that there is a roughly 25 per cent chance that the structural budget deficit will exceed 2 per cent of GDP in 2020-21. There are many reasons why this might happen. For example, the evolution of potential output could be less favourable than forecast or receipts or spending could turn out differently for a given state of the economy. And while our forecasts are conditioned on current Government policy, that is also likely to change, especially in respect of the policy settings that will apply once the UK has left the EU.

5.36 On our website we publish ready-reckoners that show how elements of the public finances could be affected by changes in some of the determinants of our fiscal forecast. 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, such as the MPC. The ready-reckoners are also subject to significant uncertainty. But bearing those caveats in mind, we can use them to calibrate several possible adverse surprises relative to our central forecast that would be sufficient to push the structural deficit above 2 per cent of GDP in 2020-21.

5.37 This analysis shows that the 1.2 per cent of GDP margin relative to the 2 per cent target could fall to zero if:

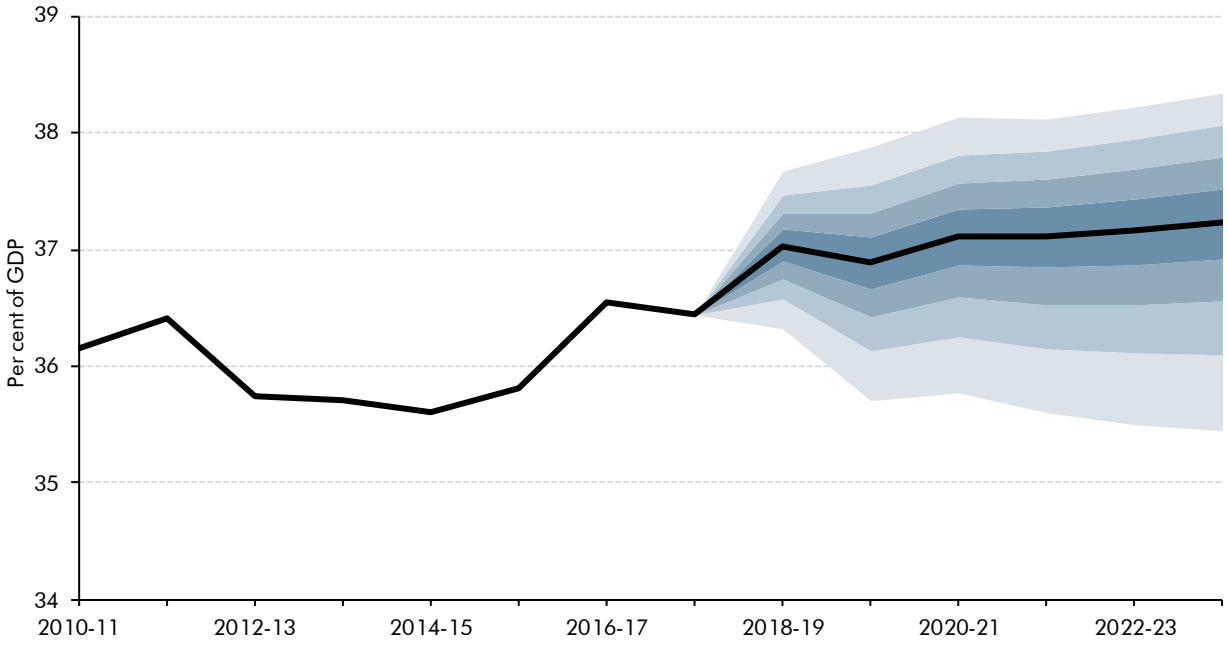
- **Potential output** were 2.4 per cent lower. This is small relative to the cumulative downward revisions made since the financial crisis, but is quite large given the relatively short period between now and the mandate year of 2020-21.

- The **effective tax rate** – as measured by the tax-to-GDP ratio – were 1.2 percentage points lower and the difference was a consequence of structural factors (e.g. if the distribution of income shifts towards the less highly paid). Chart 5.5 presents a fan chart for the receipts-to-GDP ratio, reflecting both cyclical and structural drivers of past errors. It suggests there is around a 15 per cent chance that receipts could be 1.2 per cent of GDP lower than forecast.

- **Effective interest rates** on central government gross debt were 1.4 percentage points higher (relative to our central projection of 2.1 per cent). The fact that £372 billion of conventional gilts held in the APF are currently in effect financed at Bank Rate reduces the effective interest rate by 0.5 percentage points.

- Higher **RPI inflation** could increase accrued interest on index-linked gilts. Taken in isolation, if RPI inflation were 5.9 percentage points higher than expected in 2020-21, that alone would add 1.2 per cent of GDP to debt interest costs. Based on past forecast errors, the chance of that happening is small, but in the years immediately following the 2008 financial crisis CPI inflation peaked around 3.0 percentage points above the Bank's target. A similar inflationary shock is therefore not impossible. And of course, this sort of shock to inflation would be likely to have other material effects on the public finances.

Chart 5.5: Receipts fan chart



Source: ONS, OBR

The supplementary debt target

5.38 The supplementary debt target is focused on year-on-year changes in the debt-to-GDP ratio in 2020-21. Table 5.6 shows how our central forecast for a 3.2 per cent of GDP fall in PSND in that year would be affected by two sources of sensitivity: differences in the level of debt in the preceding year and differences in growth in 2020-21. We use cyclical

adjustment coefficients to estimate the effect of GDP growth shocks on borrowing, but do not vary interest rates, so that differences in the assumed rate of GDP growth result in changes to the interest rate-growth rate differential. On that basis, the table shows that:

- In most cases, the extent to which the debt-to-GDP ratio changes in 2020-21 is inversely related to **the debt-to-GDP ratio in the preceding year**. That counterintuitive result is due to the low level of interest rates assumed in our central forecast, which means that the effect of GDP growth on the denominator in the debt-to-GDP ratio is greater than the effect of interest rates on growth in the cash level of debt (via debt interest spending). The higher the starting level of debt, the more the denominator effect outweighs the interest rate effect. It is only the larger negative growth shocks that see the growth rate fall close to the assumed interest rate. When they are similar (which would be the case if growth was around 2 percentage points slower), the two effects cancel out. If the growth rate was lower than the interest rate, the extent to which the debt-to-GDP ratio changes would be positively related to the level of debt in the preceding year.

- As expected, negative **shocks to GDP growth** reduce the extent by which debt falls as a share of GDP and positive shocks increase it. The year-on-year change in the debt-to-GDP ratio is more sensitive to GDP shocks than the deficit, because it is affected both by the deficit channel (which drives the accumulation of debt in that year) and by the denominator channel (which means the previous year's cash debt is divided by a different level of nominal GDP). Well over half the fall in the debt-to-GDP ratio in 2020-21 reflects the assumed repayment of TFS loans at the end of their four-year term. Excluding that effect, meeting the proposed target would be at risk to small negative shocks to GDP growth.

Table 5.6: Illustrative debt target sensitivities in 2020-21

		Year on year change in the PSND-to-GDP ratio in 2020-21					
		Difference in GDP growth in 2020-21 (percentage points)					
		-3	**-2**	**-1**	**0**	**+1**	**+2**
Difference in the level of PSND in 2019-20 (per cent of GDP)	**-20**	1.0	-0.3	-1.6	-2.9	-4.2	-5.4
	-10	1.2	-0.3	-1.7	-3.1	-4.4	-5.8
	+0	1.3	-0.3	-1.8	**-3.2**	-4.7	-6.2
	+10	1.4	-0.2	-1.8	-3.4	-5.0	-6.5
	+20	1.5	-0.2	-1.9	-3.6	-5.3	-6.9

5.39 The Government's fiscal targets only apply in the fixed year of 2020-21, but each is subject to different sensitivities. For example, holding all other elements of our central forecast constant, but assuming that structural borrowing in 2020-21 was 2 per cent of GDP (more than twice the level in our central forecast), it would still be possible for the supplementary target to be missed if:

- **TFS loans** issued in 2016-17 were rolled over rather than being repaid, as their repayment reduces debt by 2.2 per cent of GDP in 2020-21 in our central forecast.

- **Cyclical borrowing** caused the primary balance to deteriorate by more than 2.1 per cent of GDP. (It is near zero in our central forecast).

- **Financial transactions** pushed cash borrowing up relative to PSNB by 2.1 per cent of GDP more than in our central forecast. That could happen if the Bank of England decided that a monetary policy stimulus of the type that was announced in August 2016 was necessary in that year.

- **Nominal GDP growth** was 2.1 per cent (or lower) in the year centred on end-March 2021 that is the denominator for the debt-to-GDP ratio in 2020-21 (relative to 3.5 per cent in our central forecast).

Scenario analysis

5.40 In this section of each previous *EFO*, we have produced alternative scenarios that help us to examine how the effects of a specific risk to our economy forecast could affect the public finances. Over the past nine years, we have produced 42 such scenarios on a wide range of topical issues. The current primary risks of interest are those relating to a 'no deal' Brexit.

5.41 A 'no deal' Brexit would involve – at least in the first instance – an immediate reversion to the UK trading largely under World Trade Organization rules. Our recent Brexit *Discussion Paper* discussed the consequences of the resulting increase in trade barriers for UK trade, investment and productivity. There we noted that outside studies had yielded a range of estimates of both the long-run impact and the speed of transition. In addition, there is uncertainty as to how UK government policies will be adjusted to take advantage of the extra freedoms conferred by leaving the EU.

5.42 Our recent Brexit *Discussion Paper* also noted that an abrupt, disorderly exit could have a severe short-term impact on the economy. Elevated uncertainty would continue to depress demand and an abrupt exit would also be likely to raise inflation, with a weaker pound – alongside the direct impact of higher tariffs – pushing up import prices. In addition, a disorderly exit might well result in temporary disruption to the supply of some imported products and domestic goods containing imported components. It is, though, likely that the UK and EU authorities would in due course take action to mitigate some of the worst disruption, while businesses would gradually adjust to the new constraints. Hence, such a period of dislocation should prove largely transitory.

5.43 The Bank of England recently published an assessment of two potential 'no deal' outcomes.[7] But as the Bank emphasised at the time, these were intended as stress tests – appropriate to meeting the Bank's financial stability mandate – rather than central forecasts. Moreover, as the Governor has recently noted, supportive policy measures could potentially mitigate some – though not all – of the adverse consequences.[8]

[7] Bank of England, *EU withdrawal scenarios and monetary and financial stability: a response to the House of Commons Treasury Committee*, November 2018. The Bank also examine scenarios in which there is reversion to WTO rules after an orderly transition period.
[8] Carney, M., *Annual Report to the Treasury Committee*, February 2019.

5.44 Given the substantial uncertainty about both the short- and long-run consequences of a 'no deal' Brexit, we have not posited a specific alternative scenario. But we draw on our library of past scenarios to illustrate the indirect fiscal consequences of the types of disturbance to the outlook that are characteristic of a 'no deal' Brexit. We cannot incorporate the direct fiscal effects of policies accompanying a 'no deal' Brexit (such as the customs revenue from the introduction of new tariff rates) as these are presently unknown.

5.45 None of our past scenarios provide a direct correspondence to the combination of shocks that are likely to characterise a 'no-deal' Brexit. These include: a short-term disruption to supply, possibly accompanied by hoarding by consumers and businesses; a more persistent but temporary weakness in demand; an adverse long-run impact on potential output via productivity and migration; and a further real depreciation of sterling. But some of our past scenarios do illustrate parts of the story. Three (sets of) scenarios are particularly relevant: shocks to the economy's growth potential via productivity and migration; cyclical weakness in aggregate demand; and inflationary shocks.

