

Winter is Coming: The outlook for the public finances in the 2016 Autumn Statement

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Preface

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Executive Summary

As the new Chancellor prepares for his first fiscal statement this briefing note looks at how significant a public finance challenge he faces.

Chapter 2

This chapter lays out the state of the public finances at the time of the March 2016 Budget.

A still-high deficit and unspectacular growth forecasts meant further austerity planned to eliminate the deficit.

Public sector net borrowing peaked at £155 billion in 2010–11 and was forecast to fall to £56 billion in 2016–17. A substantial reduction, but when measured relative to the size of the economy is still 1.0% of national income – or £19 billion – above the UK’s long-run pre-crisis average deficit. With steady, but unspectacular, growth forecast for the next few years further considerable austerity was required to meet the Government’s target of eliminating the deficit by 2019–20.

The Conservative government already has the unimpressive record of meeting nought-out-of three of its fiscal targets.

The commitment to keep forecast spending on welfare within a cap was breached in Autumn 2015. The commitment to reduce debt as a share of national income every year was breached as debt rose between 2014–15 and 2015–16. The commitment to eliminate the deficit by 2019–20 has been abandoned three years before it was first due to be tested.

A considerable long-run public finance challenge remains.

The OBR’s most recent long-run projections are for the ageing of the population to increase spending on public services by the equivalent of £76 billion between 2019–20 and 2064–65. Even this relied on an optimistic assumption about NHS productivity growth, which the OBR has recently said it will “likely” reduce in future projections.

Chapter 3

This chapter explores how the economic situation has changed since the March Budget.

Growth forecast to be lower, and inflation

The Bank of England and the vast majority of independent forecasters expect lower growth and higher household

higher, than before the referendum

inflation now than they did before the referendum. By the end of the Bank forecast, in 2019Q2, national income is 2.1% lower, while their forecast implies weak growth continuing beyond this. The average of independent forecasters for output in 2020 has fallen by 2.8%. These are in line with pre-referendum predictions.

Large uncertainty over the actual path of the economy over the next few years

The Bank of England forecast is subject to higher uncertainty than normal, and there is wide disagreement between independent forecasters on the path of the economy. This underlies substantial uncertainties over economic performance in the coming years.

Chapter 4

Next we look at how these changes are likely to have affected the public finances.

Borrowing likely to be substantially higher in 2019–20 than the OBR forecast in March

Our forecast is for borrowing of £14.9 billion in 2019–20, wiping out the £10.4 billion surplus forecast in March. This is mostly down to lower economic growth, which more than outweighs the cut to spending from no longer having to make a net contribution to the EU budget and lower debt interest spending arising from lower borrowing costs.

Higher inflation makes government promises less costly to achieve and means a deeper real cut to benefits covered by the benefits freeze

While higher inflation will reduce cash receipts, it will now cost just £1.0 billion for the Government to keep its promises on a £12,500 personal allowance and £50,000 basic-rate threshold, down from an estimated £2.8 billion at the time of the March Budget. The benefits freeze means that inflation does not affect government benefit payments as it usually would, but instead many working age households will see their benefits cut by more in real terms.

Large uncertainties remain, and with still a 40% chance of a surplus in 2019–20

If economic performance turns out differently than we assume, the public finances could look much better or worse. Past public finance forecast errors imply the chancellor still has a 40% chance of a surplus in 2019–20. But, on the flipside, there is also a 40% chance that the surplus in 2019–20 turns out to be more than £30 billion.

Chapter 5

Finally, we ask how the chancellor might, and should, respond to his new forecast at the Autumn Statement.

As the chancellor writes his new fiscal targets, he should bear in mind that 10 of 12 previous UK targets since 1997 have been abandoned or missed.

With none of the Government's three fiscal targets still standing, Mr Hammond needs to consider whether to announce new fiscal targets in the Autumn Statement. Of those set out by the last three chancellors, only two have been consistently met. He should therefore choose his targets wisely. A good set of fiscal targets will be forward looking and flexible, like the two targets that were actually met.

Good case for waiting before implementing any further fiscal tightening.

The Chancellor could sensibly choose not to add to the significant tax rises and spending cuts already planned for the period through to 2019–20. Indeed a well targeted temporary fiscal stimulus might help the economy through a period of uncertainty. But if long-run growth is lower as a result of Brexit he should also prepare for further austerity in the next parliament.

A substantial long run fiscal challenge, made more difficult by our new forecasts, remains.

Even before June, the OBR forecast a long run fiscal challenge due to an ageing population. This challenge will be harder now that borrowing in 2019–20 is likely to be higher, and will be even more difficult if economic growth or immigration is lower, or interest rates are higher, over the longer term.

1. Introduction

The new Chancellor Phillip Hammond will now be preparing for a testing Autumn Statement. Prior to the referendum the public finance challenge facing the UK already looked far from easy. Two out of the three fiscal targets that the new Conservative Government set itself had already been breached and further net tax rises, benefit cuts and real cuts to spending on public services – which will not be easy to deliver – were planned for the remainder of this parliament in order to try to eliminate a still relatively high budget deficit by 2019–20. And there was a further longer-term public finance challenge caused by the financial costs of an ageing population.

But since then the referendum result has led to the Government abandoning its other fiscal target and virtually all leading economic forecasters – including the Bank of England – substantially revising down their forecasts for economic growth. If correct this worsens the UK's public finance position. This briefing note attempts to quantify how much greater the public finance challenge might be, taking into account not just the latest macroeconomic forecasts but also the movements in gilt rates, equity markets and oil prices seen since the last Budget and the scope for a cut to public spending as a result of no longer having to make a net financial contribution to the EU budget.

The note is structured as follows. Section 2 sets out the UK government's public finance plans as of the March 2016 Budget. Section 3 describes how forecasts for growth and inflation from the Bank of England and other leading forecasters have changed since the referendum result, and also highlights the evolution of equity markets, gilt rates and the sterling oil price over the same period as these can all affect revenues and spending. Given these changes, Section 4 takes a plausible outlook for the UK economy and describes how this would change the forecasts for receipts, spending, borrowing and debt through to 2019–20. In Section 5 we discuss considerations for the Chancellor around his choice of fiscal targets and how fiscal policy might need to adjust to the changing public finance outlook both over the next few years and over the longer-term. Section 6 concludes.

2. The March 2016 Budget plan

Key findings

A still-high deficit and unspectacular growth forecasts meant further austerity planned to eliminate the deficit.

Public sector net borrowing peaked at £155 billion in 2010–11 and was forecast to fall to £56 billion in 2016–17. A substantial reduction, but when measured relative to the size of the economy is still 1.0% of national income – or £19 billion – above the UK’s long-run pre-crisis average deficit. With steady, but unspectacular, growth forecast for the next few years further considerable austerity was required to meet the Government’s target of eliminating the deficit by 2019–20.

The Conservative government already has the unimpressive record of meeting nought-out-of three of its fiscal targets.

The commitment to keep forecast spending on welfare within a cap was breached in Autumn 2015. The commitment to reduce debt as a share of national income every year was breached as debt rose between 2014–15 and 2015–16. The commitment to eliminate the deficit by 2019–20 has been abandoned three years before it was first due to be tested.

A considerable long-run public finance challenge remains.

The OBR’s most recent long-run projections are for the ageing of the population to increase spending on public services by the equivalent of £76 billion between 2019–20 and 2064–65. Even this relied on an optimistic assumption about NHS productivity growth, which the OBR has recently said it will “likely” reduce in future projections.

This section briefly sets out the fiscal targets and forecasts as of the March 2016 Budget. These will form the starting point on which policy changes announced in the forthcoming Autumn Statement will be based. The section starts by describing the Government’s fiscal targets, before describing the forecasts for public sector net borrowing and public sector net debt from the March 2016 Budget and the degree to which meeting the targets required further austerity – in the form of tax rises or spending cuts – to be implemented over the remainder of this parliament.

2.1 The government’s fiscal targets

As Chancellor George Osborne set himself three fiscal targets:

- The first target, known as the fiscal mandate, is perhaps the most widely known. This is a commitment to deliver an overall budget surplus no later than 2019–20, and then to maintain one each financial year thereafter. This target applies unless growth (on a rolling four-quarter-on-four-quarter basis), either actual or forecast, drops below 1%.
- The second target is to ensure that public sector net debt falls as a share of national income each year.
- The third target is that spending on welfare will be forecast to remain below (an annually varying) cap.

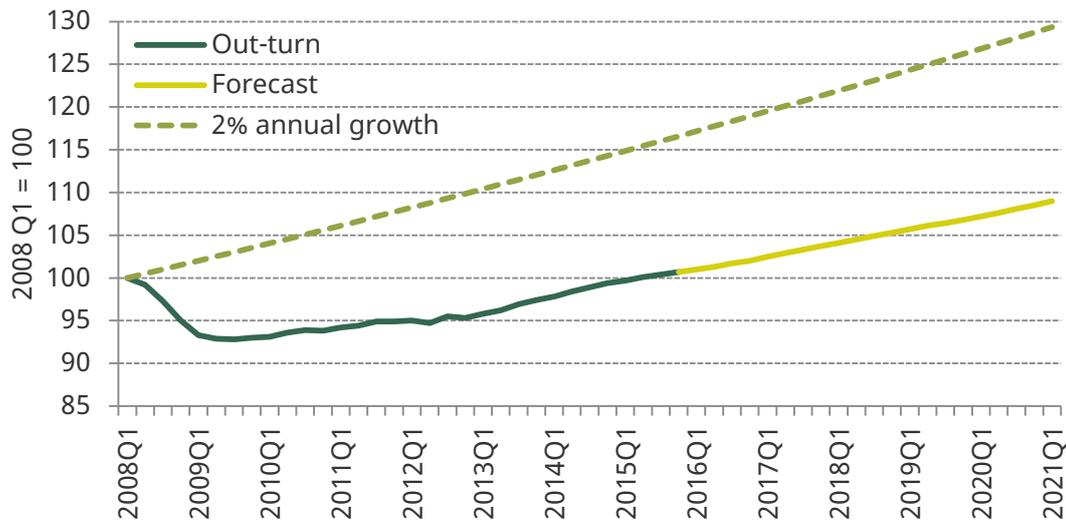
The forecasts produced in the March 2016 Budget implied that the Government was on course to meet the first fiscal target, albeit by a relatively narrow margin (relative to the revisions to fiscal forecasts that are often seen). In contrast the Government was deemed to be on course to miss the second target, as debt was forecast to rise as a share of national income between 2014–15 and 2015–16. The latest out-turn figures suggest that this was indeed the case, with debt rising from 83.3% to 84.0% of national income between 2014–15 and 2015–16. The welfare cap, having been first breached in the Autumn Statement of 2015, remained breached in the Budget.¹

In the aftermath of the referendum Mr Osborne stated – and the new Chancellor Phillip Hammond has confirmed – that the government will no longer seek to eliminate the deficit entirely by 2019–20. This gives the Conservative Government a rather unimpressive nought-out-of-three record on the fiscal targets that it has set, and indeed legislated for, in the current parliament, with two targets breached within months of the general election and one suspended three years before it was due to be first tested.

2.2 The March 2016 Budget forecasts

The UK economy has performed very poorly since the start of the financial crisis and associated recession back in 2008. National income per adult (as measured by GDP per person aged 16 or over) is estimated to have fallen by 6.9% over the two years from its pre-crisis peak (2008Q1). It then took until the first half of 2015 before it had finally recovered to this level, as shown in Figure 2.1. The economic forecasts produced by the OBR for the March 2016 Budget were for steady, but unspectacular, growth over the next few years (Section 3 sets out the forecast for growth in each calendar year). These forecasts imply national income per adult growing by an average of about 2% per year over the next five years. If correct then this will mean that national income per adult in the first quarter of 2021 would be some 16% below the level it would have been at had growth averaged 2% per year since the start of 2008.

¹ A full discussion of these fiscal targets can be found in the February 2016 IFS Green Budget. See R. Crawford, C. Emmerson, T. Pope and G. Tetlow (2016), 'Fiscal targets: committing to a path of budget responsibility?', in C. Emmerson, R. Joyce and P. Johnson (eds), *The IFS Green Budget: February 2016* (<https://www.ifs.org.uk/publications/8129>).

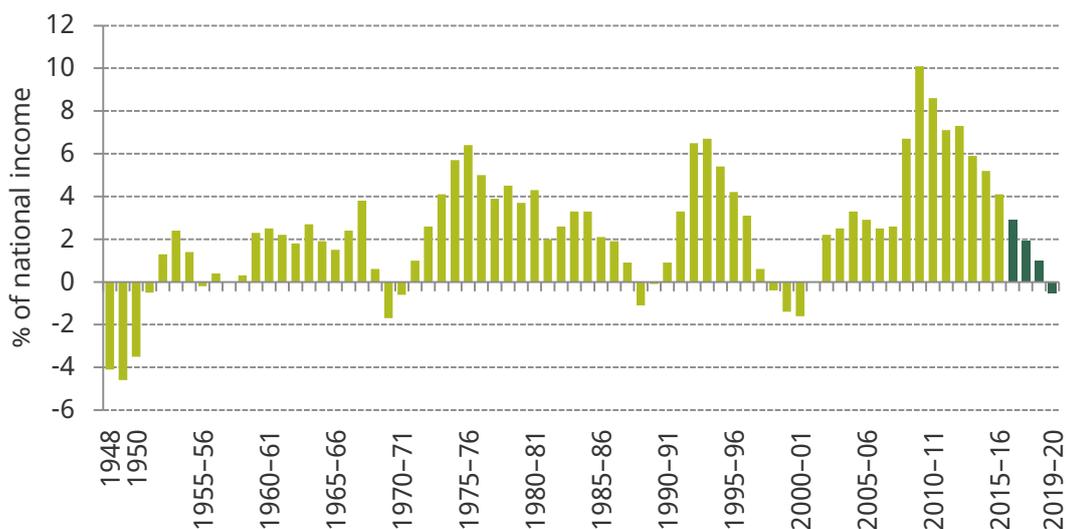
Figure 2.1. GDP per adult since 2008

Sources: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>); Authors' calculations.

This weak economic performance, during and following 2008, unsurprisingly did considerable damage to the UK's public finances. The headline budget deficit peaked at 10.1% of national income in 2009–10 which, as shown in Figure 2.2, was the highest level seen in the UK since 1948. By 2015–16 this had fallen to 4.0% of national income (£76.0 billion). This is still a relatively high level of borrowing by UK historical standards, with borrowing only exceeding this amount in nine years over the sixty years from 1948 to the onset of the financial crisis. OECD estimates suggest that in 2015 out of 27 leading industrial economies the UK had the 4th largest level of government borrowing relative to the size of the economy.² By 2016–17 the UK deficit was forecast by the OBR to fall to 2.9% of national income (£55.5 billion), which would still be 1% of national income (equivalent to £19 billion) above the average deficit (1.9% of national income) that the UK recorded between 1948 and 2007–08 (inclusive).

² As measured by the general government deficit, which counts borrowing by central and local government but not any borrowing done (or surpluses accumulated) by public corporations, as a share of GDP. The three countries with larger general government deficits were: Greece, Spain and Portugal, though data are not provided for Japan which had a higher deficit than the UK in 2014. Source: OECD statistics.

Figure 2.2. Public Sector Net Borrowing since 1948



Source: Office for Budget Responsibility, *Public Finances Databank*, (<http://budgetresponsibility.org.uk/data/>).

The fact that the economic forecasts from the March 2016 Budget were for unspectacular growth over the next few years meant that the vast majority of the headline budget deficit in 2016–17 was thought to be structural rather than cyclical. That is to say most of the deficit was not thought to reflect the impact of temporary weakness in the economy and, therefore, the extent to which we could rely on a period of strong growth to reduce the deficit was limited. As a result the commitment to deliver a budget surplus in 2019–20 was, on the basis of these forecasts, to require a combination of further net tax rises and spending cuts.

Part of the fiscal tightening between 2016–17 and 2019–20 is intended to come from discretionary changes to the tax system. Taking all tax measures announced in Budgets, Autumn Statements and Pre-Budget Reports since Alastair Darling’s March 2008 Budget (which we judge to be the last pre-crisis Budget) through to George Osborne’s March 2016 Budget suggests that the net effect of these will be to increase revenues by 2.0% of national income in 2019–20, compared to 1.5% of national income in 2016–17. This 0.5% of national income net increase in tax revenues from discretionary changes between 2016–17 and 2019–20 is equivalent to £10 billion in 2016–17 terms, although as described below it should be noted that £6.6 billion of this is corporate tax revenue that has mostly just been shuffled out of other financial years.³

Another part of the fiscal tightening over the next few years is intended to come from measures that will reduce spending on working age benefits relative to what it would have been. This includes the four year nominal freeze in the rates of most working age benefits.

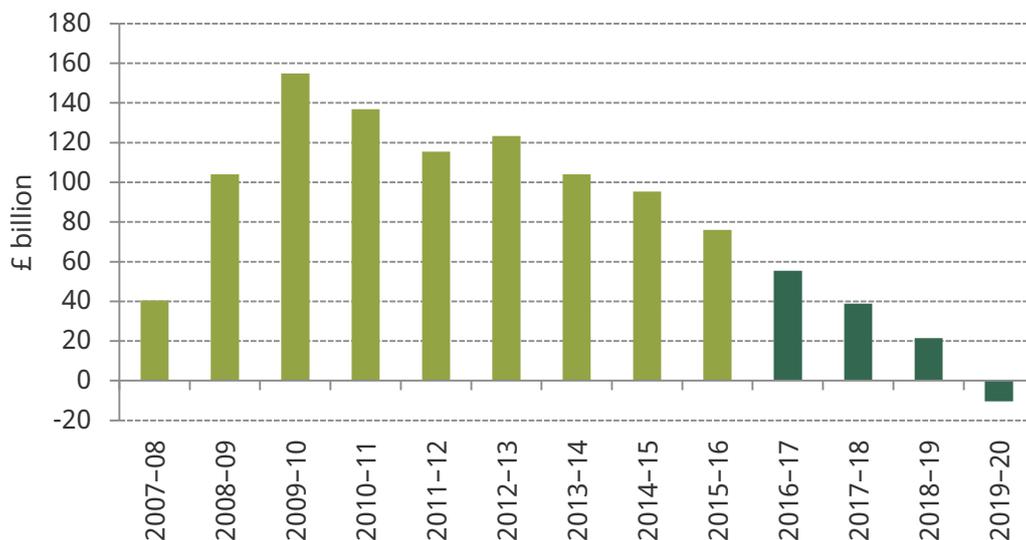
³ The main tax raising measures include: the new tax on sugary soft drinks, the new apprenticeship levy, further restrictions in the amount that those on high incomes can place in a private pension each year and measures aimed at reducing evasion and what the government considers to be avoidance in the tax system. There are also significant, although in aggregate smaller in magnitude, tax cuts such as: further increases in the income tax personal allowance and the widening of the new inheritance tax main residence allowance.

Overall changes to benefits and tax credits announced in fiscal statements since March 2008 are estimated to reduce spending by 1.1% of national income in 2016–17, rising to 1.7% of national income in 2019–20. This 0.6% of national income increase is equivalent to £12 billion in 2016–17 terms.

The final part of the planned fiscal tightening is from cuts to spending on public services. There are different ways to measure this, one of which is to look at the total amount spent by central government on the delivery and administration of public services.⁴ Between 2010–11 (the start of the fiscal consolidation) and 2016–17 this is estimated to have been cut relative to economy-wide inflation by 7.6%, with a further cut of 3.6% planned between 2016–17 and 2019–20. If delivered this would bring the total cut up to 10.9%. This cut has been far from evenly allocated across spending areas with spending on the NHS, schools, overseas aid and defence being relatively protected from budget cuts. Outside of these relatively protected areas spending has, in real terms, been cut by an average of 20.5% between 2010–11 and 2016–17 with a further cut of 10.2% planned for the three years from 2016–17 to 2019–20. If delivered this would bring the average cut to “unprotected” areas up to 28.6% over the period from 2010–11 to 2019–20.

At the time of the March Budget this fiscal consolidation was forecast to be sufficient – in fact to be more than sufficient – for the OBR to forecast that the deficit would be eliminated by 2019–20. As shown in Figure 3.3 public sector net borrowing was forecast by the OBR to fall to £55.5 billion in 2016–17, and then to continue falling such that it would reach a surplus of £10.4 billion (0.5% of national income) in 2019–20. If delivered this would be the first budget surplus since 2000–01, and only the ninth since the early 1950s.

Figure 2.3. Public Sector Net Borrowing since 2007–08



Source: Office for Budget Responsibility, *Public Finances Databank*, (<http://budgetresponsibility.org.uk/data/>).

⁴ By which we mean total (i.e. resource and capital) Departmental Expenditure Limits. We attempt to construct a consistent series over time by adjusting for changes to council tax benefit, the localisation of business rates in England, Welsh business rates, war pensions and the capital grant paid to Network Rail. Real terms changes are constructed by deflating by the growth in the GDP deflator.

Finally it should be noted that this March 2016 Budget forecast for an overall surplus of £10.4 billion in 2019–20 included the following:

- Debt interest spending by the public sector that was temporarily reduced by £8.2 billion due to the gilts held by the Asset Purchase Scheme as a result of the Bank of England’s programme of quantitative easing;
- As yet unspecified “efficiency savings” to be found from government departments worth £3.5 billion;
- Bringing forward of £1.6 billion of capital spending previously planned for 2019–20 into the two previous fiscal years;
- Changes to corporation tax that will bring in an additional £6.6 billion in 2019–20 but most of this representing revenue that would otherwise have been received earlier, with a large slice of the remainder reflecting revenue that would have otherwise have been received later. The ONS will be moving towards an accruals basis for corporation tax receipts, which would eliminate any effect from changes that only affect the timing of receipts – this is expected to happen after the Autumn Statement but before the next Budget.⁵

The first of these may be outside the Chancellor’s control, but is a change that temporarily flatters the public finances. The second would, if delivered, be welcome and genuinely strengthen the public finances – though how the government can be confident that £3.5 billion could be identified and delivered despite the new efficiency review not actually reporting until 2018 is highly questionable. The final two changes reduce the deficit in 2019–20 but do not permanently strengthen the public finances: indeed they will significantly increase the deficit in 2017–18 and 2018–19. Therefore a headline £10.4 billion surplus does not appear to be as healthy a fiscal position as one might have thought: Mr Osborne put more weight on recording a headline surplus in that year than he did on reducing the deficit in other years.

Public sector debt

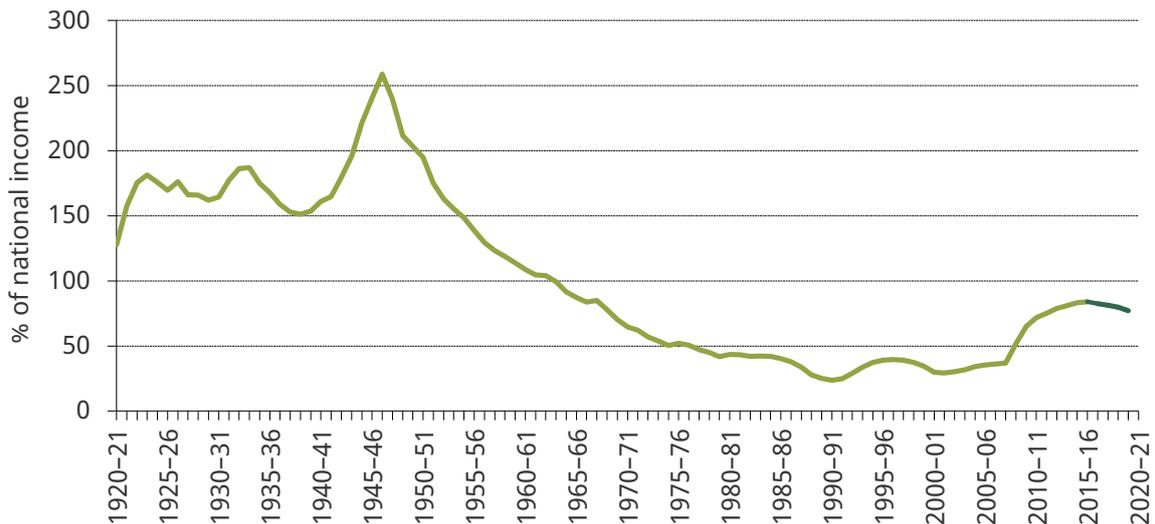
Prior to the financial crisis public sector net debt (loosely speaking the cumulative amount of borrowing that has been done by the government to date) was running at just below 40% of national income. The large amount of borrowing over the last few years has seen this increase sharply, reaching 84.0% of national income in 2015–16. This is the highest level since 1966–67, as shown in Figure 2.4. OECD estimates also suggest that in 2015 out of 30 leading industrial economies the UK had the 8th largest ratio of government debt to national income.⁶ While the forecast in the March 2016 Budget was for the UK’s public

⁵ See Office for National Statistics, *Public Sector Finances*, September 2016 (<http://www.ons.gov.uk/economy/governmentpublicsectorandtaxes/publicsectorfinance/bulletins/publicsectorfinances/sept2016>).

⁶ This refers to general government (i.e. central plus local government, but not including public corporations) net financial liabilities as a share of national income. The seven countries with larger general government net financial liabilities were: Greece, Italy, Japan, Portugal, Belgium, United States and Spain. Source: OECD statistics.

sector net debt to fall as a share of national income from 2015–16 onwards, it still implied debt remaining at a high level by recent historical standards. Looking further back, as is also shown in Figure 2.4, public sector net debt was, however, significantly above 80% of national income throughout the period from 1920 through to 1960.

Figure 2.4. National debt over the century from 1920–21 to 2019–20



Source: Office for Budget Responsibility, *Public Finances Databank*, (<http://budgetresponsibility.org.uk/data/>).

Long run fiscal challenge

This section has shown that five years after the fiscal consolidation plan began to be implemented the UK was still running a relatively large budget deficit and that, at least according to the forecasts set out in the March 2016 Budget, considerable further consolidation was expected to be required to meet the government's objective of eliminating the deficit by 2019–20. But even this understated the long-run public finance problem facing the UK. The OBR's *Fiscal Sustainability Report*, last published in June 2015, projected that the ageing of the population would increase spending on public services by 3.9% of national income (equivalent to £76 billion in 2016–17 terms) between 2019–20 and 2064–65. Even this relied on the assumption that productivity growth in the NHS will keep pace with the growth in productivity seen across the rest of the economy. That is not something which has ever been achieved over a sustained period before. Indeed in a recent paper the OBR has said that in future projections its central projection is "likely" to assume permanently lower productivity growth in the health care sector than in the economy as a whole which, all else equal, would push up the long-run public finance challenge facing the UK.⁷

⁷ See M. Licchetta and M. Stelmach (2016), *Fiscal sustainability and public spending on health*, OBR fiscal sustainability analytical paper, London: Office for Budget Responsibility (http://budgetresponsibility.org.uk/docs/dlm_uploads/Health-FSAP.pdf).

2.3 Conclusions

Public sector net borrowing peaked at £155 billion in 2010–11 and was forecast in the March 2016 Budget to have fallen to £56 billion in 2016–17. This would still be a greater than the average deficit the UK has run in the past. The OBR's forecasts for steady, but unspectacular, growth meant that the extent to which we could rely on the deficit falling automatically over the next few years was limited. As a result the commitment to deliver a budget surplus in 2019–20 required a combination of further net tax rises and spending cuts. In practice it also led to Mr Osborne putting more weight on recording a headline surplus in 2019–20 than he did on reducing the deficit in other years, with some spending brought forward out of 2019–20 and some revenue shuffled into 2019–20.

The objective of delivering a budget surplus in 2019–20 was abandoned in the aftermath of the referendum result. But even if the March 2016 Budget forecast of a £10.4 billion headline surplus in 2019–20 was delivered the UK would still face a considerable longer-term public finance challenge. The OBR's most recent long-run projections (from June 2015) are for the ageing of the population to increase spending on public services by the equivalent of £76 billion between 2019–20 and 2064–65. Even this relied on an optimistic assumption about NHS productivity growth, which the OBR has recently said it will "likely" reduce in future projections.

3. Changes in the macroeconomic outlook since March

Key findings

Growth forecast to be lower, and inflation higher, than before the referendum

The Bank of England and the vast majority of independent forecasters expect lower growth and higher household inflation now than they did before the referendum. By the end of the Bank forecast, in 2019Q2, national income is 2.1% lower, with their forecast implies weak growth continuing beyond this. The average of independent forecasters for output in 2020 has fallen by 2.8%. These are in line with pre-referendum predictions.

Large uncertainty over the actual path of the economy over the next few years

The Bank of England forecast is subject to higher uncertainty than normal, and there is wide disagreement between independent forecasters on the path of the economy. This underlies substantial uncertainties over economic performance in the coming years.

The public finance outlook the chancellor faces in November will have changed from the OBR's forecast in March. The UK's decision to leave the EU affects the public finances through two channels. First, a direct effect is to reduce – and potentially eliminate – the financial contribution that the UK makes each year to the EU budget. This direct effect strengthens the public finances by reducing public spending. The precise effect is uncertain, as the UK will likely want to replace some funding that currently comes from the EU budget, and the UK may still be required to make some contribution to the EU budget depending on the type of agreement the UK and EU reach regarding their future trading relationship.⁸ Previous research published by the IFS calculated that the UK's net contribution to the EU budget (i.e. after taking spending from the EU budget in the UK into account) could, were we to have chosen to remain in the EU, have been expected to be around £8 billion a year.

However, the decision to leave the EU is also likely to have an indirect, and probably much larger, effect on the public finances via its impact on the economy. In this section we set out the mechanisms by which the decision to leave the EU is expected by the vast majority of economists who have examined this issue to affect the economy, and how economic forecasts for the period up to 2020 have changed since the referendum.

⁸ Section 2 of C. Emmerson, P. Johnson, I. Mitchell and D. Phillips, *Brexit and the UK's Public Finances*, IFS Report 116, May 2016 sets out the current UK contributions to the EU and the likely contributions that the UK would need to make depending on the arrangement they reach with the EU.