5.46 Taking each in turn:

- One consistent theme of past scenarios is that adverse **shocks to potential output** have the greatest medium-term fiscal costs. Drawing on our previous simulations we can generate rough 'ready reckoners' of the impact of weaker productivity growth and lower net inward migration. For every 1 percentage point off potential productivity at the forecast horizon (i.e. around 0.2 percentage points a year off growth), structural borrowing would be around 0.5 per cent of GDP higher. For every 50,000 a year reduction in net inward migration, the population by the end of the forecast would be 0.4 per cent smaller and employment 0.5 per cent lower, leaving structural borrowing around 0.2 per cent of GDP higher. The effects are reasonably linear and additive, although any change in the mix of inward migrants' average pay would have further modest fiscal consequences.

- By contrast, **cyclical shocks** can cause large short-term rises in the deficit but – so long as they do not have a lasting effect on potential output – the deficit will ultimately fall back to roughly where it would have been. This was illustrated in our 'consumer bust' simulation in March 2017, which saw GDP fall 2.2 per cent below our central forecast at its weakest point, but return to the central forecast by the forecast horizon. The deficit returned to around ½ per cent of GDP above the levels in our central forecast by the end of the period, but debt was over 4 per cent of GDP higher thanks to the extra cyclical borrowing induced by the shock.

- The effect of **higher inflation** on the public finances is more complex and harder to provide a ready reckoner for. It has a large and almost immediate effect on the cost of servicing index-linked gilts. Taxes are affected via the uprating of thresholds (where higher inflation reduces revenue) and revalorisation of rates (where it raises revenue). Departmental spending rises if the Government chooses to increase budgets to maintain real spending power, as do other items of public spending (including benefits and public service pensions, most of which are uprated in line with inflation). The

balance of these effects will depend crucially on the source of the higher inflation. If it results from strong demand and higher wage growth, it tends to be positive; if it results from an exchange rate or import price shock, lowering real wages, it tends to be negative. The latter case is probably more applicable in a 'no deal' Brexit (though there would be some offset from any tariffs introduced on imports from the EU).

5.47 As mentioned above, alongside these 'indirect' effects, there would be several 'direct' impacts on the public finances. For instance, the end to full UK contributions to the EU budget would reduce public spending – but this might be tempered by the costs of any financial settlement and offset by domestic commitments. On the tax side, there would be direct revenue consequences from any changes in tariff policy: if the UK left the customs union, it would retain customs revenues instead of remitting them to the EU. And the Government would be faced with other policy choices, such as whether to incur the costs of setting up new IT systems, and whether to use fiscal policy to offset temporary disruption.

5.48 Taking all this together, what can we usefully say about the fiscal implications of a 'no deal' Brexit, were it to happen? First, the range of possible outcomes is clearly large, given the uncertainty both around the economic impact and around the nature and effectiveness of any policy response. Second, while the short-term shock to the economy would no doubt have fiscal costs, the more significant channels would probably be via its impact on potential output. Third, the direct fiscal effects of any policy response would also affect the final path of the deficit, though this is presently unknowable.

A Policy measures announced since October

Overview

A.1 Our *Economic and fiscal outlook (EFO)* forecasts incorporate the expected impact of the policy decisions announced since our previous forecast. In full 'fiscal events', like a Budget, the Government provides us with draft estimates of the Exchequer 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. For this Spring Statement, almost all the policy measures we have factored in were announced between the Budget and now.

A.2 We choose whether to certify costings as 'reasonable and central', and whether to include them – or alternative costings of our own – in our forecast. We do not scrutinise individual changes to spending within departmental expenditure limits (DELs), but rather make a judgement on the extent to which the Government's overall resource and capital spending limits will be over- or underspent. We are also responsible for assessing any indirect effects of policy measures on our economy forecast, such as excise duty changes affecting inflation.

A.3 The Government has announced 20 new policies since the Budget (Table A.2). The process for scrutinising these costings worked reasonably efficiently, and most information was provided in a timely manner. Our main concern was around the estimated effects on disability benefits spending of the changes associated with completing the transition of working-age claimants from disability living allowance to personal independence payment.

A.4 At Budget 2018 there was a package of costings relating to universal credit that we were unable to certify on the basis of the information provided at the time. Ahead of this forecast we asked DWP analysts to provide us with updated and additional material on these measures. After scrutinising this additional material, some corrections proved necessary – as we suspected – although thankfully these were relatively small (see paragraph A.22).

Government policy decisions

A.5 Table A.1 presents the aggregate direct and indirect effects of all new policy announcements, while Table A.2 presents the measure-by-measure breakdown. The overall direct effect is a small giveaway in all years, driven by higher spending.

A.6 Using 'multipliers' to estimate the effect of fiscal policy changes on GDP suggests a negligible effect on real GDP growth.[1] The higher level of government consumption raises cumulative nominal GDP growth by 0.1 percentage points by the end of the forecast. This delivers a partially offsetting indirect effect on borrowing, which reflects the modest boost the net fiscal giveaway gives to the economy and tax receipts and the increase in public service pension contributions associated with higher departmental current spending.

A.7 The overall effect of the policy decisions is to increase net borrowing by amounts rising from £0.7 billion in 2019-20 to £2.1 billion in 2023-24.

Table A.1: Summary of the effect of Government decisions on the budget balance

	£ billion					
	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Total effect of Government decisions	**-0.3**	**-0.7**	**-1.2**	**-1.2**	**-1.8**	**-2.1**
Direct effect of Government decisions	**-0.3**	**-1.2**	**-1.5**	**-1.6**	**-2.1**	**-2.4**
of which:						
Receipts	0.0	0.3	0.7	0.5	0.4	0.4
Welfare spending	0.0	0.1	-0.2	-0.3	-0.1	-0.3
Other AME	0.0	-1.3	-0.7	-1.0	-0.7	-0.8
RDEL	0.6	-1.5	-1.4	-1.4	-1.6	-2.1
CDEL	-1.0	1.3	0.0	0.6	-0.1	0.4
Indirect effect of Government decisions	**0.0**	**0.4**	**0.3**	**0.4**	**0.3**	**0.3**

Note: The presentation of these numbers is consistent with the usual scorecard treatment, with a positive sign implying an Exchequer gain (an improvement in PSNB, PSNCR and PSND) and vice versa for a negative sign. This does not include the effects of decisions by the Scottish Government, which are presented in Table A.3.

Receipts

A.8 There have been several tax measures announced since October:

- **Fixed odds betting terminals** and **remote gaming duty:** in the 2018 Budget the Government announced it would reduce the maximum stake on fixed odds betting terminals from £100 to £2 from October 2019. It also announced an increase in remote gaming duty that was designed to offset the loss in revenue. Responding to Parliamentary pressure, the start date of these measures was brought forward to April.

- **Corporation tax: relief for goodwill:** in July 2015, the Government restricted corporation tax relief for purchased goodwill, stating that this "*brings the UK regime in line with other major economies, reduces distortion and levels the playing field for merger and acquisition transactions*". Following a consultation with businesses in February 2019 the Government learned that "*respondents were generally in favour of changes to simplify the [intangible fixed assets] regime and increase the scope and generosity of relief*"[2]. This measure partially reintroduces relief for goodwill from April 2019, capped by reference to the value of the business's intellectual property.

[1] For further detail on our use of fiscal multipliers, see Box 3.2 of our July 2015 *EFO*.
[2] *Review of the corporate Intangible Fixed Assets regime Summary of Responses*, 7 November 2018.

- **Disguised remuneration loan charge: extension of time limit:** this measure introduces a seven-year payment arrangement for individual users of disguised remuneration schemes with current incomes below £30,000. Disguised remuneration schemes involve an individual being paid via a loan, often through an offshore trust or an employee benefit trust, rather than a salary. This arrangement allowed them to avoid income tax and National Insurance contributions, while the terms of the loan meant it was not paid back in practice. In Budget 2016 the Government sought to address this by imposing a charge, due to begin in April 2019, on outstanding loan balances, some of which dated back to 1999. The initial measure targeted employees, but the loan charge was extended to the self-employed in a subsequent measure in Autumn Statement 2016. In 2018 HMRC introduced a five-year payment arrangement for those affected individuals with current incomes below £50,000. HMRC estimates that the loan charge will affect up to 50,000 individuals, largely in the 'business services' sector. This change affects a relatively small number of prospective loan charge payers by relatively small amounts, so is expected to cost under £5 million a year on average.

- **Immigration health surcharge:** this charge was brought in by the Coalition in 2015 and is payable upfront by individuals coming to live in the UK for longer than six months. It was initially set as an annual payment of £200 per person and this measure doubles that to £400.[3] The increase came into effect from January and is due to raise around £0.2 billion a year. We have been advised by the Treasury that the ONS is likely to reclassify the surcharge as a tax rather than a service payment, so the charge in full raises our tax receipts forecast by £0.4 billion a year from 2019-20 onwards. The Government has decided to offset the effect of this on borrowing by removing the same amount in 'negative spending' from RDEL, where the revenues were previously recorded.[4] The Home Office has confirmed that, after deducting costs, the full amount raised from the surcharge has been transferred to the NHS.[5]

- **Probate fees:** the Government has confirmed its plans to change the fees payable for an application for a grant of probate. The new rates range between £250 and £6,000 depending on the value of the estate, and come into effect in April. The Treasury expects the ONS to classify the new structure – with its 2,700 per cent increase in cost for estates valued over £2 million – as a tax in the National Accounts. The new probate fee structure is expected to generate £155 million a year in additional tax receipts. There will be a small knock-on effect to inheritance tax receipts due to the incentive for individuals with estates worth close to thresholds in the new probate fee structure to reduce the value of their estates (through genuine or contrived means) to pay a lower fee. This effect is expected to be relatively small (around £5 million a year), since the inheritance tax liability itself already provides a significant incentive to reduce the value

[3] This is £300 per year for a student or Tier 5 (Youth Mobility Scheme) visa, up from the £150 initially set.
[4] The £0.2 billion offset in DEL associated with this new measure is shown in the 'Immigration health surcharge' line in Table A.2, while the remaining £0.2 billion offset – from the amount that would have been raised in the absence of this measure – is contained within the 'Other RDEL changes' line.
[5] The transferred funds are divided between NHS England, NHS Wales, NHS Scotland and HSC in Northern Ireland, according to the Barnett formula.

of estates. The Government has decided to offset the expected yield from probate fees by removing the same amount in 'negative spending' from RDEL.[6]

- **EU emissions trading system (ETS): rescheduling of auctions:** on 19 December 2018, the European Commission announced that, from 1 January 2019, it was suspending the issuance and surrender of UK allowances from the ETS, pending ratification of the Withdrawal Agreement. In response, the Government decided to hold no auctions during the first three months of 2019, and instead to auction 12 months' worth of permits across the remaining months of 2019. The costing mostly reflects this timing change – shifting some cash payments from 2018-19 to 2019-20, resulting in a shift in revenue from 2019-20 to 2020-21 under the National Accounts accruals treatment.

Annually managed expenditure

A.9 The Government announced several policy changes relating to universal credit (UC) and personal independence payment (PIP). These include:

- **Restricting benefits for mixed age couples: delay:** the Government has announced a delay to this policy – originally announced in 2012 – that restricts access to pension credit and pensioner housing benefit for couples where only one partner is above the State Pension age. The original start date was 1 February 2019. It is now 15 May 2019. The delay will cost around £100 million across the forecast period.

- **Universal credit: removing the two-child limit:** this measure reverses the Summer Budget 2015 announcement limiting the number of child elements that can be paid to a family newly claiming UC but that has not claimed benefits in the preceding six months and where all children were born before 6 April 2017 (along with some exceptions after that date). This has a modest medium-term cost, but no long-term cost since ultimately all children in the UC caseload will have been born after April 2017 and will therefore be subject to the existing two-child limit policy.

- **Universal credit: savings from reprofiling:** the Government has reshaped the UC managed migration profile in a way that lowers the cost of UC by £0.2 billion over the next five years – a broadly equivalent amount to the cost of the child-limiting policy reversal. We discuss these two measures more fully in Chapter 4.

- **Personal independence payment: delay full PIP rollout and reduce scheduled award reviews:** this measure has two elements. The 'full PIP rollout' has been delayed and we now assume that it will not be completed until February 2021 (rather than early 2020). DWP has also announced that award reviews will cease for all those above State pension age, unless requested by claimants. To deliver the rollout end date, DWP will need to reduce other scheduled award reviews for working-age claimants due to limited capacity to deliver all disability benefits assessments. We discuss this measure in more detail in Chapter 4 too. Its impact is subject to high uncertainty.

[6] Probate fees were due to raise around £50 million a year in the absence of this measure. The Government has decided to offset this too, and this amount is contained within the 'Other RDEL changes' line in Table A.2

A.10 Several measures were announced in the 2019-20 local government finance settlement:

- **Eliminating negative revenue support grant in 2019-20:** revenue support grant (RSG) is a central government grant that local authorities can use to finance revenue expenditure on any service. Negative RSG redistributes retained business rates revenue from authorities that do not receive any RSG to other authorities. The Government has announced it intends to eliminate negative RSG for affected authorities in 2019-20, which in effect increases their retained business rates. We assume 75 per cent of this gain to authorities will be added to their stock of reserves and the rest used to finance local spending.

- **Business rates retention: 75 per cent pilots:** the Government has been piloting full business rates retention since 2017-18. This measure launches 16 further pilots to run in 2019-20 with a 75 per cent retention rate. As local authorities retain growth in business rates revenues beyond a specified baseline, this boosts local authorities' self-financed spending beyond the amount forgone in central government grants.

- **Council tax: police authority referendum principle threshold increase:** this measure raises the amount by which English police and crime commissioner authorities can increase council tax without necessitating the calling of a local referendum (from £12 to £24 a year). We expect it to generate an average of just under £200 million a year in additional council tax receipts that local authorities will spend.

A.11 **Other Scottish Government AME:** In October 2018 Scottish Government expenditure was moved from central government DEL to AME, ostensibly because an increasing proportion of expenditure is self-financed from taxation and thus falls outside Treasury control. Changes in Scottish Government AME reported in Table A.2 largely relate to changes in the Treasury's block grant assumptions for the period beyond the current Spending Review. They therefore refer to years in which actual block grant allocations have yet to be made.

Spending within departmental expenditure limits

A.12 Table A.1 shows that the aggregate effect of new policy announcements is to increase total departmental spending in each year of the forecast, rising to £1.7 billion by 2023-24. Table A.2 presents the measure-by-measure breakdown, including:

- **Non-NHS RDEL spending:** the Government has raised this in cash terms sufficiently to hold spending flat in real terms relative to our latest GDP deflator forecast and from a 2019-20 base that reflects our latest underspend assumptions. This adds £0.5 billion a year on average from 2019-20 onwards, rising to £0.8 billion in 2023-24.

- **Additional NHS spending:** the Government has maintained the real terms increase agreed between the Government and the NHS in June 2018 given our October GDP deflator forecast. This also adds amounts that rise to £0.8 billion in 2023-24.

- **Other RDEL and CDEL changes:** these are discussed in Chapter 4.

Financial transactions

A.13 Two policy changes affect our financial transactions forecast:

- **UK Asset Resolution:** since our October forecast, the Government has pushed back completion of the sale of loan assets held within UK Asset Resolution from late 2018-19 into early 2019-20. This delay changes the profile of expected proceeds, but does not materially affect their overall size.

- **Accelerated degrees:** the Government has announced an increase in the annual fee caps and maximum fee loans applying to accelerated degrees. Despite the 20 per cent annual increase relative to standard full-time courses, with the maximum rising from £9,250 to £11,100 a year, a student would still pay less in total on tuition fees for a two-year course than a three-year equivalent. The costing assumes a significant rise in the number of students on these courses, with the majority switching from standard full-time courses. The net cost of the measure reflects the minority of new students who would not otherwise have studied at degree level, plus the higher average fees for students already planning to enrol on an accelerated course, slightly offset by lower total outlays to students switching from three- to two-year courses. This increases the public sector net cash requirement (and PSND) by around £10 million a year, but has a negligible impact on PSNB due to changes in interest and write-offs.

Table A.2: Costings for Government policy decisions

		£ million						Uncertainty
	Head	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24	
Fixed odds betting terminals: bring forward start date	Total	0	-115	0	0	0	0	Medium-low
	Receipts	*0*	*-115*	*0*	*0*	*0*	*0*	
Remote gaming duty: bring forward start date	Total	0	+115	-5	0	0	0	Medium-low
	Receipts	*0*	*+115*	*-5*	*0*	*0*	*0*	
Corporation tax: relief for goodwill	Total	-5	-20	-50	-75	-100	-125	High
	Receipts	*-5*	*-20*	*-50*	*-75*	*-100*	*-125*	
Disguised remuneration loan charge: extension of time limit	Total	-5	-5	-5	neg	neg	neg	Medium-low
	Receipts	*-5*	*-5*	*neg*	*neg*	*neg*	*neg*	
	AME	*neg*	*neg*	*neg*	*neg*	*neg*	*neg*	
Probate fees	Total	0	neg	-5	-5	-5	-5	Medium
	Receipts	*0*	*+130*	*+145*	*+150*	*+155*	*+165*	
	RDEL	*0*	*-135*	*-150*	*-160*	*-165*	*-170*	
Immigration health surcharge	Total	0	0	0	0	0	0	Medium
	Receipts	*+30*	*+220*	*+205*	*+195*	*+190*	*+185*	
	RDEL	*-30*	*-220*	*-205*	*-195*	*-190*	*-185*	
EU emissions trading system: rescheduling of auctions	Total	0	-250	+270	0	0	0	Medium-low
	Receipts	*0*	*-250*	*+270*	*0*	*0*	*0*	
Restricting benefits for mixed age couples: delay	Total	-10	-20	-20	-20	-20	-20	Medium-low
	AME	*-10*	*-20*	*-20*	*-20*	*-20*	*-20*	
Universal credit: removing the two-child limit	Total	neg	-45	-60	-65	-55	-55	Medium
	AME	*neg*	*-45*	*-60*	*-65*	*-55*	*-55*	
Universal credit: savings from reprofiling	Total	0	neg	-10	+15	+190	-20	Low
	AME	*0*	*neg*	*-10*	*+15*	*+190*	*-20*	
PIP: delay full PIP rollout and reduce scheduled award reviews	Total	+10	+115	-70	-215	-255	-220	High
	AME	*+10*	*+115*	*-70*	*-215*	*-255*	*-220*	
Eliminating negative revenue support grant in 2019-20	Total	0	-65	0	0	0	0	Low
	AME	*0*	*-55*	*0*	*0*	*0*	*0*	
	RDEL	*0*	*-15*	*0*	*0*	*0*	*0*	
Business rates retention: 75 per cent pilots	Total	0	-155	+140	0	0	0	Medium
	AME	*0*	*-910*	*+140*	*0*	*0*	*0*	
	RDEL	*0*	*+755*	*0*	*0*	*0*	*0*	
Council tax: police authority referendum principle increase	Total	0	0	0	0	0	0	Medium-low
	Receipts	*0*	*+175*	*+185*	*+190*	*+195*	*+200*	
	AME	*0*	*-175*	*-185*	*-190*	*-195*	*-200*	
Other Scottish Government AME	Total	-25	-125	-660	-775	-465	-515	Medium
	AME	*-25*	*-125*	*-660*	*-775*	*-465*	*-515*	
Non-NHS RDEL spending	Total	0	0	-290	-230	-660	-845	N/A
	RDEL	*0*	*0*	*-290*	*-230*	*-660*	*-845*	
Additional NHS spending	Total	0	-45	-115	-165	-195	-840	N/A
	RDEL	*0*	*-45*	*-105*	*-150*	*-180*	*-770*	
	AME	*0*	*-5*	*-10*	*-15*	*-15*	*-70*	
Additional police funding	Total	0	-100	0	0	0	0	N/A
	RDEL	*0*	*-95*	*0*	*0*	*0*	*0*	
	AME	*0*	*-10*	*0*	*0*	*0*	*0*	
Other RDEL changes	Total	+680	-1715	-640	-645	-400	-175	N/A
	RDEL	*+680*	*-1715*	*-640*	*-645*	*-400*	*-175*	
Capital DEL reprofiling	Total	-965	+1285	+15	+610	-90	+415	N/A
	CDEL	*-965*	*+1285*	*+15*	*+610*	*-90*	*+415*	
Direct effect of Government decisions		**-325**	**-1155**	**-1505**	**-1575**	**-2055**	**-2405**	

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.

Scottish Government decisions since October

A.14 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 October the Scottish Government has announced several new measures, the expected costs and yields for which are presented in Table A.3:[7]

- **Income tax: freeze the higher rate threshold**: the higher rate threshold for Scottish income tax payers will remain at £43,430 in 2019-20, further widening the gap relative to taxpayers in the rest of the UK, where it rises to £50,000 in April 2019.

- **LBTT: increase the additional dwelling supplement**: this supplement – chargeable, for example, on purchases of second homes and buy-to-let properties in Scotland – was increased from 3 to 4 per cent, with effect from 25 January 2019. The yield from this is less uncertain than the yield from introducing the supplement was in April 2016, but nevertheless the behavioural response to the rise is uncertain.

- **LBTT: commercial property rates and thresholds**: the rates and thresholds for LBTT due on purchases of commercial property will change. A lower rate of 1 per cent (previously 3 per cent) will apply to transactions between £150,000 and £250,000 (previously the up to £350,000). The upper rate – applying to transactions above £250,000 – will rise from 4.5 to 5 per cent.

- **Scottish non-domestic rates**: the Scottish Government announced several giveaways for non-domestic ratepayers. The largest sets a rate for 2019-20 of 49 pence, lower than would have prevailed if it had risen in line with RPI inflation as previously assumed.

- **Scottish landfill tax: banning biodegradable municipal waste**: in 2012 the Scottish Parliament passed legislation banning the landfilling of biodegradable municipal waste in Scotland from January 2021. We now have sufficient information to include the year-by-year effects of this policy in our forecast. It is expected to reduce Scottish landfill tax receipts significantly, but mostly to the benefit of UK landfill tax receipts by diverting waste to England. The scale of this behavioural response is highly uncertain.

- **Council tax: lifting the cap in Scotland:** Scottish local authorities will be allowed to raise council tax by up to 4.79 per cent in 2019-20 – more than previously assumed. We assume that Scottish local authorities will spend this additional revenue.

[7] For more detailed information on the costings for the devolved taxes see our *Devolved taxes and spending forecasts* publication produced alongside this *EFO* and available on our website. Costings that relate to the devolved taxes should be considered alongside the fiscal consequences set out in the Treasury's fiscal framework agreements with the Scottish and Welsh Governments respectively.

Table A.3: Costings for Scottish Government policy decisions

	Head	£ million					
		2018-19	2019-20	2020-21	2021-22	2022-23	2023-24
Income tax: freeze the higher rate threshold	Receipts	0	+70	+80	+80	+85	+90
Land and buildings transaction tax: increase additional dwellings supplement	Receipts	neg	+25	+25	+30	+30	+30
Land and buildings transaction tax: commercial property rates and thresholds	Receipts	neg	+15	+15	+15	+15	+15
Scottish landfill tax: banning biodegradable municipal waste	Receipts	0	0	-5	-15	-15	-15
Scottish non-domestic rates	Receipts	0	-40	-45	-45	-45	-45
	Current AME	0	+40	+45	+45	+45	+45
Council tax: lifting the cap in Scotland	Receipts	0	+55	+55	+60	+60	+60
	Current AME	0	-55	-55	-60	-60	-60
Direct effect of Scottish Government decisions		+5	+105	+115	+105	+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.

Uncertainty

A.15 In order to be transparent about the potential risks to our forecasts, we assign each certified costing a subjective uncertainty rating, as shown in Table A.2. These can range from 'low' to 'very high'. To do so, we consider 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 certified costing as particularly uncertain, that means that we see risks lying to both sides of what we nonetheless judge to be a reasonable and central estimate.