3.1 The effects of Brexit on the economy

Before examining how forecasts have changed since the referendum, it is helpful first to lay out the mechanisms by which the UK leaving the EU is likely to affect the economy. These include mechanisms that are likely to affect growth in the short and long run, as well as other effects such as changes to inflation in the short run. It is worth noting that our analysis, which extends to 2020, will mostly capture short run effects as the economy adjusts to the UK's new relationship with the EU and the rest of the world. However, if there are longer run effects which, for example, affect the rate of economic growth going forwards, the long-run effect will likely be much larger than that seen by 2020.

Short run effects

One economic change which has clearly been driven by the Brexit vote is the reduction in the value of the pound (see Figure 3.2). This depreciation largely reflects an anticipated or actual reduction in demand from investors for sterling-based assets. This is expected to lead to higher consumer price inflation as the prices of imported goods rise, which will reduce the spending power of households, potentially reducing demand. Exports may see some benefit (notwithstanding any reduction in investment from increased uncertainty that occurs within export-orientated industries) as sterling is weaker, with a potential improvement in the UK's trade balance.

The vote to leave the EU will increase uncertainty in the short run. Uncertainty arises from several sources. First, there is uncertainty over when leaving will actually occur (and so when the UK's existing relationship with the EU and the rest of the world cease to operate). Additional uncertainty arises from the nature of the agreements that the UK agree with the EU and others. For example, what access the UK is able to negotiate to the EU single market, or the nature of trade deals with other countries, are currently subject to substantial uncertainty.

Uncertainty over these questions also fuels further short run uncertainty. The exchange rate and government interest rates have both displayed substantial fluctuations since June 23rd. In September and October 2016, for example, the pound fluctuated between a (day end) high of \$1.33 and a low of \$1.21, while government gilt yields had a high of 1.3% and low of 0.7%. Over the same period last year both were much less volatile: the pound fluctuated between \$1.56 and \$1.51 and gilt yields varied between 2.0% and 1.7%.

That greater uncertainty adversely affects economic performance is well established. In particular, uncertainty is likely to lead to both companies and households delaying their investment or spending decisions until the outlook is clearer. This may be particularly the case for business investment, for which returns often accrue over a long time horizon and once taken decisions may be costly to reverse.

Long run effects

In the medium to longer term, the effects of leaving the EU will depend on the UK's future relationship with the EU and the rest of the world. Drawing on (in particular) the analysis of CEP, HM Treasury and NIESR, Emmerson *et al* (2016, op cit) identify four areas in which the UK leaving the EU might affect the UK economy. The first and most important is trade costs. The EU is the UK's largest trading partner, accounting for 44% of exports and 53% of imports in 2015. Leaving the EU is likely to mean increased barriers to trade with the EU,

possibly including tariffs on goods, but also an increase in non-tariff barriers, which are increasingly important – especially for trade in services.⁹ Barriers to trade with non-EU countries would also change if the UK exits the EU and negotiates new trade deals rather than being covered by EU agreements. Among pre-referendum forecasters of the economic impact of leaving the EU, there was broad agreement that, in the longer term, effects on trade are likely to be quantitatively most important in considering the effects on economic performance. In most estimates, in most possible states of the world, these effects were projected to be negative as costs of trade increase. The effects were bigger in scenarios in which the UK does not rejoin the European Economic Area (EEA) and biggest if it cannot agree a trade deal with the EU.

The second effect that leaving the EU may have in the short run and the long run is on Foreign Direct Investment (FDI). FDI is an important contributor to the UK economy and feeds through into higher productivity. Membership of the EU might impact on FDI into the UK either because the EU does not place restrictions on the movement of capital, which might make it easier for companies based in EU countries to invest in the UK, or because membership of the EU single market makes the UK a more attractive destination for FDI from countries outside the EU. Most estimates before the referendum suggested that FDI inflows would be reduced if the UK were to leave the EU and this would have a negative effect on national income in the longer run.

The other effects identified were potential changes to regulation and migration. It is possible that leaving the EU would allow a reduction in financially costly regulation, though quite how much appetite there would be for deregulation is uncertain. We start with an economy that is relatively lightly regulated by international standards and we know that recent governments have chosen more, not less, regulation in key areas over which we do have control. The impact of Brexit on migration is uncertain. Reducing immigration would reduce national income and if it were to have an effect on national income per capita it would more likely reduce it than increase it, though that would depend on the exact nature of policies put in place.

3.2 Changes to independent forecasts since May

Table 3.1 sets out changes in forecasts since before the referendum for real GDP growth and two measures of inflation; the consumer price index (CPI) and retail price index (RPI). This includes forecasts from the Bank of England and the set of independent forecasters surveyed by the Treasury each month. Both the Bank and (the average of) other independent forecasters tell a similar tale, but we examine each in turn.

⁹ Non-tariff measures can be defined as ‘all non-price and non-quantity restrictions on trade in goods, services and investment, at federal and state level. This includes border measures (customs procedures, etc.) as well as behind-the border measures flowing from domestic laws, regulations and practices’ (ECORYS, *Non-Tariff Measures in EU-US Trade and Investment: An Economic Analysis*, Final Report, commissioned by European Commission, Directorate-General for Trade, 2009, reference: OJ 2007/S180-219493). In other words, non-tariff measures and regulatory divergence are restrictions to trade in goods, services and investment at the federal or (member) state level.

Bank of England

The Bank of England has now produced two forecasts since June in its August and November inflation reports. Between May and November, the 2016 growth forecast has increased slightly, but growth in subsequent years has been downgraded by a large margin. Growth in 2017 is now forecast to be 1.4% (down from 2.3%), while growth in 2018 is forecast to be 1.5% (down from 2.3% in May). Furthermore, the latest forecast is for growth of only 1.6% in 2019, suggesting that the negative effects on growth are thought likely to be persistent. Cumulatively, taking the out-turn data that were available at the time of the forecasts, the November forecast implies the economy will be 2.1% smaller in mid-2019 than the Bank forecast in May, but the eventual downgrade could be larger than this if growth depressed beyond the end of the current forecast period.

The Bank also forecasts CPI inflation, which the Monetary Policy Committee (MPC) is required to target at 2%. In May, the forecast expected 2016 Q3 inflation (which is particularly significant as the September figure determines the uprating of some benefits and thresholds in the tax system) to be 0.8%. The outturn for this year was somewhat higher, at 1.0%. In its latest forecast, the Bank expects that inflation will be 2.7% in 2017, 2.8% in 2018 and 2.5% in 2019, all of which exceed their previous forecast. Over the period 2016-2019, the CPI is now expected to grow by 2.5 percentage points more than was forecast in March. In their August *Inflation Report*, the Bank noted that their forecast increase in inflation results mostly from imported cost pressures (due to the devalued pound) but that this is to be counteracted slightly by low domestic cost pressures due to additional spare capacity in the economy.

In its November *Inflation Report*, the MPC emphasises that their judgment is that uncertainty weighs on growth throughout their forecast period. However, they also acknowledge that the forecast itself is especially uncertain in current circumstances. The forecasts for both growth and inflation changed substantially between August and November, reflecting the Bank's judgment over both the severity and timing of the short term economic shock. The MPC assigns an uncertainty measure to its forecast for each quarter for CPI and GDP growth, which is reflected in the width of the probability bands of their fan chart.¹⁰ In May, the uncertainty measure for the final quarter of their growth forecast was 1.62. In November, their fan chart was much wider, with the uncertainty measure increased by 25% (to 2.03) in the final quarter.

Independent forecasters

While magnitudes differ a little, the average of independent forecasters surveyed by the Treasury since May implies a similar economic story.¹¹ Lower growth is predicted in every year of the forecast. The average forecast is for growth in 2017 to be 1%. Overall the

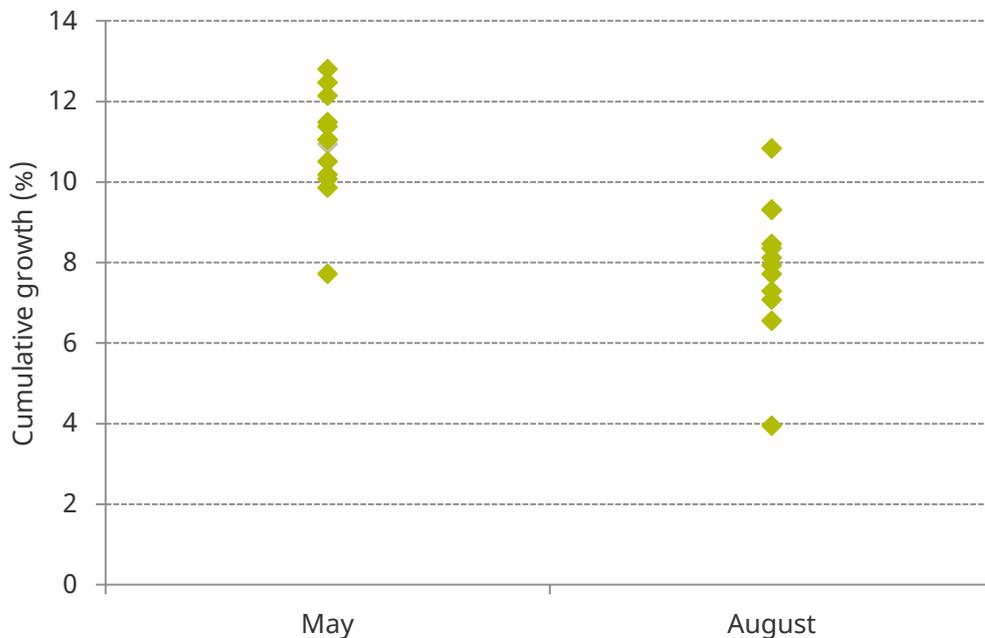
¹⁰ Precisely, it is equivalent to the standard deviation of the probability distribution if that distribution is not skewed.

¹¹ While the Treasury surveys forecasters every month, medium term forecasts (beyond the first two years) are only provided quarterly. As of publication, August 2016 was the most recent medium term survey. We use the average of October forecasts for 2016 and 2017, and the average from the August survey beyond that. See <https://www.gov.uk/government/collections/data-forecasts>

average of forecasts implies that the economy will be 2.8% smaller by 2019–20 than expected in May.

However, the average masks sizeable disagreements across forecasts over the likely changes to growth as a result of the leave vote, which emphasises the substantial uncertainty over the size of the economic impact. While there is a broad consensus that growth is now likely to be lower than expected in May (only one forecaster, Liverpool Economics, increased their 2017 growth forecast between May and August), there is a much larger dispersion in expected growth rates in the latest forecasts than the earlier ones. This is displayed in Figure 3.1, which shows forecasts for growth to 2020 as of May 2016 and as of August 2016. For the most part, forecasts in August are below those in May. However, there is also a much greater dispersion in the latest forecasts. The total variance between the estimates in August is more than twice as large as the May forecasts.

Figure 3.1. Forecasts from May and August of cumulative growth from 2016 to 2020, compared



Note: Includes all forecasters that provide a GDP forecast up to 2020 in either survey.

Source: HM Treasury, Forecasts for the UK Economy, May 2016 and August 2016

(<https://www.gov.uk/government/collections/data-forecasts>)

The average of independent forecasters implies a smaller increase in inflation, as measured by the CPI, than the Bank of England: 1.2% higher than May rather than up by 2.3%. Of course this will, at least in part, reflect the fact that the pound has fallen further since August and therefore independent forecasters may now also expect a larger increase in prices in the future. This also masks some disagreement, with the total variance in cumulative total growth more than doubled between May and August. Nonetheless, the independent forecasters, like the Bank, expect inflation to be higher than they originally anticipated in May.

Table 3.1. Changes in economic forecasts since May

| Forecaster | | 2016 | 2017 | 2018 | 2019 | 2020 | Cumulative |
|----------------------|-----------------|-------|-------|-------|-------------------|-------|------------|
| Real GDP: | | | | | | | |
| OBR | <i>EFO</i> | 2.0% | 2.2% | 2.1% | 2.1% | 2.1% | 11.0% |
| Bank of England | <i>Previous</i> | 1.9% | 2.3% | 2.3% | | | 6.6% |
| | <i>New</i> | 2.1% | 1.4% | 1.5% | N.A | N.A | 5.1% |
| | <i>Change</i> | +0.2% | -0.9% | -0.8% | | | -2.1% |
| Independent | <i>Previous</i> | 2.0% | 2.1% | 2.2% | 2.1% | 2.2% | 11.1% |
| | <i>New</i> | 1.9% | 1.0% | 1.5% | 1.7% | 1.7% | 8.0% |
| | <i>Change</i> | -0.1% | -1.1% | -0.5% | -0.4% | -0.5% | -2.8% |
| CPI: | | | | | | | |
| OBR (Q3) | <i>EFO</i> | 0.7% | 1.6% | 2.0% | 2.1% | 2.1% | 8.8% |
| Bank of England (Q3) | <i>Previous</i> | 0.8% | 1.5% | 2.1% | 2.2% ^a | | 6.8% |
| | <i>New</i> | 1.0% | 2.7% | 2.8% | 2.5% | N.A | 9.3% |
| | <i>Change</i> | 0.2% | 1.2% | 0.7% | 0.3% | | 2.3% |
| Independent (Q4) | <i>Previous</i> | 0.9% | 1.8% | 2.0% | 2.0% | 2.0% | 9.0% |
| | <i>New</i> | 1.1% | 2.5% | 2.3% | 2.0% | 2.0% | 10.3% |
| | <i>Change</i> | 0.2% | 0.7% | 0.3% | 0.0% | 0.0% | 1.2% |
| RPI: | | | | | | | |
| OBR (Q3) | <i>EFO</i> | 1.7% | 2.6% | 3.3% | 3.2% | 3.2% | 14.8% |
| Independent (Q4) | <i>Previous</i> | 2.0% | 2.8% | 3.1% | 3.1% | 3.3% | 15.1% |
| | <i>New</i> | 2.1% | 3.0% | 3.0% | 3.1% | 3.3% | 15.4% |
| | <i>Change</i> | 0.1% | 0.2% | -0.1% | 0.0% | 0.0% | 0.2% |

Note: Cumulative is the cumulative change in growth from 2016 to the end of the forecast. For the Bank of England, the forecast end in 2019 Q2 for growth and 2019 for inflation. For independent forecasters and the OBR, the end date is 2020. ^a This is 2019 Q2, the last quarter of the May forecast.

Sources: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>); HM Treasury, *Forecasts for the UK Economy*, August 2016 (<https://www.gov.uk/government/statistics/forecasts-for-the-uk-economy-august-2016>); HM Treasury, *Forecasts for the UK Economy*, October 2016 (<https://www.gov.uk/government/statistics/forecasts-for-the-uk-economy-october-2016>); Bank of England, *Inflation Report*, November 2016 (<http://www.bankofengland.co.uk/publications/Pages/inflationreport/2016/nov.aspx>).

The final item in Table 3.1 is RPI inflation, which the Bank does not forecast but which is covered by the Treasury survey. The RPI is an alternative (discredited) measure of household price inflation, but is still important for the public finances as it is still used to uprate certain parameters (such as indexed linked gilts, student loan repayments, rail fares, indirect tax rates (such as fuel duties) and business rate multipliers). Inflation measured by the RPI is, in contrast to that measured by the CPI, not forecast to be much higher now than it was in May. The composition of the RPI differs from the CPI mostly due to the inclusion of housing costs, such as mortgage interest repayments. Since the

referendum, action by the Bank of England has lowered expectations over the future path of interest rates (at least in the short run), offsetting increases to consumer prices elsewhere (in particular the increased cost of imported goods).