An example of assigning uncertainty rating criteria

A.16 Table A.4 shows the detailed uncertainty criteria and applies them to a sample policy measure announced since October: **'corporation tax: relief for goodwill'**. This reinstates corporation tax relief on goodwill, subject to certain conditions. Companies that acquire goodwill on or after 1 April 2019 will receive relief in corporation tax for goodwill up to six times the value of any qualifying intellectual property assets in the business being acquired. The policy is expected to cost £20 million in 2019-20 rising to £125 million in 2023-24. The cost will continue to rise beyond our five-year forecast horizon; HMRC estimates that it may take up to 15 years to reach its steady state. Against each uncertainty criterion:

- **Modelling:** Several uncertain behavioural effects are modelled, including an increase in the value of qualifying intellectual property in transactions and in the value of goodwill associated with qualifying intellectual property. These complex effects cannot be modelled easily, so we considered this to be a 'high' source of uncertainty.

- **Data:** This is the most important source of uncertainty in this costing. The data used are from 2016-17 company accounts, with subsequent examination of the top 100 cases of goodwill determining the relationship between goodwill and intellectual property that would qualify for relief were the new relief to be in place. While broadly reliable, the data are subject to two key potential issues. First, the share of goodwill estimated to be intellectual property qualifying for relief is uneven across time. Second, the top 100 cases cover less than half the net book value of goodwill in 2016-17. As such, there is uncertainty around how well the results from the data analysed will represent the whole population of goodwill purchases potentially affected. We considered this to be a 'high' source of uncertainty too.

- **Behaviour:** Several behavioural effects are considered in this costing, including firms waiting until 2019-20 to complete acquisitions and companies being induced to bring further goodwill into the scope of the relief. The extent of these behavioural effects is largely based on judgement from relevant compliance officials in HMRC. We considered this to be a 'medium' source of uncertainty.

Taking all these into account, we gave the costing an overall rating of 'High'.

Table A.4: Assigning uncertainty rating criteria to 'Corporation tax: relief for goodwill'

Rating	Modelling	Data	Behaviour
Very High	Significant modelling challenges Multiple stages and/or high sensitivity on a range of unverifiable assumptions	Very little data Poor quality	No information on potential behaviour
High	Significant modelling challenges Multiple stages and/or high sensitivity on a range of unverifiable assumptions	Little data Much of it poor quality	Behaviour is volatile or very dependent on factors outside the tax/benefit system
Medium-High	Some modelling challenges Difficulty in generating an up-to-date baseline and sensitivity to particular underlying assumptions	Basic data May be from external sources Assumptions cannot be readily checked	Significant policy for which behaviour is hard to predict
Medium	Some modelling challenges Difficulty in generating an up-to-date baseline	Incomplete data High quality external sources Verifiable assumptions	Considerable behavioural changes or dependent on factors outside the system
Medium-Low	Straightforward modelling Few sensitive assumptions required	High quality data	Behaviour fairly predictable
Low	Straightforward modelling of new parameters for existing policy with few or no sensitive assumptions	High quality data	Well established, stable and predictable behaviour
Importance	**Medium**	**High**	**Low**
Overall		**High**	

Other highly uncertain measures

A.17 There is only one other measure factored into this forecast to which we have assigned a 'high' uncertainty rating: **'personal independence payment (PIP): delay full PIP rollout and reduce scheduled award reviews'**. This costing reflects announcements from DWP Ministers in December (delaying the managed migration of DLA cases to PIP – the 'full PIP rollout') and March (to stop scheduled award reviews for claimants over the State Pension age, unless they request one). It assumes the removal of some other award reviews for younger claimants in order to deliver the full PIP rollout to the timetable set by Ministers.

A.18 Modelling is the most important source of uncertainty. Delaying 'full PIP rollout' affects spending on DLA and PIP, and both forecast models were used in the costing. But ensuring consistency of assumptions across the cases affected was challenging. The award review modelling relies on proxies for the caseload and the likelihood of having an award review, as well as the effect of a maturing caseload on the baseline number of scheduled award reviews that would have taken place for claimants over the State Pension age. We consider modelling to be a 'high' source of uncertainty. The behavioural response to removing scheduled award reviews is also uncertain. We consider behaviour to be a 'medium-high' source of uncertainty. Overall, we assign this costing a 'high' uncertainty rating.

Update on previous measures

A.19 We cannot review and re-cost all previous measures each time we produce a new forecast (the volume of them being simply too great), but we do look at any for which the original (or revised) costings are under- or over-performing, and at costings that we have previously identified as subject to particular uncertainty, including in respect of operational delivery.

Policy reversals

A.20 Two of the Government's new measures – **'corporation tax: relief for goodwill'** and **'universal credit: removing the two-child limit'** – reverse ones that were announced in 2015. Indeed, the latter continues the steady process of dropping parts of the Summer Budget 2015 package of welfare cuts that were announced by the then Chancellor with the aim of cutting £12 billion a year from working-age welfare spending by 2019-20. That started with the decision later in 2015 not to go ahead with large cuts to tax credit entitlement, the equivalent of which in universal credit have been largely reversed via subsequent increases in the generosity of the income taper (in the 2016 Autumn Statement) and the work allowances (in the 2018 Budget). Two further new policies – those relating to **fixed odds betting terminals** and **remote gaming duty** – were announced in the 2018 Budget, but just over a fortnight later the Government bowed to pressure to bring forward their start dates from October to April 2019. Table A.2 sets out the costing for these four measures.

Policy delays

A.21 In order to certify costings as central, we need to estimate when – as well as by how much – measures will affect the public finances. As we have set out in previous *EFOs*, many announced policy measures do not follow the timetable factored into the original costings – even where we have required greater contingency margins to be assumed before certifying the measure. This continues to pose a risk to our forecast. The policy delays we have been notified about for this forecast include:

- **Personal independence payment: full PIP rollout:** as described above.
- **Restricting benefits for mixed age couples: delay:** also described above.
- **Dynamic coding out of debt:** this measure, announced in Autumn Budget 2017, will enable HMRC to bring forward collection of self-assessment income tax debts by coding out closer to real-time, rather than waiting until the subsequent fiscal year. IT problems have seen the start date pushed back from April 2019 to October 2019.
- **Tax credits debt: enhanced collection:** this measure, also 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. Now, after further delays, this time in testing the IT solution, it is planned to go live in May 2019. The original costing expected the measure to yield £60 million in 2018-19 and £180 million in 2019-20. This has been revised down to nil and £75 million respectively. HMRC is confident the revised timetable will be met, though past evidence compels us to note it as a continuing risk.
- **Extending landfill tax to illegal waste sites:** this measure made waste disposals at sites without an environmental permit liable for landfill tax. It was announced in the 2017 Autumn Budget and was due to begin in April 2018. The original costing was predicated on HMRC recruiting the necessary compliance staff ahead of that date, which it did. But it did not allow for a delay in putting the relevant health and safety procedures in place to safeguard those staff. This delay means compliance activity only began in September 2018, reducing the expected yield in 2018-19.

Other policy updates

A.22 We have incorporated updates to several other measures in this forecast. First, we have revisited the **Budget 2018 package of universal credit measures** that we were unable to certify as 'reasonable and central' at the time. We noted in October that "*Experience warns that mistakes are inevitable when such changes are estimated in haste late in a Budget process*". This has proved to be the case, although thankfully the issues that were revealed in the recosting process were relatively minor. First, DWP analysts were not aware of the Budget income tax personal allowance measures. These affect universal credit because awards are tapered with post-tax income. Factoring this in reduces the cost of the package

modestly. Second, errors were identified in the modelling of certain elements where incorrect baselines had been used and there was insufficient time for quality assurance processes to pick that up. These were the kinds of issues that we had in mind when choosing not to certify the package in October. This updated costing lowers the overall cost by around £100 million a year, so that it now reaches £2.0 billion in 2023-24.

A.23 Other updates include:

- **Corporation tax reliefs:** in October, we reported on the rising cost of corporation tax reliefs, including R&D tax credits and 'creative' sector reliefs. Company tax credits were expected to cost £5 billion a year by 2023-24. This has been revised up by around 12 per cent a year in this forecast, with increases across both categories. Our latest forecast for 2023-24 is £5.6 billion, continuing the substantial increase in cost since 2015-16. We will work with HMRC to examine the reasons for the continuing growth in the costs of these and other tax reliefs and will return to the issue in a future report.

- **Corporation tax: bank compensation payments:** this was announced at Summer Budget 2015 to prevent banks from obtaining corporation tax (CT) deductions for provisions they had set aside to compensate customers, mainly relating to payment protection insurance (PPI). In March 2017, the Financial Conduct Authority announced a 29 August 2019 deadline for PPI claims, which prompted an increase in claims. This avoided the loss of around £0.3 billion of revenue in 2017-18, £0.1 billion more than originally forecast, as banks responded by increasing provisions but these were not deductible for CT purposes. HMRC believes that additional PPI-related provisions are unlikely, and that the existing stock will probably unwind by the end of 2019-20. This has lowered our CT forecast by an average of £0.1 billion in 2018-19 and 2019-20.

- **Alcohol wholesaler registration scheme:** in December 2013 a mandatory registration scheme for alcohol wholesalers was announced. Licenses would only be issued to operators passing a 'fit and proper' test. It took effect in January 2016, and initial outturn data suggested fewer, but higher value, cases than originally expected. In November 2017 we revised the average value of a case from £50,000 to £254,000. The average yield has since fallen to £142,000, prompting us to lower the expected yield from this measure by around £100 million a year. This remains uncertain. The mix of traders registering has also changed relative to what was originally expected, with small breweries and distilleries accounting for most new applications in the past two years, reflecting the rising popularity of craft beers and gins.

- **Soft drinks industry levy:** this measure came into effect (on time) in April 2018, two years after it was announced in the 2016 Budget. It was originally expected to raise over £500 million a year, but this estimate was subsequently revised down as manufacturers appeared to be lowering the sugar content of their drinks by more than originally thought. Revised data also suggested the tax base had been significantly overestimated. Our October forecast was for receipts of £250 million a year. We now have outturn data for the first three quarters of the levy's operation, which have prompted us to revise that up to around £340 million a year. Several factors could

explain the unexpected strength in receipts relative to our October forecast: consumers may be less price sensitive than previously thought; the tax base could be larger; reformulation could be taking place more slowly; or the assumed tax gap could be smaller than previously assumed.

- **Help to Buy ISA** and **Lifetime ISA:** these are savings products providing a regular top-up from the Government. We have previously reported that initial take-up for both – which we highlighted as highly uncertain at the time of the original costings – has fallen short of expectations. We have revised down top-up related spending on both further in this forecast. The Help to Buy ISA was announced in the 2015 Budget and launched in December that year. We expect spending to average £170 million over the current forecast period, down 13 per cent on our October forecast. The 2015 Budget costing expected spending to rise to £835 million in 2019-20 – our latest estimate for that year is £150 million, a shortfall of 82 per cent. The Lifetime ISA was announced in the 2016 Budget and took effect in April 2017. Further weakness in outturns since our October forecast have led us to revise spending down by around 20 per cent a year. The original costing expected it to reach £845 million in 2020-21 – our current forecast is £420 million, a shortfall of 50 per cent.

- **Help to Save:** in the 2016 Budget, the Government announced the introduction of a regular savings account for certain low-income recipients of tax credits and universal credit. Savers can save up to £50 a month and receive a 50 per cent top-up from the Government after two years, with an option to continue saving for a further two years. After a six-month delay, Help to Save was launched in September 2018. Take-up was always expected to be low as the target population is not one that typically has money spare for regular savings. Year-to-date outturns suggest the number of new accounts has been lower than we expected. Our October forecast assumed 195,000 accounts would be opened by the end of 2018-19, but by the end of January there were only 90,450 live accounts. We have therefore lowered our forecast for spending on top-ups by around 50 per cent from 2020-21 onwards, when the first accounts mature.