3.3 Comparison of pre-brexit predictions and new forecasts

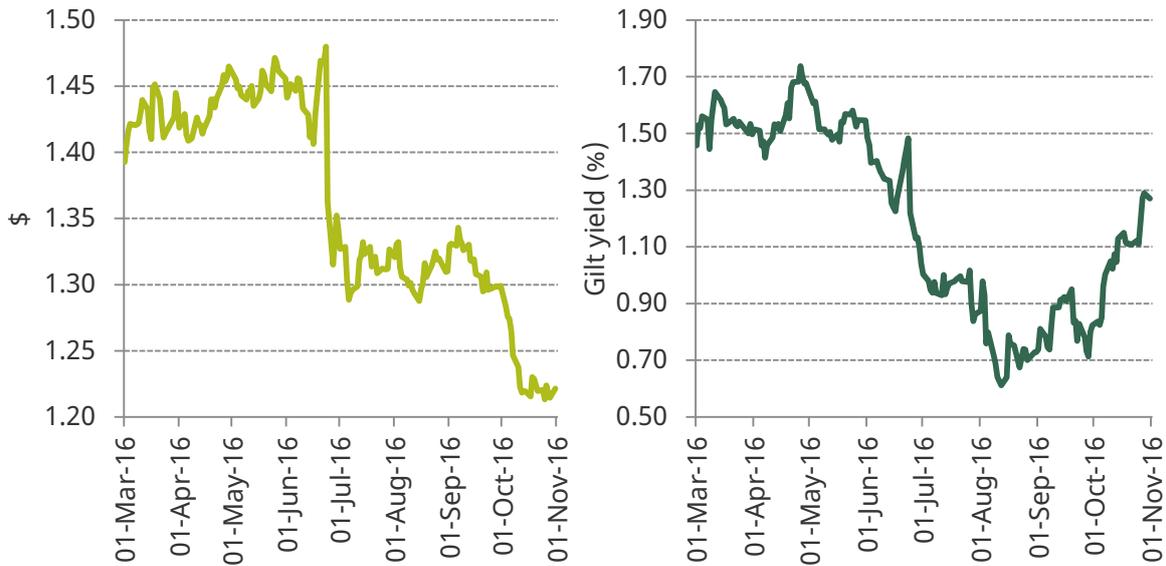
Before the referendum, several forecasters estimated the likely effect of a vote to leave the EU on economic growth. Four forecasters – NIESR, HM Treasury, OECD and PWC/CBI – estimated effects up to 2020. Where models assumed that the UK agreed a free trade deal with the EU after exit, the negative impact on GDP varied between 1.8% (NIESR) to 3.6% (HM Treasury).¹²

The Bank of England forecast implies a reduction of 2.1% by the second quarter of 2019, while the average of independent forecasters implies a 2.8% drop by 2020. Both of these reductions fall within the range of pre-referendum estimates. And the weak growth that the Bank of England now forecasts through to 2019 Q4 suggests that their total downgrade is greater than the 2.1% seen through to 2019 Q2. Overall, they imply a somewhat larger reduction in GDP than NIESR, and a somewhat smaller effect than that anticipated by the Treasury, at least when one takes the scenarios where the UK leaves the EEA but does have a free trade agreement with the EU.

Each of the four forecasters expected the pound to depreciate by between 10% (OECD) and 20% (NIESR) in the short run. At the time of writing, the pound had depreciated by 18% from its level on June 23rd, though the pound appreciated a little between the releases of the May forecasts and the vote (see Figure 3.2). The forecasts also incorporate an anticipated increase in borrowing costs in the short run for both government and households and businesses. So far, interest rates have fallen rather than risen (see Figure 3.2), partly due to the intervention of the Bank of England, though we might expect this to be a temporary effect and yields have recovered somewhat in the last month.

¹² See Table 3.7 of C. Emmerson, P. Johnson, I. Mitchell and D. Phillips, *Brexit and the UK's Public Finances*, IFS Report 116, May 2016.

Figure 3.2. Exchange rate (left pane) and gilt yields (right pane) since March

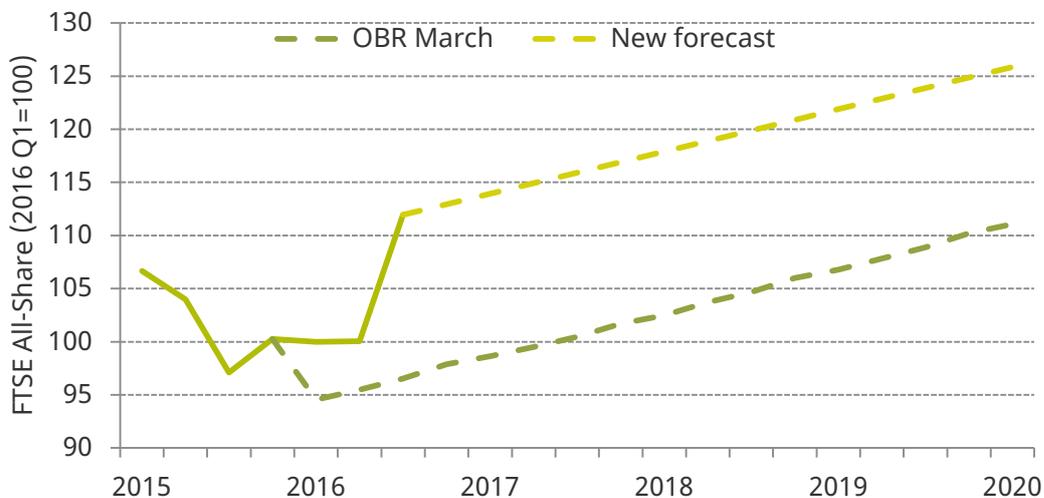


Note: Yield refers to government 10-year gilt yield. Both series are the daily average.
 Source: Bank of England.

3.4 Other economic changes likely to affect the public finances

There have also been other changes to the economy since March, and especially since June 23rd, that are likely to have an effect on the public finances. In particular, both the stock market and the oil price have increased considerably since the vote. Adopting the OBR’s assumption that the stock market will grow in line with nominal GDP, Figure 3.3 shows how expectations over the future path of the stock market have changed. In particular, there has been a large increase in the value of the FTSE All-Share index since June, which is partly explained by the depreciation of sterling (reducing the \$ price of FTSE floated stocks for any given £ price). In dollar terms, the FTSE is actually currently below its pre-referendum level.

Figure 3.3. Changes in stock market since March

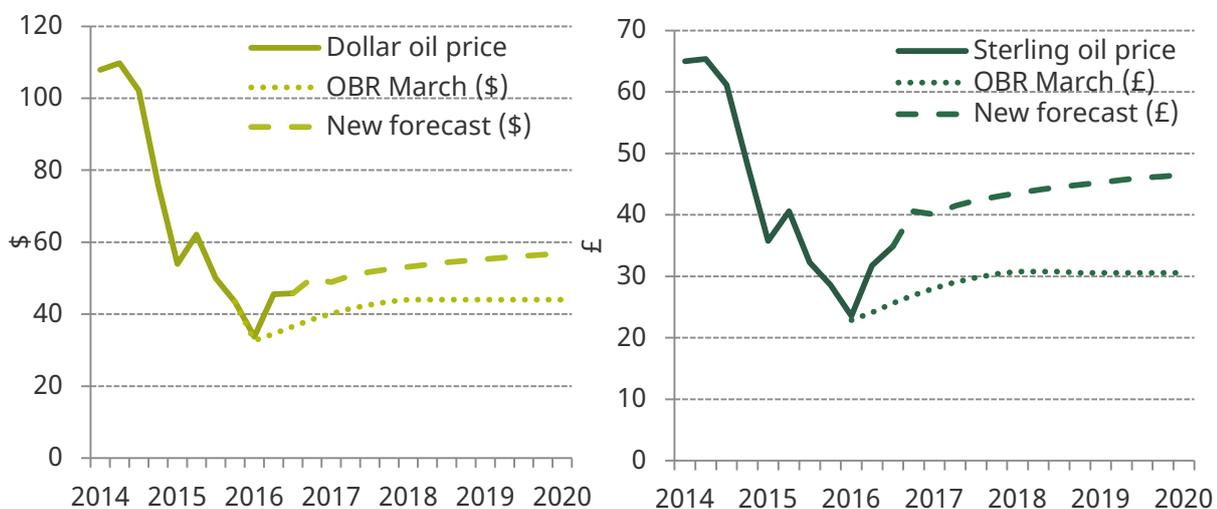


Note: Forecast assumes the stock market grows in line with nominal GDP. Graph shows the FTSE All-share index.

Source: Google finance, Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>).

Meanwhile, expectations over oil prices have also changed substantially since March. The OBR forecast that the oil price would reach only \$44 per barrel by the end of the forecast period, from a value of \$32.7 in the first quarter of 2016. However, as Figure 3.4 shows, since then the price has rallied and has averaged over \$45 a barrel since May. Based on futures markets, the dollar price is expected to continue to rise over the forecast period, reaching almost \$57 by 2019. On top of this increase in the dollar value of oil, the depreciation of sterling further increases the price of oil in pounds. As well as contributing to inflation, this will boost UK tax revenues from the North Sea.

Figure 3.4. Changes in oil prices since March in £ (left pane) and \$ (right pane)



Note: Calculation of sterling price assumes average exchange rate during October 2016 is constant across the remainder of the forecast. Dollar oil prices forecast using Brent crude oil futures prices.

Source: Bank of England, barchart.com.

3.5 Conclusions

This section has shown a macro picture that is much changed from the one presented by the OBR in March. Most notably, national income is forecast to be lower – by a sizeable amount and by a similar level suggested by pre-referendum predictions. Additionally, inflation is forecast to be higher, the exchange rate and gilt rate have fallen while the stock market and oil prices have risen. In the next section we turn to the implications of these changes for the public finances.

4. Changes to the public finances since March

Key findings

Borrowing likely to be substantially higher in 2019–20 than the OBR forecast in March

Our forecast is for borrowing of £14.9 billion in 2019–20, wiping out the £10.4 billion surplus forecast in March. This is mostly down to lower economic growth, which more than outweighs the cut to spending from no longer having to make a net contribution to the EU budget and lower debt interest spending arising from lower borrowing costs.

Higher inflation makes government promises less costly to achieve and means a deeper real cut to benefits covered by the benefits freeze

While higher inflation will reduce cash receipts, it will now cost just £1.0 billion for the Government to keep its promises on a £12,500 personal allowance and £50,000 basic-rate threshold, down from an estimated £2.8 billion at the time of the March Budget. The benefits freeze means that inflation does not affect government benefit payments as it usually would, but instead many working age households will see their benefits cut by more in real terms.

Large uncertainties remain, and with still a 40% chance of a surplus in 2019–20

If economic performance turns out differently than we assume, the public finances could look much better or worse. Past public finance forecast errors imply the chancellor still has a 40% chance of a surplus in 2019–20. But, on the flipside, there is also a 40% chance that the surplus in 2019–20 turns out to be more than £30 billion.

The previous section outlined a series of changes – either already in action or anticipated – to the economy since the Budget in March. Overwhelmingly, forecasters expect growth between now and 2020 to be lower and household inflation to be higher than the OBR forecast in March. Additionally, the stock market has performed strongly, oil prices have risen and gilt rates have fallen while the Bank of England has extended its Quantitative Easing program. All of which is likely to affect the state of the public finances over the next 4 years (and beyond). This section sets out our forecast for the public finances until 2019–20, which is the end of the current spending review period, the date by which the previous chancellor’s fiscal charter required that the public sector run a budget surplus, perhaps the first financial year in which the UK will no longer be a member of the EU, and the last full financial year before the scheduled date of the next UK general election.

We derive our economic forecast for GDP and measures of inflation by adjusting the OBR's March forecast by the changes in forecast since May by the Bank of England (for GDP and CPI up to and including 2018–19) and the average of independent forecasters (for GDP and CPI in 2019–20, and RPI and the GDP deflator in all years) for each financial year. Details of the assumptions underlying the forecasting of other economic variables are provided in this or the previous section. The economic determinants of our forecast, and their counterpart from the OBR Economic and Fiscal Outlook in March, are shown in Table 4.1.

To develop our public finance forecast, we draw on the historic relationship between GDP growth and the public finances, as well as the estimated impact of changes in various economic indicators on public sector spending and receipts provided by the OBR. Overall, our estimates imply that borrowing is likely to be higher in 2019–20 than Mr Osborne forecast in March, even after assuming the elimination of our net financial contributions to the EU budget.

Table 4.1. Economic determinants of the fiscal forecast: March EFO and our assumptions compared

| Economic indicator | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|---|---------|---------|---------|---------|
| OBR EFO: | | | | |
| Nominal GDP (£bn) | 1,943 | 2,021 | 2,106 | 2,189 |
| Real GDP growth (%) | 2.0 | 2.2 | 2.1 | 2.1 |
| Real GDP (2015-16=100) | 102.0 | 104.2 | 106.4 | 108.7 |
| GDP deflator (%) | 1.5 | 1.8 | 2.1 | 1.9 |
| CPI (%) | 0.6 | 1.6 | 2.1 | 2.0 |
| RPI (%) | 1.7 | 2.6 | 3.3 | 3.2 |
| Oil prices (\$ per barrel) ^a | 35.5 | 41.9 | 44.0 | 44.0 |
| Oil prices (£ per barrel) ^a | 24.9 | 29.3 | 30.7 | 30.6 |
| Equity prices (FTSE All-share) | 3337 | 3471 | 3617 | 3760 |
| Bank rate (%) | 0.4 | 0.4 | 0.6 | 0.8 |
| Market gilt rates (%) | 1.7 | 1.9 | 2.1 | 2.2 |
| APF gilt holdings (£bn) | 374.9 | 374.9 | 374.9 | 374.9 |
| Our assumptions: | | | | |
| Nominal GDP (£bn) ^b | 1,939 | 2,001 | 2,071 | 2,143 |
| Real GDP growth (%) ^b | 2.1 | 1.1 | 1.4 | 1.7 |
| Real GDP (2015-16=100) | 102.1 | 103.3 | 104.7 | 106.5 |
| GDP deflator (%) | 1.0 | 2.1 | 2.1 | 1.8 |
| CPI (%) ^b | 1.0 | 2.7 | 2.8 | 2.5 |
| RPI (%) | 2.0 | 3.0 | 3.2 | 3.2 |
| Oil prices (\$ per barrel) ^a | 43.0 | 50.1 | 54.1 | 56.0 |
| Oil prices (£ per barrel) ^a | 31.9 | 41.7 | 44.3 | 45.8 |
| Equity prices (FTSE All-share) | 3716 | 3944 | 4084 | 4227 |
| Bank rate (%) | 0.4 | 0.2 | 0.2 | 0.4 |
| Market gilt rates (%) | 1.1 | 1.4 | 1.6 | 1.7 |
| APF gilt holdings (£bn) | 402.5 | 435 | 435 | 435 |

Notes: ^a Oil prices are calendar year. ^b To forecast these variables, we assume that the OBR forecast changes in each year by the same as: Bank of England forecast up to 2018-19, average of independent forecasters thereafter.

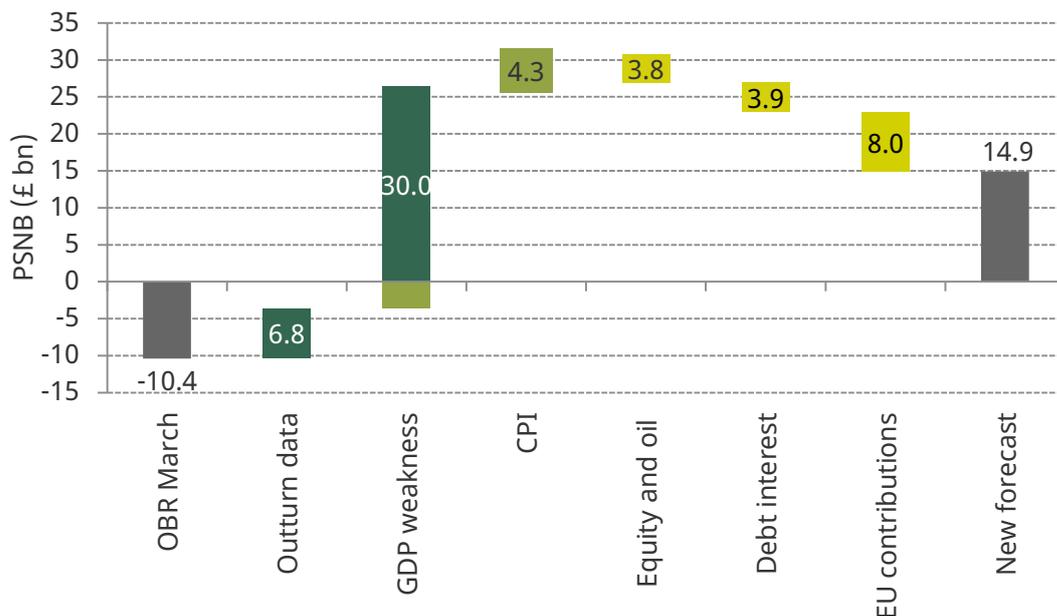
Sources: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>); HM Treasury, *Forecasts for the UK economy*, August 2016 (<https://www.gov.uk/government/statistics/forecasts-fo`1r-the-uk-economy-august-2016>); Bank of England, *Inflation Report*, November 2016(); FTSE All-Share from Google finance (<https://www.google.co.uk/finance/historical?q=INDEXFTSE%3AASX&start=180&num=30&ei=adkAWKP9NJCPUO2LlAG>) and oil futures prices from barchart.com (http://www.barchart.com/commodityfutures/Crude_Oil_Brent/CB?search=CB*).

4.1 The forecast for borrowing

Our forecast for public sector net borrowing (PSNB), assuming that only the policies already in place are implemented, is set out in Table 4.2. By 2019–20, we forecast a deficit of £14.9 billion, as opposed to the £10.4 billion surplus forecast in March. This £25.3 billion worsening is caused by a reduction in receipts, which are around £31 billion lower. This is slightly offset by spending that is around £6 billion lower driven by an assumed £8 billion cut to public spending from not longer having to make a net contribution to the EU budget. This turns a 0.5% of national income surplus into a 0.7% deficit – a worsening of the net borrowing position by 1.2% of national income. Figure 4.1 displays the changes to our 2019–20 borrowing forecast. This is primarily driven by forecast weakness in national income, although the weak data on tax receipts in the first six months of this financial year, and the increase in expected inflation, also contribute to the weaker fiscal outlook.

The impact of lower GDP growth weakens the public finances by £30 billion in our forecast. As we noted in Section 3, there is considerable uncertainty surrounding the outlook for growth over the next few years. If GDP were only 1% lower (rather than our forecast 2.1%) by 2020, the worsening due to growth would be only £14 billion. However, if the worsening were 3% of national income, this would lead to a worsening of £43 billion.

Figure 4.1. Public Sector Net Borrowing change in forecast, 2019–20



Note: See Table 4.2. Where applicable, categories refer to changes in both tax revenues and spending.

Table 4.2. Changes in forecasts for public spending, tax revenues and borrowing since March

| | 2016-17 | 2017-18 | 2018-19 | 2019-20 |
|--------------------------|---------|---------|---------|---------|
| Spend (£bn) | | | | |
| EFO March | 771.9 | 784.6 | 801.0 | 810.4 |
| New forecast | 770.6 | 781.2 | 800.5 | 804.5 |
| Change | -1.3 | -3.4 | -0.5 | -5.9 |
| <i>Of which</i> | | | | |
| GDP downgrade | 0.0 | 0.0 | +2.6 | +4.9 |
| CPI increase | 0.0 | +0.2 | +0.7 | +1.0 |
| Debt interest payments | -1.4 | -3.6 | -3.8 | -3.9 |
| EU contributions | 0.0 | 0.0 | 0.0 | -8.0 |
| Tax (£bn) | | | | |
| EFO March | 716.5 | 745.8 | 779.5 | 820.9 |
| New forecast | 710.0 | 733.8 | 756.1 | 789.6 |
| Change | -6.5 | -12.0 | -23.4 | -31.3 |
| <i>Of which</i> | | | | |
| Weakness in 2016-17 data | -8.0 | -6.2 | -6.5 | -6.8 |
| GDP downgrade | 0.0 | -8.9 | -18.5 | -25.1 |
| CPI increase | 0.0 | -0.5 | -2.1 | -3.3 |
| Equity prices | +1.2 | +3.1 | +3.0 | +3.0 |
| Oil prices | +0.3 | +0.6 | +0.7 | +0.8 |
| PSNB | | | | |
| EFO March (£bn) | 55.4 | 38.8 | 21.5 | -10.4 |
| New forecast (£bn) | 60.5 | 47.3 | 44.4 | 14.9 |
| Change (£bn) | +5.1 | +8.5 | +22.9 | +25.3 |
| EFO March (% GDP) | 2.9 | 1.9 | 1.0 | -0.5 |
| New forecast (% GDP) | 3.1 | 2.4 | 2.1 | 0.7 |
| Change (% GDP) | +0.2 | +0.5 | +1.1 | +1.2 |

Note: Assumes policy proceeds as planned in March and economic determinants evolve according to Table 4.1.

Source: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016

(<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>).

Spending

Our forecast overall implies spending that is slightly lower in cash terms by the end of the forecast – though higher as a proportion of national income – than the OBR forecast in March. Based on outturn data for the year so far, spending seems on track to match the OBR forecast in cash terms. In the coming years, depressed GDP growth and higher inflation push up spending, while lower interest rates and reduced contributions to the EU reduce it.

GDP weakness

Lower growth in national income affects spending (as a proportion of national income) via two channels. The first, direct channel arises from the fact that departmental spending plans are, by default, fixed in cash terms until the end of the financial year 2019–20.

Broadly, therefore, a reduction in national income does not lead to a reduction in spending (in cash terms), increasing government spending as a proportion of national income. OBR estimates (Helgadottir *et al* (2012)) suggest that a 1% reduction in national income leads to a 0.4% of national income increase in spending in the first year. Given that spending accounts for around 40% of national income, this is entirely consistent with cash spending plans being unchanged.¹³

While departmental spending plans are unchanged in cash terms, changing national income and inflation projections affect how difficult or severe the cuts planned over the next few years appear.

- In March, spending by government departments was forecast to make up 17.1% of national income by 2019–20 (down from 18.8% in 2016–17). Our new estimates imply spending would now make up 17.4% of national income by 2019–20.
- The GDP deflator (a measure of economy-wide inflation) is actually forecast to be slightly lower by the end of our forecast period than expected in March. This is different from the CPI, which is a measure of consumer price inflation, because the GDP deflator measures the price of goods and services produced in the UK and therefore does not include the rising price of imported goods. This implies a smaller real terms cut to departmental spending (3.3% rather than 3.6%). Whether or not these plans are now actually easier or harder to deliver will in practice depend on how costs faced by departments change. Some costs, such as fuel, are likely to increase. However, other cost saving measures may be easier to implement. For example, lower private sector wage growth may make the planned continuation of the squeeze on public sector wages easier to deliver.

While a fall in national income leaves departmental spending unchanged in cash terms, a reduction in national income may also lead to an increase in cash spending on social security benefits. An increase in unemployment, or depressed wage growth, could lead to an increase in means tested payments such as Jobseeker’s Allowance, Housing Benefit, or tax credits. Helgadottir *et al* find that this effect operates with a lag (so a 1% reduction in national income in one year leads to an increase in cash spending in the following year) and that it increases spending by 0.1% of national income. That the effect is lagged might be rationalised by the fact that unemployment tends to be a lagging indicator of economic downturns.

¹³ The model used by T. Helgadottir, G. Chamberlin, P. Dhimi, S. Farrington and J. Robbins, *Cyclically adjusting the public finances*, Office for Budget Responsibility Working paper no.3, 2012 (http://budgetresponsibility.org.uk/docs/dlm_uploads/Working-paper-No3.pdf) suggests that the number is 0.44, which is very close to the 43% average level of spending as a share of national income over the period from which it is estimated. The estimate (from Table 2.9) is rounded to 0.4 (from which it is not statistically significantly different).

In total, national income disappointing by 1% leads to spending 0.5% higher as a proportion of national income after 2 years. Of this, 0.1% represents an increase in cash spending. In our forecast, the decrease in national income (relative to the OBR forecast in March) leads to cash spending being £4.9 billion higher in 2019–20 (0.3% of national income higher than had cash spending remained unchanged).

Higher household inflation

Ordinarily, the CPI inflation measure has a significant impact on nominal government spending. The default for the majority of the working-age benefit budget is that payments increase with CPI each year. An increase in the rate of inflation would therefore have implications for expected social security expenditure (in cash terms) in future years. The benefits would maintain their generosity – at least in terms of purchasing power – and so households in receipt of these benefits would be protected from variation in the rate of inflation. The CPI also forms part of the ‘triple lock’ on the state pension, which requires that the state pension be uprated with the maximum of CPI, average earnings growth and 2½%.

Under current policy through to 2019–20 the government is less exposed to variation in the CPI than would normally be the case. The vast majority of payments in the working-age welfare system are frozen in cash terms for the duration of the parliament. As a result, higher inflation does not increase spending on these benefits, but the cash-terms freeze simply represents a larger real-terms cut in benefit spending. Put another way, the policy of freezing these benefits transfers inflation risk from the government to households. It is also the case that our forecast implies that inflation will not be the largest element of the triple lock in any year, such that higher CPI will also not affect the uprating of the state pension (in cash terms), though the real terms increase is now forecast to be lower.

For these reasons higher household inflation over the next 4 years has only a minor effect on public spending. Public sector pensions, the outgoings on which are around £40 billion per year, is the only spending element of note that will be uprated by CPI. This leads to an increase in spending of around £1 billion in 2019–20. However, this masks a larger effective burden that the nominal freeze in working age benefits now applies to households. Analysis recently published by the IFS suggests that higher inflation over the next few years might impose an increased burden of £1.2 billion on working age benefit-recipient households.¹⁴ This assumed that the CPI would be pushed up by 2.0 percentage points, whereas our estimates (Table 4.1) are based on the assumption it will be pushed by 2.3 percentage points. If correct this implies the additional squeeze on working benefit recipient households would be increased to around £1.4 billion.

Debt interest payments

In 2015–16, the (net) interest payments of the public sector totalled £32.8 billion. At present, the path of these interest payments is determined by four factors: the stock of debt on which interest must be paid, the interest rate paid on that debt, the amount of that debt held in the Bank of England Asset Purchase Facility (APF) through its

¹⁴ For more details on the effect of inflation changes on benefit recipients, see C. Emmerson, A. Hood and T. Waters, *Falling sterling, rising prices and the benefits freeze*, IFS Observation, October 2017 (<https://www.ifs.org.uk/publications/8699>).

Quantitative Easing programme, and the bank rate, set each quarter by the Bank of England, that determines the rate of interest the APF is charged on its QE activity. Of these four factors, the first would lead us to forecast higher interest payments than the OBR did in March, but the other three have moved in a more favourable direction for the public finance headline number.

Higher borrowing implies a national debt that is growing more quickly. Cumulatively our forecast implies borrowing around £62 billion more by 2019–20 than the OBR assumed in March, with a knock on effect for the amount of debt interest payments the government needs to make. However, this is more than outweighed by the reduction in interest rates since March. Gilt rates look set to be 0.5% lower at the end of this year than the OBR forecast in March. We assume that interest rates evolve according to the same path set out by the OBR, and that the 0.5% gap persists throughout our forecast period. Initially, this has a relatively small effect on the public finances, as the lower effective interest rate applies only to new debt (the majority of debt interest is paid on the existing stock of debt that pays interest based on the prevailing rate when the bond was purchased). Over time, persistently lower borrowing costs have a larger effect on the public finances as a higher proportion of the existing debt stock is refinanced at this lower rate.¹⁵

The largest effect on interest payments arises from the Bank of England APF. Since March, the APF has expanded QE, increasing its holdings from £375 billion of government bonds to £435 billion. At the same time, the bank rate (which is the rate at which the APF pays interest on its loan used to purchase the bonds) has also been reduced from 0.5% to 0.25%. Debt interest payments from central government to the APF on bonds held by the APF do not count towards public sector net interest spending. An increase in APF holdings of government bonds therefore reduces public sector debt interest payments.¹⁶ A reduction in the bank rate further reduces the amount of interest paid by the public sector as the APF can now finance its loan more cheaply. While this has a substantial impact on the public finances (accounting for £3.5 billion of the £3.9 billion total debt interest saving in 2019–20), the temporary nature of the QE intervention means that these changes do not reflect meaningful changes in the health of the public finances.

In the longer run (i.e. beyond our forecast horizon), the increase in debt is likely to mean higher debt interest payments. This would be especially pronounced if lower interest rates prove to be a temporary phenomenon, which seems more likely than not given that pre-referendum predictions typically expected an increase rather than a reduction in borrowing costs.

¹⁵ Debt interest payments are also affected by short-term interest rates (interest rates on government debt with a maturity below one year). It is likely these will also be lower in 2019–20 than the OBR forecast in March, which would further reduce debt interest spending. However, our forecast also likely underestimates RPI inflation (as, after 2017, our forecast is based on what forecasters believed in August, since which time interest rates have risen and sterling has fallen). Higher RPI leads to higher debt interest spending on index-linked gilts, and so would serve to increase debt interest spending. In any case, we judge that any reduction in short-term interest rates would likely be temporary, and so would not strengthen the public finances in the medium to longer term.

¹⁶ As the APF purchases existing bonds held in the market, these bonds typically have a higher associated interest rate than new government debt. The average yield of APF holdings is around 3.6%, compared to a current 10 year gilt yield of 1.2%.

EU budget contribution

In our forecast, we assume that the UK concludes negotiations and leaves the EU before the start of 2019–20. Additionally, we assume that the UK ceases to make contributions to the EU budget, and that all EU spending in the UK becomes funded directly by the UK public sector. As a result, public spending is reduced by the net financial contribution of the UK to the EU budget, which is around £8 billion.