- **Making tax digital:** since our October forecast, HMRC reports that progress has been made with its making tax digital programme, ahead of the full launch in April. At the time of writing, 37,000 VAT businesses had signed up[8] and by the end of April this is due to rise to around 300,000. We will revisit this in future forecasts.

- **Common reporting standard and worldwide disclosure facility:** This Budget 2015 announcement gave UK taxpayers the opportunity to disclose their tax affairs voluntarily – via the 'worldwide disclosure facility' (WDF) – before HMRC received details about offshore financial accounts as part of an international exchange of information – the common reporting standard (CRS). In October, we revised down the expected WDF yield in 2018-19 from £235 million to £195 million, to reflect an assumed change in the settlement pattern. HMRC has informed us that, by end of

[8] This includes all businesses and clients (signed up by their agents). It includes a mixture of customers above and below the VAT threshold.

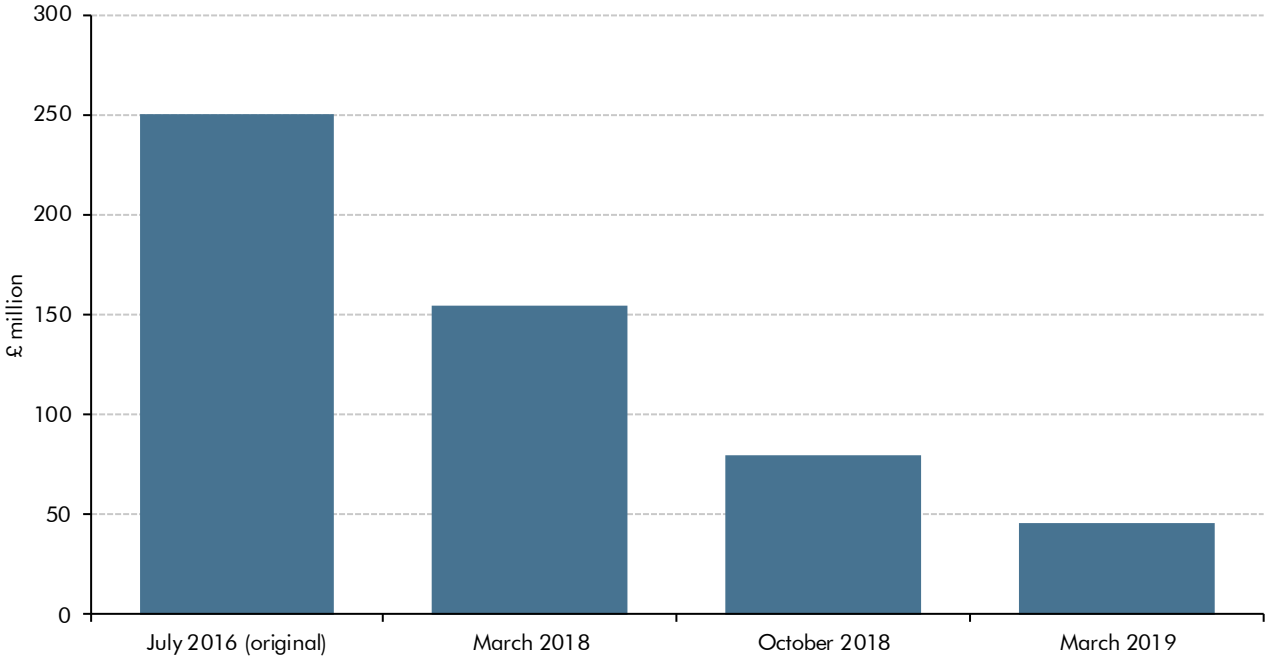
January, around £120 million had been disclosed directly through the WDF.[9] HMRC has also told us that it has now had two successful CRS data exchanges – 1.5 million accounts in September 2017 and a further 5 million in September 2018. HMRC is conducting compliance activity based on the first exchange, while the second remains at the data-processing stage. We have asked HMRC to report on both the WDF and the CRS ahead of our autumn forecast.

- **Customs declaration service:** HMRC's customs declaration service (CDS) – built to handle 300 million import and export declarations a year – will be rolled out at a slower pace than we reported in October. It had been scheduled to be fully rolled out in March 2019 but, at the time of writing, CDS has only processed 500 declarations from four traders.[10] Instead, HMRC has prioritised the upgrading of its existing 'customs handling of import and export freight' (CHIEF) system and remains confident that its existing operations will not be affected. The risk posed by the smooth operation of these systems to our forecasts for VAT and customs duties would be greater in scenarios in which customs duties were levied on imports from the EU – which is not a feature of the broad-brush Brexit assumptions that underpin our central forecast. HMRC agrees there are revenue risks from running a sub-optimal customs model, such as in a 'no deal' Brexit, and that these largely arise from a potential lack of readiness from businesses submitting customs declarations, rather than its systems.

- **Support for mortgage interest:** in Summer Budget 2015, the Government announced that, from April 2018, support for mortgage interest (SMI) would switch from being a non-repayable benefit payment to an interest-bearing loan, secured against a mortgaged property and due to be repaid upon death or the sale of the property. This measure was originally due to reduce welfare spending by £270 million in 2018-19 and to increase lending (which affects debt but not the deficit) by a broadly equivalent amount. While the effect on spending has happened, far fewer people than expected have taken up the loan instead. As a result we have made successive downward revisions to SMI-related lending (see Chart A.1). We now expect just 24,000 claimants to take-up the loan in 2018-19, compared to 98,000 expected originally, a shortfall of 76 per cent. We have revised down take-up in future years too. But we have revised down lending by less than the number of recipients, because the average loan size among those fewer-than-expected recipients has been larger than assumed.

[9] Some of this amount has not yet been finalised.
[10] HMRC evidence to the Public Accounts Committee, 4 March 2019, and National Audit Office report on *The UK border: preparedness for EU exit update*, 27 February 2019.

Chart A.1: Support for mortgage interest: forecast loan outlays in 2018-19



Source: OBR

Policy risks

A.24 Parliament requires that our forecasts only reflect current Government policy. As such, when the Government or governing party 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. Abstracting from the wider policy uncertainty associated with the negotiations on leaving the EU, we note:

- DWP's December 2017 **review of automatic enrolment into workplace pensions** made several new proposals, including reducing the age threshold from 22 to 18 and calculating pension contributions from the first pound earned rather than from the lower earnings limit for NICs. The Treasury has told us that these remain proposals, so we have not included their effects in our economy or fiscal forecasts. Auto-enrolment in its present form is factored into our economy forecast as a wedge between total employee compensation and wages, while tax relief on the employee contributions features in our income tax forecast. These proposals would increase both effects.

- The **ruling on widowed parent's allowance** by the Supreme Court in August 2018. The ruling deemed that the exclusion of unmarried couples was incompatible with the principles of the European Convention on Human Rights. If the Government responds by changing the entitlement of unmarried couples, we will include it in our forecast.

- The **'worldwide harmonised light vehicle test procedure' (WLTP)** for testing the emission levels of new passenger cars is set to replace the previous 'new European driving cycle' test for vehicle excise duty (VED) banding from 2020-21. The new test is more rigorous

than the previous one, so it is expected to move some vehicles into higher VED bands. The Government launched a review of the impact of WLTP, which closed in February 2019, but no policy changes have yet been announced.

- The Government announced the intention to introduce **a tax on plastic packaging** from April 2022. It is now consulting on the design and rates of the tax, and the consultation will close in May 2019. We will include this in our central forecast once a decision with sufficient detail on design allows us to forecast year-by-year impacts.

- Possible faster **increases in the National Living Wage (NLW)**. In Budget 2018, the Government set out an aspiration to end low pay as defined by the OECD i.e. two-thirds of median earnings. An increase in the NLW to this level from the 60 per cent of median hourly earnings that it is set to reach in 2020 could have material consequences for employment, tax receipts and welfare spending, as discussed in Box 3.3 of our October 2018 *EFO*. The Treasury told us that the Government is "*planning to engage with stakeholders including the Low Pay Commission, as well as employers and the TUC, to gather evidence and views*" over the coming months, with the intention to set the post-2020 remit for the Low Pay Commission in the 2019 Budget.

- The intention to **localise all business rates** and to provide some additional discretion to local authorities in setting them, while also shifting some spending responsibilities to local authorities. In October 2015 the Government pledged that "*by the end of the Parliament, local government should retain all taxes raised locally, including 100% of locally collected business rates*". This ambition was restated in the 2019-20 local government finance settlement technical consultation, but the precise timetable remains unclear. The Government has been running pilot schemes in selected authorities since 2017-18, with further pilots announced since our October forecast.

- The **intention to expand right-to-buy to tenants of housing associations**. An initial pilot scheme ran from January 2016 to July 2017 and an expanded pilot was launched in August 2018. The Housing and Planning Act was passed in May 2016, but the Government has again informed us that the secondary legislation detailing how the full right-to-buy policy will work remains ongoing. Until these details are specified and the implementation timetable is sufficiently clear, we cannot estimate the effects of this policy on a year-by-year basis. An expansion to right-to-buy would require the Government to compensate housing associations for the discounts in the sale price of property, as well as having consequences for benefit eligibility for some individuals.

- The **incentives for landlords that offer tenancies of at least 12 months**. In November 2017 the Government announced that it "*will consult on the barriers to landlords offering longer, more secure tenancies to those tenants who want them*". The consultation closed on 26 August 2018, but the Government has not yet issued a response and policy decisions have not yet been taken.

- The **ban on Help to Buy equity loans for leasehold houses**. In February 2017 the Government launched a White Paper on the leasehold market, and the consultation

on it closed in December 2017, with the Government subsequently announcing it intended to bring forward "*legislation to ban future leasehold house sales*". In July 2018, the Government announced it would in future stop Help to Buy funds being used for "*unjustified new leasehold houses*", but gave no timeframe for implementing this. We have been told that the Government has not yet decided when it will do so.

- The consultation on the **surcharge on stamp duty land tax for non-resident buyers** acquiring residential property in England and Northern Ireland was launched in February 2019 and will close in May 2019. The design and implementation of this policy remain subject to the outcome of the consultation.

- 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 too has been delayed, and a new date has yet to be set.

- The **'Augur' review of post-18 education funding** was launched in February 2018 but its publication date has yet to be announced. It covers the level, terms and duration of students' financial contribution to their post-18 education. Given the scale of outlays on student loans, any ensuing policy changes could have material effects on our forecast. These would also depend on the accounting changes discussed in Annex B.

- The Government announced the **structures and buildings allowance** at Budget 2018 saying it would "*addresses a significant gap in the UK's current capital allowances regime, and will improve the international competitiveness of the UK's tax system*". On the same day, HMRC published a technical report that set out how much of the benefit gained from the allowance may eventually be clawed back through future increases in capital gains tax liability. How this mechanism will work has yet to be finalised.

- The provision of a **centrally funded clinical negligence scheme for general practitioners**. The Department of Health and Social Care has announced it wants to "*protect the general practice workforce against rising indemnity costs*", and will therefore replace the current insurance system with a Government-run scheme from April 2019. It has not yet detailed how this will operate and how it might affect the Government's contingent liabilities or the way in which GPs pay is determined.

A.25 Several policy risks relate to the devolution of fiscal powers:

- The **devolution of corporation tax to Northern Ireland**. The Corporation Tax (Northern Ireland) Act received Royal Assent in March 2015, with devolution originally due to have begun in April 2018. The Northern Ireland Executive has previously announced its intention to set a 12.5 per cent rate to match that of the Republic of Ireland. While primary legislation has been passed, final devolution is subject to agreement between the UK Government and the Northern Ireland Executive. This has yet to be reached, as the Executive is currently suspended, so the effect of the proposed tax cut has not been included in our central forecast.