The precise ‘direct’ public finance improvement as a result of Brexit will depend both on the nature of the deal reached by the UK with the EU and how much the government wants to replace EU funding that currently flows to the UK. As laid out in more detail in Emmerson, *et al*, (2016)¹⁷, the UK makes a contribution (after taking into account its rebate) of around £14.5 billion a year, while approximately £6.5 billion of the EU budget is spent in the UK. One potential outcome is that the UK makes no contributions to the EU budget, although as part of the negotiations it is possible that some reduced payment continues.

Tax receipts

In cash terms, our forecast change in tax receipts is much larger than our forecast change in spending. We expect receipts to be £31 billion lower in 2019–20 than the OBR forecast in March.

Outturn data

Over the first six months of 2016–17, receipts were lower than the trend implied by the March forecast. A simple extrapolation of this trend would suggest that receipts might be £14 billion down on forecast. This is likely to overstate the gap, as receipts this year are expected to be back-loaded. The recent rise in income tax on dividend income for those receiving relatively large dividend payments is likely to have led to some owner-managers bringing forward their dividend payments ahead of the increase in the tax rate. As a result we can expect strong growth in income tax receipts on dividend payments to arrive around the self-assessment deadline at the end of January.

However, some weakness is likely to persist. Taking into account the weakness so far this year in receipts from National Insurance Contributions, PAYE income tax and VAT, offset slightly by somewhat stronger-than-forecast receipts from corporation tax, we expect receipts to undershoot forecast by around £8 billion in 2016–17. Furthermore, weakness in these tax receipts is unlikely to be confined to this year only. At least some of this weakness is likely to represent a permanent weakness across the whole forecast period. We assume that $\frac{3}{4}$ of this weakness is persistent,¹⁸ and so this has implications for receipts throughout the forecast period.

GDP weakness

Perhaps the clearest impact of a disappointment in national income is a reduction in the level of tax receipts. If the tax system effectively applied a constant tax rate on economic

¹⁷ C. Emmerson, P. Johnson, I. Mitchell and D. Phillips, *Brexit and the UK's Public Finances*, IFS Report 116, May 2016

¹⁸ Specifically, we assume that the persistent weakness is £6 billion in 2016–17 terms. This weakness is scaled up by nominal GDP growth in future years.

activity, a 1% reduction in economic activity would reduce tax receipts by 1%. However, this would ignore the fact that in progressive tax systems, such as the UK's, the average tax rate rises with growth in the tax base. So, for example, if tax receipts were expected to be 40% of national income and the economy grew by an additional 1%, we would expect tax receipts to grow by more than 1% and tax receipts as a share of national income to edge above 40%.¹⁹ The converse is true if GDP disappoints.

The OBR forecast that, for a 1% reduction in national, tax receipts *as a proportion of national income* decrease by 0.1% of national income in the first year and a further 0.1% in the following year. Overall, the effect of national income on tax revenues totals £25 billion. Of this, £17 billion arises from national income being smaller (assuming tax revenue is constant as a proportion of national income), and the remaining £8 billion weakness arises from the progressivity of the tax system (which reduces tax revenue as a proportion of GDP).

Higher household inflation

We noted above that government spending is mostly shielded from inflation risk on the spending side as most working age benefits are frozen in cash terms. However, an increase in inflation also affects receipts. Some thresholds in the National Insurance and income tax systems (such as the personal allowance) are by default increased in line with inflation as measured by the CPI. Higher thresholds imply less tax is collected. The OBR assumes a 1% increase in CPI leads to a £1¼ billion reduction in receipts with a one year lag. In our forecast, the CPI is cumulatively 2.3% higher in 2018–19, reducing receipts in 2019–20 by around £3.3 billion.

Equity prices

A number of capital taxes – stamp duty on shares, capital gains tax and inheritance tax – depend on the value of shares. Stamp duty is charged at 0.5% of the share value in any transaction, while capital gains and inheritance tax liabilities increase if assets become more valuable. Equity prices also indirectly affect receipts of personal and corporation taxes from the financial sector. The increase in the value of the stock market in recent months is therefore good news for these revenue streams. We follow the OBR's assumption that, going forwards, the FTSE All-Share index grows in line with nominal GDP growth. Between November and March, the OBR forecast for equity prices in 2019–20 reduced by 9.5% and receipts were lowered by £2.1 billion as a result. Our equity price forecast implies prices will be 14% higher in 2019–20, translating into a £3.0 billion boost to receipts in that year compared with March.

Oil prices

A further price change with implications for revenue is the oil price. As we noted in Section 3.4, the dollar price of oil has increased since March, and the sterling depreciation means the change in the pound price is even more dramatic. Oil prices have two direct effects on the public finances. First, a higher price increases profits from the North Sea oil industry.

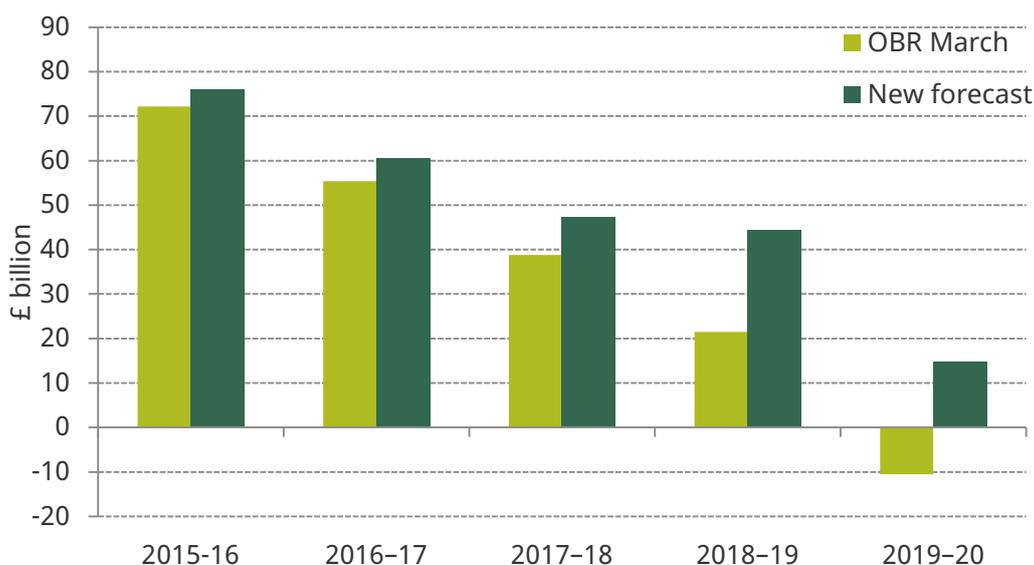
¹⁹ Income tax is the obvious example where this happens. When a basic-rate income tax payer receives an additional £100 of income, they will (if they remain a basic-rate income tax payer) pay additional income tax at their marginal tax rate of 20% which, due to the presence of the personal allowance, is much higher than their average income tax rate. Similar effects apply to some other taxes, such as capital gains tax and inheritance tax.

The effect on receipts was estimated to be £¾ billion for every £10 a barrel increase in price by the OBR in March 2015. This is likely to be an overestimate today as tax rates on North Sea activity have been reduced since then. A second impact is on fuel prices. An increase in these prices leads to a reduction in fuel purchases and so a reduction in fuel duty receipts of around £¼ billion. Putting these together every £10 increase in the price of a barrel of oil leads to a (maximum) £0.5 billion improvement in receipts. We forecast oil will be £16 a barrel more expensive in 2019–20 than forecast in March, leading to a £0.8 billion increase in receipts. Overall the direct benefits to the public finances arising from higher oil prices are likely to be fully offset as higher oil prices reduce growth. However this latter effect should be captured by our GDP adjustment to receipts.

Borrowing

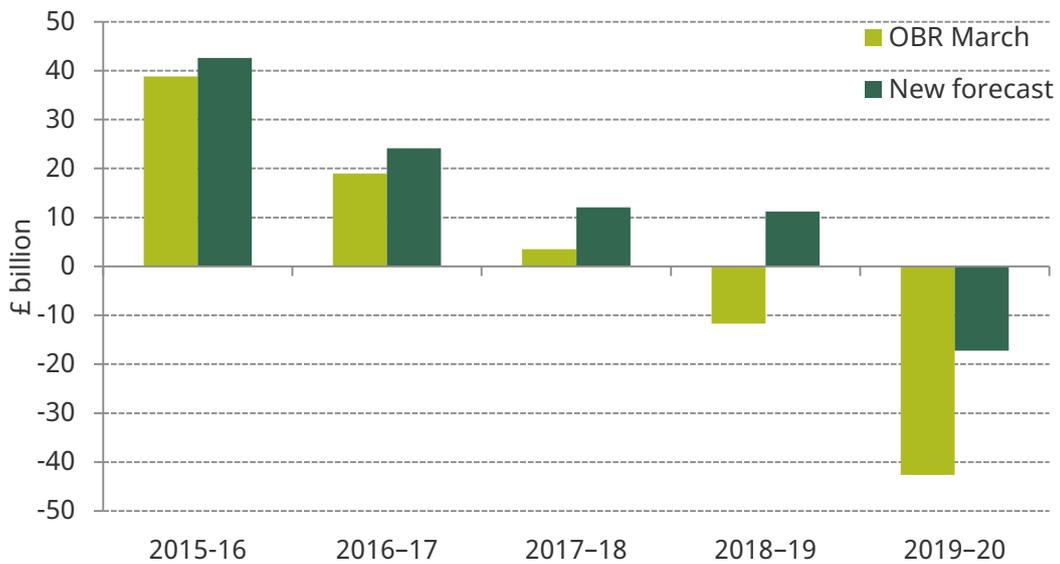
Figure 4.2 shows how our borrowing forecast differs from the March forecast. Borrowing is higher in every year, while we forecast that the budget will no longer reach a surplus by 2019–20. On the current budget (i.e taking out net investment spending), as shown in Figure 4.3, we forecast that surplus is not reached in 2018–19 but will still be achieved in 2019–20.

Figure 4.2. Public Sector Net Borrowing change in forecast



Note: Outturn for 2015–16 is higher than the March forecast.

Source: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>)

Figure 4.3. Current Budget change in forecast

Note: Outturn for 2015-16 is higher than the March forecast.

Source: Office for Budget Responsibility, *Economic and Fiscal Outlook*, March 2016 (<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>)

4.2. The forecast for national debt

Table 4.3 shows our forecast for the evolution of the national debt up to 2019-20. Debt is higher in cash terms, and significantly higher as a proportion of national income. This is a 'denominator effect': we now expect national income to be lower than was forecast in March, so even if debt were unchanged in cash terms it would still be a greater burden as a proportion of national income. Whereas the OBR's March forecast was for debt to fall as a share of national income throughout the forecast horizon, our forecast implies that debt will be pretty stable as a share of national income until 2018-19 before then starting to fall.

Table 4.3. Change in PSND forecast since March

| | 2016–17 | 2017–18 | 2018–19 | 2019–20 |
|----------------------|---------|---------|---------|---------|
| OBR EFO (£bn) | 1638 | 1677 | 1715 | 1725 |
| New forecast (£bn) | 1652 | 1709 | 1770 | 1805 |
| Change (£bn) | 14 | 32 | 55 | 80 |
| <i>Of which:</i> | | | | |
| Higher PSNB | 5 | 14 | 37 | 62 |
| APF gilt holdings | 3 | 8 | 8 | 8 |
| APF corporate bonds | 5 | 10 | 10 | 10 |
| OBR EFO (% GDP) | 82.6 | 81.3 | 79.9 | 77.2 |
| New forecast (% GDP) | 84.3 | 84.5 | 84.6 | 83.4 |
| Change (% GDP) | 1.7 | 3.2 | 5.7 | 6.2 |

Note: Numbers may not sum due to rounding.

Source: Office for Budget Responsibility, *Public Finances Databank*, (<http://budgetresponsibility.org.uk/data/>) and authors' calculations.

Higher borrowing

By far the largest effect on the (cash level) national debt is that the government is now forecast to be borrowing more. Cumulatively, our borrowing forecast implies £62 billion of extra borrowing by 2019–20, which is financed by issuing more gilts.

Quantitative Easing

The way the Bank of England APF is treated for public finance purposes means that the QE decisions of the Monetary Policy Committee have a substantial effect on the headline measure of debt. Thus far, the QE programme has purchased only government gilts. The difference between the purchase price of the bond and their face value contributes to the national debt.

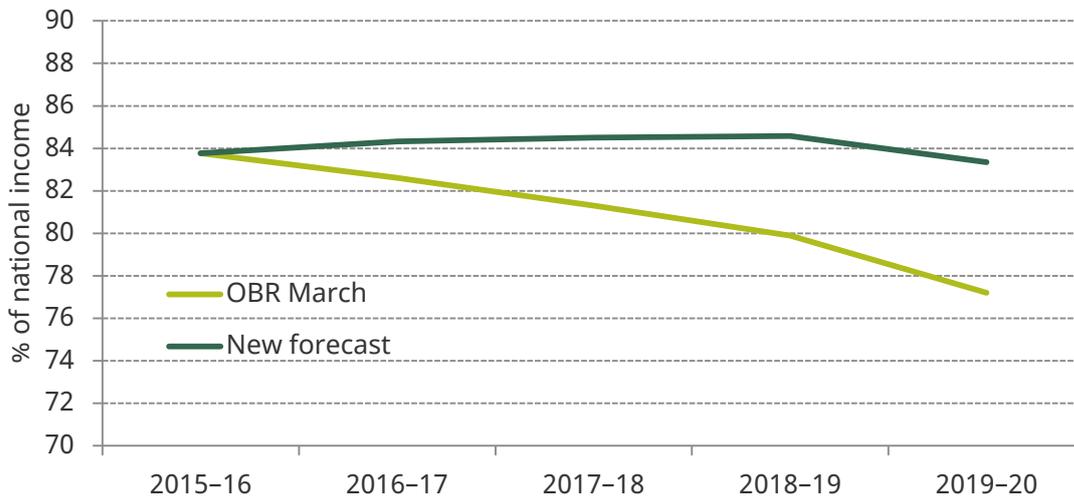
Meanwhile, the APF is also able to purchase up to £10 billion in corporate bonds. For national debt purposes, the full value of corporate bond purchases will contribute. This means that a £10 billion corporate bond purchase will increase PSND by £10 billion. This is despite the fact that the public sector owns an asset of equivalent value.

Both of these effects lead to a change in net debt, but do not represent a meaningful change in the health of the public finances. Any effects will unwind as long as the APF is unwound. They may make debt look higher in the short term, but do not affect the public finances in the long run. Notably, the opposite is true for public sector net borrowing, which is temporarily flattered by QE through lower debt interest payments. This emphasises the difficulty in trying to target a measure such as public sector net debt, or even public sector net borrowing. The headline number can be affected by measures which do not affect the underlying stability or health of the public finances.

The national debt

Figure 4.4 shows our forecast for the national debt over the next four years compared with the OBR forecast. We project that the national debt will now not reach its peak until 2017–18, and will only fall below the 2015–16 level as a proportion of national income in 2019–20.

Figure 4.4. Public Sector Net Debt change in forecast



Source: Office for Budget Responsibility, *Public Finances Databank*, (<http://budgetresponsibility.org.uk/data/>)

4.3. Uncertainties in the forecast

Public finance forecasts, especially when made several years out, are subject to substantial uncertainty even in normal times. Given the heightened uncertainty over the likely path of the economy – and over public policy – over the next few years, this forecast is likely even more uncertain. Here we consider some factors that could lead our forecast to be too optimistic or pessimistic for the public finances over the next few years.

- Economic uncertainty:** Our forecast is predicated on a certain path for the economy over the next few years. In Section 3.3, we noted large variance between predictions over economic growth. Given that most of our increase in borrowing is attributable to changes in national income, an impact that is more or less severe than our forecast assumes would affect the public finances differently. If the shock is more severe, for example as implied by the forecast of Experian (who have revised down their forecast for the level of GDP in 2020 by 4.3%), the impact would be very different to if, as assumed by Liverpool Economics, growth is now likely to be stronger (they have revised up their 2017 forecast).
- Uncertainty over the relationship between the economy and the public finances:** Our forecast is derived on relationships between economic determinants and the public finances that have been observed in the past. However, no downturn is quite like another. For example, if reductions in national income were focussed in a “tax-rich” part of the economy such as the banking sector, the public finance shock would

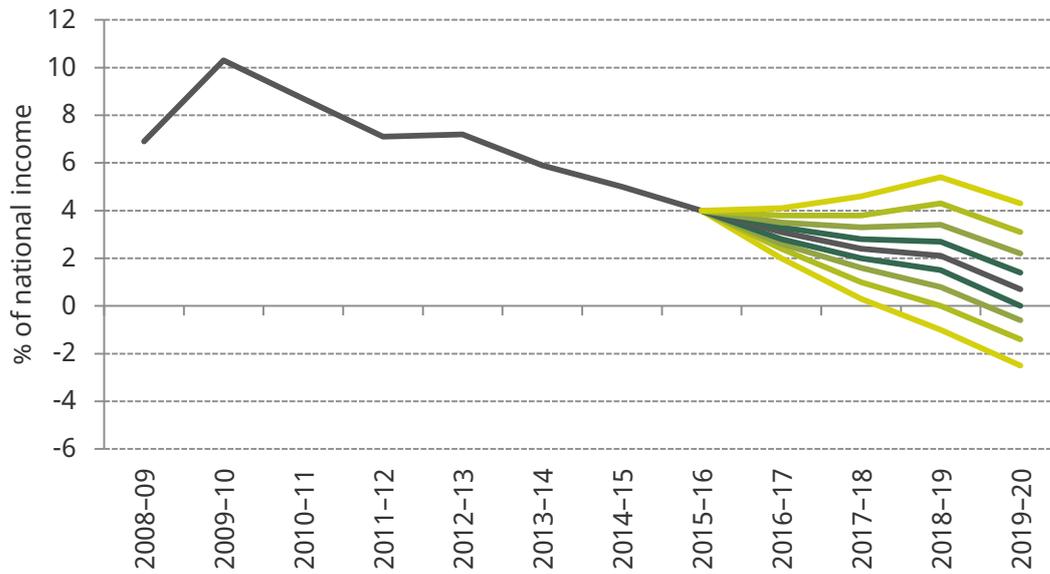
be much worse than if less tax-rich activity were more adversely affected. Policy changes may also have had an effect on this relationship: for example, as we mentioned above, changes to the North Sea oil tax regime may well mean that rising oil prices boost North Sea revenues by less than we assume.

- **Policy uncertainty:** Our forecast assumes no further policy changes over and above those already scored in budget documents. However, some policies, such as the pledge to have a personal allowance of £12,500 and a higher rate threshold of £50,000 by the end of the parliament, were manifesto pledges but have not been confirmed by the Government (although a higher inflation forecast, which affects default uprating, means this pledge will now cost only £1.0 billion, down from £2.8 billion in March). The Chancellor may also choose to provide stimulus to the economy (for example increasing investment spending or delaying some of the planned spending cuts). However, he might also decide to counteract a forecast that implies higher borrowing with measures, perhaps for implementation over the longer-term, designed to reduce the deficit. Our forecast also assumes a path for monetary policy that the Monetary Policy Committee at the Bank of England may deviate from and assumes a particular direct impact (at a particular time) on spending from the UK leaving the EU, which is discussed in Section 4.2.

Previous forecast errors

As noted above, even in normal times forecasts are subject to wide margins of error. To try to quantify the uncertainty in our forecast, we look at the accuracy of previous official forecasts made by the Treasury and OBR. Based on previous forecast errors, there is a 40% chance that the government will reach surplus in 2019–20 (see Figure 4.5).²⁰ Of course, this also means there is a 40% chance that borrowing will be 0.7% of GDP or more higher (which would lead to a deficit in excess of £30 billion). We may even expect forecast errors to be greater in this period of heightened uncertainty, in which case the probability of a surplus might even be a little higher but, unfortunately, the chances of a deficit in excess of £30 billion would also be more likely.

²⁰ This assumes that forecast errors are unbiased (that an overshoot is as likely as an undershoot). Historically, outturns for borrowing have more often come in at higher than the forecast rather than below.

Figure 4.5 Public sector net borrowing fan chart

Note: The solid black line represents our forecast's central projection. Different coloured lines going outwards represent 20% probability bands. For example, the probability that the out-turn will be between the two dark green lines is 20%. Probabilities based on past forecasting errors.

Source: Chart 5.3 of Office for Budget Responsibility, *Economic and Fiscal Outlook: November 2015*, (<http://budgetresponsibility.org.uk/efo/economic-and-fiscal-outlook-november-2015/>).

4.4 Long-run public finances

As explained in Section 2, prior to the referendum the OBR had, in its long-term fiscal analysis, pointed out that the ageing of the UK population was already projected to place the public finances in greater strain beyond 2019–20. Increased spending on age-related public services, in particular on health and social care, would be offset only slightly by an increase in tax receipts as a share of national income. If left unchecked this would increase government borrowing and debt considerably, with the OBR projection as of June 2015 suggesting public sector net borrowing would increase from a surplus of 0.3% of national income in 2019–20 to a deficit of 5.2% of national income in 2064–65. This would clearly be an unsustainable fiscal position. Moreover this estimate is sensitive to a number of factors. In particular it would tend to be pushed up if (all else equal):

- The structural deficit at the end of the medium-term forecast period is increased;
- Future immigration is assumed to be lower;
- Future growth is assumed to be lower;
- Future interest rates are assumed to be higher.

In addition to worsening the outlook for the UK public finances through to 2019–20 we might well expect Brexit to increase the additional challenge facing the UK's public finances beyond 2019–20. At least this would certainly be true were, in addition to increasing the size of the deficit in 2019–20, Brexit was to reduce future immigration, lower future growth and increase future interest rates.

4.5 Conclusions

This section has set out our forecast for the public finances over the next four years. Public sector borrowing and debt are both on course to be higher than the OBR forecast in March for every year of our forecast. This forecast is subject to substantial uncertainties, meaning that even with this dramatic downgrade there is a 40% chance that the budget will be in surplus in 2019–20. The longer run implications are even more uncertain, and depend on the prospects for economic growth, immigration and interest rates going forward.

5. Autumn Statement options

Key findings

As the chancellor writes his new fiscal targets, he should bear in mind that 10 of 12 previous UK ones since 1997 have been abandoned or missed.

With none the Government's three fiscal targets still standing, Mr Hammond needs to consider whether to announce new fiscal targets in the Autumn Statement. Of those set out by the last three chancellors, only two have been consistently met. He should therefore choose his targets wisely. A good set of fiscal targets will be forward looking and flexible, like the two targets that were actually met.

Good case for waiting before implementing any further fiscal tightening.

The Chancellor could sensibly choose not to add to the significant tax rises and spending cuts already planned for the period through to 2019–20. Indeed a well targeted temporary fiscal stimulus might help the economy through a period of uncertainty. But if long-run growth is lower as a result of Brexit he should also prepare for further austerity in the next parliament.

A substantial long run fiscal challenge, made more difficult by our new forecasts, remains.

Even before June, the OBR forecast a long run fiscal challenge due to an ageing population. This challenge will be harder now that borrowing in 2019–20 is likely to be higher, and will be even more difficult if economic growth or immigration is lower, or interest rates are higher, over the longer term.

Given the new set of economic and fiscal forecasts provided by the OBR the new Chancellor, Phillip Hammond, will have a number of decisions to make. It is worth remembering that his first decision has to be whether to accept these forecasts as his own – as his predecessor did on every occasion since the OBR was formed after the 2010 general election – or whether to use a different forecast. Not to accept the OBR's judgment would be a bold, and unwise, step.

Assuming that the Chancellor does adopt the OBR's forecast as his own, and assuming it is a downgrade in economic growth and the public finances of a magnitude similar to that which we have set out in sections 3 and 4 of this report, there are a number of subsequent decisions to be made:

- whether to announce a new set of fiscal targets and, if so, what they should be;

- what fiscal policy response to implement during the period when the economy is expected to be particularly weak and monetary policy particularly loose;
- what fiscal policy response to plan for the longer-term, beyond our forecast horizon, when the public finances are expected to be in significantly weaker position than Mr Osborne aimed for in his last Budget as Chancellor.

This section briefly addresses each of these questions in turn.

5.1 A new set of fiscal targets needed?

With existing fiscal targets either already missed or abandoned Mr Hammond may decide to announce a new set of targets in order to make explicit what the Government considers to be desirable policy and to communicate this to the Treasury, government departments, financial markets and the wider public.

But when considering whether, and if so which, fiscal targets to adopt the Chancellor should remember that there is an inevitable trade-off. On the one hand it is useful to allow flexibility to deal appropriately with a changing fiscal outlook. On the other hand simplicity, and the lack of flexibility which often goes with it, helps ensure that the rule is easy to monitor and the government can be held to account.²¹

Fiscal targets can be a useful pre-commitment device that helps to align the incentives of the Government with a desirable outcome, because missing a fiscal target may not be politically costless. But this is not brought about by setting targets that can be easily manipulated. Neither would it be achieved by setting targets that would imply unrealistic or inappropriate fiscal responses in the face of quite plausible adverse fiscal situations.

Recent UK history suggests that the Chancellor ought to take time to consult and consider before putting in place a robust set of fiscal rules. Table 5.1 sets out a brief summary of the fiscal rules and targets that have been put in place by Chancellors Gordon Brown, Alistair Darling and George Osborne over the last two decades. Over this period we have managed to have five different sets of targets, with a total of twelve different targets (admittedly two were repeated so arguably only ten distinct targets). And out of those twelve different targets eight would not have been met (although most were abandoned

²¹ For more background to the material in this subsection see C. Emmerson, *Designing Fiscal Targets for the UK*, presentation at IFS roundtable, 21 May 2014 (https://www.ifs.org.uk/uploads/publications/conferences/140521_Fiscal_Rules_Roundtable.pdf). Further analysis can be found in previous editions of the *IFS Green Budget* – in particular: R. Chote, C. Emmerson and C. Frayne, 'The fiscal policy framework' in R. Chote, C. Emmerson, R. Harrison and D. Miles (eds), *The IFS Green Budget: January 2006*, (<https://www.ifs.org.uk/budgets/gb2006/06chap2.pdf>); R. Chote, C. Emmerson and G. Tetlow, 'The fiscal rules and policy framework', in R. Chote, C. Emmerson, D. Miles and J. Shaw (eds), *The IFS Green Budget: January 2009*, IFS Commentary 107 (<http://www.ifs.org.uk/budgets/gb2009/09chap5.pdf>); R. Crawford, C. Emmerson and G. Tetlow, 'The new fiscal framework: an assessment', in M. Brewer, C. Emmerson and H. Miller (eds), *The IFS Green Budget: February 2011* (<http://www.ifs.org.uk/budgets/gb2011/11chap2.pdf>); R. Crawford, C. Emmerson, T. Pope and G. Tetlow, 'Fiscal targets: committing to a path of budget responsibility?', in C. Emmerson, R. Joyce and P. Johnson (eds), *The IFS Green Budget: February 2016* (<https://www.ifs.org.uk/uploads/gb/gb2016/gb2016ch3.pdf>).

before they were formally breached), while two would – according to our estimates in the previous section – now be on course not to be met had they not already been abandoned.

As a result only two targets managed to be met consistently: that is the Coalition Government’s initial target to aim for a cyclically-adjusted balance on the current budget five years out and its subsequent revised target to aim to achieve this three years out. It is perhaps not a coincidence that these two targets also had much to commend them. In contrast the other targets either had more thresholds that were more arbitrary (“when did the cycle start and end?”, “why 40% of GDP?”, “why should debt definitely fall between two future points in time?”, “why should welfare spending definitely be below some fixed level?”) and/or were not sufficiently flexible in the face of adverse fiscal shocks (“why must there be an overall surplus in 2019–20?”, “why must borrowing in 2013–14 be no more than half what it was in 2009–10?”). The weaknesses of these other targets often meant that their abandonment was preferable than trying slavishly to adhere to them.

As argued in previous editions of the *IFS Green Budget* a forward-looking target for the current budget balance – in line with what the coalition Government subsequently signed up to 2010 – meets several criteria for a good fiscal rule. Further details can be found in those Green Budget chapters, but in brief, a forward-looking target for a current budget balance allows:

- borrowing to pay for investment spending, much as companies and households often do;
- current budget deficits to be run during economic downturns, helping to support the economy during times of temporary weakness, as long as a current budget balance is forecast to be restored by the target year;
- policy makers to adjust gradually to shocks or to forecast errors so that frequent and abrupt policy changes do not need to be made, again as long as a current budget balance is forecast to be restored by the target year.

Therefore there is a strong case for the Chancellor setting a target for a balance on the current budget in, say, a certain number of years time (for example the coalition government initially choose five years and then later shortened this to three years). On the basis of our estimates set out in Figure 4.3 we would still be on course for a current budget surplus three years out (in 2019–20).

Table 5.1. Brief history of UK fiscal targets

| Fiscal target | Dates in operation | Target requirements | Rule met? |
|-------------------------------|---------------------------|--|---|
| <i>Labour</i> | | | |
| Golden rule | 1997–2009 | Current budget balance over the economic cycle | No. Abandoned due to financial crisis |
| Sustainable investment rule | 1997–2009 | Net debt under 40% of GDP over the economic cycle | No. Abandoned due to financial crisis |
| Fiscal consolidation plan | 2009–2010 | Deficit falling every year from 2009–10 to 2015–16 | No, PSNB rose in 2012–13. |
| | | Halve budget deficit 2009–10 to 2013–14 | No. |
| | | Net debt falling as % GDP in 2015–16 | No. |
| <i>Coalition</i> | | | |
| Fiscal mandate (1) | 2010–2014 | Cyclically-adjusted current budget balance 5 years out (rolling target) | Yes. |
| Supplementary debt target | 2010–2015 | Debt falling as a percentage of national income between 2014–15 and 2015–16 | No. |
| Fiscal mandate (2) | 2014–2015 | Cyclically-adjusted current budget balance 3 years out (rolling target) | Yes. |
| Supplementary debt target (2) | 2014–2015 | Debt falling as a percentage of national income between 2015–16 and 2016–17 | Don't yet know. March Budget forecast implied yes, our update implies no. |
| Welfare cap | 2014– | Cap welfare spending at a level set by the Treasury for every year of the five year forecast | No: breached since November 2015. |
| <i>Conservative</i> | | | |
| Fiscal mandate (3) | 2015–2016 | Surplus in 2019–20, and every subsequent year if growth remains above 1% | Don't yet know. Abandoned after referendum. |
| Supplementary debt target (3) | 2015– | Debt falling as a percentage of national income every year to 2019–20 | No: debt rose between 2014–15 and 2015–16. |

Source: Authors' calculations.