- The **devolution of air passenger duty (APD) to the Scottish Parliament**. The Scotland Act 2016 included provisions for the devolution of APD and the Scottish Government initially announced this would be replaced by an air departure tax (ADT) from April 2018. But devolution has been delayed pending clarity over the Highlands and Islands exemption. Both the UK and Scottish Governments have confirmed that devolution remains on hold. The Scottish Government has previously said it intends to set ADT rates at half the level of APD rates. As the timing of APD devolution is still uncertain, we have not included it, or the effect of the proposed tax cut, in our central forecast.

- Further **devolution of social security benefits to Scotland**. The Scotland Act also allows for the devolution of several benefits to the Scottish Parliament, including carer's allowance and disability benefits. The Scottish Government set up a new executive agency, Social Security Scotland, in April 2018, and started making carer's allowance supplement payments in September 2018. The Scottish Government will take on legal responsibility for disability benefits (worth around £2.5 billion a year) from 1 April 2020. It has published a consultation on their replacement. Devolution is unlikely to affect spending materially, but as the details of the replacement system are yet to be settled, we have not included that in our central forecast.

- The **devolution of aggregates levy to Scotland and Wales**. The Scotland Act 2016 also provides for the devolution of aggregates levy to Scotland, and the UK Government has announced its intention to devolve this tax to Wales as well. Devolution was delayed pending completion of a court case regarding state aid, but legal proceedings were dropped in February 2019, clearing the way for devolution to be implemented. But the timeline for devolution has not been confirmed yet.

- The Scottish Government is considering the introduction of a **'transient visitor levy'** (TVL) – the so-called 'tourist tax' – announced in the Scottish Budget in December 2018. The introduction and administration of the TVL would be left to local authorities; the Scottish Government has said it has "*no plans to implement such a tax*" at a Scotland level, but has launched a Scotland-wide consultation on the potential legislation for powers to introduce it. The City of Edinburgh Council recently announced that it intends to pursue a TVL, subject to Scottish Parliament legislation.

A.26 There are many policy uncertainties regarding Brexit that are discussed throughout this document. We also reviewed the uncertainties around possible substitute spending once the UK's contributions to the EU budget end in Annex B of our March 2017 *EFO*. There are also several policy risks to specific to individual lines of our fiscal forecasts:

- The **UK's participation in the EU emissions trading system (ETS) beyond 2020**. The draft Withdrawal Agreement between the UK Government and the EU sets out that the UK will remain in the scheme until the end of the transition period, but no decision has been made on the details of what will happen beyond 2020, other than that the UK will implement a system of carbon pricing of at least the same effectiveness and scope as the EU ETS. The political declaration on the future relationship between the UK and the EU states that the UK will consider linking a future carbon pricing system with the

EU ETS. The Government has also legislated for the introduction of a carbon emissions tax from April 2019 if the UK were to leave the EU without a deal.

- The **access to funding for higher education for EU students beyond 2020**. The draft Withdrawal Agreement provides for EU students to retain access to funding during the transition period, but no decision has been made on what will happen beyond 2020.

- The **support scheme for traders facing import VAT on goods imported from the EU**. The Government has announced it will introduce deferred accounting for import VAT on goods from the EU in the event of a 'no deal' Brexit. But it has not decided on what support scheme would be put in place after the transition period.

B Accounting for student loans

Introduction

B.1 The stock of student loans in the UK has been rising rapidly in recent years, thanks to the larger size of the loans offered to English students since 2012 and the relatively high rate at which interest accrues on outstanding balances. Student loans therefore play an important role in our assessment of the sustainability of the public finances and the Government's performance against its fiscal targets.

B.2 Unfortunately, the current National Accounts treatment is bedevilled by 'fiscal illusions' – as we described in a working paper last year.[1] This has been recognised by committees of both Houses of Parliament.[2] The subsidy cost of student loans is understated for decades while their beneficial effect on revenue is overstated for decades, so they flatter the headline budget deficit measure. And their value as government assets is ignored in the headline net debt measure, but overstated in the broader net financial liabilities measure.

B.3 The Office for National Statistics (ONS) has a difficult job addressing these problems, because existing international statistical guidance did not envisage governments issuing loans with high expected write-offs, with repayments that look more like income tax than debt service, and that accrue interest at relatively high rates but that is not expected to be paid in full. In July 2018 the ONS published an article outlining potential improvements to the recording of income-contingent student loans.[3] Our working paper described the deficiencies of the current approach and illustrated the fiscal impacts of different potential methodologies. We updated them in our October 2018 *Economic and fiscal outlook (EFO)*.

B.4 On 17 December the ONS published a follow-up article laying out its plans and Eurostat published bilateral advice on the recording of such loans.[4,5] The ONS intends to move from the current approach of treating student loans as conventional loans to one that treats them as a part-grant, part-loan hybrid (which it calls the 'partitioned loan-transfer approach'). It intends to publish provisional estimates under the new treatment in the June 2019 public finances release, before incorporating final estimates from September 2019.

B.5 As discussed in Chapter 4, there are too many uncertainties over the implementation of this methodology for us to move our central forecast onto the new basis now. But clearly, once

[1] Office for Budget Responsibility, *Working paper No. 12: Student loans and fiscal illusions,* July 2018.
[2] House of Commons Treasury Committee, *Student Loans Seventh Report of Session 2017-19*, February 2018 and House of Lords Economic Affairs Committee, *Treating Students Fairly: The Economics of Post-School Education Second Report of Session 2017-19*, June 2018.
[3] ONS, *Looking ahead: developments in public sector finance statistics,* July 2018.
[4] ONS, *New treatment of student loans in the public sector finances and national accounts,* December 2018.
[5] Eurostat, *Ex ante advice on the recording of the UK student loans in Government Finance Statistics,* December 2018.

implemented, this change will have a material effect on the measured health of the public finances – bringing the data closer to the true underlying picture. So in this annex we:

- set out **the deficiencies of the current approach** and the fiscal illusions caused;
- discuss the key attributes of **the ONS's proposed approach**;
- present **updated estimates of the impact of changing the methodology** and how this differs from the illustrative methodology we have used previously;
- discuss **the key economic and policy determinants in the student loans forecast**; and
- consider the potential for **revisions to outturns and forecasts**.

Fiscal illusions from student loans

B.6 Our working paper discussed the 'fiscal illusions' arising from the current treatment of student loans. Fiscal illusions occur where the accounting treatment of a transaction does not reflect its economic reality well, either by over- or under-valuing transactions or by recording them at a very different point in time from when the underlying activity took place.

B.7 Student loans are subject to both types of illusion under current National Accounts rules:

- **the large subsidy element is only recognised when unpaid loans are written off several decades in the future** and beyond any government's normal planning horizon;
- **much more interest is recorded than will actually be paid**, which flatters the deficit in the medium term while increasing the amount that is then written off much later;
- **by selling loans the Government can avoid ever recognising a spending element and the associated impact on borrowing**, creating perverse incentives;
- **the loans are held on the balance sheet at their face value, which is considerably higher than their true worth**, flattering public sector net financial liabilities; but
- **the loans are not counted as assets in public sector net debt** (PSND), overstating their actual detrimental impact on the sustainability of the public finances.

B.8 The 'missing asset' treatment in net debt reflects the standard definition of 'liquid assets' that are netted off this measure, so this fiscal illusion is created in respect of all loans, not just student loans. The other illusions arise from the accounting treatment of student loans specifically and it is these that the ONS's revised treatment seeks to address.

B.9 This annex looks first at the flow issues (delayed recognition of spending and recording too much interest income) and how the revised treatment by ONS will seek to address these, before turning to asset sales and public sector net financial liabilities (PSNFL).

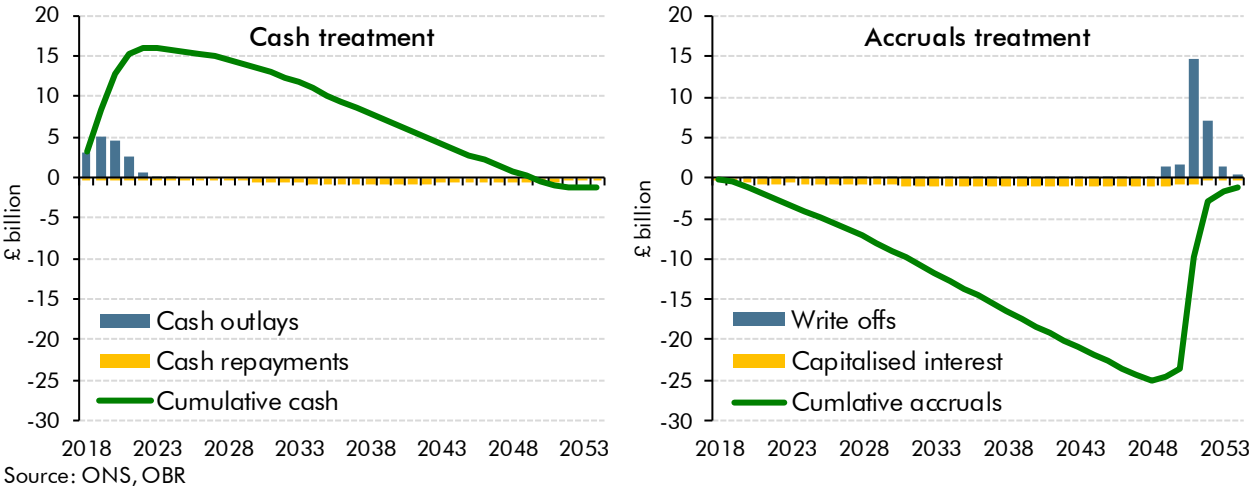
B.10 Chart B.1 shows the cash and accrued flows associated with our latest forecast for the cohort of students who are mostly taking out their first full-time Plan 2 student loan in England in the 2018 academic year:[6]

- In the first few years, relatively large sums of money are handed to the borrowers, a **cash flow** from the public to the private sector. Over the next several decades, the borrowers make smaller cash repayments, returning cash from the private to the public sector. (These cashflows determine the effect of student loans on the central government net cash requirement (CGNCR) and PSND. They will not be affected by the proposed ONS methodological changes.)

- The **accruals treatment** of these cashflows records no expenditure element when the cash outlays take place, but accrues interest income that is capitalised onto the loan balance for several decades. The mismatch between the cash and accrued flows is resolved at the term of the loans, more than 30 years into the future, when any outstanding balances are written off.

B.11 For this cohort the total cash balance is £16.2 billion of outlays minus £17.4 billion of repayments or a £1.2 billion net gain to the Exchequer. (As we showed in last year's working paper, this small net gain becomes a £13.2 billion net loss when the associated financing costs are taken into account.) The public finances accrue no initial spending but do accrue £29.3 billion in capitalised interest income over the lifetime of the loans. The £28.1 billion difference between the accrued gain and the much smaller cash gain is recorded as write-offs at the term of the loans.

Chart B.1: Current National Accounts treatment: the 2018 cohort



Source: ONS, OBR

[6] 'Plan 2' loans are the larger loans that have been in place since the funding reforms that took effect in 2012. For a fuller discussion of the different types of loans outstanding, see Chapter 2 of our July 2018 working paper. English Plan 2 loans dominate student loan outlays and are becoming increasingly dominant in the overall stock of outstanding student debt. On our latest forecast, 88 per cent of outstanding loans in 2023-24 will be English Plan 2 loans. This includes the effect of capitalised interest.

B.12 In our working paper we concluded that a better treatment would record more spending as the loans are extended, to reflect their subsidy element, and would reduce recorded interest income sufficiently so that there is no need to write off any balances at the end of the life of the loans. This would mean that upfront spending minus interest recorded would equal the cash balance (for the 2018 cohort this would equal -£1.2 billion).

B.13 As we noted, there are many ways this could arithmetically be achieved. In our 'hybrid' illustration we took the simple approach of using the same scaling factor for both interest and spending. For the 2018 cohort in our illustration, 62 per cent of the total amount charged to borrowers is expected to be written off: because £17.4 billion of repayments are expected to be made against £45.5 billion of loan balances ultimately outstanding (£16.2 billion of outlays plus £29.3 billion of capitalised interest). Recording 62 per cent of outlays (£10.0 billion) as upfront expenditure would leave the remaining 38 per cent to be treated as 'genuine' loans for which principal and interest will be repaid, and so 38 per cent of capitalised interest (£11.2 billion) would be recorded as income. The effect of this illustrative approach, relative to the current and proposed ones, is shown in Chart B.2 below.

The proposed ONS approach: part grant, part loan

B.14 The ONS and Eurostat have concluded that the accounting treatment should indeed change and the ONS's preferred approach is to treat the part of the cash outlay that the student is expected to repay with interest as a loan and the part that s/he is not expected to repay as a grant – its 'partitioned loan-transfer approach'. Conceptually this is the same as the 'hybrid' approach in our working paper and will therefore involve recording more expenditure upfront and less interest income thereafter, with the aim of having no write-offs at maturity. The precise effects in any given year will be different to those in our working paper, in part because the ONS intends to take a different approach to adjusting expenditure and income.

B.15 The ONS starts by noting that if there are to be no write-offs at the term of the loans, the loan balance at maturity must be zero. Using estimates of the interest rate charged and the cash amounts repaid in the final year allows the corresponding balance at the end of the preceding year to be calculated. This can then be repeated for each preceding year to reveal an opening loan balance and the proportion of the total initial outlay that is in effect granted to the student. This is recorded as spending. Based on changes in the estimated loan balances and the relevant interest rates, interest income can then be recalculated.

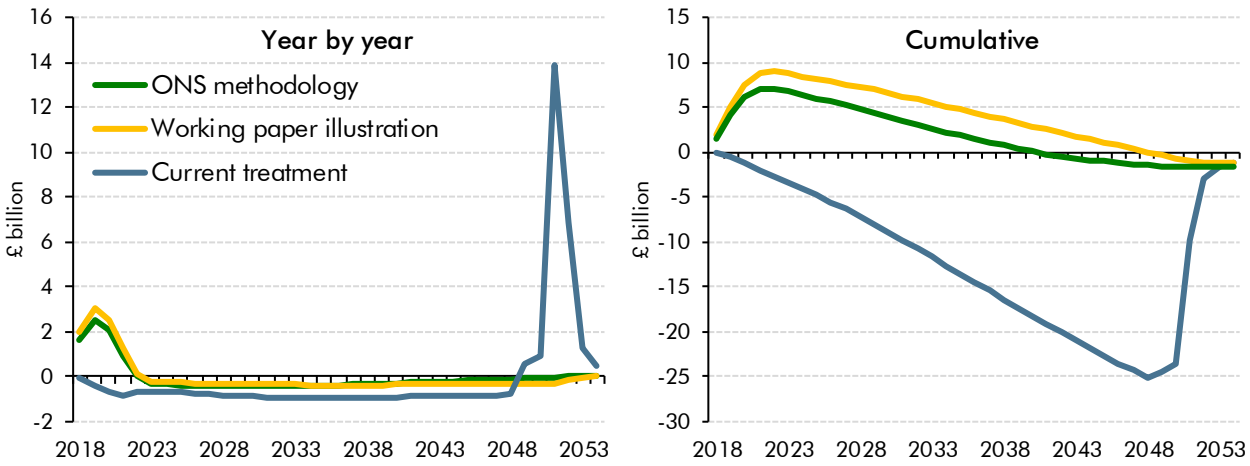
B.16 The other key difference is that the ONS intends to apply this approach at a more disaggregated level than at the cohort level we have illustrated previously. The Department for Education (DfE) has been developing its microsimulation model to be able to deliver this methodology and has made significant progress for most loan types.[7] We use the same model when producing our medium-term forecasts and long-term projections, so once the ONS methodology has been settled we will be able to replicate it in our forecasts.

[7] For more details of the model see Department for Education, *Student loan forecasts, England: 2017-18. Quality and methodology information,* June 2018.

B.17 Over the coming months DfE will work with ONS to finalise forecast methodologies for undergraduate and post-doctoral loans, extend the methodology to doctoral loans, and develop a historical back series for inclusion in the public finances data.

B.18 Chart B.2 shows the impacts on net borrowing for the 2018 cohort using preliminary results from the revised modelling approach, the current treatment and our working paper approach. The proposed new ONS approach and our working paper approach both record significant amounts of expenditure upfront and lower interest income thereafter than under the current approach. This results in higher borrowing in all years until maturity, when the large write-offs under the current treatment begin. Initial results from the ONS approach point to a smaller rise in borrowing than in our working paper at the start of the period, due to lower spending and higher initial interest receipts. Recorded interest declines over the term of the loans, eventually becoming lower than under our working paper approach. This gives a more plausible real-world profile than the simple straight-line adjustment we illustrated in the working paper. But even so, the differences between these two approaches are small relative to the difference between either of them and the current approach.

Chart B.2: Annual and cumulative net borrowing impacts: the 2018 cohort



Source: OBR

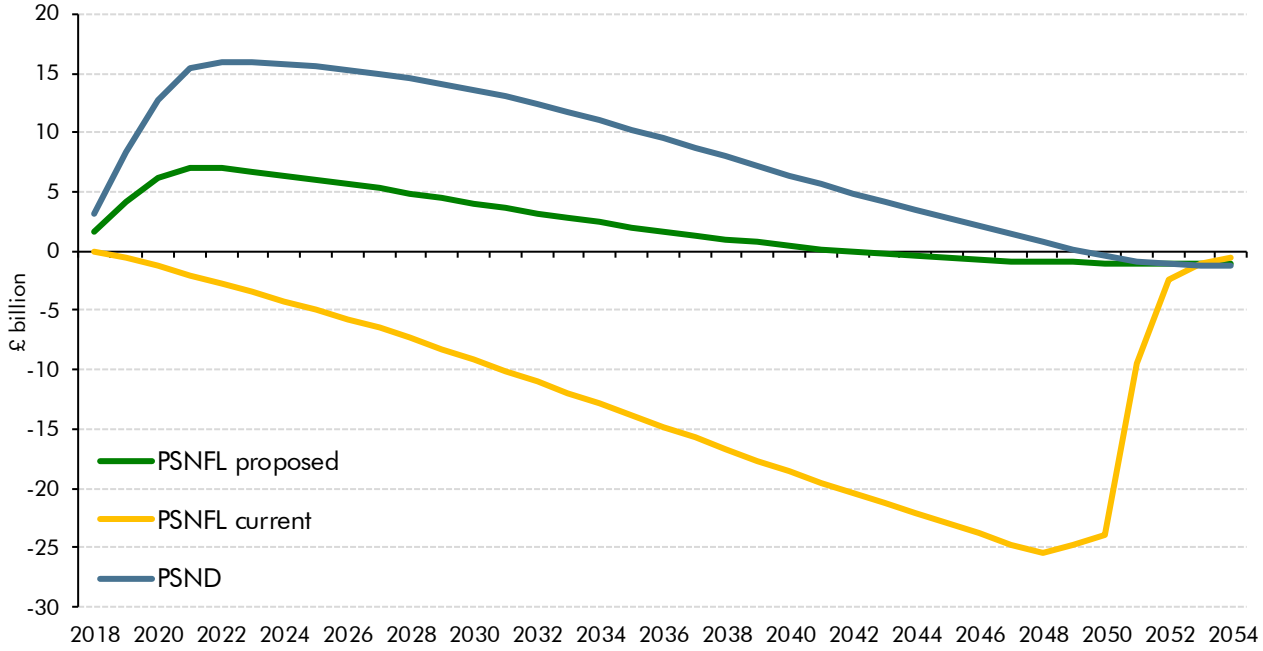
B.19 Splitting the amounts transferred to students into loan and spending portions results in lower outstanding loan balances than are currently recorded and therefore lowers the value of the government's loan assets. This increases public sector net financial liabilities (PSNFL) relative to the current 'face value' recording. This is shown in Chart B.3 for the 2018 cohort, along with the impacts of loans on PSND (which will not change under a new treatment). The chart does not include the costs to government of financing student loans, which were discussed in our working paper and are relevant in assessing the impact of student loans on the public finances relative to a world in which they do not exist at all:

- **PSND** rises sharply as loans are extended, as financing them increases debt but the loan assets are not recognised. This effect falls over time as repayments are made.

- The current treatment for **PSNFL** records no initial impact as the loan asset is valued at an amount equal to the outlays. Interest then capitalises faster than repayments are

made, so the value of the loan asset rises over time, reducing PSNFL. At maturity large write-offs then increase PSNFL. In contrast, under the proposed treatment the path of PSNFL runs between those of PSND and of PSNFL on the current treatment – a much more reasonable outcome. At issuance the recorded asset is smaller than outlays, so net liabilities rise. The path to maturity is then much smoother than currently recorded.

Chart B.3: Effects on balance sheet aggregates: the 2018 cohort



Source: ONS, OBR

Fiscal impacts of the new treatment

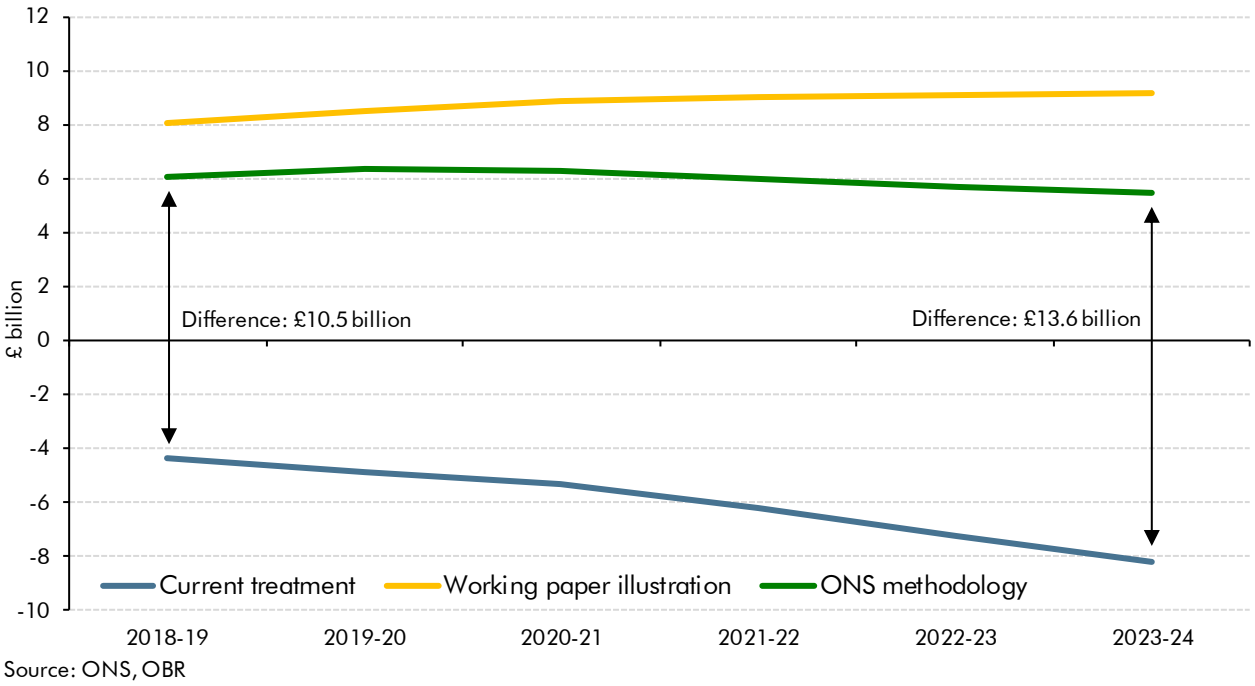
B.20 Adding the effects on net borrowing for successive cohorts allows us to update our estimate of the medium-term impact of the proposed changes (see Chart B.4).[8] Relative to not issuing student loans at all, the proposed ONS methodology would show the overall impact of student loans on net borrowing in our medium-term forecast peaking at an addition of £6.4 billion in 2019-20, gradually declining to £5.4 billion by 2023-24 (excluding financing costs). This reflects a relatively stable path for the spending component, which rises from £8.5 billion in 2018-19 to £10.2 billion in 2023-24, offset by steadily rising interest on the increasing stock of loans (rising from £2.5 billion in 2018-19 to £4.8 billion in 2023-24) even though considerably less interest income is recorded than under the current approach.