One issue with any target for the current budget is that it does not constrain the total amount of borrowing that is done, and therefore does not constrain the total amount of debt that can be accumulated. Our estimates in Section 3 suggest we can expect the current budget to be in balance in three years time but, despite this, as shown in Figure 4.4 public sector net debt rises through to 2018–19 and is over 6% of national income higher in 2019–20 than planned in the March 2016 Budget. For this reason both Mr Brown and Mr Osborne chose to have a secondary target that related to public sector net debt.

The problem is that any ceiling on debt, or any commitment to ensure debt falls at some point in the near future, is going to be arbitrary and risks going the way of previous targets of this type. Moreover experience suggests that debt can often change in ways that do not reflect a genuine movement in the health of the public finances (most obviously when debt increases as the counterpart of the acquisition of an asset, as with the Asset Purchase Facility holdings of corporate bonds). These definitional issues also mean that debt could be inappropriately manipulated in order to meet a rigid fiscal target in an inappropriate way: for example through the sale of assets such as the student loans book.

Ultimately it is the long-run outlook for the public finances, and the long-run path of debt, that fiscal policy should be paying attention to. And this makes it difficult to agree on a rule that provides suitable flexibility in the short and medium-term without allowing the possibility that this flexibility will be abused and that we will run deficits that are higher than is appropriate. Moreover a direct target for net debt may risk being gamed and therefore not necessarily proving a meaningful check on the health of the public finances.

5.2 The fiscal policy response: short-run

When considering the Government’s fiscal policy response to the new forecast in the Autumn Statement, there will potentially be a different set of considerations for the next few years to those for the longer-term. Over the remainder of this parliament there is already a considerable fiscal tightening planned. As set out in Chapter 2 discretionary tax measures announced over the last few years are estimated to raise £10 billion more in revenue in 2019–20 than they will in 2016–17 (although £6.6 billion of this is corporate tax revenue that has mostly just been shuffled out of other financial years), while cuts to the working age benefit system are estimated to cut spending in 2019–20 by an additional £12 billion. In addition the November 2015 Spending Review implied deep cuts to central government spending on the delivery and administration of many public services. Our new forecast suggests that overall Departmental Expenditure Limits are to be cut, relative to economy-wide inflation, by a further 3.3% over the period from 2016–17 to 2019–20, with cuts averaging 9.9% to come from budgets outside of the “protected” areas of the NHS, schools, overseas aid and defence. This includes the £3.5 billion of “efficiency savings” in 2019–20 promised in the March Budget but not yet allocated to spending departments. Delivering these plans will not be easy.

With this in mind the Chancellor may well decide not to respond to a deteriorating fiscal situation with further austerity in the current parliament. Indeed he might respond to poorer growth forecasts, in the context of monetary policy being at or close to the limit of what it can achieve, by loosening fiscal policy. Of course such a course of action would add to government borrowing in the near term, although at least at the moment this can be done extremely cheaply. Any easing of fiscal policy should only be a response to temporarily weak demand in the economy: it can't be permanently looser. If long run potential output is reduced by the UK leaving the EU then in the end public spending will have to be lower, or taxes higher, than would otherwise have been the case.

Were the Chancellor to decide to implement a discretionary fiscal loosening he should ensure that the chosen package is:

- Targeted: so that it does boost demand where it is most needed;
- Timely: so that it boosts demand when it is most needed.
- Temporary: so that it only increases government borrowing in the near-term and doesn't add to the long-term fiscal challenge;

One option for the Chancellor would be to push back the already planned fiscal tightening: for example to implement the cuts to spending on public services more slowly than is currently planned or to push back some of the planned tax rises (such as the apprenticeship levy due to come into effect from April 2017 that is estimated to raise £3 billion in 2019–20).

In addition – or alternatively – the Chancellor could announce new measures. The OBR's fiscal multipliers provide an indication of what measures would, on average, deliver the best bang-for-their-buck in terms of the impact on demand in the economy. These suggest that the best option could be increased investment spending (with a multiplier of 1.0), followed by increased day-to-day spending on public services (0.6), spending on benefits (0.6), VAT cuts (0.35) and cuts to income tax or National Insurance contributions (0.3).

In practice it is important that any measures are implemented in a targeted, timely and temporary manner. With this in mind, and considering the likely multiplier effects, possible policies worth considering – versions of all of which were implemented by Mr Darling in response to the financial crisis – include:

- a one-off boost to public sector investment spending;
- a temporary cut to the main rate of VAT to encourage consumers to spend;
- a time-limited tax break to encourage companies to invest;
- a stamp duty holiday to stimulate housing transactions.

Finally if there are tax cuts, or for that matter spending increases, that the Chancellor is intending to do in the longer-term there is a case for bringing forward their implementation. Doing this would not affect the long-run public finances (as long as the

measure was definitely going to be introduced anyway) and could help increase demand in the economy when it is most needed. For example the Conservative Party manifesto commits to increasing the income tax personal allowance to £12,500 and the higher rate threshold to £50,000 by the end of this parliament. Doing this in April 2017, with a cash freeze on these thresholds through to the end of 2020–21, would deliver the manifesto pledge at no additional cost in 2020–21 (assuming it was always going to be in place in that year). But it would inject additional funds into the economy in 2017–18.

5.3 The fiscal policy response: long-run

Our estimates presented in Section 4 suggest that were the OBR to downgrade its forecasts for the economy in line with that done by the Bank of England and independent forecasters then we could expect the deficit to be around 1.2% of national income, or £25 billion, higher in 2019–20 than forecast at the time of the March 2016 Budget. So there would be a forecast headline deficit of £14.9 billion (0.7% of national income) instead of a headline surplus of £10.4 billion (0.5% of national income). This means that to restore the public finances to the path intended by Mr Osborne would require an additional fiscal tightening of £25 billion. This is unlikely to happen and there are good reasons why it should not.

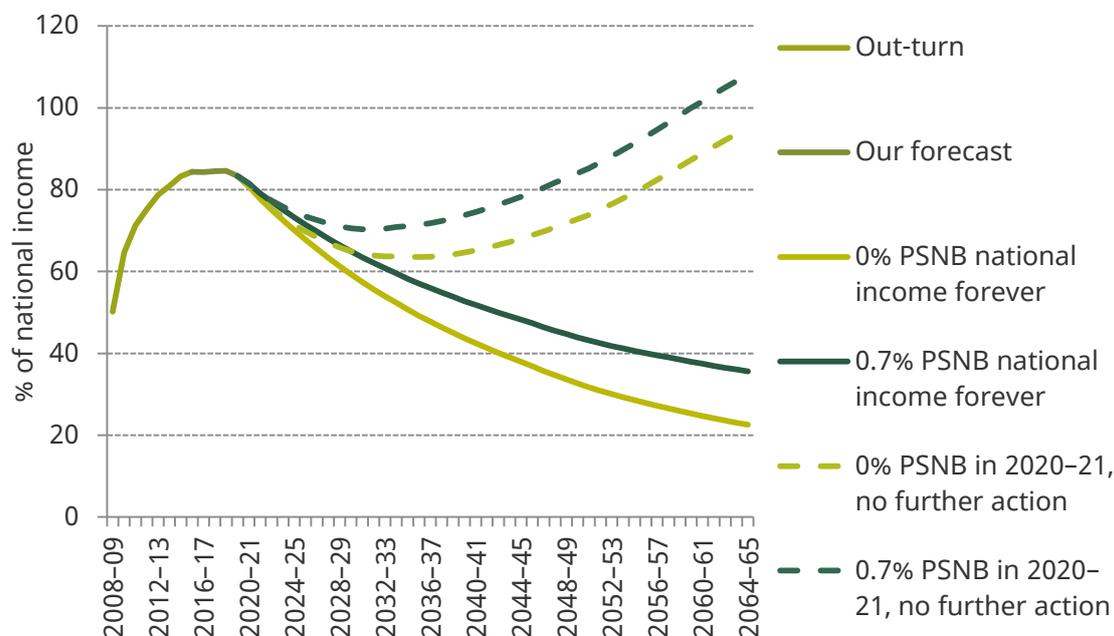
In addition the greater than usual uncertainty around economic and fiscal forecasts suggests that the Chancellor might want to wait before deciding on an appropriate response.

However, unless we are now content to live with a permanently higher level of debt a deterioration in the public finances of around 1.2% of national income would need, at some point, to be met with further fiscal tightening. To give a sense of scale this is equivalent to £23 billion in 2016–17 terms (the £25 billion referred to above is in 2019–20 prices). Given there are currently 27 million households in the UK this is equivalent to just over £850 per year for every household currently in the country (although of course any tightening would in practice not be shared equally and could, in part, come from cuts to public-service spending rather than entirely being a squeeze on household incomes through higher taxes or less generous benefits). The £23 billion figure also amounts to around 13% of the underlying increase in government borrowing since the start of the financial crisis.

A good measure of the long term health of the public finances is projected net debt as a proportion of national income. Figure 5.1 shows projections for public sector net debt under different scenarios for borrowing, under the now arguably optimistic assumption that that growth proceeds as the OBR assumed in their most recent (June 2015) *Fiscal Sustainability Report*. If the government were to reach budget balance in 2020–21 (implying on our estimates a reduction in borrowing of 0.7% of national income between 2019–20 and 2020–21), and keep borrowing at that level (on average), debt would not be projected to reach its pre-crisis level of 40% of national income until around the mid-2040s. If, on the other hand, the deficit were maintained at the 2019–20 level as a proportion of national

income implied by our forecast, debt would not be projected to return to 40% of national income until the a decade later, in the mid-1950s.

Figure 5.1 Projections of public sector net debt under different scenarios for borrowing and the effect of an ageing population , assuming long-run growth as of June 2015



Note: Assumes that nominal national income growth follows the path assumed in the Office for Budget Responsibility *Fiscal Sustainability Report*, June 2015, and that demographic pressures affect the public finances by the same proportion of national income as they assume.

Source: Office for Budget Responsibility, *Fiscal Sustainability Report*, June 2015 (<http://budgetresponsibility.org.uk/fsr/fiscal-sustainability-report-june-2015/>) and authors' calculations.

However, even keeping the deficit at the same level in the longer term implies considerable fiscal tightening. If the government were to take no action to reduce the deficit beyond 2019-20, the fiscal pressure of an ageing population would, on the basis of the OBR's June 2015 estimates, lead to debt being projected to increase remorselessly over the next fifty years.

While Figure 5.1 illustrates that the Chancellor faces a substantial fiscal challenge, the actual challenge may be even greater. As described in Section 4.4, the increase in the deficit in 2019-20 is likely to understate the increase in the longer-term deficit seen since March. The OBR's projections used above already embedded a somewhat optimistic assumption over the assumed path of NHS productivity growth, which they are likely to revise down in their future projections. Furthermore any reduction in future immigration, any reduction in longer-term growth or any increase in future interest rates would make the fiscal arithmetic harder still.

5.4 Conclusions

Given previous Chancellors' chequered success at adhering to their own fiscal targets, the new Chancellor would be well advised to select his targets carefully. Any he chooses should be flexible enough to allow the government to respond appropriately in the short run, while maintaining a stable fiscal footing in the longer term. For example he should consider a return to George Osborne's original target to aim for forecast current budget balance a few years out.

Given substantial uncertainty surrounding the forecast for the economy, and the sizeable fiscal tightening already planned for the rest of the parliament, it would not be appropriate to try to counteract all of the worsening in the public finances with additional measures implemented in this parliament. However, in the longer term there are challenges for the chancellor due to a worse short term fiscal outlook and demographic pressures that remain on the horizon. Were longer term growth to be lower going forwards, this would make the challenge all the more difficult. Preparing for further austerity in the next parliament may be the wisest course of action.

6. Conclusions

At the time of the March 2016 Budget the UK's public finances were still some way off being repaired following the damage wrought by the financial crisis and associated recession. While public sector net borrowing had fallen considerably since it peaked at £155 billion in 2010–11, it was still forecast to be £56 billion 2016–17. When measured as a share of national income this would still be 1.0% (£19 billion in 2016–17 terms) greater than the average deficit that the UK has run in the past. The OBR forecasts implied steady, but unspectacular, growth over the next few years meaning that relatively little of this deficit was thought to represent temporary weakness in the economy. Therefore considerable further austerity – in the form of net tax rises, cuts to working age benefits and cuts to the budgets of many public services – was planned. Moreover the UK faced a longer-term public finance challenge as the ageing of the population was projected (by the OBR in June 2015) to increase spending on public services by the equivalent of £76 billion (in 2016–17 terms) between 2019–20 and 2064–65.

Since the referendum vote for the UK to leave the EU most forecasters have revised down their forecasts for economic growth. For example the central forecast from the Bank of England published on November 3 implies the UK economy being 2.1% smaller in the middle of 2019 than it forecast in May. Lower growth in the economy would be bad for the public finances as it would, in cash terms, depress tax receipts. But this is not the only important factor that has changed since the referendum. Inflation is now widely forecast to be higher, driven by the recent decline in the value of sterling. Higher inflation will, in cash terms, harm the public finances as some tax thresholds naturally increase more quickly and public service pension payments rise. But there are also some offsetting factors: the cost of government borrowing has fallen pushing down debt interest payments; the stock market has grown strongly pushing up receipts from capital taxes; and oil prices have risen pushing up receipts from the North Sea. In addition leaving the EU could potentially eliminate entirely the £8 billion a year net financial contribution the UK makes to the EU budget.

Taking all these factors into account our estimate is that we might expect the OBR to revise up its forecast for government borrowing in 2019–20 by around £25 billion, so that instead of a surplus of £10.4 billion we might now expect a deficit of around £15 billion. This does not mean that the Chancellor should implement further tax rises or spending cuts, on top of those already planned, worth a total of £25 billion in the next few years. He could sensibly choose not to – indeed there may be a case for a temporary fiscal stimulus – and still expect to have a balance on the current budget in three years time (which was the rolling fiscal target put in place by the coalition government prior to the last general election). But doing this would leave us on course to miss the now abandoned, but still legislated, commitment to eliminate the budget deficit from 2019–20 onwards. This is in addition to the Conservative Government having managed, in just months following the general election, to break both the other two fiscal targets that it set itself.

Another reason for the Chancellor to wait before implementing any further fiscal tightening is that there is even more economic uncertainty than usual. But building a plan for further austerity in the next parliament would be prudent. Indeed even if a balanced

headline budget was delivered in 2020–21 and then maintained thereafter public sector net debt would not be on course to reach its pre-crisis level of 40% of national income until around the mid-2040s. Unfortunately if anything the £25 billion estimated deterioration in the public finances in 2019–20 is likely to understate the increase in the longer-term challenge that has occurred since the March Budget. The OBR’s previous long-run projections were based on an optimistic assumption about NHS productivity growth which they have recently said is likely to be revised down in their future projections. More fundamentally any reduction in future immigration, any reduction in longer-term growth or any increase in future interest rates would make the fiscal arithmetic harder still.