B.21 Compared to the current methodology, the proposed ONS methodology records significantly higher expenditure and lower interest, resulting in PSNB being £10.5 billion higher in 2018-19, rising to £13.7 billion higher in 2023-24. In the Government's fiscal target year of 2020-21, PSNB would be £11.6 billion higher, removing 0.5 per cent of the headroom against the borrowing target in our latest forecast.

[8] For the loans in the devolved administrations, doctoral loans and advanced learner loans, estimates in the ONS approach are those of our working paper approach.

B.22 These impacts are smaller than the illustrative estimates we presented last year, as the proposed ONS methodology results in somewhat higher interest income at the start of the loan term and (thanks to lower interest income in the longer term) lower upfront spending. There remains considerably uncertainty around the precise methodology the ONS will adopt, so these implications for borrowing should still be treated as approximate.

Chart B.4: Effects on public sector net borrowing: all cohorts



Source: ONS, OBR

B.23 Under the ONS approach the size of the loan asset recorded in PSNFL is much smaller than at present, because the initial loan element is smaller (some has been recorded as spending) and the capitalised interest is therefore smaller too. Each year the difference between the asset levels in the two methods will increase by the PSNB difference. Cumulatively this means that PSNFL falls by 5.4 per cent of GDP from 2018-19 to 2023-24 under the ONS approach compared to 7.8 per cent currently. We cannot yet say what the value of the stock of loans in 2018-19 would be under the proposed methodology.

Determinants of student loans estimates

B.24 The proposed ONS methodology will better align the public finance statistics with economic reality. But many variables can affect the initial outlay ultimately recovered from students – thanks to the income-contingent repayments and interest rates, plus the 30-year term after which outstanding balances are simply written off. So changes in these variables could change the picture of the public finances painted in the official statistics.

B.25 The DfE-operated models that we use to produce our student loans forecasts and long-term projections – and that the ONS will use to generate outturn estimates for the public finances statistics – rely on several medium and long-term assumptions about borrowers' incomes and the wider economy, and the terms and conditions of the loans.

B.26 For new outlays each year, the key variables are:

- the **number of borrowers** – determined by factors such as demographics, application rates and continuation rates, as well as government policy on eligibility; and
- the average **size of loans** – determined by the maximum fee set by government and take-up rates by students, since not all students take up the maximum offered.

B.27 For repayments, the key determinants are:

- each borrower's **earnings relative to the repayment threshold** above which repayments are calculated – determined by assumptions about whole economy earnings growth and how an individual graduate's earnings can be expected to vary relative to that;
- the **repayment rate** applied to earnings above the threshold – set by government; and
- the **duration** of the loans before outstanding balances are written off – also determined by government.

B.28 The level of capitalised interest is driven by:

- the **level of outstanding balances** – determined by the level of outlays, repayments and the accumulated capitalised interest; and
- the **interest rates** charged – determined by government policy (currently varying from the level of RPI inflation to RPI plus 3 per cent dependant on income) and assumptions about inputs into the interest rate calculation (RPI inflation and borrowers' incomes).

B.29 Projections for all these input assumptions over many decades determine the extent to which an individual loan is expected to be repaid, and therefore the extent of distant future write-offs under the current treatment and of initial spending under the proposed approach.

B.30 We can consider three general types of student loan recipient to illustrate these issues:

- **Full payer**: This borrower earns sufficient money to repay their entire loan balance – the initial outlay plus the interest charged. For this borrower the student loan is indeed a loan and so all outlays are recorded as loans and all interest charged as interest.
- **Zero payer**: This borrower does not earn enough in any period to repay any of their outstanding loan balance. All the loan should therefore be recorded as a transfer – i.e. as government spending. None of the interest charged should be recorded as income.
- **Partial payer**: This borrower falls somewhere in between. They repay some but not all of their loan, and so the original outlay and interest charged should be treated as a hybrid product that is part loan (accruing interest) and part grant (recorded upfront).

B.31 The IFS estimates that on current policy settings only 17 per cent of plan 2 borrowers will repay in full.[9] Most of the remainder will be partial payers.

B.32 In contrast to the current treatment, under the proposed ONS approach income and expenditure should move more intuitively with changes in the overall cash position. More or fewer borrowers will be associated with more or less spending, for example. But changes in the other determinants will affect the different categories of borrowers differently, and could alter the composition of the student population – thereby increasing or decreasing the sizes of the groups. Table B.1 summarises the expected impact of such changes on the estimates of upfront spending, interest income and net borrowing. In practice the response could be more complex, depending on the final methodology the ONS settles on. In the medium term, effects on spending will dominate effects on interest in terms of the overall impact on net borrowing. The main effects are:

- **Increasing the loan size** for a full payer increases the cash returns to government. It does not affect accrued spending (as all outlays are recorded as loans), but would result in larger balances and therefore more interest charged and a longer payment period. This increased income for government would reduce borrowing. For other types of payer there would be larger unpaid balances and so more spending to record upfront but no more cash income or interest. This would increase borrowing. There would be more partial payers and fewer full payers, but no effect on zero payers.

- **Higher interest rates** due to higher RPI inflation (or Bank Rate for Plan 1 borrowers) or due to increases to the variable interest portion will increase cash repayments from full payers and so increase interest receipts and reduce the deficit. For partial payers (all else equal) there would be no cash consequences, but the formula proposed by the ONS would assign a greater portion of repayments to interest (increasing receipts) and so a lower portion to the loan principal (increasing accrued spending). Again, there would be more partial payers and fewer full payers, but no effect on zero payers.

- **Higher earnings** among borrowers (either relative to the whole economy average or because all earnings were rising faster than previously assumed) or **a lower repayment threshold** would lead to full payers repaying more quickly, so less interest would accrue leading to lower cumulative receipts. Some partial payers would become full payers and some zero payers would become partial payers. A partial payer would repay more of their balance, leading to higher recorded interest and lower upfront spending. The fiscal effects of the change in size of the partial payer population, and the average speed and extent of repayment within the partial payer population overall, would depend on the relative flows to full and from zero payers.

- **A higher repayment rate** would act in the same way as higher earnings, except that it would not affect the population of zero payers.

[9] Institute for Fiscal Studies, *Higher Education finance reform: Raising the repayment threshold to £25,000 and freezing the fee cap at £9,250*

- **A longer loan duration** before write-off would not affect a full payer, but would increase the number of such payers. It would not affect a zero payer, but would reduce the number of them. Partial payers would repay larger amounts, increasing recorded interest receipts and reducing spending.

Table B.1: Impact on the deficit of determinant changes under the new treatment

	Impact of change			Medium-term
Variable	Full payer	Partial payer	Zero payer	deficit impact
Loan size larger				
Cash position	Repayments up	Unpaid balances higher		
Accrued spending	None	Spending up		
Accrued interest	More interest	None	None	
Composition	Fewer	More	None	
Interest rates higher				
Cash position	Repayments up	None	None	
Accrued spending	None	Spending up	None	
Accrued interest	More interest	More interest	None	
Composition	Fewer	More	None	
Earnings higher / Repayment threshold lower				
Cash position	Repayments down	Repayments up	None	
Accrued spending	None	Spending down	None	
Accrued interest	Less interest	More interest	None	
Composition	More	More or Fewer	Fewer	
Repayment rate higher				
Cash position	Repayments down	Repayments up	None	
Accrued spending	None	Spending down	None	
Accrued interest	Less interest	More interest	None	
Composition	More	Fewer	None	
Loan duration longer				
Cash position	None	Repayments up	None	
Accrued spending	None	Spending down	None	
Accrued interest	None	More interest	None	
Composition	More	More or Fewer	Fewer	

Revisions to outturns and forecasts

B.33 Many uncertainties regarding the new treatment remain to be resolved before it can be implemented in the official statistics. The proposed treatment will need to go through the ONS's own internal methodology review processes and Eurostat will, at some point, produce more detailed accounting guidance. When a final methodology is agreed upon, there will also be some uncertainty in how DfE will be able to operationalise it for use both in the public finances outturn data and in our forecasts.

B.34 The student loans system is complex, with multiple types of loans across the UK and revisions could affect multiple cohorts. The DfE model is also very detailed (covering thousands of estimated loan paths) and the ONS methodology relatively complex. Together these mean that it will not be practical to update estimates exhaustively and so it is likely that some practical way of simplifying the process will need to be found.

B.35 As new information arises (either as outturn, as changes to future economic expectations or due to changes in policy terms and conditions) the model can be updated to incorporate this information and so revise expected future flows. But under the 'partitioned loan-transfer approach', accounting estimates of outturn income and expenditure also depend on the forecasts of decades of payments, repayments and interest charges. Consequently, changes to the forecasts will alter estimates of how the initial outlays should have been partitioned into loans and spending and/or to the amounts of interest recorded. The ONS would face several choices about how to incorporate this new information into the data:

- **Revise the entire time series.** The ONS usually prefers to revise an entire time series to take account of latest information, so that it is all on a consistent basis. But for student loans this would eventually mean making revisions 30-plus years into the past, which it may not be comfortable with and may not be appropriate where those revisions were the result of subsequent policy decisions.

- **Record a one-off lump sum.** The revision could be recorded as a lump sum in the year in which it was made, but given the potentially large size of such revisions this could mean that changes in long-term expectations had a distorting effect on the year-to-year path of the deficit that would make it less meaningful and less suitable as a target aggregate for policy. This problem is already evident in the Whole of Government Accounts, when the budget deficit measure can be distorted significantly year to year by valuation changes resulting from changes to the discount rates used.

- **Smooth the revision over future years.** A practical solution that avoids distorting the year-to-year path of the deficit could be to smooth revisions over the remaining years of the loans. But this would be something of a backwards step, as getting away from recording spending decisions made today several decades in the future is the primary driver of the desire to change the current accounting treatment.

- **Change the stock level with no deficit flow.** Revisions could alter the value of the stock of student loans (and thus the level of PSNFL), but with no corresponding flow that hits the deficit. This would be analogous to the current treatment of financial assets, where changes in the market value affect PSNFL but not PSNB. But this would mean that over the life of the loans the cumulative cash impact would not equal the cumulative deficit impact, generating a risk of creating future fiscal illusions.

B.36 No approach to revisions will be without drawbacks, leaving the ONS with a difficult choice to make. It could choose different approaches for different types of revision. Eurostat's letter states that "*further capital transfers should be recorded in case of… significant changes of*

law", suggesting that changes in policy should be recorded as one-off lump sums. Purely economic changes could be recorded differently, perhaps with no associated deficit flow.

B.37 The ONS could face the question of how to deal with revisions due to policy changes relatively soon. The 'Augar' review of post-18 education funding was launched by the Government in February 2018, but its publication has been delayed with no date yet announced. The review is considering the level, terms and duration of students' financial contribution to their post-18 education. Were the Government to change the terms of student loans on the back of its recommendations, expected future cashflows and so accrued spending and interest under the proposed methodology would change too.

B.38 A further uncertainty surrounds what to record when student loans are sold. At present these sales have no impact on the deficit, which means that write-offs associated with that portion of the loan book are never recorded in the public finances. Current sales of student loan tranches are achieving around 50 pence for each pound of face value and so have very large discounts relative to their holding value under the current treatment – much of which represents this write-off element. The ONS is considering how to treat sales under the new accounting treatment, but – as the new treatment involves recording the value of the loans at a significantly lower level than the current one – discounts would be much smaller.

Index of charts and tables

Chapter 4 Fiscal outlook

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